ANALYSIS OF THE INFLUENCE OF GREEN INTELLECTUAL CAPITAL, LEVERAGE RATIO AND PROFIT QUALITY ON COMPANY VALUE WITH COMPANY SIZE AS A MODERATOR

Eko Supriyanto[1]*, Joko Setiawan[2], Tris Sudarto[3]
[1,2,3]Postgraduate Programs, Sekolah Tinggi Ilmu Ekonomi GICI, Indonesia
*Corresponding Author:
ekosperdep@gmail.com

Abstract

This study aims to analyze the effects of Green Intellectual Capital (GIC), leverage ratio (Debt to Asset Ratio - DAR), and earnings quality on the firm value of palm oil plantation companies listed on the Indonesia Stock Exchange (IDX). Furthermore, it investigates the moderating role of firm size in these relationships. The research employs a quantitative approach using panel data from publicly listed palm oil companies on the IDX from 2017 to 2024. Data were analyzed using panel data regression analysis with the EViews application to test the direct effects and moderating effects. The results indicate that: (1) GIC has a positive and significant effect on firm value; (2) Leverage ratio (DAR) has a negative and significant effect on firm value; (3) Earnings quality has no significant effect on firm value; (4) Firm size does not directly affect firm value but acts as a significant moderator; (5) Firm size weakens the positive effect of GIC on firm value; (6) Firm size strengthens the negative effect of leverage ratio on firm value, turning it less negative or positive in context; and (7) Firm size does not moderate the relationship between earnings quality and firm value. This study provides novel insights into the dual and contrasting moderating role of firm size in an emerging market context, specifically showing how it dampens the value of sustainability disclosures (GIC) while amplifying the acceptability of financial leverage. Managers should strategically disclose GIC to enhance valuation and adopt prudent leverage policies. For larger firms, it is crucial to communicate their sustainability efforts more effectively to maintain their premium, as investors' higher expectations can diminish the marginal value of these disclosures.

Keywords: Green Intellectual Capital, Leverage, Earnings Quality, Firm Value

1. Introduction

The palm oil industry stands as a cornerstone of the Indonesian economy, contributing significantly to foreign exchange earnings and employment. In 2023, the sector generated IDR 600 trillion in revenue and absorbed approximately 16.2 million workers nationwide (GAPKI, 2023). Indonesia has solidified its position as the world's largest producer, accounting for nearly 60% of global palm oil production a figure that reached 78.2 million tons in 2024 (USDA, 2024; BPS Indonesia, 2024). Despite its economic significance, the industry operates within a complex landscape marked by global market dynamics, stringent environmental scrutiny, and evolving sustainability expectations.

The operational success of a company is ultimately reflected in its performance across multiple dimensions, including financial health, resource management, and organizational efficiency (Haryono & Iskandar, 2015 in Supriyadi & Ghoniyah, 2022). In today's competitive environment, companies must not only pursue profitability but also demonstrate commitment to sustainable practices. This dual objective requires balancing

economic objectives with environmental stewardship, as business goals now extend beyond profit maximization to include community welfare and planetary sustainability (Dahli, 2008 in Supriyadi & Ghoniyah, 2022).
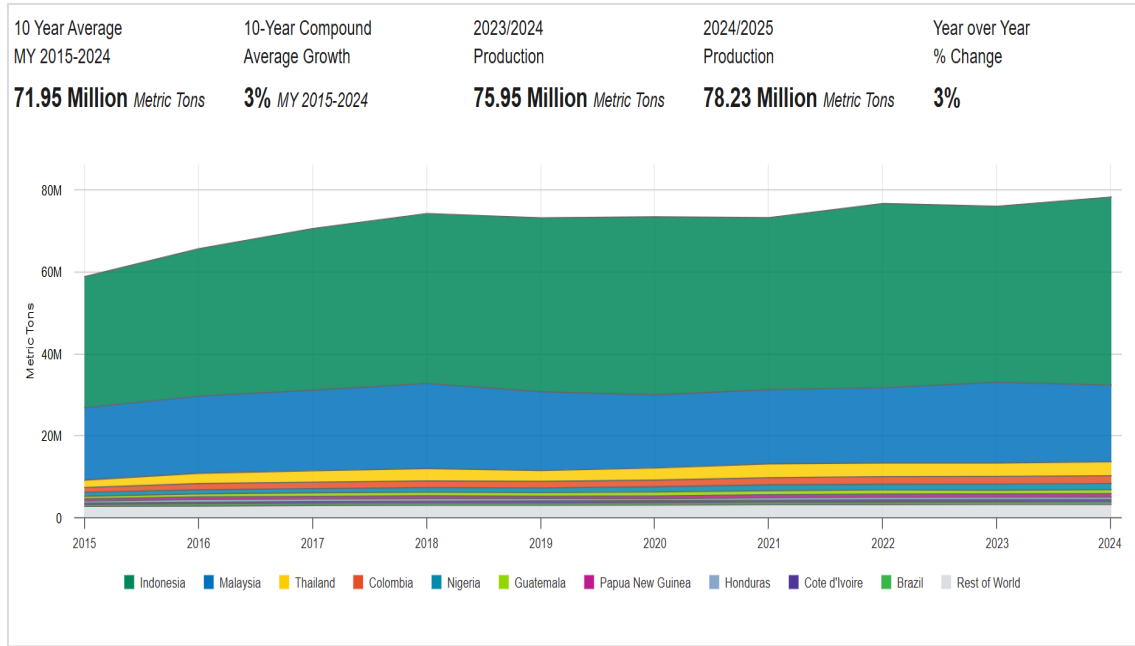

