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The Moderating Role of Good Corporate Governance in the Relationship between Intellectual Capital, Green Accounting, and Company Performance

Dian Indriana Tri Lestari[1*], Risti Ulfi Hanifah[2], Naini Rizka Amalia[3]
Accounting Study Program, Faculty of Economy, Universitas Semarang, Indonesia[1,2,3]
dianindriana@usm.ac.id[1*], ristiulfi@usm.ac.id[2], naini@usm.ac.id[3]

ABSTRACT

This study aims to examine the effect of intellectual capital and green accounting on company performance, with corporate governance as a moderating variable. This research employs panel data from 20 property and real estate companies listed on the Indonesia Stock Exchange during the 2020–2024 period, resulting in 100 observations. The data were analyzed using panel data regression with the Random Effects Model. The results indicate that intellectual capital has a significant negative effect on company performance, while green accounting does not have a significant effect. Simultaneously, intellectual capital and green accounting significantly influence company performance. Furthermore, corporate governance strengthens the relationship between green accounting and company performance but does not moderate the relationship between intellectual capital and company performance. These findings suggest that the utilization of intellectual capital in the observed sector is not yet optimal, and environmental accounting practices have not been able to directly enhance company performance. This study contributes to the literature by providing empirical evidence from emerging markets and highlighting the role of corporate governance in improving the effectiveness of environmental practices.

Keywords: *Company Performance, Intellectual Capital, Green Accounting, Corporate Governance*

1. Introduction

Corporate sustainability refers to a company's capacity to ensure long-term viability by addressing both financial and non-financial aspects. In today's dynamic business landscape, organizations are increasingly expected to adopt sustainability practices that extend beyond traditional financial objectives. Financial sustainability includes the strategic and efficient allocation of resources to maximize profitability, while non-financial sustainability encompasses customer satisfaction, product innovation, environmental responsibility, and organizational development, all of which significantly contribute to long-term business performance (Yawika & Handayani, 2019). Corporate performance is commonly reflected in profitability indicators that signal market confidence regarding future prospects and operational effectiveness. Higher profitability not only increases shareholder wealth but also strengthens a firm's ability to sustain its competitive position over time (Damas et al., 2021). One of the most widely used indicators for measuring corporate performance is Return on Assets (ROA), which evaluates how efficiently companies utilize their assets to generate profits and support strategic business decisions.

In the era of sustainable business development, firms are required not only to pursue financial outcomes but also to manage strategic intangible resources and environmental responsibilities effectively. The increasing complexity of the business environment has shifted organizational focus from tangible assets toward knowledge-based resources as key determinants of value creation and competitive advantage. This transition reflects a movement from a traditional industrial economy

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to a knowledge-based economy, where intangible resources such as innovation capability, technological knowledge, employee expertise, and organizational learning become essential for improving company performance.

This strategic intangible resource is widely recognized as Intellectual Capital (IC). Stewart (1997) defines intellectual capital as collective knowledge that can be utilized to create competitive advantages. Quantitatively, intellectual capital is commonly measured using the Value Added Intellectual Coefficient (VAIC) developed by Pulic (1998), which assesses the efficiency of value creation through human capital, structural capital, and capital employed. The Resource-Based Theory proposed by Barney (1991) argues that organizations can achieve sustainable competitive advantage through the effective utilization of resources that are valuable, rare, difficult to imitate, and irreplaceable. Intellectual capital possesses these characteristics and therefore serves as a critical organizational asset in enhancing company performance.

Previous studies have provided empirical evidence regarding the importance of intellectual capital in improving organizational outcomes. Intellectual capital contributes to operational efficiency, innovation capability, and financial performance because firms that effectively utilize employee knowledge and organizational resources are better able to adapt to changing market conditions (Chen et al., 2005; Dimitrios et al., 2011; Nimtrakoon, 2015). Similar findings were also reported by Nasif et al. (2017), Xu and Wang (2018), Smriti and Das (2018), Ardiansari et al. (2021), Hashim et al. (2015), and Adesina (2019), who found that intellectual capital positively contributes to financial and market performance. Furthermore, studies conducted in emerging economies indicate that effective management of intellectual resources improves productivity and strengthens long-term sustainability (Asfarawenti & Saiful, 2019). However, despite these findings, empirical results remain inconsistent across industries and countries, suggesting that the effectiveness of intellectual capital may depend on contextual and organizational factors.

Beyond knowledge-based resources, firms currently face increasing pressure regarding environmental sustainability issues. Companies are no longer solely expected to maximize profits under a single bottom-line approach but are increasingly required to balance economic, environmental, and social objectives under the triple bottom-line framework. Consequently, Green Accounting has emerged as an important mechanism for integrating environmental concerns into corporate decision-making and reporting systems. According to Gray et al. (1995), social and environmental reporting enhances organizational legitimacy and transparency by communicating environmental responsibility to stakeholders. Green accounting refers to accounting practices that incorporate environmental costs and environmental management activities into financial reporting systems and organizational decision-making processes.

