



Environmental, social, and governance performance and corporate bond ratings: empirical evidence from Indonesia

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ABSTRACT

This study examined the influence of Environmental, Social, and Governance (ESG) performance on corporate bond ratings among companies listed on the Indonesia Stock Exchange during the 2020–2024 period. A quantitative approach was employed using secondary data obtained from Refinitiv, PT Pemeringkat Efek Indonesia (PEFINDO), annual reports, and sustainability reports. The sample consisted of 23 companies with 106 firm-year observations selected through purposive sampling. Binary logistic regression was used to test the proposed relationships. The results showed that Total ESG Score and Environmental performance did not significantly affect corporate bond ratings. In contrast, Social performance had a positive and significant effect, while Governance performance exhibited a significant negative effect. Furthermore, the Environmental, Social, and Governance dimensions jointly influenced corporate bond ratings. These findings indicate that ESG dimensions contribute differently to credit assessments and that evaluating individual ESG dimensions provides more meaningful information than relying solely on an aggregate ESG score in explaining corporate bond ratings in Indonesia.

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1. INTRODUCTION

Corporate bond ratings play a crucial role in capital markets because they provide an assessment of an issuer's ability to fulfill its financial obligations and serve as an important indicator of credit risk. Bond ratings reduce information asymmetry between issuers and investors by providing independent evaluations of corporate creditworthiness (Rahman, 2021; Yohana, 2022). For investors, bond ratings function as a reference for assessing investment risk and expected returns, while for issuers, higher ratings facilitate access to external financing at lower borrowing costs. Consequently, bond ratings have become one of the most influential factors in determining investment decisions and corporate financing strategies in modern financial markets (Kurbonov et al., 2024).

In Indonesia, the corporate bond market has experienced significant development in recent years, as reflected by the increasing performance of corporate bond total return indices. Nevertheless, the growth of the bond market has not eliminated the occurrence of credit risk among issuers. Several Indonesian corporations have experienced bond rating downgrades and even default classifications due to financial distress and the inability to meet debt obligations (Wulandari et al., 2026). For example, PT Wijaya Karya (Persero) Tbk experienced a rating downgrade to idD due to

increasing credit risk and uncertainty regarding its debt repayment capacity (Kontan.co.id, 2023). These cases indicate that despite favorable market conditions, corporate credit quality remains vulnerable to various operational, financial, and governance-related risks (Yohana, 2022). Therefore, understanding the determinants of corporate bond ratings remains highly relevant for investors, regulators, and corporate managers.

Traditionally, bond ratings have been evaluated primarily based on financial indicators such as profitability, leverage, liquidity, and cash flow performance (Natalia, 2022; Permatasari et al., 2025). However, recent developments in sustainable finance have shifted attention toward non-financial factors that may influence corporate creditworthiness (Wulandari et al., 2026). One of the most widely adopted frameworks for assessing non-financial performance is Environmental, Social, and Governance (ESG). ESG reflects the extent to which firms integrate sustainability principles into their business operations, strategic decisions, and risk management processes. Investors, regulators, and credit rating agencies increasingly recognize ESG performance as an important indicator of long-term corporate sustainability and risk management quality (Abdi et al., 2020; Andariyani et al., 2026; Bao et al., 2024; Nurbaiti et al., 2024). Nurbaiti et al. (2024) further demonstrate that ESG practices are associated with the mitigation of potential risks and corruption-related concerns in Asian banking institutions, highlighting the importance of ESG in risk assessment processes.

The assessment of ESG performance is particularly important for corporate bond ratings in Indonesia because it provides information on non-financial risks that may not be fully captured by traditional financial indicators. Environmental issues, stakeholder relations, and governance quality can influence a firm's operational stability, regulatory compliance, reputation, and long-term financial sustainability. These factors are directly relevant to a company's ability to meet its debt obligations and therefore may affect its creditworthiness. In the Indonesian context, where sustainable finance initiatives and ESG disclosure practices continue to develop, understanding whether ESG performance contributes to bond rating assessments becomes increasingly important. Such understanding can assist investors in evaluating credit risk more comprehensively, support rating agencies in improving risk assessment frameworks, and encourage companies to strengthen sustainability practices as part of their long-term financing strategy.