10 Year Average MY 2015-2024	10-Year Compound Average Growth	2023/2024 Production	2024/2025 Production	Year over Year % Change
71.95 Million *Metric Tons*	**3%** *MY 2015-2024*	**75.95 Million** *Metric Tons*	**78.23 Million** *Metric Tons*	**3%**

Figure 1. World Palm Oil Production Trends 2015 - 2024
Source: USDA 2024

Corporate valuation reflects investor assessment of a company's success, often manifested through stock prices. When stock prices rise, corporate value increases, thereby strengthening market confidence reflecting not only current performance but also future prospects (Aviany & Rifandi, 2024). This valuation is particularly crucial in the palm oil sector, where companies face increasing pressure to address environmental concerns while maintaining financial viability. The industry has been associated with serious environmental issues, including deforestation, habitat destruction, and carbon emissions, creating a stark contrast between economic benefits and environmental impacts (Hidayah, 2025).

In response to these challenges, companies are increasingly adopting green strategies, including Green Innovation (GI) and Green Intellectual Capital (GIC) relatively novel concepts in corporate management that serve as sustainability strategies to avoid serious environmental damage from corporate activities (Kurniawati & Widiayana, 2024). Simultaneously, investors are showing growing interest in sustainable investment practices, considering not only financial returns but also environmental, economic, and social welfare impacts (Hakim & Joko Setiawan, 2024).

This research examines how Indonesian palm oil companies navigate this complex landscape by investigating the interplay between green intellectual capital, financial structure, earnings quality, and corporate valuation. Specifically, we explore how these companies balance environmental commitments with financial performance in an industry characterized by capital-intensive operations and increasing sustainability demands.

The study addresses several critical questions: How does green intellectual capital influence corporate valuation in the palm oil sector? What role does financial leverage ratio play in this relationship? How does earnings quality moderate these dynamics? By examining these questions, we contribute to the understanding of sustainable business

practices in emerging markets and provide insights for policymakers, investors, and corporate managers seeking to reconcile economic and environmental objectives.

Our research makes several important contributions: First, we provide empirical evidence from Indonesia's palm oil sector, offering insights from the world's largest producer. Second, we examine the relatively underexplored concept of green intellectual capital in an emerging market context. Third, we investigate how financial metrics interact with sustainability indicators in determining corporate valuation. Finally, we offer practical implications for companies seeking to enhance their market valuation through sustainable practices while maintaining financial stability.

2. Theoretical Background

2.1 Resource-Based View (RBV) Theory

The Resource-Based View theory, developed to analyze competitive advantage, emphasizes knowledge economy and intangible assets (Firmansyah, 2017 in Zalfa & Novita, 2021). In contemporary environmental contexts, green intellectual capital serves as a motivational factor for employee engagement in environmental protection activities and sustainability thinking, ultimately supporting business continuity (Mohd et al., 2019). The synergy between intangible assets and environmentally friendly business practices strengthens achievement of superior performance (Yi et al., 2019 in Zalfa & Novita, 2021).

2.2 Trade Off Theory

The essence of trade off theory in capital structure involves finding balance between benefits and drawbacks of debt usage. Optimal debt level occurs when tax savings reach highest level against financial distress costs (Brigham & Houston, 2019). This theory predicts a positive relationship between capital structure and firm value, assuming tax benefits outweigh bankruptcy and agency costs.

