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Corporate Governance, Carbon Emission Disclosure, and Firm Value: A Study of Mining Companies

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ABSTRACT
This study examines the influence of corporate governance mechanisms and carbon emission disclosure on firm value, specifically in mining companies listed on the Indonesia Stock Exchange. The research focuses on three corporate governance variables: audit committee, independent commissioners, and institutional ownership. It also evaluates the level of carbon emission disclosure based on GRI 305 indicators. Using a purposive sampling, data were collected from 72 observations between 2019 and 2021. Multiple linear regression analysis was employed to assess the relationships between independent variables and firm value, measured using Tobin's Q. The results reveal that the audit committee has a significant positive effect on firm value, indicating that stronger oversight enhances investor confidence. However, independent commissioners, institutional ownership, and carbon emission disclosure were found to have no significant impact on firm value. These findings suggest that while governance practices like active audit committees play a critical role in supporting firm valuation, the market may not fully appreciate other governance elements and environmental disclosures. The study highlights the need for broader stakeholder awareness and regulatory reinforcement regarding the value relevance of environmental transparency and governance practices in high-impact industries like mining.

Keywords: Corporate Governance, Carbon Emission Disclosure, Firm Value, Mining Companies
JEL Code: G34, M14, Q56, G32.

I. Introduction

Firm value is currently regarded as a key reflection of an entity's performance quality and competitive position amidst a continuously evolving and high-pressure business environment. Not only does it serve as a benchmark for shareholders in assessing the company's success, but firm value is also used by investors and market analysts as an indicator of long-term sustainability potential (García-Sánchez & Martínez-Ferrero, 2018). In this context, assessment is no longer limited to financial ratios alone. However, it has begun to consider other strategic factors that reflect managerial governance and the company's ability to adapt to external dynamics.

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In line with the growing concern for global environmental issues and rising public awareness of sustainability, non-financial aspects such as sound corporate governance practices and environmental responsibility disclosure have become increasingly relevant. One area that has gained significant attention is transparency in carbon emission reporting, which is seen as a tangible form of a company's commitment to managing the environmental impact of its operational activities (Chithambo & Tauringana, 2022). Disclosure of such information enhances the company's reputation in the eyes of the public and investors and strengthens market trust in the company's integrity and accountability in conducting sustainable business. The mining sector is crucial in supporting the global economy, particularly supplying vital energy resources and industrial raw materials. As the backbone of infrastructure and energy development, this industry contributes significantly to the economic growth of various countries. However, behind its contributions, the mining industry is also known as one of the sectors with high carbon emissions, directly impacting climate change issues and environmental degradation. As a result, mining companies are increasingly under scrutiny from various stakeholders, especially concerning operational practices that potentially harm the environment (Fraser, 2021)

The demand for greater transparency and accountability in mining companies has recently intensified. Regulators, investors, and civil society demand that companies implement better corporate governance and openly disclose the environmental impacts of their operations, including the carbon emissions they produce. This growing pressure reflects a broader shift in stakeholder perspectives, where environmental and social aspects are increasingly viewed as critical determinants in assessing firm value and investment feasibility. Therefore, examining the extent to which corporate governance and carbon emission disclosure influence firm value becomes highly relevant and essential, especially in the context of mining companies facing complex operational and environmental risks (Ali et al, 2024)

The implementation of good corporate governance is a vital foundation in creating a managerial system that is transparent, accountable, and oriented toward long-term sustainability. Robust governance practices enable companies to operate by adhering to prudence principles and complying with prevailing regulations. Among the essential components within the governance structure are the audit committee, independent commissioners, and institutional ownership, each playing a strategic role in enhancing the integrity of company reporting and building investor confidence (Khan et al., 2020). Together, these three elements promote effective management oversight while ensuring the company operates according to transparency and social responsibility principles. In more detail, the audit committee supervises the financial reporting process. It ensures that the reports are prepared by applicable accounting standards and objectively reflect the company's financial condition (García-Sánchez & Martínez-Ferrero, 2018). The presence of independent commissioners in the oversight structure adds value through their role as external parties capable of assessing management policies neutrally and professionally, thus protecting the interests of minority shareholders. Meanwhile, institutional ownership is considered to have a strong influence on shaping the company's strategic direction, as institutional shareholders generally possess the capacity and interest to encourage management to enhance long-term performance and firm value (Khan et al., 2020). Hence, synergy among these governance elements is crucial in creating resilient and high-value companies in the eyes of stakeholders.