The environmental dimension evaluates a company's ability to manage environmental impacts, including carbon emissions, resource utilization, waste management, and compliance with environmental regulations. Effective environmental management can reduce operational disruptions, regulatory penalties, and reputational risks that may adversely affect financial performance (Dahivale, 2022). In addition, environmental accounting disclosure and green process innovation have been shown to improve firms' economic performance, suggesting that environmental initiatives may contribute to long-term corporate sustainability and value creation (Cahyaningsih & Ihromi, 2024). The social dimension reflects how companies manage relationships with employees, customers, suppliers, and communities. Strong social performance can enhance stakeholder trust, improve operational stability, and mitigate social conflicts that may threaten business continuity (Amaral et al., 2023; Becchetti et al., 2022). Meanwhile, the governance dimension focuses on corporate transparency, accountability, board effectiveness, and internal control systems. Effective governance mechanisms are expected to reduce agency conflicts and information asymmetry while strengthening corporate decision-making processes (Bao et al., 2024; Rahman, 2021; Yohana, 2022). Evidence from Indonesian listed companies also suggests that corporate governance practices play an important role in shaping ESG performance, indicating that governance remains a fundamental component of corporate sustainability initiatives (Saraswati' et al., 2024).

From the perspective of Agency Theory, ESG practices can serve as mechanisms for reducing conflicts between managers and stakeholders. Agency Theory suggests that managers possess more information regarding corporate conditions than investors and creditors, creating information asymmetry and agency costs (Hendrastuti & Harahap, 2023). ESG implementation, particularly through transparent governance practices and sustainability disclosures, can improve information quality and enhance stakeholder confidence. Consequently, companies with stronger ESG

performance may be perceived as having lower credit risk and greater capability to fulfill long-term financial obligations. Such conditions may positively influence the assessment of credit rating agencies and contribute to higher corporate bond ratings (Alves & Meneses, 2024).

Prior studies have provided evidence supporting the relationship between ESG performance and credit quality. Jang et al. (2020) found that ESG information contains relevant risk-related information that complements traditional credit assessments in bond markets. Apergis et al. (2022) reported that stronger ESG performance is associated with lower debt costs and reduced credit risk. Similarly, Chodnicka-Jaworska (2022) demonstrated that ESG factors significantly affect corporate credit ratings, particularly through environmental performance. More recently, Anaz & Awad (2025) documented that overall ESG scores and each ESG pillar positively influence corporate creditworthiness. These findings suggest that sustainability performance increasingly contributes to credit market evaluations beyond conventional financial indicators.

Despite growing evidence, empirical findings regarding the relationship between ESG and bond ratings remain inconclusive. Several studies have reported heterogeneous results across industries and ESG dimensions. For instance, Fermo et al. (2025) found that environmental and social performance significantly improve credit ratings in the banking sector, whereas governance does not exhibit a significant effect. In contrast, other studies reported that the impact of ESG dimensions varies across sectors and institutional environments (Bruno & Henisz, 2024; Chodnicka-Jaworska, 2021). Differences in industry characteristics, market structures, and measurement approaches may contribute to inconsistent empirical outcomes. In addition, variations in ESG disclosure quality, differences in rating agency methodologies, regulatory environments, levels of ESG integration across countries, and the relative importance of financial versus non-financial information may also explain the mixed findings reported in previous studies. These factors can influence how ESG information is interpreted and incorporated into credit risk assessments, leading to divergent results across different research settings. Furthermore, most previous studies have focused on developed markets, while evidence from emerging economies remains relatively limited.