2.3. Signaling Theory

Signaling Theory describes reciprocal relationship between management as signal senders and investors as signal recipients (Spence, 1973 in Anjani et al., 2023). Management provides signals through information about company conditions, containing messages about corporate performance that impact quality and firm value improvement (Charisma & Suryandari, 2021). Earnings quality serves as an indicator of financial reporting quality and accurate representation of company performance through accounting profits.

2.4 Firm Value

Firm value represents the market's perception of a company's worth and plays a crucial role in investment decisions. According to Brigham and Houston (2019), high stock prices reflect increased firm value and enhance investor confidence in their investments. Positive corporate image can yield beneficial impacts, with high firm value indicating significant asset ownership including securities, equipment, buildings, and other valuable resources.

In the context of sustainable business practices, firm value transcends mere financial metrics. As noted by Triyani and Rusmanto (2023), increasing firm value manifested through rising stock prices compared to net book value demonstrates significant corporate success in sustainability and fundamental financial management while maintaining attention to social and environmental aspects. This comprehensive approach to valuation

aligns with contemporary investment paradigms where environmental responsibility significantly influences investor considerations (Nazwa & Fitri, 2022 in Nur Aeni & Murwaningsari, 2023).

2.5 Green Intellectual Capital (GIC)

Green intellectual capital incorporates natural environment into intellectual capital, addressing previous limitations in environmental problem resolution (Dewi & Ananda, 2024). Chen (2008) defines GIC as intangible assets, knowledge, abilities, relationships, and other elements related to environmental protection or innovation at both individual and organizational levels. GIC comprises three components:
1) Green Human Capital (GHC): Employee knowledge, skills, abilities, experience, behavior, wisdom, creativity, and environmental protection efforts
2) Green Structural Capital (GSC): Organizational capabilities, commitment, knowledge management systems, management philosophy, corporate culture, and environmental protection innovations
3) Green Relational Capital: External relationships and networks supporting environmental initiatives

2.6 Leverage Ratio

Leverage ratio, measured through Debt to Asset Ratio (DAR), indicates the proportion of total assets financed by debt. Higher DAR values suggest greater asset financing through debt and consequently higher risk (Brigham & Houston, 2019). This study employs DAR due to the capital-intensive nature of palm oil industry (Serrano, 2024) and its ability to provide comprehensive assessment, particularly for companies with negative or minimal equity.

2.7 Earnings Quality

Earnings quality refers to the ability of financial statements to accurately represent actual company performance (Rahmah & Suyanto, 2020 in Anjani et al., 2023). High-quality earnings reflect true company conditions without management manipulation (Nanang & Tanusdjaja, 2019). This study employs the Penman and Zhang (2002) measurement method, calculating operating cash flow divided by net income, where ratios above 1.0 indicate high earnings quality.

2.8 Firm Size

Firm size, measured through total assets, represents a scale measuring company magnitude (Atiningsih & Wahyuni, 2020 in Yulimtinan & Atiningsih, 2021). Larger companies typically demonstrate greater stability due to better market control and enhanced economic competition capabilities. Firm size serves as an indicator affecting earnings quality level, with larger companies generally showing more effective profit generation capabilities (Pratama & Wiksuana, 2016 in Putra & Anwar, 2021).

2.9 Hypothesis Development

Based on the theoretical framework, we develop the following hypotheses:
1) Based on Resource-Based View theory, Green Intellectual Capital (GIC) is hypothesized to positively influence firm value as environmental-focused intellectual assets including green knowledge, eco-innovation, and sustainability management create rare and inimitable competitive advantages that enhance operational efficiency,

corporate reputation, and investor confidence, ultimately reflected in improved market valuation. *H1: Green Intellectual Capital and Firm Value*

2) Grounding in Trade Off Theory, leverage ratio (DAR) is hypothesized to exhibit an inverted U-shaped relationship with firm value, where debt-derived tax shield benefits initially enhance value up to an optimal point, beyond which increasing leverage reduces firm value due to escalating financial risk and capital costs. *H2: Leverage Ratio and Firm Value*

3) Drawing on Signaling Theory, earnings quality is hypothesized to positively affect firm value as high-quality earnings characterized by persistence, predictability, and minimal manipulation provide credible signals about fundamental performance and sustainability prospects, reducing information asymmetry and strengthening investor trust. *H3: Earnings Quality and Firm Value*

4) According to Economies of Scale Theory, firm size is hypothesized to positively influence firm value as large-scale operations enable cost efficiencies, improved financing access, risk diversification, and stronger market competitiveness, collectively enhancing profitability and stability perceptions among investors. *H4: Firm Size and Firm Value*