Effective corporate governance is the primary foundation in establishing a managerial mechanism that upholds the principles of transparency, accountability, and long-term sustainable development. The implementation of sound governance enables companies to operate with a strong emphasis on regulatory compliance and prudence in strategic decision-making. Within the governance structure, audit committees, independent commissioners, and institutional ownership are important instruments that strengthen the company's internal oversight system. Each of these elements contributes to improving the quality of reporting and enhancing investor trust, ultimately influencing the market's positive perception of the company (Khan et al., 2020). As one of the main pillars of oversight, the audit committee is responsible for reviewing the accuracy and compliance of financial reports with applicable standards and ensuring that no manipulative practices reduce the integrity of financial information (García-Sánchez & Martínez-Ferrero, 2018). Independent

commissioners, meanwhile, add value through their impartial supervisory function, which helps evaluate management policies objectively and ensure the protection of all shareholders' interests, predominantly minority shareholders. On the other hand, institutional ownership is considered to have a significant impact in encouraging management to be more disciplined and focused on achieving long-term corporate performance. Institutional shareholders possess the capacity and motivation to demand efficiency, transparency, and more accountable strategic decision-making (Khan et al., 2020). The synergy of these three governance elements forms an essential foundation for realizing a professional, high-integrity, and high-value company from the stakeholders' viewpoint.

Studies that combine the two variables—corporate governance and carbon emission disclosure—to measure their influence on firm value, especially in Indonesia's mining sector, remain very limited. Most previous studies have only separately discussed governance aspects in general or environmental disclosure (Arsal & Wildani, 2025). Therefore, this study offers a more comprehensive quantitative approach through multiple linear regression analysis to evaluate the simultaneous influence of these two factors on firm value.

Research that simultaneously investigates the influence of corporate governance and carbon emission disclosure on firm value, particularly in the Indonesian mining sector, is still relatively rare in the academic literature. Most prior studies examine these two variables independently without integrating them into a unified analytical model. For instance, the study by Nasih et al. (2019) predominantly emphasized the broader aspects of corporate governance without thoroughly addressing the specific role of carbon emission disclosure. In response, this study aims to bridge this gap by employing a quantitative method through multiple linear regression analysis, enabling a simultaneous and empirical assessment of the influence of both corporate governance and carbon disclosure on firm value.

In addition, this study specializes in the strategic role of independent commissioners as a key element in governance structure, while integrating the ESG (Environmental, Social, and Governance) perspective into the analysis. This approach has become increasingly relevant in response to the growing demand for business practices that prioritize profitability and uphold sustainability and social responsibility (Zhang et al., 2023). By focusing on the mining sector, recognized as a significant contributor to both economic activity and carbon emissions, this study is expected to provide meaningful contributions, both in the development of corporate governance and sustainability theory, and in formulating policies that support ethical, transparent, and sustainable business practices in Indonesia.

II. Literature Review and Hypothesis Development

2.1. Firm Value

Firm value refers to the process undertaken by a company to build public trust and perception toward the entity. A high firm value indicates that the company has strong performance and is considered trustworthy by investors, with a positive future outlook (Pambudi & Ahmad, 2022). Signaling theory states that transparency in governance and environmental sustainability sends a positive signal to investors, increasing firm value. Firm value is significant for shareholders. Firm value can be measured using Tobin's Q, the ratio between the market value and the company's asset value.

Formula:

$$\text{Tobin's Q} = (E + D) / TA$$

Description:
E = Market Value of Equity = Share price × Number of shares outstanding
D = Total Debt = Company's total liabilities (both long-term and short-term debt)
TA = Total Assets based on financial statements

2.2. Corporate Governance

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Good Corporate Governance (GCG) refers to a system that regulates the relationship between management, shareholders, creditors, regulators, and other stakeholders to ensure transparency, accountability, and responsible corporate management (FCGI, 2001). The main goal of implementing GCG is to minimize agency conflicts and protect investor rights, thereby supporting sustainable firm value (Kusmayadi, Rudiana, & Badruzaman, 2015). This study uses three leading indicators to measure corporate governance: the audit committee, independent commissioners, and institutional ownership.

1. Audit Committee
   The audit committee plays a crucial role in strengthening oversight of the financial reporting process and ensuring compliance with regulations. Agency theory states that an audit committee can reduce information asymmetry between management and shareholders (Yamin & Aryati, 2024). The formula measures it:

$$\text{Audit Committee} = \frac{\text{Number of independent audit committee members}}{\text{Total audit committee members}}$$

2. Independent Commissioners
   Independent commissioners serve as objective overseers who are not affiliated with major shareholders. Their role is to ensure that strategic decisions align with the principles of GCG and the company's long-term interests. According to Deniza (2022), the presence of independent commissioners significantly influences strategic decision-making. The indicator is measured as:

$$\text{Proportion of Independent Commissioners} = \frac{\text{Number of independent commissioners}}{\text{Total board of commissioners}}$$