The implementation of green accounting allows organizations to identify environmental costs, improve environmental performance, and provide transparent environmental disclosures to stakeholders. Such practices may improve corporate reputation and stakeholder trust while ensuring compliance with environmental regulations. Stakeholder Theory developed by Freeman (1984) explains that organizations that address stakeholder interests effectively are more likely to gain support and legitimacy, thereby enhancing organizational performance. However, recent findings concerning green accounting remain inconclusive. While environmental initiatives are expected to improve performance, some studies report that green accounting practices do not necessarily lead to direct improvements in financial outcomes (Indiani & Fitriyah, 2024; Sari & Cahyonowati, 2025; Salsabilah et al., 2025). These findings suggest that environmental practices may produce indirect or contingent effects depending on organizational characteristics and governance quality.

Moreover, recent literature increasingly highlights the relationship between intellectual capital and environmental sustainability. Green intellectual capital has emerged as an important concept that combines knowledge-based resources with environmental innovation practices. Asiaei et al. (2023) found that green intellectual capital significantly enhances environmental performance through organizational innovation mechanisms. These findings indicate that intellectual resources and environmental strategies should not be viewed independently but rather as integrated organizational capabilities that contribute to sustainable performance.

Despite growing research on intellectual capital and green accounting, previous findings concerning their effects on corporate performance remain inconsistent. This inconsistency indicates the existence of potential moderating factors that may strengthen or weaken these relationships. Corporate governance has increasingly been recognized as a strategic mechanism capable of improving organizational effectiveness through better monitoring systems, accountability, and decision-making processes. Good corporate governance may strengthen the impact of intellectual capital and environmental initiatives because governance mechanisms ensure that organizational resources are utilized efficiently and aligned with strategic objectives (Karina & Setiadi, 2020). Furthermore, strong governance structures improve organizational transparency and reduce agency conflicts, thereby increasing organizational value and performance (Jannah & Sartika, 2022).

Previous studies also suggest that governance mechanisms influence the effectiveness of intangible resources and sustainability practices. Damas and Tarisa (2022) found that management control systems can moderate the relationship between sustainability practices and firm value. Similarly, Marbun and Ulpah (2024) reported that board functions strengthen the relationship between intellectual capital and firm performance. Samhadi et al. (2024) further demonstrated that corporate governance strengthens the relationship between environmental initiatives and firm value. Nevertheless, limited studies have simultaneously examined the moderating role of corporate governance in the relationship between intellectual capital, green accounting, and company performance, particularly in property and real estate sectors within emerging economies.

Based on these gaps, this study aims to analyze the influence of intellectual capital and green accounting on company performance measured by profitability (ROA) among property and real estate companies listed on the Indonesia Stock Exchange during the period 2020–2024. Furthermore, this study investigates the moderating role of corporate governance in strengthening the relationship between intellectual capital, green accounting, and company performance. This research contributes theoretically by extending the integration of Resource-Based Theory and Stakeholder Theory in explaining sustainable company performance. Practically, the findings are expected to provide useful implications for managers, investors, and policymakers regarding the strategic importance of intellectual resource management, environmental accounting practices, and governance systems in enhancing organizational performance.

2. Literature Review

The Influence of Intellectual Capital on Company Performance

In the modern knowledge-based economy, intellectual capital has become one of the most important resources determining a company's competitiveness and sustainability. Intellectual capital refers to intangible assets consisting of knowledge, information, intellectual property, and experience that can be leveraged to create value for an organization. According to the Resource-Based Theory proposed by Barney (1991), companies can achieve sustainable competitive advantages through the effective utilization of unique and strategic resources, including intellectual

capital. Intellectual capital generally consists of three major components: human capital, structural capital, and relational capital. Human capital represents the knowledge, competencies, and experience possessed by employees. Structural capital includes organizational processes, databases, technologies, and information systems that support business operations, while relational capital reflects relationships with customers, suppliers, and other stakeholders.

Previous studies have consistently indicated that intellectual capital plays a significant role in improving organizational and financial performance. Chen et al. (2005) found that firms with strong intellectual capital management tend to achieve higher market value and superior financial performance. Similarly, Dimitrios et al. (2011) demonstrated that intellectual capital positively influences both market value and firm performance because efficient utilization of intangible resources enhances value creation capabilities. Furthermore, Nimtrakoon (2015) reported that intellectual capital positively affects firm performance among ASEAN countries, suggesting that knowledge-based assets contribute significantly to competitiveness in emerging markets.

Additional empirical evidence also supports these findings. Nasif et al. (2017) showed that intellectual capital positively affects the financial performance of banking institutions through improvements in operational efficiency. Smriti and Das (2018) found that firms capable of managing intellectual resources effectively experience higher profitability and sustainable growth. Xu and Wang (2018) further emphasized that intellectual capital not only improves financial performance but also contributes to long-term sustainable growth. Similarly, Adesina (2019) found that intellectual capital significantly improves cost efficiency and technical performance in financial institutions. Ardiansari et al. (2021) also reported that intellectual capital positively affects both market value and financial performance, while Hashim et al. (2015) and Asfarawenti and Saiful (2019) highlighted the importance of intellectual resources in enhancing organizational effectiveness and competitive advantage.

