THE IMPACT OF ENVIRONMENTAL, SOCIAL, AND GOVERNANCE (ESG) PRACTICES ON SUSTAINABILITY RISK OF BANKING COMPANIES LISTED ON THE IDX (2021–2024)

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Abstract

This study aims to analyze the relationship between Environmental, Social, and Governance (ESG) practices and sustainability risks in banking companies listed on the Indonesia Stock Exchange during the period 2021–2024. The study used a quantitative approach with panel-shaped secondary data obtained from the annual reports and sustainability reports of 18 banks, resulting in 72 observations. ESG practices are measured using a composite ESG index, while sustainability risk is constructed as a standardized deviation from environmental, social, and governance risk exposures, so that negative values reflect a relatively lower level of risk than the sample average. Data analysis was carried out using simple linear regression as an initial approach to identify patterns of statistical relationships between variables. The results showed that the ESG index was negatively and statistically significant with sustainability risk ($\beta = -2.979$; $p < 0.05$), with a determination coefficient value (R^2) of 0.375. These findings indicate that stronger ESG practices tend to correlate with lower levels of sustainability risk, although they are not intended to draw strong causal conclusions. In the perspective of sharia economics, these empirical results are interpreted reflectively through the framework of maqāṣid al-sharīʿah, in particular the principles of safeguarding benefits and sustainability, without claiming direct empirical testing of these normative values.

Keywords: *ESG, Sustainability Risk, Banking, Maqāṣid Al-Sharīʿah, Data Panel.*

Abstrak

Penelitian ini bertujuan untuk menganalisis hubungan antara praktik Environmental, Social, and Governance (ESG) dan risiko keberlanjutan pada perusahaan perbankan yang terdaftar di Bursa Efek Indonesia selama periode 2021–2024. Penelitian menggunakan pendekatan kuantitatif dengan data sekunder berbentuk panel yang diperoleh dari laporan tahunan dan laporan keberlanjutan 18 bank, menghasilkan 72 observasi. Praktik ESG diukur menggunakan indeks ESG komposit, sedangkan risiko keberlanjutan dikonstruksi sebagai deviasi terstandarisasi dari

eksposur risiko lingkungan, sosial, dan tata kelola, sehingga nilai negatif merefleksikan tingkat risiko yang relatif lebih rendah dibandingkan rata-rata sampel. Analisis data dilakukan menggunakan regresi linier sederhana sebagai pendekatan awal untuk mengidentifikasi pola hubungan statistik antarvariabel. Hasil estimasi menunjukkan bahwa indeks ESG berhubungan negatif dan signifikan secara statistik dengan risiko keberlanjutan ($\beta = -2{,}979$; $p < 0{,}05$), dengan nilai koefisien determinasi (R^2) sebesar 0,375. Temuan ini mengindikasikan bahwa praktik ESG yang lebih kuat cenderung berkorelasi dengan tingkat risiko keberlanjutan yang lebih rendah, meskipun tidak dimaksudkan untuk menarik kesimpulan kausal yang kuat. Dalam perspektif ekonomi syariah, hasil empiris ini diinterpretasikan secara reflektif melalui kerangka maqāṣid al-sharīʿah, khususnya prinsip penjagaan kemaslahatan dan keberlanjutan, tanpa mengklaim pengujian empiris langsung atas nilai-nilai normatif tersebut.

Kata Kunci: *ESG, Risiko Keberlanjutan, Perbankan, Maqāṣid Al-Sharīʿah, Data Panel*

INTRODUCTION

The development of sustainability issues has driven a change in the way companies and financial institutions understand long-term business risks. Corporate risk is no longer limited to conventional financial risks, but also includes risks sourced from environmental, social, and governance aspects. In this context, Environmental, Social, and Governance (ESG) developed as an evaluation framework to assess how a company manages non-financial risk exposures that have the potential to affect the Company's operational sustainability and reputation (Friede et al., 2015). For the banking sector, this issue becomes relevant because banks not only face internal risks, but also play a role in transmitting sustainability risks through financing decisions to the real sector.