3. Institutional Ownership
   Institutional ownership refers to the percentage of company shares held by institutions such as pension funds, insurance companies, and mutual funds. A higher proportion of institutional ownership indicates stronger external oversight and sends a positive signal to the market (Abedin et al, 2022). It is calculated as:

$$\text{Institutional Ownership} = \frac{\text{Number of shares held by institutions}}{\text{Total shares outstanding}} \times 100\%$$

2.3. Carbon Emission Disclosure

In the current business environment, companies are expected to disclose financial information and environmental and social activities. One important aspect of environmental disclosure is carbon emission reporting. This practice remains voluntary mainly in Indonesia, despite its potential to enhance corporate reputation and demonstrate social responsibility. According to legitimacy theory, companies more transparent in disclosing carbon emissions are more likely to gain public and governmental support due to their positive image. Supporting this, Rahmawati et al. (2023) found that firms with higher transparency in carbon reporting tend to have higher firm value, as such disclosure boosts investor trust. In this study, carbon emission disclosure refers to the company's effort to report information regarding greenhouse gas (GHG) emissions resulting from its operational activities. The level of disclosure is measured using specific indicators that reflect the extent and quality of information provided in sustainability reports.

Table 1. Carbon Disclosure Checklist

Category	Item
305-1	Direct GHG emissions (Scope 1)

Category	Item
305-2	Energy indirect GHG emissions (Scope 2)
305-3	Other indirect GHG emissions (Scope 3)
305-4	GHG emissions intensity
305-5	GHG emissions reduction

2.4. Hypothesis

Although research on corporate governance and firm value has been widely conducted, most previous studies focus on governance as a general construct without examining the specific and simultaneous roles of audit committees, independent commissioners, and institutional ownership. In addition, studies that integrate environmental sustainability indicators, particularly carbon emission disclosure, alongside governance variables remain limited, especially in high-emission industries such as mining in Indonesia. Mardessi (2022) emphasized that an active audit committee enhances the transparency of financial reporting, which in turn may positively impact firm value. This finding is consistent with García-Sánchez and Martínez-Ferrero (2018), who noted that audit committees are crucial in reducing information asymmetry, reinforcing investor confidence, and increasing firm valuation.

Meanwhile, Deniza (2022) emphasized the strategic role of independent commissioners in ensuring objective supervision of management decisions, which is crucial for sustaining the company's long-term value. In addition, García-Sánchez and Martínez-Ferrero (2018) found that firms with a higher proportion of independent board members tend to disclose sustainability information more transparently, enhancing investor trust and positively influencing firm performance. Regarding institutional ownership, Mardessi, S. (2022) found that institutional shareholders contribute significantly to managerial discipline and strategic oversight, enhancing corporate competitiveness and efficiency. According to Signaling Theory (Jensen & Meckling, 2019), significant institutional ownership sends a positive signal to the market regarding a firm's stability and prospects.

Finally, carbon emission disclosure has increasingly been recognized as an important indicator of environmental accountability. Maharani et al. (2024) found that companies with more transparent carbon reporting tend to attract greater investor trust, positively influencing firm value. This result is further supported by Chithambo et al. (2022), who argued that voluntary carbon disclosure significantly enhances market valuation, particularly as environmental responsibility becomes a critical stakeholder consideration. Based on the underlying theories and previous research, the hypotheses proposed in this study are as follows:

H1: The audit committee has a positive influence on firm value.
H2: Independent commissioners have a positive effect on firm value.
H3: Institutional commissioners have a positive impact on firm value.
H4: Carbon emission disclosure is positively correlated with firm value.

III. Research Method

This study adopts both causal and descriptive research designs to examine the relationship between variables associated with corporate governance, namely, the audit committee, independent commissioners, institutional ownership, and carbon emission disclosure, on firm value. The causal approach enables the measurement of the influence of independent variables on the dependent variable. At the same time, the descriptive design is intended to provide a detailed explanation of the research variables and their interrelationships (Sekaran & Bougie, 2016).

The operational definitions of variables are established to ensure precise measurement. Corporate governance is assessed through three components: audit committees, independent commissioners, and institutional ownership. The audit committee is measured by the proportion of independent members to total

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committee members, aligning with the provisions of the Financial Services Authority Regulation No. 55/POJK.04/2015 (Otoritas Jasa Keuangan, 2015). Independent commissioners are measured by the percentage of board members external to the company, reflecting the governance quality, following the framework suggested by Deniza (2022). Institutional ownership is calculated as the percentage of shares held by institutions such as pension funds, banks, or insurance companies relative to the total outstanding shares, based on the measurement approach utilized by Abedin, Haque, Shahjahan, and Kabir (2022). Carbon emission disclosure is evaluated using indicators from the Global Reporting Initiative (GRI), particularly GRI Standard 305 (Global Reporting Initiative, 2021). The disclosure index is calculated by dividing the number of disclosed emission-related items by the total applicable indicators and multiplying the result by one hundred percent. This method has been validated in prior studies, such as Maharani, Putri, and Santoso (2024), who demonstrated the positive impact of transparent carbon disclosure on firm valuation.