These findings indicate that firms capable of effectively managing knowledge-based resources are more likely to innovate, improve productivity, enhance operational efficiency, and respond rapidly to environmental changes and market competition. Consequently, companies with strong intellectual capital management tend to achieve better financial performance and profitability. Therefore, the following hypothesis is proposed:

H1: Intellectual capital has an impact on company performance (ROA).

The Effect of Green Accounting on Company Performance

Environmental sustainability has become an increasingly important issue for businesses worldwide. Organizations are expected not only to achieve economic objectives but also to address environmental and social responsibilities. One approach used to integrate environmental considerations into organizational activities is Green Accounting. Green accounting refers to the process of identifying, measuring, and reporting environmental costs and environmental performance within a company's financial system. Gray et al. (1995) argued that environmental reporting increases organizational legitimacy and transparency because it communicates environmental responsibilities to stakeholders.

The implementation of green accounting allows firms to manage environmental costs more efficiently, reduce waste, improve resource utilization, and enhance environmental performance. Additionally, environmental disclosures improve transparency and increase stakeholder confidence, potentially leading to greater investor trust and competitive advantages. According to Stakeholder Theory developed by Freeman (1984), companies that effectively address stakeholder interests are more likely to receive support and legitimacy, ultimately improving organizational performance.

Empirical studies on the impact of environmental practices on performance, however, have shown mixed findings. Damas et al. (2021) found that environmental initiatives such as eco-efficiency and green innovation contribute positively to firm value and organizational performance. Similarly, Dheva et al. (2026) indicated that green accounting practices positively affect company performance when supported by effective governance systems and capital structures. However, contradictory findings were reported by Indiani and Fitriyah (2024), who found that green accounting implementation does not necessarily improve financial performance directly. Similar results were found by Sari and Cahyonowati (2025) and Salsabilah et al. (2025), suggesting that environmental practices often require strong strategic integration before producing measurable financial benefits.

Furthermore, Asiaei et al. (2023) introduced the concept of green intellectual capital and found that environmental innovation capabilities significantly improve environmental performance. This suggests that environmental initiatives are more effective when integrated with organizational knowledge and strategic resources. Therefore, despite mixed findings, green accounting is expected to contribute positively to company performance through improved transparency, resource efficiency, and stakeholder trust.

Therefore, the following hypothesis is proposed:

H2: Green accounting has an impact on company performance (ROA).

Intellectual Capital and Company Performance Moderated by Good Corporate Governance

Corporate Governance (CG) refers to systems, policies, and mechanisms used to direct and control organizational activities. Effective governance ensures accountability, transparency, fairness, and responsibility in corporate management. Governance mechanisms such as independent boards, institutional ownership, and audit committees help reduce agency conflicts and improve decision-making quality.

According to Stakeholder Theory proposed by Freeman (1984), effective governance demonstrates organizational responsibility toward stakeholders and ensures that business activities align with stakeholder interests. Previous studies indicate that governance practices significantly contribute to organizational performance. Jannah and Sartika (2022) found that good corporate governance positively affects firm value through financial performance. Similarly, Karina and Setiadi (2020) showed that governance mechanisms strengthen organizational value creation processes.

In relation to intellectual capital, governance systems may strengthen the effectiveness of knowledge-based resources because effective governance encourages firms to invest in employee development, knowledge management systems, and innovation initiatives. Marbun and Ulpah (2024) found that board functions strengthen the relationship between intellectual capital and organizational performance. Strong governance mechanisms ensure that intellectual resources are strategically managed to maximize organizational benefits.

Similarly, governance mechanisms may strengthen the effectiveness of green accounting practices. Firms with stronger governance structures are more likely to integrate sustainability principles and environmental responsibilities into strategic decision-making. Samhadi et al. (2024) demonstrated that good corporate governance strengthens the relationship between environmental initiatives and firm value. Furthermore, Damas and Tarisa (2022) found that management control systems moderate sustainability practices and organizational outcomes.

Therefore, effective governance mechanisms are expected to strengthen both the relationship between intellectual capital and company performance and the relationship between green accounting and company performance.

H3: Corporate governance strengthens the relationship between intellectual capital and company performance (ROA).
H4: Corporate governance strengthens the relationship between green accounting and company performance (ROA).