5) Building on Resource Orchestration Theory, firm size is hypothesized to strengthen the GIC-firm value relationship as larger firms possess superior resources (e.g., budgets, technology, human capital) to effectively leverage green intellectual capital, thereby optimizing sustainable value creation. *H5: Moderating Role of Firm Size on GIC-Firm Value Relationship*

6) Based on Contingency Theory, firm size is hypothesized to enhance the leverage ratio-firm value relationship as larger firms typically benefit from better capital market access, favorable debt terms, and more sophisticated financial risk management capabilities, enabling more optimal utilization of debt. *H6: Moderating Role of Firm Size on Leverage Ratio-Firm Value Relationship*

7) Grounding in Signaling Theory, firm size is hypothesized to amplify the earnings quality-firm value relationship as larger firms exhibit greater market visibility, stricter analyst scrutiny, and stronger financial reporting credibility, making quality earnings signals more trustworthy and positively received by the market. *H7: Moderating Role of Firm Size on Earnings Quality-Firm Value Relationship*

3. Methods

3.1. Research Design

This study employs a quantitative research design utilizing a causal-associative approach to examine the relationships between independent variables, moderating variables, and dependent variables. The research adopts a longitudinal panel data analysis covering an 8-year period from 2017 to 2024, allowing for the examination of temporal patterns and relationships while controlling for individual heterogeneity across firms. The study utilizes secondary data extracted from annual reports and sustainability reports of palm oil plantation companies listed on the Indonesia Stock Exchange (IDX).

3.2. Population and Sampling

The study population consists of all palm oil plantation companies listed on the Indonesia Stock Exchange during the 2017-2024 period. A purposive sampling method was employed with the following criteria:

Table 1. Sample Selection Process

Selection Criteria	Number of Companies
Total palm oil plantation companies listed on IDX (2017-2024)	24
Less: Companies conducting IPO during research period	(8)
Less: Companies with incomplete reporting	(3)
Final Sample Size	13
Total Observations (13 companies × 8 years)	104

3.3. Variable Operationalization

Table 2. Variable Definitions and Measurement

Variable	Definition	Measurement	Scale
Firm Value (Y)	Market valuation relative to book value	Price to Book Value Ratio: Stock Price / Book Value per Share	Ratio
Green Intellectual Capital (X_1)	Environmentally-oriented intellectual capital disclosure	Disclosure Index: Number of disclosed items / Total possible items	Ratio
Leverage Ratio (X_2)	Debt financing proportion	Debt to Asset Ratio: Total Debt / Total Assets	Ratio
Earnings Quality (X_3)	Quality of reported earnings	Cash Flow Ratio: Operating Cash Flow / Net Income	Ratio
Firm Size (M)	Company scale and capacity	Natural Logarithm of Total Assets	Absolute

3.4. Data Analysis Method

The study employs Moderated Regression Analysis (MRA) using EViews 12 software to test the hypothesized relationships. Two models are estimated:

Direct Effects Model ……………………………………………………………………. (1)

$$Y = \beta_0 + \beta_1 GIC + \beta_2 RL + \beta_3 KL + \beta_4 UP + \varepsilon$$

Moderation Effects Model …………………………………………………......... (2)

$$Y = \beta_0 + \beta_1 GIC + \beta_2 RL + \beta_3 KL + \beta_4 UP + \beta_5(GIC \times UP) + \beta_6(RL \times UP) + \beta_7(KL \times UP) + \varepsilon$$

Where:
Y   = Firm Value (PBV)
GIC = Green Intellectual Capital
RL   = Leverage Ratio (DAR)
KL   = Earnings Quality
UP   = Firm Size (Moderator)
β_0 = Constant
β_1-β_7 = Regression coefficients
ε = Error term

4. Results and Discussion

4.1. Descriptive Statistics

Table 1. Descriptive Statistics of Research Variables

Variable	Proxy	N	Maximum	Minimum	Mean	Std. Deviation
Green Intellectual Capital	GIC	104	0.889	0.222	0.629	0.152
Leverage Ratio	DAR	104	2.642	0.093	0.624	0.434
Earnings Quality	EQ	104	109.049	-13.235	3.502	11.858
Firm Size	Total Assets	104	45,333	1,946	15,584	11,083
Firm Value	PBV	104	5.002	-0.477	0.932	0.898

The GIC disclosure index shows moderate implementation of green intellectual capital practices (mean = 0.629), with DSNG achieving the highest score (0.889 in 2024) and GZCO and JAWA showing the lowest scores (0.222 in 2018). Leverage ratios demonstrate considerable variation, with UNSP exhibiting extremely high leverage (DAR = 2.642 in 2024) while LSIP maintained conservative leverage ratio levels (DAR = 0.093 in 2024). Earnings quality shows dramatic fluctuations, ranging from -13.235 to 109.049, indicating inconsistent earnings sustainability across the industry.