This study seeks to address these gaps by examining the influence of Total ESG Score, Environmental, Social, and Governance performance on corporate bond ratings among Indonesian listed companies during the 2020–2024 period. Unlike prior studies that primarily focus on overall ESG performance or specific industries, this research simultaneously evaluates the effects of aggregate ESG performance and individual ESG dimensions within the context of the Indonesian corporate bond market. The study employs binary logistic regression to analyze whether ESG-related indicators contribute to the likelihood of firms obtaining investment-grade bond ratings (Ghozali, 2021).

The novelty of this study lies in three aspects. First, it investigates both Total ESG Score and individual ESG pillars simultaneously to identify the specific dimensions that contribute most significantly to corporate bond ratings. Second, it provides empirical evidence from Indonesia, an emerging market where ESG adoption and sustainable finance practices continue to evolve. Third, the study applies a binary credit quality classification based on investment-grade and non-investment-grade ratings issued by PEFINDO, allowing a direct assessment of ESG performance in relation to corporate creditworthiness. Therefore, this research contributes to the growing literature on sustainable finance and credit risk assessment while providing practical implications for investors, corporate managers, and rating agencies in evaluating corporate bond quality beyond traditional financial indicators.

2. RESEARCH METHOD

This study employed a quantitative research approach to examine the effect of Environmental, Social, and Governance (ESG) performance on corporate bond ratings among companies listed on the Indonesia Stock Exchange (IDX). A quantitative design was selected because the study utilized numerical data to test the relationship between ESG indicators and bond ratings through statistical

analysis. The research focused on determining whether ESG performance contributes to the probability of obtaining investment-grade bond ratings during the 2020–2024 period.

The population of this study consisted of all Indonesian listed companies that issued corporate bonds and were rated by PT Pemeringkat Efek Indonesia (PEFINDO) during the 2020–2024 period. The sample was selected using a purposive sampling technique based on several predetermined criteria. First, the company had to be listed on the Indonesia Stock Exchange throughout the observation period (2020–2024). Second, the company had to have corporate bond ratings published by PEFINDO. Third, ESG data had to be consistently available in the Refinitiv database during the observation period. Fourth, the company had to provide complete financial and sustainability information required for the analysis. Based on these criteria, 23 companies met the sampling requirements and were selected as the final sample. Since the study covered a five-year observation period, the final dataset consisted of 106 firm-year observations.

The sampled companies generally represent large and established firms that actively participate in the Indonesian capital market, issue corporate bonds, and maintain ESG disclosures in the Refinitiv database. The sample includes firms from various sectors, such as financial services, infrastructure, telecommunications, energy, manufacturing, and mining, which are among the industries with relatively high financing needs and exposure to sustainability-related risks. Furthermore, the selected companies are characterized by the availability of both bond rating information and ESG performance data throughout the observation period, enabling a comprehensive assessment of the relationship between sustainability performance and corporate creditworthiness.

The 2020–2024 observation period was selected for several reasons. First, this period reflects the growing implementation of ESG practices and sustainability reporting among Indonesian listed companies following increased regulatory and market attention toward sustainable finance. Second, ESG data coverage in the Refinitiv database became more comprehensive and consistent during this period, enabling more reliable measurement of ESG performance. Third, the observation period captures corporate conditions during and after the COVID-19 pandemic, a period characterized by heightened financial and operational uncertainty that may have influenced both ESG practices and corporate credit risk. Therefore, the selected period provides a relevant setting for examining the relationship between ESG performance and corporate bond ratings in Indonesia.

This study used secondary data collected from publicly available sources. ESG performance data, including Total ESG Score, Environmental Score, Social Score, and Governance Score, were obtained from the Refinitiv database. Corporate bond ratings were collected from PEFINDO publications, while supporting company information was obtained from annual reports, sustainability reports, and financial statements. The use of secondary data ensured data consistency and reliability across the observation period.

The dependent variable was corporate bond rating. Following PEFINDO's rating classification, bond ratings were converted into a binary variable. Companies classified as investment grade (idAAA to idBBB–) were assigned a value of 1, while companies classified as non-investment grade (idBB+ to idD) were assigned a value of 0. This classification enabled the application of binary logistic regression as the primary analytical method.