Based on the background, objectives, problem formulation, and hypothesis development, the author proposes the following research model:

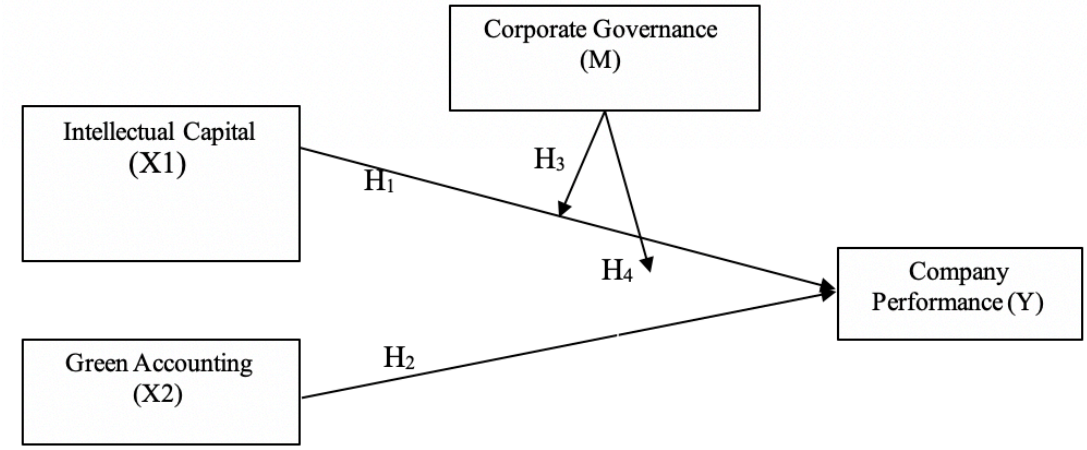

Figure 1. Research Model

3. Methods

This study uses a quantitative method with regression analysis to explore the correlation and influence between variables. This study utilizes secondary data in the form of panel data, which combines time series and cross-sectoral data. Secondary data comes from the financial statements of property and real estate companies from 2020 to 2024, obtained from the official website of the Indonesia Stock Exchange (IDX) at https://www.idx.co.id/id. Data collected from various entities are used in this study. Panel data refers to observations of multiple subjects over a specific period. Furthermore, this study employs a literature review approach by observing, studying, and directly citing relevant journal articles and books, which serve as a theoretical foundation for this study. The total sample consists of 100 observations from 20 companies. The dependent variable in this study is company performance (proxied by profitability/ROA). Two independent variables are used: intellectual capital (X1), green accounting (X2), and corporate governance as a moderating variable (M). The data analysis method applied in this study is panel data regression, analyzed using EViews 12. The analysis stages include descriptive statistics, model feasibility testing, paired correlation analysis, normality test, multicollinearity test, heteroscedasticity test, autocorrelation test, F test, T test, moderated regression analysis (MRA), and R-Square determination coefficient test (R^2).

The regression model used in this study is formulated as follows:

Main model:

$$Yit = \alpha + \beta 1ICit + \beta 2GAit + \beta 3GCGit + \varepsilon it$$

Moderation model:

$$Yit = \alpha + \beta 1ICit + \beta 2GAit + \beta 3GCGit + \beta 4(ICit \times GCGit) + \beta 5(GAit \times GCGit) + \varepsilon it$$

Where:

Y = Company Performance (ROA)

IC = Intellectual Capital
GA = Green Accounting
GCG = Corporate Governance
ε = Error term

Intellectual capital is measured using the Value Added Intellectual Coefficient (VAIC) method, calculated as:

VAIC = VACA + VAHU + STVA

Green accounting is measured using an environmental disclosure index based on sustainability reporting standards. Corporate governance is proxied by governance mechanisms such as institutional ownership and board structure.

4. Result and Discussion

Descriptive Statistical Analysis

In this study, descriptive statistics show the maximum, minimum, mean, and standard deviation values.

Table 1. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Y	100	0.13	49.46	17.24	9.807
X1	100	1.18	86.97	49.07	19.073
X2	100	2	5	4.01	0.573
M	100	0.54	0.87	0.62	0.09
Valid N (listwise)	100				

Source: Data Processed EViews 12

Table 1 presents the descriptive statistics of all variables used in this study. The dependent variable, company performance (ROA), has a minimum value of 0.13 and a maximum value of 49.46, with a mean of 17.24 and a standard deviation of 9.807, indicating that the sampled companies generally exhibit moderate profitability with relatively high variability among firms. Intellectual capital (X1) shows a minimum value of 1.18 and a maximum value of 86.97, with a mean of 49.07 and a standard deviation of 19.073, suggesting considerable differences in the effectiveness of managing intangible resources across companies. Green accounting (X2) has a minimum value of 2 and a maximum value of 5, with a mean of 4.01 and a relatively low standard deviation of 0.573, indicating that most companies demonstrate similar levels of environmental disclosure and relatively limited variation in green accounting practices. Meanwhile, corporate governance (M) has a minimum value of 0.54 and a maximum value of 0.87, with a mean of 0.62 and a standard deviation of 0.09, reflecting a relatively consistent implementation of governance practices among the sampled firms. Overall, while intellectual capital exhibits substantial variability across companies, green accounting and corporate governance tend to show more homogeneous patterns within the observed sample.

Regression Model Selection

Chow Test

The Chow Test is a panel data test used to determine the best model to use. If the prob value < 0.05, the best estimation to use is fixed effect, and if the prob score > 0,05, the best estimation to use is common effect.