The global literature shows that ESG practices are often associated with corporate stability and quality of risk management. However, these relationships are not uniform and are highly dependent on the context of the industry, region, and type of risk being analyzed. A number of studies emphasize the role of ESG in reducing reputational and long-term risks, while other studies show that the influence of ESG on risk is indirect, conditional, or even insignificant when the characteristics of the company and the institutional environment are taken into account. This indicates that equating ESG as a risk mitigation instrument in general has the potential to simplify the complexity of the types of risks that companies face (Eccles et al., 2024), (Prasetyo & Musmini, 2025).

In the banking sector, sustainability risks have more complex characteristics than the non-financial sector. Environmental risks can arise from financing sectors with high

ecological impacts, social risks related to employment practices, financial inclusion, and stakeholder relations, while governance risks are related to transparency, management oversight, and regulatory compliance (Finance, 2025). Therefore, examining the relationship between ESG practices and sustainability risks in banking requires conceptual caution so as not to simplify ESG as a single indicator that automatically lowers all forms of risk.

In Indonesia, the urgency of ESG studies is increasing in line with the Financial Services Authority's policy that encourages the implementation of sustainable finance through sustainability reporting obligations for financial institutions. Nonetheless, most domestic research still focuses on the relationship between ESG and financial performance or company value, while studies that specifically link ESG to banking sustainability risks are still relatively limited. In addition, many studies use a descriptive or simple regression approach without explicitly discussing the limitations of causal inference from observational data.

Empirically, previous research has shown that good ESG implementation correlates with lower corporate risk. A study by Fakhrunnas et al (2025) found that high ESG performance contributes to the reduction of bank risk in developing countries. Similar results were also shown by Yudaruddin et al (2024) and Santoso et al (2025) who stated that increased ESG risks have a negative impact on banking stability. The findings show that ESG plays an effective risk mitigation instrument, especially in the face of economic uncertainty and global sustainability pressures.

This study does not intend to claim that ESG causally reduces sustainability risks, but rather seeks to identify a pattern of statistical relationships between ESG practices and the level of sustainability risk in banking companies listed on the Indonesia Stock Exchange during the period 2021–2024. Using panel data based on corporate reports, this study positions the results of the analysis as associative empirical evidence that can enrich the discourse on the role of ESG in banking risk management, especially in emerging markets.

From the theoretical side, this study refers to stakeholder theory and legitimacy theory as a conceptual framework to understand why banking companies are encouraged to disclose and improve ESG practices (Freeman, 1984). However, such

theories are not used to test causal relationships directly, but rather as analytical tools to interpret the empirical tendencies found. Thus, this study does not aim to normatively confirm the theory, but to explore its relevance in the context of Indonesian banking sustainability risks (Suchman, 2020).

The perspective of sharia economics in this study is placed as an additional interpretive framework, rather than as an empirical variable that is statistically tested (Adirestuty et al., 2025)The concept of maqāṣid al-sharīʿah is used to reflect on the compatibility between ESG practices and sustainability values in Islamic economics, especially related to the principles of safeguarding the benefits, justice, and sustainability of resources. This approach is intended to expand the dimension of normative analysis without claiming that these sharia values have been empirically tested in a research model (M. Umer Chapra, 2000) (Ardianto & Sukardi, 2024) (Chandra & Shauki, 2024)

Based on this description, the research gap of this research lies in the limitations of empirical studies that specifically examine the relationship between ESG practices and sustainability risks in the Indonesian banking sector with a panel data approach and conceptual reflection of sharia economics. Therefore, this study is directed to answer the question: the *impact of environmental, social, and governance (ESG) practices on the sustainability risks of banking companies listed on the IDX (2021–2024)*, while still considering the methodological limitations and interpretation space of the research results.

RESEARCH METHODS

1. Research Design

This study uses a quantitative approach with a non-experimental research design based on observational data. A quantitative approach was chosen to identify patterns of statistical relationships between Environmental, Social, and Governance (ESG) practices and banking firms' sustainability risks based on publicly available numerical data. This study is not intended to test the cause-and-effect relationship robustly, given the limitations of non-experimental design and the use of secondary data (Sekaran & Bougie, 2017).