The independent variables consisted of Total ESG Score, Environmental Score, Social Score, and Governance Score. Total ESG Score represented the aggregate sustainability performance of a company based on environmental, social, and governance dimensions. Environmental Score measured corporate performance related to environmental management, including resource utilization, emissions reduction, and environmental compliance. Social Score reflected a company's relationships with stakeholders, including employees, customers, suppliers, and local communities. Governance Score measured the effectiveness of corporate governance practices, including transparency, accountability, board structure, and shareholder protection. All ESG variables were measured using Refinitiv ESG scores ranging from 0 to 100, where higher values indicate better ESG performance.

The analysis began with descriptive statistics to provide an overview of the characteristics and distribution of the research variables. Subsequently, binary logistic regression was employed to examine the influence of ESG performance on corporate bond ratings. Logistic regression was considered appropriate because the dependent variable was dichotomous and categorized into investment-grade and non-investment-grade ratings (Ghozali, 2021).

The logistic regression model was estimated using two specifications. The first model examined the effect of Total ESG Score on corporate bond ratings. The second model assessed the individual effects of Environmental, Social, and Governance dimensions simultaneously. Model adequacy was evaluated using the Hosmer–Lemeshow goodness-of-fit test, while overall model significance was assessed through the Omnibus Test of Model Coefficients. The explanatory power of the models was evaluated using Nagelkerke R Square. Individual hypotheses were tested using the Wald statistic and significance values at a 5% significance level. A variable was considered to have a significant effect on corporate bond ratings when its probability value was below 0.05.

To evaluate predictive performance, a classification matrix was also employed to assess the accuracy of the logistic regression model in classifying companies into investment-grade and non-investment-grade categories. Through these procedures, the study aimed to provide robust empirical evidence regarding the role of ESG performance in determining corporate bond ratings in the Indonesian capital market.

3. RESULTS AND DISCUSSIONS

3.1 Descriptive Statistics

This study analyzed 106 firm-year observations from 23 companies listed on the Indonesia Stock Exchange (IDX) during the period 2020–2024. The data are unbalanced, as several companies in certain years were not rated by PT PEFINDO. Descriptive statistics were employed to provide an overview of the characteristics of the research variables.

Table 1. Descriptive Statistics

Variable	N	Minimum	Maximum	Mean	Std. Deviation
Bond Rating	106	0	1	0.95	0.213
Total ESG Score	106	16	89	62.69	17.354
Environmental	106	12	93	54.15	22.202
Social	106	18	96	67.35	19.227
Governance	106	12	94	60.13	22.620

Source: Processed data (2026).

Table 1 indicates that the mean bond rating score is 0.95, suggesting that most sample companies were classified as investment-grade issuers during the observation period. The average Total ESG Score of 62.69 reflects a moderate level of ESG implementation among Indonesian listed companies. Among the ESG dimensions, the Social pillar exhibits the highest average score (67.35), followed by Governance (60.13) and Environmental (54.15). The relatively high standard deviations indicate substantial variation in ESG practices across firms, suggesting heterogeneous sustainability performance within the Indonesian corporate bond market.

3.2 Logistic Regression Results

Before interpreting the regression coefficients, the goodness-of-fit of the logistic regression models was assessed using the Hosmer–Lemeshow test. Following the significant Omnibus Test results, this test was used to evaluate the consistency between observed and predicted values. A non-significant chi-square statistic ($p > 0.05$) indicates that the model adequately fits the data, suggesting that both models demonstrate acceptable fit.

Table 2. Hosmer–Lemeshow Goodness-of-Fit Test

Model	Chi-square	df	Sig.
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Total ESG Score Model	8.870	8	0.353
ESG Dimensions Model	1.530	8	0.992

Source: Processed data (2026).