As the dependent variable, firm value is measured using the Tobin's Q ratio, which is the ratio of market value to total assets. The formula follows Chung and Pruitt (1994), where market value is the sum of the equity market value and total liabilities, divided by the book value of total assets. The population of this study comprises mining companies listed on the Indonesia Stock Exchange (IDX). The inclusion criteria are companies that published annual reports between 2019 and 2021, whose stocks were actively traded without suspension or delisting, and disclosed comprehensive data regarding corporate governance practices and carbon emissions. Sampling is conducted using a purposive sampling technique to ensure the selection of information-rich cases (Sugiyono, 2017).

Data collection involves accessing secondary data sources, including the official IDX website and corporate annual reports. The analysis method employed is multiple linear regression, allowing for simultaneously testing multiple independent variables on the dependent variable (Hair, Hult, Ringle, & Sarstedt, 2019). This model is particularly effective in explaining the impact of governance and sustainability components on firm value. Classical assumption tests are performed to validate the model before conducting regression analysis. Multicollinearity is examined by analyzing the Variance Inflation Factor (VIF) values, normality testing is conducted using the Kolmogorov–Smirnov method, heteroskedasticity is assessed through scatterplot analysis, and autocorrelation is tested using the Breusch–Godfrey procedure (Ghozali, 2018).

Subsequent hypothesis testing employs both F-tests and t-tests. The F-test is used to evaluate the overall significance of the regression model, while the t-test examines the individual contribution of each independent variable. Hypotheses are tested at a 5% significance level, with p-values below 0.05 indicating statistically significant relationships (Gujarati & Porter, 2009). Finally, the coefficient of determination (R^2) is analyzed to determine how much of the variance in firm value can be explained by the independent variables. According to Hair et al. (2019), a higher R^2 value reflects a stronger predictive capability of the model. Through the comprehensive application of quantitative methods and robust measurement indicators, this study aims to provide valuable insights into how corporate governance mechanisms and carbon emission disclosure contribute to firm value, particularly in Indonesia's mining sector.

IV. Results and Discussion

4.1. Descriptive Statistical Test

Table 1. Descriptive Statistical Test

	N	Minimum	Maximum	Mean	Std. Deviation
Firm Value	72	.21	5.0398	1.5098	1.0079
Carbon Emission Disclosure	72	.60	1.00	.7681	.1397
Institutional Ownership	72	.36	.68	.4754	..0955
Independent Commissioner	72	.20	.50	.3434	..0982
Audit Committee	72	3	6	3.666	.787
Valid N (listwise)	72				

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The following findings were obtained based on the descriptive statistical analysis of the 72 samples in this study. The Audit Committee comprises between 3 and 6 members, with an average of 3.66 and a standard deviation of 0.787, indicating that most companies comply with good corporate governance practices. Independent Commissioners range from 1 to 4 members, with an average of 0.3434 and a standard deviation of 0.0982, reflecting general adherence to OJK regulations. The proportion of Institutional Commissioners averages 47.5% of the total board, with a standard deviation of 0.95, suggesting a significant presence in the corporate governance structure. Meanwhile, Carbon Emission Disclosure shows an average of 78.6% with a standard deviation of 13.9%, indicating varying levels of transparency among companies in reporting their carbon emissions. Finally, as Tobin's Q measures, firm value ranges from 0.21 to 5.03, with an average of 1.509 and a standard deviation of 1.0079, illustrating that most companies receive favorable market appreciation.

4.2. Classic Assumption Test

4.2.1. Normality Test

The normality test assesses whether the research data follows a normal distribution. Using the Kolmogorov-Smirnov test, data is normally distributed if the significance value exceeds 0.05, whereas a value below 0.05 indicates a non-normal distribution.

Table 2. Normality Test

Test	Statistic	P Value	Results
Kolmogorov-Smirnov	0.1415	0.1012	Normal

After the data transformation, the significance value was 0.1012, which exceeds 0.05, indicating that the data follows a normal distribution.

4.2.2. Multicollinearity Test

Table 3. Multicollinearity Test

		VIF
1	Firm Value	4.15
	Carbon Emission Disclosure	4.62
	Institutional Ownership	3.87
	Independent Commissioner	5.23

The multicollinearity test results presented in the table above show that the variables—carbon emission disclosure, institutional ownership, independent board of commissioners, audit committee, environmental performance, and ultra-low emission zone—have VIF values of 4.15, 4.62, 3.87, and 5.23. Based on these results, all independent variables have VIF values below 10, indicating the absence of multicollinearity in this study.