The data used has a panel structure, which is a combination of cross-company data (cross-section) and time series (time series). The use of panel data in this study is intended to capture variations between companies and between observation periods. However, the analysis is positioned as a baseline analysis to explore the associative relationships between variables, without claiming full control over company heterogeneity or unobserved time effects. The observation period is set for four years, namely 2021–2024, to reflect the dynamics of ESG practices and banking sustainability risks following the strengthening of sustainable financial policies in Indonesia.

2. Scope and Object of Research

The scope of this study is limited to banking companies listed on the Indonesia Stock Exchange (IDX) during the 2021–2024 period. The selection of the banking sector is based on its strategic role as a financial intermediary institution that has a systemic impact on the economy as well as relatively high exposure to sustainability risks through financing activities. In addition, the banking sector is one of the sectors that is actively encouraged by regulators to implement sustainability principles through the policies of the Financial Services Authority (OJK).

The research objects include ESG practices as independent variables and sustainability risk as dependent variables. The research subjects consisted of 18 banks that were consistently listed on the IDX and published annual reports and sustainability reports during the observation period. Thus, the total analysis units in this study amounted to 72 observations (18 banks × 4 years). This scope limitation is carried out to maintain the homogeneity of industry characteristics and reduce the potential for structural bias between sectors.

3. Data Types and Sources

This study uses quantitative data in the form of secondary data obtained from the annual report and sustainability report of banking companies. Secondary data was chosen because it allows for an analysis based on information that has been audited and officially published, thereby improving the reliability and replicability of the research.

4. Place and Time of Research

This research was conducted through desk research without collecting field data. The process of data collection, processing, and analysis is carried out in the academic environment of Indo Global Mandiri University. The research period lasts during 2024–2025, including the stages of data collection, variable coding, statistical analysis, and preparation of research reports.

5. Data Collection Techniques

The data collection technique is carried out through the documentation method by examining the annual reports and sustainability reports of banking companies. All data was collected systematically using a consistent list of indicators between periods to maintain data comparability

6. Data Analysis Techniques

Data analysis was carried out using SPSS software. The analysis stages include descriptive statistics to describe the characteristics of the data and simple linear regression to identify the statistical relationship between ESG practices and sustainability risks. Linear regression is used as an initial approach to explore associations between variables, with the realization that this method has not yet fully accommodated the heterogeneity of the company and the time effects inherent in the data panel. Therefore, the results of the analysis are interpreted carefully and are not intended as strong causal evidence.

Operational Definition of Research Variables

1. Practice Environmental, Social, and Governance (ESG)

ESG practices are an independent variable in this study. ESG is measured using a composite ESG index compiled based on the level of disclosure of ESG indicators in corporate reports. The total indicators used are 63 items, which include the environmental, social, and governance dimensions. The ESG Index reflects the intensity and breadth of disclosure of a company's sustainability practices, not the level of risk inherent in the dimension, namely:

- Environment (E)
- Social (S)
- Governance (G)

The ESG index is calculated by the formula:

$$ESG = \frac{Jumlah\ item\ ESG\ yang\ diungkapkan}{Total\ Item\ ESG}$$

The value of the ESG index is in the range of 0–1, where a higher value indicates a better level of ESG implementation.

2. Sustainability Risks

Sustainability risk is a dependent variable defined as the level of a company's exposure to potential losses stemming from environmental, social, and governance factors. To avoid conceptual overlap with ESG measurements, sustainability risk is constructed as a standardized risk index that represents a company's relative deviation from the sample average. Higher risk values indicate a relatively greater exposure to sustainability risks, while lower values (including negative values) reflect a relatively lower level of risk compared to other companies in the sample.

Sharia Economic Approach in Research Methods

The approach to sharia economics in this study is positioned as a reflective methodological framework, not as an empirical variable that is statistically tested. The principle of maqāṣid al-sharīʿah is used to interpret empirical results normatively, especially in understanding ESG practices as an effort to safeguard benefits, justice, and sustainability. This approach is not intended to prove the empirical relationship between sharia values and sustainability risks, but rather to enrich the interpretation of research results in the context of Islamic economic ethics.