Both models exhibit significance values greater than 0.05, indicating no statistically significant difference between the observed and predicted values. Therefore, the logistic regression models demonstrate an adequate fit and are considered appropriate for further analysis.

In addition to model fit, predictive performance was assessed using classification matrices to evaluate the accuracy of each model in predicting bond rating categories. The results indicate the classification performance of both models.

Table 3. Classification Matrix

Model	Observed	Predicted Investment Grade	Percentage Correct
Total ESG Score Model	Non- Investment Grade (0)	0 of 5	0.0%
	Investment Grade (1)	101 of 101	100.0%
	Overall Accuracy		95.3%
ESG Dimensions Model	Non- Investment Grade (0)	0 of 5	0.0%
	Investment Grade (1)	100 of 101	99.0%
	Overall Accuracy		94.3%

Source: Processed data (2026).

The Total ESG Score model achieved an overall classification accuracy of 95.3%, while the ESG Dimensions model reached 94.3%. However, both models failed to correctly classify the five non-investment-grade observations, likely due to the imbalanced distribution of the dataset, where investment-grade observations dominate. Despite this limitation, the satisfactory goodness-of-fit and relatively high overall accuracy indicate that both models remain appropriate for hypothesis testing.

Binary logistic regression was employed to examine the effect of ESG performance on corporate bond ratings. The overall model was statistically significant, as indicated by the Omnibus Test of Model Coefficients.

Table 4. Omnibus Test of Model Coefficients

Model	Chi-square	df	Sig.
ESG Dimensions Model	14.688	3	0.002

Source: Processed data (2026).

The Omnibus Test result shows a significance value of 0.002, indicating that the Environmental, Social, and Governance dimensions jointly influence corporate bond ratings. The explanatory power of the model was further evaluated using Nagelkerke R Square.

Table 5. Model Explanatory Power

Model	Cox & Snell R Square	Nagelkerke R Square
Total ESG Score Model	0.000	0.001
ESG Dimensions Model	0.129	0.409

Source: Processed data (2026).

The explanatory power of the logistic regression models was evaluated using Cox & Snell R Square and Nagelkerke R Square. Cox & Snell R Square reflects the proportion of variation in the dependent variable explained by the model, although its value does not reach a maximum of 1. Therefore, Nagelkerke R Square was used as an adjusted measure to provide a clearer interpretation of explanatory power in logistic regression. The results indicate that the ESG dimensions model explains approximately 40.9% of the variation in corporate bond ratings, while the Total ESG Score model explains only 0.1%. This suggests that individual ESG dimensions provide substantially greater explanatory power than the aggregate ESG measure. The regression coefficients are presented in Table 6.

Table 6. Binary Logistic Regression Results

Variable	B	S.E.	Wald	Sig.	Exp(B)
Total ESG Score	0.005	0.026	0.040	0.841	1.005
Environmental	0.009	0.034	0.074	0.786	1.009
Social	0.114	0.054	4.514	0.034	1.121
Governance	-0.169	0.075	5.115	0.024	0.844

Source: Processed data (2026).

The results demonstrate that Total ESG Score does not significantly affect corporate bond ratings ($p = 0.841$). Similarly, Environmental performance does not have a significant influence on bond ratings ($p = 0.786$). In contrast, Social performance has a positive and significant effect ($p = 0.034$), while Governance performance exhibits a significant negative effect ($p = 0.024$).

3.3 Discussion

a. Total ESG Score and Corporate Bond Ratings

The results indicate that Total ESG Score did not significantly affect corporate bond ratings, as shown by a significance value of 0.841 (> 0.05). Aggregate ESG performance therefore did not play a meaningful role in influencing bond ratings among companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The very small regression coefficient ($B = 0.005$) further confirms that changes in Total ESG Score had only a negligible impact on the probability of obtaining higher bond ratings, implying that ESG, in its aggregated form, has not yet become a key determinant in credit rating assessments.