Table 2. Results of the Chow-Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	30.554578	(19,77)	0.0000
Cross-section Chi-square	202.537416	19	0.0000

Source: Data Processed EViews 12

Table 2 presents the results of the Chow test. The probability value of the Cross-section Chi-square is 0,0000, which is lower than the significance level of ,.05. This result indicates that the Fixed Effects Model is more appropriate than the Common Effects Model.

This finding suggests that there are significant differences in characteristics across cross-sectional units (companies), which should be captured through individual-specific effects. Therefore, the Fixed Effects Model is initially selected. However, to determine the most appropriate model between Fixed Effects and Random Effects, the Hausman test is conducted in the next stage.

Hausman Test Results

In determining the model to be used in panel data regression, this test aims to compare the random effect model with the fixed effect model.

Table 3. Results of the Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	4.302807	3	0.4473

Source: Data Processed EViews 12

Table 3 presents the results of the Hausman test. The probability value of the Cross-section random is 0,4473, which is greater than the significance level of 0,05. This result indicates that the Random Effects Model is more appropriate than the Fixed Effects Model. This finding suggests that the individual effects across companies are not correlated with the independent variables, making the Random Effects Model more efficient and suitable for this study. However, since the Chow test previously indicated the Fixed Effects Model, while the Hausman test suggests the Random Effects Model, further testing using the Lagrange Multiplier (LM) test is required to determine the most appropriate model between the Random Effects Model and the Common Effects Model.

Lagrange Multiplier Test

The Lagrange Multiplier test aims to determine the best model between the random effect approach and the common effect approach that should be used in panel data modeling.

Table 4. Results of the Lagrange Multiplier Test

	Test Hypothesis		
	Cross-section	**Time**	**Both**
Breusch-Pagan	137.1862	0.173680	129.4509
	(0.0000)	(0.7949)	(0.0000)

Sumber: Olah Data EViews 12

Based on the results in Table 4, the LM test for the Common Effect Model with Random Effect yielded a Cross-section probability of 0,000, which is less than 0,05. Therefore, it can be concluded that the model suitable for panel regression is the Random Effect Model. Next, classical assumption tests were conducted.

Classic Assumption Test

Normality Test

The Normality Test is used to determine whether the data is normally distributed or not. The criteria for the normal distribution test are that if the Jarque-Bera value and probability > α (0,05), then the data is assumed to be normally distributed.

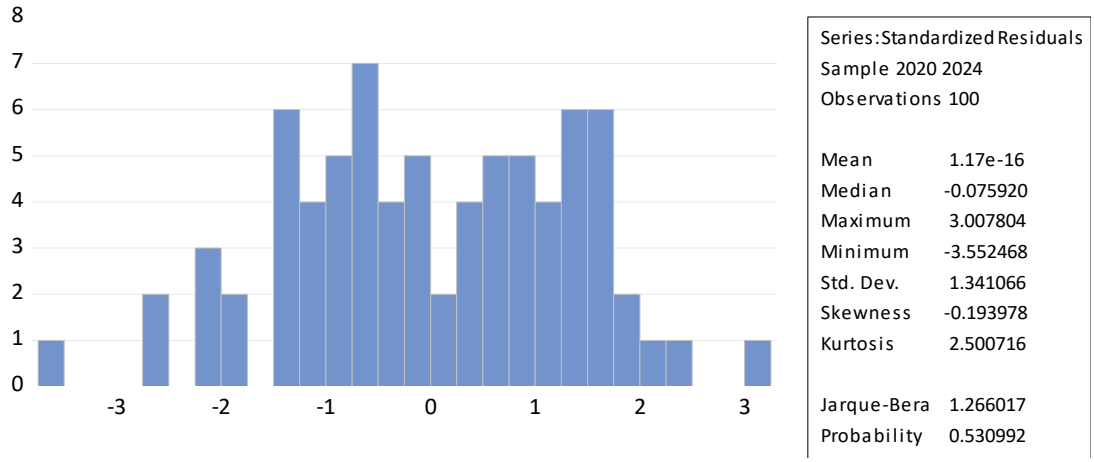

Figure 2. Normality Test

Source: Data Processed EViews 12

Based on Figure 2, the Jarque-Bera Probability value obtained is 1.266017, with a probability of 0,530992. The test results show that the Probability value > α. (0,05). Therefore, it can be concluded that the data is normally distributed, so the data is considered to meet the assumption of normal distribution and is suitable for conducting a panel regression test.

Multicollinearity Test

The multicollinearity test is used to examine the relationship between independent variables. The test criteria assume that multicollinearity does not occur if the centered VIF value < 10.