RESULTS AND DISCUSSION

This discussion aims to answer research questions about whether Environmental, Social, and Governance (ESG) practices are able to reduce sustainability risks in banking companies listed on the Indonesia Stock Exchange (IDX) for the 2021–2024

period. The analysis was carried out by integrating the results of ESG data processing and sustainability risks using SPSS-based linear regression and linking them with previous theories and empirical findings.

Statistik Deskriptif

The results of descriptive statistics are presented in Table 1. Based on 72 observations, the ESG index value has a relatively high average with moderate variation, while sustainability risk shows a negative average value indicating a downward risk tendency in banks with high ESG.

Tabel 1. Statistik Deskriptif

Variabel	N	Minimum	Maksimum	Mean	Std. Deviasi
ESG Index (X)	72	0,476	0,984	0,791	0,124
Sustainability Risks (Y)	72	-1,536	2,302	-0,214	0,843

Classic Assumption Test

The normality test was performed using Kolmogorov–Smirnov. The test results showed a significance value greater than 0.05, so the data was distributed normally.

Table 2. Kolmogorov–Smirnov Normality Test

Variabel	Statistik K-S	Sig.
Residual Not Standardized	0,081	0,200

The heteroscedasticity test was performed using a scatterplot between predictive and residual values. The results show a random point distribution and do not form a specific pattern, so it can be concluded that heteroscedasticity does not occur.

Linear Regression Results

A simple linear regression analysis is used to test the influence of ESG practices on sustainability risks. A summary of the regression results is presented in Table 3.

Tabel 3. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error
1	0,612	0,375	0,366	0,671

The results of the ANOVA test showed that the regression model was significant simultaneously.

Tabel 4. ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	19,024	1	19,024	42,263	0,000
Residual	31,586	70	0,451		
Total	50,610	71			

The results of the partial t-test are presented in Table 5. The ESG coefficient is negative and significant.

Tabel 5. Coefficients

Variabel	B	Std. Error	t	Sig.
Konstanta	2,143	0,462	4,637	0,000
Indeks ESG (X)	-2,979	0,458	-6,501	0,000

The regression results show that ESG practices have a negative and significant effect on sustainability risk. Any increase in the ESG index will lower the sustainability risk of the banking company.

The Relationship between ESG Practices and Sustainability Risk

The results of linear regression analysis of 72 observations showed a negative and statistically significant relationship between Environmental, Social, and Governance (ESG) practices and sustainability risks in banking companies. Negative regression coefficients indicate that increased ESG disclosure intensity tends to be associated with lower levels of sustainability risk. These findings are not interpreted as causal relationships, but rather as an empirical pattern consistent with the literature that places ESG as one of the indicators of non-financial governance in corporate risk management.

In this study, sustainability risk was constructed as a standardized index that represents the relative deviation of the company's risk exposure to the sample average. Thus, a negative risk value does not indicate the absence of risk, but rather a company's relatively lower risk position compared to other companies in the same observation

period. On the contrary, a positive value reflects a relatively higher exposure to sustainability risks. This approach allows for cross-company and time comparisons without assuming absolute risk distributions, and is in line with relative risk measurement practices in financial studies.

Theoretically, the negative relationship between ESG practices and sustainability risks can be explained through the perspective of risk management and corporate governance. Broader ESG disclosures reflect a more transparent governance structure, a more accountable decision-making process, and attention to stakeholders. These factors have the potential to reduce non-financial uncertainties, such as reputational risk and compliance risk, which are often key components of sustainability risk in the banking sector. However, this study did not directly test the mechanism, so this interpretation is both theoretical and contextual.

The findings of this study are in line with Fakhrunnas et al. (2025) who found that ESG performance is associated with lower levels of bank risk in developing countries, as well as consistent with Yudaruddin et al. (2024) who show a negative relationship between ESG risk and banking stability. However, unlike some previous studies that concluded the role of ESG as a risk mitigation instrument in general, the results of this study show that the relationship is limited and depends on the risk definition used and the methodological approach applied. Therefore, equating ESG as a mitigation tool for all types of risks needs to be treated with caution.

In contrast to the descriptive approach that compares individual banks, this study did not test differences between groups of banks or estimate panels with fixed or random effects. Therefore, the presentation of a particular bank example is not intended as the main empirical evidence, but rather as a contextual illustration that has no inferential weight. The study's main findings remain based on aggregate regression results, which identify a tendency for statistical relationships between ESG practices and sustainability risks at the sample level.