4.2.3. Autocorrelation Test

Table 4. Autocorrelation Test

Test	Statistics	P Value	Results
Autocorrelation Breusch-Godfrey	4.04	0.1325	No autocorrelation

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Based on the data processing results using SPSS version 22 in 2024, a p-value of 0.1325 was obtained. This value is greater than the significance level of 0.05, indicating that statistically, no autocorrelation is present in the tested model.

4.3. Heteroscedasticity Test

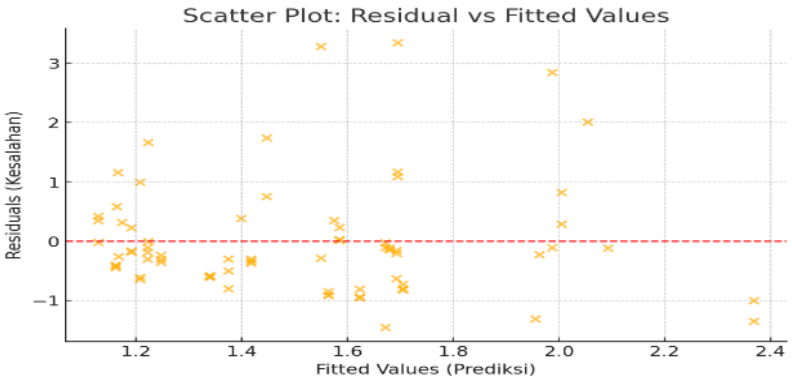

Figure 1. Heteroscedasticity Test Results

Based on the SPSS output, the scatterplot shows that the points are randomly dispersed and spread above and below the zero value on the Y-axis. This indicates that the regression model does not suffer from heteroscedasticity issues.

4.4. Regression Analysis

Table 5. Multiple Linear Regression Test Results

Variable	Coefficient	T-Value	P Value	Conclusion
Intercept (Constant)	-0.176	-0.139	0.890	Not Significant
Audit Committee	0.413	2.548	0.013	Significant
Independent Commissioner	-0.056	-0.044	0.965	Not Significant
Institutional Commissioner	0.807	0.634	0.528	Not Significant
Emission Disclosure	-0.246	-0.265	0.792	Not Significant

The estimated parameter values based on the coefficients can be modeled as follows:

$$Y = \alpha + \beta 1\ X1 + \beta 2\ X2 + \beta 3\ X3 + \beta 4\ X4 + e$$
$$Y = -0.176 + 0.413\ X1 + (-0.056)\ X2 + 0.807\ X3 + (-0.246)\ X4 + e$$

The following is the interpretation of the regression equation for each variable:

a. The constant (α) has a value of -0.176. This means that if the independent variables of carbon emission disclosure, institutional ownership, independent board of commissioners, audit committee, environmental performance, and ultra-low emission zone are all at zero, the value of the dependent variable (firm value) would be -0.176.
b. The regression coefficient for the Audit Committee variable (X1) is 0.413 and has a positive sign. This positive sign indicates a direct relationship between the audit committee and firm value. It suggests that if the audit committee increases by 1%, the firm value is expected to increase by 41.3%. Audit Committee significantly influences firm value (p-value = 0.013 < 0.05). This finding indicates that the existence and effectiveness of the audit committee contribute positively to the firm's value. A significant p-value below the 0.05 threshold suggests that an active audit committee, which plays a key role in overseeing financial

reporting, risk management, and internal controls, enhances investor confidence and improves firm valuation.

c. The regression coefficient for the Independent Ownership variable (X2) is -0.056 and has a negative sign. This negative sign indicates an inverse relationship between independent ownership and firm value. It suggests that if independent ownership increases by 1%, the firm value is expected to decrease by 5.6%. Independent Commissioners have no significant influence on firm value (p-value = 0.965 > 0.05). The result demonstrates that independent commissioners do not significantly affect firm value. Despite their role in providing oversight and ensuring good corporate governance, the statistical insignificance implies that their presence alone may not be sufficient to influence market perceptions or enhance firm performance within the context of this study.
d. The regression coefficient for the Institutional Board of Commissioners variable (X3) is 0.807 and has a positive sign. This positive sign indicates a direct relationship between the institutional board of commissioners and firm value. It suggests that if the institutional board of commissioners increases by 1%, the firm value is expected to increase by 80.7%. Institutional Commissioners have no significant influence on firm value (p-value = 0.528 > 0.05). This outcome suggests that the involvement of institutional commissioners does not have a notable impact on firm value. Although institutional representatives on the board may offer expertise and strategic guidance, their effect may be neutralized by other factors within the company, rendering their influence statistically insignificant in this model
e. The regression coefficient for the Carbon Emission Disclosure variable (X4) is -0.246 and has a negative sign. This negative sign indicates an inverse relationship between carbon emission disclosure and firm value. It suggests that if carbon emission disclosure increases by 1%, the firm value is expected to decrease by 24.6%. Carbon Emission Disclosure does not significantly influence firm value (p-value = 0.792 > 0.05). The result indicates that the disclosure of carbon emissions does not significantly affect firm value in this study. This could suggest that, while environmental transparency is increasingly important, market participants may not yet fully price carbon disclosure information as a determinant of firm value, or the market may require more decisive environmental actions beyond mere disclosure.