Table 5. Results of the Multicollinearity Test

	Coefficient	Uncentered	Centered
Variable	**Variance**	**VIF**	**VIF**
C	0.153	6.826	NA
X1	5.160	2.063	1.261
X2	0.051	2.385	1.226
M	0.882	5.206	1.031

Source: Data Processed EViews 12

Based on Table 5, the results of the multicollinearity test obtained VIF values for the intectual capital (X1) of 1,261, green accounting (X2) of 1,226 and CG (M) of 1,.031. All independent variables have values less than 10, according to these values, which indicates that the assumption of no multicollinearity is met in this study.

Heteroscedasticity Test

The Heteroskedasticity Test is used to assess the goodness of fit of the regression model. This study employs the Glejser test with residuals as the dependent variable, and if the significance score is more than 5% (0,05), then heteroskedasticity is not found.

Table 6. Heteroscedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3.399	4.385	-.0775	0.440
X1	-0.023	0.012	-1.950	0.054
X2	-0.568	1.199	-0.473	0.636
M	10.200	5.946	1.715	0.089

Source: Data Processed Eviews 12

Based on Table 6, each variable, namely the intellectual capital (X1) obtained a probability value of 0,054, the green accounting (X2) 0,636 and the CG (M) 0,089. The probability values indicate that all variables have values greater than the significance level of 0.05. There is a possibility that this data does not show signs of heteroscedasticity.

Autocorrelation Test

The Autocorrelation test is used to see if there is a correlation between the observed data, which means the appearance of one data point is influenced by other data points. This research uses the Durbin-Watson test for autocorrelation, with the criteria that if dL < DW < 4-dU, then there is no sign of autocorrelation.

Table 7. Results of the Autocorrelation Test

Durbin-Watson stat	1.962

Source: Data Processed EViews 12

Based on Table 7, the Durbin-Watson value obtained is 1,615, and the values obtained are dL = 1,613, dU = 1,736, and 4-dU = 2,263. Using the test criteria, we obtain dL < DW < 4-dU, which is 1.613 < 1.962 < 2,263. Therefore, it can be concluded that the assumption of no autocorrelation is met in this research.

Panel Regression Analysis

Panel regression analysis is used to analyze regression over a specific period. This analysis is used to determine the intellectual capital (X1), the green accounting (X2), and the CG (M).

Table 8. Random Effect Panel Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.927	0.643	-1.442	0.152
X1	-0.006	0.001	-3.197	0.001
X2	0.190	0.191	0.990	0.324
M	2.278	0.867	2.627	0.010

Source: Data Processed EViews 12

Here is the regression equation based on table 8:

$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_4 M + e$

$ROA = -0{,}927 - 0{,}006\ VAIC + 0{,}190\ GA + 2{,}278\ CG + e$

Based on the panel regression equation, it is concluded:

The coefficient value with the dependent variable of company performance (Y) is – 0,927, meaning that if the assumptions of the intellectual capital (X1), the green accounting (X2) and the CG (M) are zero, the value of company performance would be – 0,927. The intelectual capital (X1) has a coefficient value of -0,006, which means that if the intellectual capital (X1) increases by 1% with the assumption that the green accounting (X2) and the CG are all zero, it will decrease company performance by -0.006. The green accounting (X2) has a coefficient value of 0,190. Which means

that if the green accounting (X2) increases by 1% with the assumption that the intelectual capital and the CG (M) are zero, it will increase company performance by 0.1900. The variable of the G (M) has a coefficient of 2,278. If the GCG increases by 1% and it is assumed that the values of other variables are zero, it will decrease company performance value 2,278.

Hypothesis Testing

Simultaneous Testing (Uji F)

The F test, commonly referred to as the simultaneous test, is used to observe the influence of independent variables on the dependent variable collectively. The criterion for the F test is that if the significance value is < 0,05, then the independent variables simultaneously have a significant effect.

Table 9. F-Test Results

F-statistic	4.944
Prob(F-statistic)	0.003

Source: Data Processed EViews 12

Based on table 9, the F-statistic value obtained is 4,944 and the probability is 0,003. With the test criteria F-statistic > F-table, which is 4,944 > 3,091, and probability < alpha (5%), which is 0,003 < 0.05. These results prove that the intellectual capital (X1), the green accounting (X2) and the CG (M) have a significant simultaneous effect on company performance in company listed on the Indonesia Stock Exchange**.**

Partial Hypothesis Testing (T-test) and *Moderated Regression Analysis* (MRA)

If a probability of < 0,05 is produced, it will be stated that there is a significant implication from the independent variable to the dependent variable. If a probability of > 0.05 is produced, it is said that there will not be a significant effect.