Thus, this discussion confirms that ESG practices correlate with lower levels of sustainability risk in Indonesia's banking sector, but the relationship needs to be interpreted proportionately. The results of this study provide an early indication of the role of ESG in the context of sustainability risk management, while also confirming the

importance of further research with a more comprehensive panel approach and more specific risk mechanism testing.

Interpretation of SPSS Regression Results

The results of the t-test on the simple linear regression model showed that the Environmental, Social, and Governance (ESG) practice variable had a statistically significant relationship with sustainability risk at a significance level of 5 percent. These findings indicate a consistent association between the intensity of ESG disclosures and variations in sustainability risks in banking firms over the observation period. However, given that the model used is a simple linear regression with no control variables, these results cannot be interpreted as evidence of a strong cause-and-effect relationship.

The value of the determination coefficient (R^2) indicates that ESG practices explain some variation in sustainability risks, while a greater proportion of variation is influenced by other factors not included in the model, such as bank-specific characteristics (size, business complexity, and capital structure), macroeconomic conditions, and regulatory and institutional factors. As such, the explanatory capabilities of this model are limited and are not intended to represent the entire determinants of banking sustainability risk.

Classical assumption testing was carried out as a prerequisite for the use of linear regression, including residual normality, heteroscedasticity, and multicollinearity tests. The test results show that there is no significant violation of the assumption, so the estimation of the regression coefficient can be used for statistical inference purposes within the limitations of the applied model. Nonetheless, the fulfillment of classical assumptions does not eliminate the methodological limitations inherent in non-experimental design and simple model structures.

Therefore, the findings of this study are positioned as initial empirical evidence regarding the statistical relationship between ESG practices and sustainability risks in the Indonesian banking sector. These results provide a basis for further research that can develop models by incorporating control variables, more appropriate panel estimation techniques, and more specific risk mechanism testing to strengthen the validity of the inferences generated.

Integration of Findings with Theory

The findings of this study can be interpreted within the framework of stakeholder theory by placing ESG practices not solely as normative fulfillment of stakeholder demands, but as an institutional mechanism that has the potential to influence the sustainability risk profile of banking companies. In this context, ESG disclosure serves as a strategic means of communication that reduces information asymmetry between banks and key stakeholders, such as regulators, investors, and the public. The reduction in sustainability risk observed in this study can be understood as a result of reduced uncertainty and potential conflicts of interest arising from lack of transparency (Freeman, 1984).

Nevertheless, the stakeholder theories in this study were not tested as an explicit causal relationship, but were instead used to explain the potential mechanisms underlying the empirical association between ESG practices and sustainability risks. The effectiveness of ESG as a risk management instrument is very likely to be contextual and depends on certain boundary conditions, such as the level of regulatory supervision, the maturity of financial markets, and the sensitivity of stakeholders to sustainability issues. In the context of Indonesian banking, regulatory pressures and public expectations of sustainable financial practices can strengthen the role of ESG as a signal of institutional credibility.

From the perspective of legitimacy theory, ESG practices can be understood as part of a company's strategy to maintain the alignment between values, norms, and social expectations with its operational activities (Suchman, 1995). The study's empirical findings suggest that banks with higher levels of ESG disclosure tend to have lower sustainability risks, indicating that social legitimacy has the potential to act as a buffer mechanism against external pressures. However, the legitimacy gained through ESG is not automatic or universal, but rather depends on stakeholders' perception of the quality and substance of the ESG practices themselves.

In contrast to some previous studies that treated ESG as a single indicator of risk mitigation, the theoretical contribution of this study lies in the affirmation that the relationship between ESG and sustainability risk is associative and contextual, rather

than deterministic. These findings enrich the literature by showing that ESG practices function more as a mechanism for managing expectations and legitimacy in a given institutional environment, rather than as a technical instrument that directly lowers all forms of corporate risk (Santoso et al., 2025).