Table 6. Coefficient of Determination Test

Statistic	Value
R^2 (Coefficient of Determination)	0.0920
Adjusted R^2	0.0378

The coefficient of determination test results, as shown in Table 4.10, indicate that the R^2 value is 0.092. This means that only 9.2% of the variation in firm value (as measured by Tobin's Q) can be explained by the independent variables included in the regression model: audit committee, independent commissioners, institutional ownership, and carbon emission disclosure. The remaining 90.8% is influenced by other factors not examined in this study. Furthermore, the adjusted R^2 value is 0.0378, which suggests that after accounting for the number of predictors in the model, the explanatory power drops to 3.78%. This relatively low adjusted R^2 implies that the regression model has weak explanatory power and is limited in capturing the variations in firm value. It indicates that the model may not be robust enough for predictive purposes, and there may be other significant variables that were not included in the analysis but could better explain firm value.

4.5. Discussion

4.5.1. Audit Committee and Firm Value

The research results show a p-value of 0.013 < 0.05, indicating that the Audit Committee significantly influences firm value. This suggests that the observed effect is not due to chance but genuinely reflects a relationship between the audit committee and firm value. The Audit Committee plays a crucial role in ensuring transparency and the accuracy of financial reporting, which enhances investor confidence and potentially increases the firm's market value. The oversight conducted by the Audit Committee fosters stronger governance structures, which investors highly value. This finding is consistent with the study by Yamin and Aryati (2024), which found that an active audit committee improves the transparency of financial reporting

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and strengthens firm value. However, this result differs from the research by Dwi Tirta Kencana and Sefia Putri (2022), which concluded that the audit committee does not significantly impact firm value. Although the audit committee is theoretically expected to enhance oversight and transparency, in practice, its involvement in operational and strategic decision-making that directly affects firm value may be limited.

4.5.2. Independent Board of Commissioners and Firm Value

The research results show a p-value of 0.965, indicating that the Independent Board of Commissioners does not significantly influence firm value, as the p-value exceeds the 0.05 (5%) significance threshold. Consequently, the hypothesis is rejected, suggesting that the proportion of independent commissioners does not significantly impact firm value. This result contradicts the initial hypothesis, which posited a positive relationship between the independent board of commissioners and firm value. Deniza (2022) emphasized that the independent board of commissioners is a critical element of corporate governance, overseeing management strategies and maintaining corporate accountability. These roles are theoretically intended to enhance firm value. However, increasing the number of independent commissioners does not necessarily improve firm value if appointments are made merely for regulatory compliance purposes without strengthening actual supervisory effectiveness. This finding is consistent with studies by Kosasih and Mungniyati (2022), Eliana and Tampubolon (2023), and Maharani et al. (2024), which concluded that the presence of independent commissioners does not automatically influence firm value. The presence of independent commissioners, often a formality to satisfy Financial Services Authority (OJK) regulations, may not guarantee substantive improvements in governance quality. Furthermore, in sectors like energy, where the proportion of independent commissioners remains low, management may still engage in opportunistic behavior, increasing agency conflicts.

4.5.3. Institutional Ownership and Firm Value

The research findings indicate that institutional ownership does not significantly influence firm value (p-value = 0.528 > 0.05). This lack of influence may be attributed to the relatively small proportion of institutional shareholders, limiting their ability to control key decision-making processes. Consequently, institutional investors may not have sufficient leverage to influence corporate policies that directly impact firm value. This finding is consistent with the study by Kosasih and Mungniyati (2022), which also concluded that institutional ownership does not significantly affect firm value. However, it contrasts with research by Abedin, Haque, Shahjahan, and Kabir (2022), who argued that institutional ownership enhances monitoring mechanisms and improves firm performance in emerging markets. Similarly, Nathania and Karnawati (2022) found that higher institutional ownership positively influences firm value, as institutional investors effectively monitor management, reducing agency conflicts and enhancing firm valuation.