Tabel 10. T-Test Result and MRA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.927	0.643	-1.442	0.152
X1	-0.006	0.001	-3.197	0.001
X2	0.190	0.191	0.990	0.324
X1→M	0.198	0.305	0.648	0.518
X2→M	-0.009	-0.003	-3.090	0.002

Source: Data Processed EViews 12

Based on table 10, the probability value of the intelectual capital (X1) is 0,001 < 0,05, so H1 is accepted and it is concluded that the intelectual capital has a significant impact on company performance. In contrast, he green accounting (X2) obtained a probability value of 0,324 > 0,05, so H2 is rejected and it can be concluded that the green accounting does not have a significant effect on company performance. Next, the interpretation of the results of the regression moderation analysis with CG as the moderating variable. The probability of the intelectual capital (X1) on company performance (Y) moderated by the CG (M) is 0,518, which is greater than the significance level of 0,05. This means that the CG (M) is unable to moderated the effect of the intelectual capital on company performance, thus H3 is rejected. While, the probability of the green accounting (X2) on company performance (Y) moderated by the CG (M) is 0,002 < 0,05, therefore H4 is accepted,

indicating that the CG (M) is able to moderate the effect of the green accounting (X2) on company performance (Y).

Test of the Coefficient of Determination (R^2)

The value of the coefficient of determination (R^2) is used to explain the contribution or the extent of the influence exerted by the independent variable on the dependent variable.

Table 11. Results of the Coefficient of Determination Test (R^2)

R-squared	0.133835
Adjusted R-squared	0.106767

Source: Data Processed EViews 12

Based on Table 11, an R-squared score of 0,133835 was obtained. This means that the independent variables of intellectual capital (X1), green accounting (X2), and corporate governance (M) contribute 13,38% to company performance (Y), with the remaining 86,62% influenced by other variables outside this study.

Discussion

The Effect of Intellectual Capital on Company Performance

The findings of this study indicate that intellectual capital significantly influences company performance. This result suggests that intellectual resources play an essential role in creating organizational value and enhancing firm competitiveness. According to the Resource-Based Theory proposed by Barney (1991), companies can achieve sustainable competitive advantages through effective utilization of valuable and difficult-to-imitate resources, including knowledge-based assets. Intellectual capital, which consists of human capital, structural capital, and relational capital, represents a strategic resource capable of improving operational efficiency and supporting long-term organizational sustainability.

However, this study found that the direction of the relationship tends to indicate that intellectual capital utilization within the observed companies may not yet generate optimal financial benefits. This finding suggests that organizations in the property and real estate sector still rely heavily on tangible assets rather than maximizing the strategic potential of intangible resources. Intellectual resources require effective management mechanisms and organizational capabilities before they can be transformed into measurable financial outcomes. In industries characterized by large investments in physical assets, the contribution of intellectual capital may not directly translate into higher profitability.

Several previous studies have emphasized the importance of intellectual capital in improving firm performance. Chen et al. (2005) demonstrated that intellectual capital positively affects market value and financial performance because knowledge-based assets improve value creation capability. Similar findings were reported by Dimitrios et al. (2011), Nimtrakoon (2015), Nasif et al. (2017), Xu and Wang (2018), and Smriti and Das (2018), who concluded that effective management of intellectual resources enhances profitability and sustainable growth. Furthermore, Adesina (2019) found that intellectual capital improves efficiency and organizational performance, while Ardiansari et al. (2021) and Asfarawenti and Saiful (2019) reported that intellectual resources strengthen both market and financial performance. Nevertheless, the results of this study indicate that the contribution of intellectual capital may vary across industries and organizational contexts. Differences in resource management capabilities, organizational culture, and sector characteristics may explain why intellectual capital does not always produce immediate positive financial

outcomes. Therefore, organizations should not only invest in intellectual resources but also strengthen knowledge management systems and organizational learning processes to ensure that intellectual assets contribute effectively to corporate performance.

The Effect of Green Accounting on Company Performance

The findings indicate that green accounting does not directly influence company performance. This result suggests that the implementation of environmental accounting practices alone may not immediately generate financial benefits for organizations. Although green accounting aims to integrate environmental costs and responsibilities into corporate decision-making, the effectiveness of these practices largely depends on how environmental initiatives are incorporated into broader business strategies.

From the perspective of Stakeholder Theory proposed by Freeman (1984), companies that address stakeholder expectations regarding environmental responsibility are expected to gain greater legitimacy and support. Similarly, Gray et al. (1995) argued that environmental reporting enhances corporate transparency and organizational legitimacy. However, the present findings indicate that environmental disclosure and sustainability practices may not automatically improve profitability, particularly when environmental initiatives are implemented merely to fulfill regulatory requirements rather than as part of strategic organizational objectives.

This finding is consistent with previous studies suggesting that environmental practices do not necessarily produce direct financial outcomes. Indiani and Fitriyah (2024) reported that green accounting implementation does not significantly improve financial performance in Indonesia. Similar findings were also reported by Sari and Cahyonowati (2025), Salsabilah et al. (2025), and Dheva et al. (2026), who found that environmental practices often require complementary organizational factors before producing measurable impacts on company performance. In addition, Damas et al. (2021) suggested that environmental initiatives become more effective when integrated with innovation and environmental performance mechanisms.

Another possible explanation is related to the characteristics of emerging markets, where investors may still prioritize traditional financial indicators over environmental disclosures when making investment decisions. Environmental initiatives often require substantial investment and generate benefits over a relatively long period. Consequently, the financial impact of green accounting practices may not be immediately observable. Furthermore, Asiaei et al. (2023) emphasized that environmental initiatives are more effective when combined with green intellectual capital and organizational innovation capabilities. Therefore, firms should consider environmental practices not as isolated activities but as strategic components integrated into organizational knowledge and long-term value creation processes.