Thus, this study does not aim to develop new theories, but provides limited empirical reinforcement of the relevance of stakeholder theory and legitimacy in explaining the dynamics of banking sustainability risks in emerging markets. These findings also open up space for further research to more explicitly examine causal mechanisms, such as the mediating role of reputation, governance quality, or regulatory pressures, that have not yet been analyzed in this research model.

Analysis of ESG Dimensions and Sustainability Risks

This study did not conduct separate statistical testing for each of the Environmental, Social, and Governance dimensions, so it is not possible to draw empirical conclusions regarding the dominance or relative contribution of each dimension to sustainability risk (Antonius & Ida, 2023). The ESG variables in the research model are treated as composite indices, so the results of the analysis only reflect the aggregate relationship between overall ESG practices and sustainability risks.

Therefore, the discussion of the role of environmental, social, and governance dimensions in this study is conceptual and interpretive, not a direct empirical finding. Previous literature has shown that the environmental dimension is often associated with long-term risk exposure, particularly through financing in sectors with high ecological impacts, while governance is associated with internal controls, transparency, and operational stability of companies. However, the relationship was not partially tested in this study and cannot be claimed as a statistical result of the study.

Similarly, the social dimension in the context of banking is often associated with reputation, customer trust, and financial inclusion. Although theoretically this aspect may affect sustainability risk, this study does not provide separate empirical evidence showing the specific influence of the social dimension on the level of risk observed. Thus, the role of the social dimension in this study can only be understood as part of the ESG construct in aggregate (Friede et al., 2015) (Prasetyo & Musmini, 2025).

These limitations confirm that the interpretation of risk mechanisms based on ESG dimensions must be treated with caution. To gain a deeper understanding of the contribution of each ESG dimension, further research needs to use multivariate models or partial tests that allow for the separate testing of environmental, social, and governance influences, as well as considering potential interactions between dimensions. With this approach, ESG dimension analysis can move from the conceptual realm to more robust empirical testing.

Sharia Economic Perspective

The perspective of sharia economics in this study is not positioned as a statistically tested empirical framework, but rather as a reflective-conceptual approach to interpret associative findings regarding ESG practices and sustainability risks. Therefore, the discussion in this section is not intended to state that ESG *empirically* reduces sustainability risks from a sharia point of view, but rather to evaluate the conceptual conformity of ESG practices with the basic values of Islamic economics.

In Islamic economic literature, the concept *of maqāṣid al-sharīʿah* emphasizes the protection and preservation of human welfare, which is generally classified into religious care (*ḥifẓ al-dīn*), soul (*ḥifẓ al-nafs*), intellect (*ḥifẓ al-ʿaql*), heredity (*ḥifẓ al-nasl*), and property (*ḥifẓ al-māl*) (Chapra, 2000). ESG practices can be understood as a modern governance framework that has normative wedges with these goals, particularly in the context of non-financial risk management and financial institutions' social responsibility.

The environmental dimension in ESG, for example, has a conceptual relationship with the principle *of khalīfah fī al-arḍ*, which places humans as the guardians of the sustainability of natural resources. However, this study does not operationalize these principles into sharia quantitative indicators, so the relationship is reflective, not empirical. Similarly, the social dimension of ESG can be linked to the principles of justice (*al-ʿadl*) and benefit (*maṣlaḥah*), especially in the context of financial inclusion and protection of people's interests. These correlations are normative and are not tested directly through special statistical variables or models.

The governance dimension in ESG also has a conceptual fit with the values of trust, transparency, and accountability that are the foundation of governance in Islamic economics. However, such conformity is not intended as evidence that ESG practices automatically meet sharia governance standards or result in risk reduction in the sense of fiqh muʿāmalah. In contrast, ESG is positioned as a modern institutional framework that has the potential to support sharia ethical values within certain limits, depending on the quality of implementation and the regulatory context.

Thus, the contribution of the sharia economics approach in this study lies in the effort to expand the interpretation of empirical findings into ethical discourse and values, rather than on new empirical testing. This clear separation between statistical results and normative reflection is important to avoid moral repetition of the quantitative findings discussed earlier. Further research is suggested to develop measurable indicators of maqāṣid al-sharīʿah and integrate them into empirical models, so that Islamic economic perspectives can contribute methodologically, not just conceptually (Ardianto & Sukardi, 2024; Chandra & Shauki, 2024).