Similar evidence was reported by Michalski & Low (2021), Harymawan et al. (2021), and Kanno (2023), who argue that aggregated ESG measures often fail to capture the distinct contributions of environmental, social, and governance dimensions in explaining credit risk. In emerging markets, financial fundamentals tend to dominate rating decisions, making ESG less influential in credit evaluation. However, these results differ from Anaz & Awad (2025), who documented a positive relationship between ESG and creditworthiness in markets with stronger ESG integration, suggesting that the role of ESG remains highly dependent on market conditions and institutional settings.

One possible explanation for this outcome is the relatively early and heterogeneous stage of ESG adoption among Indonesian firms. During the 2020–2024 period, bond rating assessments were likely more focused on short-term financial resilience amid post-pandemic recovery and macroeconomic uncertainty. From an Agency Theory perspective, while ESG disclosure is expected to reduce information asymmetry, an aggregated ESG score may not provide sufficient detail regarding specific sources of corporate risk, thereby limiting its relevance in bond rating assessments.

3.3.2 Environmental Performance and Corporate Bond Ratings

The results indicate that Environmental performance did not significantly affect corporate bond ratings, as shown by a significance value of 0.786 (> 0.05). Environmental performance therefore did not play a meaningful role in influencing bond ratings among companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The relatively small regression coefficient ($B = 0.009$) further confirms that changes in environmental performance had only a minimal impact on the likelihood of obtaining higher bond ratings, implying that environmental factors have not yet become a key consideration in credit rating assessments.

Similar results were documented by Boubaker et al. (2025) and Isnurhadi et al. (2022), who report that environmental performance does not always significantly affect credit evaluations, particularly in markets where financial indicators remain dominant. Kong et al. (2024) further argue that environmental initiatives often involve substantial compliance costs, while their economic benefits may not be immediately reflected in credit outcomes. In addition, Anaz & Awad (2025) find that the environmental dimension tends to have a weaker relationship with credit quality compared to social and governance factors, especially in emerging markets with uneven ESG integration.

A plausible explanation is that environmental implementation remained highly heterogeneous across firms during the observation period, while ESG adoption and disclosure practices were still developing. At the same time, companies faced post-pandemic recovery pressures and macroeconomic uncertainty, encouraging rating agencies to place greater emphasis on financial indicators such as profitability, liquidity, leverage, and debt repayment capacity. Under these circumstances, environmental performance may not yet have been fully incorporated into corporate bond rating assessments in Indonesia.

b. Social Performance and Corporate Bond Ratings

The results indicate that Social performance had a positive and significant effect on corporate bond ratings, as shown by a significance value of 0.034 (< 0.05) and a positive regression coefficient. The evidence highlights that firms with stronger social performance were more likely to obtain higher bond ratings. This relationship suggests that improvements in stakeholder relations, employee welfare, customer trust, and community engagement contribute positively to credit assessments.

This outcome aligns with Pérez-Cornejo & de Quevedo-Puente (2023), who emphasize that labor relations, community involvement, and stakeholder protection positively affect credit ratings. Similarly, Anaz & Awad (2025) identify the social dimension as one of the most consistent ESG components influencing corporate creditworthiness. Lee et al. (2024) further explain that firms facing downgrade risk often strengthen social initiatives to reduce reputational risk and enhance stakeholder confidence, indicating that social factors are closely linked to operational stability and perceived repayment ability.

Such a relationship may be explained by the growing importance of stakeholder management in sustaining corporate resilience amid post-pandemic recovery and macroeconomic uncertainty. Companies operating in sectors such as banking, infrastructure, telecommunications, mining, and manufacturing depend heavily on stakeholder trust, workforce stability, and public legitimacy. Consequently, firms with stronger social performance may be perceived as more capable of maintaining operational continuity and managing reputational risks, leading to more favorable bond rating assessments.

c. Governance Performance and Corporate Bond Ratings

The results indicate that Governance performance had a significant negative effect on corporate bond ratings, as shown by a significance value of 0.024 (< 0.05) and a negative regression coefficient. The evidence indicates that governance performance significantly influenced corporate bond ratings, albeit in a negative direction. In other words, higher governance scores were associated with a lower likelihood of obtaining higher bond ratings, suggesting that stronger governance implementation did not necessarily lead to more favorable credit assessments.