The Effect of Intellectual Capital on Company Performance Moderated by Corporate Governance

The findings indicate that corporate governance is unable to strengthen the relationship between intellectual capital and company performance. This suggests that although governance mechanisms contribute to organizational accountability and monitoring processes, they may not directly influence how companies utilize their knowledge-based resources.

Corporate governance generally aims to reduce agency conflicts and improve decision-making quality through mechanisms such as board independence, institutional ownership, and audit committees. Strong governance structures are expected to support the efficient use of organizational resources and encourage investments in innovation and employee development.

However, intellectual capital differs from tangible resources because its value largely depends on internal organizational capabilities and knowledge-sharing processes.

The findings of this study suggest that the existence of governance structures alone is insufficient to optimize the effectiveness of intellectual resources. Intellectual capital requires supportive organizational cultures, learning systems, and innovation capabilities to create value. Marbun and Ulpah (2024) found that board functions strengthen the relationship between intellectual capital and performance, indicating that governance quality can influence the effectiveness of knowledge-based resources. However, the present findings indicate that such governance mechanisms may not function effectively in the observed context. Therefore, governance practices should not focus solely on monitoring and compliance but should also support knowledge management and organizational learning processes.

The Effect of Green Accounting on Company Performance Moderated by Corporate Governance

The findings demonstrate that corporate governance strengthens the relationship between green accounting and company performance. This indicates that governance mechanisms play a critical role in enhancing the effectiveness of environmental practices and sustainability initiatives. Effective governance systems encourage organizations to integrate environmental concerns into strategic decision-making processes and ensure that sustainability initiatives are implemented consistently and transparently.

Good corporate governance enhances the credibility of environmental disclosures and increases stakeholder confidence in organizational sustainability commitments. Companies with stronger governance systems are more likely to perceive environmental activities not merely as compliance obligations but as strategic investments capable of generating long-term value. This finding supports the argument that environmental initiatives become more effective when supported by strong governance mechanisms.

These findings are consistent with previous studies emphasizing the role of governance in sustainability practices. Samhadi et al. (2024) found that corporate governance strengthens the relationship between environmental initiatives and firm value. Similarly, Damas and Tarisa (2022) demonstrated that management control mechanisms improve the effectiveness of sustainability practices. Karina and Setiadi (2020) also suggested that governance mechanisms strengthen organizational value creation processes. Furthermore, effective governance structures can encourage organizations to develop sustainability-oriented strategies that align environmental responsibility with business objectives. Consequently, governance mechanisms may serve as an important strategic factor in translating environmental initiatives into improved organizational outcomes.

The relatively limited explanatory power of the model further suggests that company performance is influenced by various additional factors beyond intellectual capital, green accounting, and corporate governance. Factors such as firm size, leverage, market conditions, innovation capability, and operational efficiency may contribute significantly to organizational performance and should therefore be considered in future research.

5. Conclusion

This study examines the influence of intellectual capital and green accounting on company performance, as well as the moderating role of corporate governance in companies listed on the Indonesia Stock Exchange. The findings indicate that intellectual capital has a significant negative

effect on company performance, suggesting that knowledge-based resources within the observed companies may not yet be managed effectively enough to generate optimal financial benefits. This result implies that companies in the property and real estate sector still tend to rely more heavily on physical and tangible resources than on strategic intangible assets. In contrast, green accounting does not demonstrate a direct influence on company performance, indicating that environmental practices alone may not immediately translate into improved profitability unless they are integrated into broader organizational strategies.

Furthermore, this study finds that corporate governance strengthens the relationship between green accounting and company performance, indicating that effective governance mechanisms can improve the implementation and credibility of environmental initiatives and transform sustainability practices into organizational value. However, corporate governance does not strengthen the relationship between intellectual capital and company performance, suggesting that governance structures alone may be insufficient to optimize the utilization of knowledge-based resources without support from organizational learning systems and innovation capabilities.

The findings contribute theoretically by extending the application of Resource-Based Theory and Stakeholder Theory in explaining the relationship between intellectual capital, environmental practices, governance mechanisms, and company performance within emerging market contexts. Practically, this study provides implications for managers and policymakers by emphasizing the importance of strengthening knowledge management systems, integrating environmental accounting into strategic decision-making, and improving governance quality to enhance organizational performance and sustainability.

This study has several limitations, including the relatively limited sample size, the focus on a single industrial sector, and the relatively low explanatory power of the model, indicating that company performance is influenced by additional factors beyond the variables examined in this study. Therefore, future research is recommended to include broader industry coverage, employ larger datasets, and incorporate additional variables such as firm size, leverage, innovation capability, environmental performance, and market conditions to provide a more comprehensive understanding of the determinants of company performance.

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