4.5.4. Carbon Emission Disclosure and Firm Value

The research results show that carbon emission disclosure does not significantly influence firm value (p-value = 0.792 > 0.05). Although carbon emission disclosure is critical for promoting corporate sustainability, investors may not fully integrate environmental considerations into their investment decision-making processes. Moreover, the substantial compliance costs associated with carbon emission disclosure could be perceived as an additional financial burden, potentially diminishing firm value in the eyes of the market, particularly when the expected long-term benefits from sustainability initiatives are not immediately realized. This finding is consistent with the study by Chithambo et al. (2022), who found that voluntary carbon disclosure does not always yield a direct positive impact on firm valuation, especially in emerging markets where environmental awareness among investors remains limited. Conversely, Aprilyani and Budiadnyani (2024) found that corporate activities involving the recognition, measurement, and disclosure of carbon

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emissions can generate positive market reactions and enhance the company's reputation, as investors increasingly value information presented in annual and sustainability reports.

V. Conclusion

Several key conclusions were drawn based on the findings of this study, which examined the influence of carbon emission disclosure and corporate governance proxies such as institutional ownership, independent commissioners, and audit committees on firm value. The audit committee was found to have a significant impact on firm value. This suggests that an effective audit committee enhances oversight and corporate transparency, ultimately boosting investor confidence. In contrast, independent commissioners and institutional ownership showed no significant effect on firm value. Although both elements are expected to strengthen governance mechanisms, their influence was not evident in increasing firm value in this study. Similarly, carbon emission disclosure did not have a tangible impact on firm value. Despite growing attention to environmental issues, the market appears not fully to incorporate this factor into corporate valuation. Based on these findings, it is recommended that future research include additional relevant variables to enrich the analysis. Moreover, more advanced analytical methods and extending the research period are advised to capture broader dynamics. Expanding the sample size, incorporating companies from various sectors, and integrating stakeholder perspectives are also suggested to provide a more comprehensive understanding of the factors influencing firm value.

References

Abedin, S. H., Haque, H., Shahjahan, T., & Kabir, M. N. (2022). Institutional ownership and firm performance: evidence from an emerging economy. Journal of Risk and Financial Management, 15(12), 567.

Ali, W., Wilson, J., & Frynas, J. G. (2024). Corporate governance mechanisms and carbon disclosure: A multilevel and multitheory literature survey. Corporate Social Responsibility and Environmental Management, 31(6), 5670–5689.

Aprilyani, D. A., & Budiadnyani, N. P. M. (2024). The effect of carbon emission disclosure on firm value: Evidence from Indonesia. Jurnal Ilmu Akuntansi, 17(1), 78–89.

Arsal, M., & Wildani, I. B. (2025). Bridging Profitability and Sustainability: Insights from Carbon Emission Disclosures and Governance Practices. Saudi J Econ Fin, 9(1), 1-6.

Bursa Efek Indonesia. (2014). Surat Keputusan Direksi PT Bursa Efek Indonesia No. Kep-00001/BEI/01-2014.

Carbon Disclosure Project. (n.d.). Global system for environmental disclosure. Retrieved from https://www.cdp.net

Chithambo, L., Tauringana, V., Tingbani, I., & Achiro, L. (2022). Stakeholder pressure and greenhouse gas voluntary disclosures. Business Strategy and the Environment, 31(1), 159-172.

Choi, B. B., Lee, D., & Psaros, J. (2013). Carbon disclosure: Determinants of carbon management strategy and its impact on carbon emissions reduction. Journal of Business Ethics, 114(3), 469–485.

Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's Q. Financial Management, 23(3), 70–74.

Deniza, R., Wahyuni, S., Wibowo, H., & Pandansari, T. (2022). Pengaruh Kepemilikan Institusional, Proporsi Dewan Komisaris Independen, Frekuensi Rapat Dewan Komisaris Dan Latar Belakang Pendidikan Dewan Komisaris Terhadap Kinerja Keuangan Perusahaan. Juremi: Jurnal Riset Ekonomi, 2(4), 567-578.

Dwi Tirta Kencana, A., & Sefia Putri, R. (2022). The impact of corporate governance mechanisms on firm value: Evidence from Indonesian listed companies. Journal of Accounting Research and Auditing, 9(2), 45–58.

Eliana, R., & Tampubolon, L. (2023). Board composition and its influence on firm value: An Indonesian perspective. Jurnal Riset Akuntansi Kontemporer, 15(1), 45–53.

Firmansyahrez, A., Dudipratomo, J., & Siskayudowati, E. (2016). Peran komisaris independen dalam penerapan good corporate governance di perusahaan. Jurnal Manajemen dan Akuntansi, 20(3), 45–55.