In contrast to the present results, Jeon (2021) and Chodnicka-Jaworska (2021) reported a positive relationship between governance quality and credit ratings, emphasizing that better governance enhances transparency, monitoring effectiveness, and risk management quality. However, Fuadah et al. (2022) and Li et al. (2022) argue that stronger governance mechanisms may also increase compliance burdens, monitoring intensity, and operational costs, particularly in emerging markets. These contrasting findings indicate that the impact of governance on credit outcomes may vary across institutional environments, ownership structures, and market characteristics.

One possible explanation is that higher governance scores did not necessarily translate into immediate improvements in financial efficiency or credit quality. During the post-pandemic recovery period, firms were also adapting to regulatory adjustments and heightened economic uncertainty, which may have increased governance complexity and compliance requirements. Under such conditions, governance improvements may have been perceived as reflecting greater administrative

and operational burdens rather than stronger financial resilience. Consequently, bond rating agencies may have placed greater emphasis on profitability, liquidity, leverage, and debt repayment capacity than on governance performance alone.

d. ESG Dimensions and Corporate Bond Ratings

The results of the simultaneous test using the Omnibus Test of Model Coefficients show a significance value of 0.002 (< 0.05), indicating that Environmental, Social, and Governance (ESG) dimensions jointly have a significant effect on corporate bond ratings among companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The evidence demonstrates that corporate bond ratings are not determined solely by financial indicators but are also influenced by sustainability performance reflected through ESG dimensions.

According to Agency Theory, ESG disclosure collectively functions as a mechanism to reduce information asymmetry between managers and external stakeholders regarding corporate sustainability practices and long-term risk exposure. By disclosing environmental management, social responsibility practices, and governance quality, firms enhance transparency and provide broader information to investors and creditors. As a result, companies with stronger ESG performance are more likely to be perceived as having lower credit risk and greater capacity to meet long-term debt obligations, which may positively influence bond rating assessments.

Supporting evidence from Chodnicka-Jaworska (2021), Aslan et al. (2021), Zanin (2022), and Anaz & Awad (2025) indicates that ESG performance contributes to stronger credit quality and lower default risk. In the Indonesian context during the 2020–2024 period, sustainability considerations appear to have become increasingly relevant in corporate credit evaluations, particularly among firms operating in sectors with relatively high operational and regulatory risks. Overall, ESG implementation may strengthen risk management practices, enhance stakeholder confidence, and improve corporate resilience, making sustainability-related factors an increasingly important component of corporate bond rating assessments.

The findings also have important implications for corporate sustainability strategies. Since the Social dimension was found to positively influence bond ratings, companies should prioritize stakeholder-oriented initiatives, including employee welfare, customer relations, community engagement, and social responsibility programs. Moreover, firms should integrate ESG considerations into their long-term strategic planning rather than treating sustainability as a compliance-oriented activity. By strengthening ESG practices that are most relevant to credit assessments, companies may improve stakeholder confidence, enhance corporate resilience, and potentially increase their access to external financing at more favorable terms.

The quality of ESG disclosure may also play an important role in shaping bond investors' decisions. High-quality ESG disclosures provide investors with more transparent, consistent, and credible information regarding a firm's sustainability performance and risk management practices. Such disclosures can reduce information asymmetry between issuers and investors, enabling more accurate assessments of long-term credit risk. As a result, bond investors may place greater confidence in companies that provide comprehensive ESG information, particularly when evaluating firms operating in industries exposed to environmental, social, and governance risks. Therefore, improving the quality and transparency of ESG reporting may support better investor decision-making and strengthen firms' perceived creditworthiness in the bond market.