Implications of Research Findings

The implications of the findings of this study need to be understood carefully and limited by the characteristics of the empirical model used. Given that this study uses simple linear regression based on panel data without control variables, the implications derived are indicative and are not intended as prescriptive policy or managerial recommendations.

For banking management, the results of this study provide an early signal that ESG practices can function as one of the non-financial indicators related to the variation in sustainability risks. However, these findings cannot be used as a single basis for strategic decision-making, but rather as a complement to information in a more comprehensive risk management framework, which also includes financial factors, internal governance, and macroeconomic conditions (Adirestuty et al., 2025).

For regulators, especially financial sector supervisory authorities, this study is not intended to evaluate the effectiveness of existing sustainable finance policies. On the contrary, these associative empirical findings can be used as an initial reflection on the

importance of consistency and quality of ESG disclosure in the framework of banking transparency (Dwi et al., 2025). However, further research with stronger empirical models is needed before these results can be used as a basis for strengthening regulations or integrating ESG into banks' health assessments.

From an academic perspective, the contribution of this research is limited but specific. This study adds to the empirical evidence regarding the statistical relationship between ESG practices and sustainability risks in the Indonesian banking sector, by explicitly placing the findings as associations, rather than causal relationships. The approach of sharia economics in this study is positioned as a conceptual interpretive framework, not as a methodological variable tested, so that its contribution lies in the expansion of ethical and value perspectives in reading empirical findings, not in the development of new models or theoretical tests.

Thus, the scientific added value of this research lies in the methodological prudence and clarity of the analytical position, as well as in the identification of advanced research opportunities that can integrate ESG and Islamic economic principles in a more operational and empirical manner. Further research is expected to develop a more complex panel model, include control variables, and formulate measurable maqāṣid al-sharīʿah indicators so that the resulting academic and practical implications become stronger and more applicable.

CONCLUSION

Based on the results of data analysis and discussions that have been conducted, this study finds a statistically significant relationship between Environmental, Social, and Governance (ESG) practices and sustainability risks in banking companies listed on the Indonesia Stock Exchange during the 2021–2024 period. The results of a simple linear regression showed that the ESG index was negatively associated with sustainability risk, with a regression coefficient of –2.979 and a significance level of 0.000 (< 0.05). These findings indicate that banks with higher levels of ESG disclosure tend to have lower levels of sustainability risk in the observation period.

Nevertheless, the findings cannot be interpreted as evidence of a strong cause-and-effect relationship. The simple linear regression model used in this study was non-

experimental and did not include control variables or effects of interbank and inter-time heterogeneity. A determination coefficient value (R^2) of 0.375 indicates that ESG practices explain only a partial variation in sustainability risks, while most of the other variations are influenced by other factors not covered by the model, such as bank-specific characteristics, macroeconomic conditions, and regulatory dynamics. This limitation confirms that the results of the study must be understood as associative findings that are indicative.

The descriptive argument regarding the difference in the level of risk between banks in this study is not intended as additional statistical evidence, but rather as a contextual illustration that supports the understanding of empirical patterns in general. Therefore, interbank comparisons cannot be used as a basis for drawing broader inferential conclusions without further statistical testing.

From a theoretical perspective, the findings of this study provide limited empirical reinforcement of the relevance of stakeholder theory and legitimacy theory in explaining the tendency of the relationship between ESG practices and sustainability risks in the banking sector. Support for the theory is confirmative, not a new theoretical development, as this study does not test causal mechanisms or more specific boundary conditions.

The perspective of sharia economics in this study is placed as a normative and conceptual reflection, not as an empirical finding that is methodologically tested. The alignment between ESG practices and the values of maqāṣid al-sharīʿah is understood as a slice of ethics and sustainability goals, without claiming that those principles have been operationalized or statistically verified in the research model.

Overall, the study contributes to the literature by providing preliminary empirical evidence on the relationship between ESG practices and sustainability risks in Indonesian banking, while affirming the importance of caution in drawing causal conclusions. Further research is recommended to use a more appropriate panel estimation method, include control variables, and develop measurable sharia indicators so that the resulting empirical and theoretical contributions become stronger and more profound.

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