ISSN [Online]: 2776-6780

Forum for Corporate Governance in Indonesia. (2001). Good corporate governance: Pedoman umum dan praktik terbaik. Jakarta: Forum for Corporate Governance in Indonesia.

Fraser, J. (2021). Mining companies and communities: Collaborative approaches to reduce social risk and advance sustainable development. Resources Policy, 74, 101144.

García-Sánchez, I. M., & Martínez-Ferrero, J. (2018). How do independent directors behave concerning sustainability disclosure?. Corporate Social Responsibility and Environmental Management, 25(4), 609-627.

Ghozali, I. (2018). Aplikasi analisis multivariate dengan program IBM SPSS 22 (8th ed.). Semarang: Badan Penerbit Universitas Diponegoro.

Global Reporting Initiative. (2021). GRI 305: Emissions 2016. Retrieved from https://www.globalreporting.org/

Gujarati, D. N., & Porter, D. C. (2009). Introductory econometrics (5th ed.). New York: McGraw-Hill/Irwin.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2019). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.

Ikatan Komite Audit Indonesia. (n.d.). Panduan kerja komite audit. Jakarta: IKAI.

Jensen, M. C., & Meckling, W. H. (2019). Theory of the firm: Managerial behavior, agency costs and ownership structure. In Corporate governance (pp. 77-132). Gower.

Khan, S. A. R., Yu, Z., Belhadi, A., & Mardani, A. (2020). Investigating the effects of renewable energy on international trade and environmental quality. Journal of Environmental Management, 272, 111089.

Kosasih, A., & Mungniyati, F. (2022). The impact of corporate governance mechanisms on firm value: Evidence from Indonesian energy sector companies. Jurnal Akuntansi dan Keuangan, 17(2), 123–135.

Kusmayadi, T., Rudiana, A., & Badruzaman, M. (2015). Penerapan good corporate governance dalam meningkatkan kinerja perusahaan. Jurnal Manajemen dan Bisnis, 17(2), 55–64.

Maharani, D., Putri, S., & Santoso, T. (2024). Carbon emissions disclosure and firm value: Evidence from Indonesian companies. International Journal of Accounting and Finance, 9(1), 45–57.

Mardessi, S. (2022). Audit committee and financial reporting quality: the moderating effect of audit quality. Journal of Financial Crime, 29(1), 368–388.

Nasih, M., Harymawan, I., Paramitasari, Y. I., & Handayani, A. (2019). Carbon emissions, firm size, and corporate governance structure: Evidence from Indonesia's mining and agricultural industries. Sustainability, 11(9), 2483.

Nathania, V. E., & Karnawati, M. (2022). Institutional ownership, leverage, and profitability influence firm value in Indonesian companies. Journal of Economics and Business Research, 29(3), 178–187.

Otoritas Jasa Keuangan. (2015). Peraturan Otoritas Jasa Keuangan Nomor 55/POJK.04/2015 tentang Pembentukan dan Pedoman Pelaksanaan Kerja Komite Audit. Jakarta: Otoritas Jasa Keuangan.

Pambudi, S., & Ahmad, H. (2022). Peran nilai perusahaan dalam menentukan kepercayaan investor terhadap prospek masa depan perusahaan. Jurnal Ekonomi dan Bisnis, 15(3), 112–120.

Permanasari, I. (2010). Peran kepemilikan institusional dalam peningkatan pengawasan manajemen perusahaan. Jurnal Akuntansi dan Keuangan, 12(2), 90–100.

Safutri, M., & Zakhrudfa, M. (2023). Pengungkapan emisi karbon dan tata kelola perusahaan yang baik sangat penting untuk meningkatkan nilai perusahaan. [Perlu konfirmasi nama jurnal atau penerbit.]

Sari, P., & Mildawati, S. (2017). Nilai perusahaan dan kepercayaan masyarakat: Sebuah pendekatan jangka panjang. Jurnal Manajemen Perusahaan, 14(1), 40–50.

Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill-building approach (7th ed.). Wiley.

Sugiyono. (2017). Metode penelitian kuantitatif, kualitatif, dan R&D. Bandung: Alfabeta.

Yamin, T., & Aryati, T. (2024). Effectiveness of Audit Committee Features to Asymmetric Information with Audit Quality as a Moderator. European Journal of Management Issues, 32(2), 86-99.

Yanti, R., & Darmayanti, I. (2019). Pengaruh nilai perusahaan terhadap keberhasilan investasi dan profitabilitas: Perspektif investor. Jurnal Keuangan dan Manajemen, 21(2), 88–96.

Zhang, X., Zhang, J., & Feng, Y. (2023). Can companies get more government subsidies through improving their ESG performance? Empirical evidence from China. Plos one, 18(10), e0292355.