The findings further suggest that companies seeking to improve their bond ratings should adopt a targeted ESG strategy rather than focusing solely on improving aggregate ESG scores. The results suggest that firms should not focus solely on increasing their overall ESG scores, as the aggregate ESG measure was not found to significantly influence bond ratings. Instead, companies should prioritize ESG dimensions that are more closely associated with credit assessments, particularly the Social dimension. Strengthening employee welfare programs, stakeholder engagement, customer relations, community development initiatives, and social responsibility

activities may enhance corporate credibility and operational stability, thereby supporting higher bond ratings. In addition, companies should ensure that ESG initiatives are effectively integrated into risk management and business strategies rather than being implemented merely to satisfy disclosure requirements. By adopting a more targeted and strategic ESG approach, firms may improve their perceived creditworthiness and strengthen their ability to access external financing under more favorable conditions.

4. CONCLUSION

This study aimed to examine the influence of Environmental, Social, and Governance (ESG) performance on corporate bond ratings among companies listed on the Indonesia Stock Exchange during the 2020–2024 period. The findings indicate that ESG performance contributes to corporate bond rating assessments, although the influence varies across ESG dimensions. In particular, Social performance positively influences corporate bond ratings, highlighting the importance of stakeholder-related factors in credit assessments. Meanwhile, Governance performance exhibits a significant effect, suggesting that governance practices may be interpreted differently within the context of emerging markets. Furthermore, the simultaneous analysis demonstrates that Environmental, Social, and Governance dimensions collectively influence corporate bond ratings, indicating that sustainability-related factors have become increasingly relevant in corporate credit evaluations.

These findings support the argument that ESG performance should not be viewed as a homogeneous construct when assessing corporate creditworthiness. Instead, individual ESG dimensions provide more meaningful information regarding corporate risk and credit quality than aggregate ESG measures. The results also extend the sustainable finance literature by providing empirical evidence from Indonesia, where ESG integration in bond rating assessments remains relatively underexplored.

From a practical perspective, the findings suggest that investors, corporate managers, and rating agencies should consider ESG dimensions alongside traditional financial indicators when evaluating corporate credit risk. In particular, strengthening social performance may enhance stakeholder confidence and improve firms' perceived credit quality. The findings also have implications for credit rating agencies in integrating ESG considerations into their credit assessment models. The results suggest that rating agencies may benefit from evaluating ESG dimensions separately rather than relying solely on aggregate ESG scores, as individual ESG pillars exhibit different relationships with bond ratings. In particular, the significant influence of the Social dimension indicates that stakeholder-related factors may provide valuable information regarding a firm's long-term creditworthiness and risk profile. Consequently, incorporating more granular ESG indicators into credit assessment frameworks may enhance the accuracy and comprehensiveness of bond rating evaluations.

Future research may incorporate financial determinants of bond ratings, such as profitability, leverage, liquidity, and firm size, extend the observation period, and conduct cross-country or cross-industry comparisons. Further research is also needed to examine the causal mechanisms through which ESG dimensions influence corporate bond ratings, particularly in emerging markets. Future studies may employ larger samples, longitudinal designs, alternative ESG measurement frameworks, and additional credit risk indicators to improve the robustness of empirical evidence. Moreover, investigating the moderating effects of institutional quality, industry characteristics, corporate governance structures, and ESG disclosure quality may provide deeper insights into the conditions under which ESG performance affects bond rating assessments. Such developments are expected to provide a more comprehensive understanding of how ESG performance influences corporate creditworthiness and bond rating assessments across different institutional environments. Future research may also explore the relationship between ESG performance and bond ratings within specific industrial sectors. Since ESG-related risks and sustainability priorities differ across industries, sector-specific analyses may provide a more nuanced

understanding of how environmental, social, and governance dimensions influence credit assessments. For example, environmental factors may be more relevant in energy and mining industries, while social and governance factors may play a more prominent role in financial services and telecommunications sectors. Such investigations may help identify industry-specific ESG drivers of creditworthiness and contribute to the development of more tailored sustainability and risk assessment frameworks.

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