4.2. Classical Assumption Tests

All classical assumption tests were conducted to ensure the validity of regression results:

Table 2. Results of Classical Assumption Tests

Test	Method Used	Test Statistic	p-value	Conclusion
Normality	Jarque-Bera Test	-	0.531	Residuals are normally distributed ($p > 0.05$)
Multicollinearity	Variance Inflation Factor (VIF)	Max VIF = 2.87	-	No multicollinearity (all VIF < 10)
Heteroscedasticity	White Test	Obs*R-squared	0.2495	Homoscedasticity present ($p > 0.05$)
Autocorrelation	Breusch-Godfrey LM Test	-	0.061	No autocorrelation ($p > 0.05$)

Note:
1) Normality test confirmed using Jarque-Bera test ($p > 0.05$).
2) Multicollinearity assessed via VIF; all values < 10 indicate no multicollinearity.
3) Heteroscedasticity tested using White test ($p > 0.05$ supports homoscedasticity).
4) Autocorrelation evaluated with Breusch-Godfrey LM test ($p > 0.05$ indicates no autocorrelation).

4.3. Panel Model Selection

Three statistical tests were conducted to determine the appropriate panel data model:

Table 3. Results of Panel Model Selection Tests

Test	Statistic	p-value	Null Hypothesis (H₀)	Conclusion
Chow Test	F-statistic = 17.407	0.0000	Common Effects Model (CEM) is appropriate	Reject H₀; Fixed Effects Model (FEM) is preferred over CEM

Test	Statistic	p-value	Null Hypothesis (H₀)	Conclusion
Hausman Test	Chi-square = 14.327	0.049	Random Effects Model (REM) is appropriate	Reject H₀; Fixed Effects Model (FEM) is preferred over REM
Lagrange Multiplier Test	-	0.0000	Common Effects Model (CEM) is appropriate	Favors REM over CEM, but Hausman test takes precedence; FEM is final choice

Note:
1) The Chow test compares Fixed Effects (FEM) vs. Common Effects (CEM).
2) The Hausman test compares Fixed Effects (FEM) vs. Random Effects (REM).
3) The Lagrange Multiplier (LM) test compares Random Effects (REM) vs. Common Effects (CEM).

Final model selection is based on the Hausman test result ($p = 0.049 < 0.05$), confirming Fixed Effects Model (FEM) as the most appropriate for this analysis.

4.4. Regression Results
Table 4. Goodness-of-Fit and Overall Model Significance Tests

Test Category	Metric	Value	Interpretation
Goodness of Fit	R-squared	0.7357	73.57% of the variation in firm value is explained by the independent and moderating variables.
Simultaneous Significance (F-test)	F-statistic	12.311	The model is statistically significant overall ($p = 0.000$).
	p-value (F-test)	0.000	Reject null hypothesis; the model provides a better fit than an intercept-only model.

Note:
1) R-squared measures the proportion of variance in the dependent variable (firm value) explained by the model.
2) F-test evaluates the joint significance of all independent variables. A p-value < 0.05 indicates the model is statistically significant.
3) The results confirm the model's robustness and explanatory power for analyzing determinants of firm value.

4.4.2. Partial Significance (t-test)
The individual variable effects are summarized in Table 5:
Table 5. Regression Results of Fixed Effects Model

Variable	Coefficient	t-statistic	p-value	Result
GIC	44.669	2.678	0.009	Significant positive effect
DAR	-27.324	-3.452	0.001	Significant negative effect
EQ	-0.045	-0.329	0.742	Not significant
SIZE	0.461	0.649	0.518	Not significant
GIC×SIZE	-1.908	-2.601	0.011	Significant negative moderation
DAR×SIZE	1.300	3.487	0.001	Significant positive moderation
EQ×SIZE	0.002	0.290	0.772	Not significant

The final regression equation is:
$$Y = -11.528 + 44.669GIC - 27.324DAR - 0.045EQ + 0.461SIZE - 1.908GIC{\times}SIZE + 1.300DAR{\times}SIZE + 0.002EQ{\times}SIZE$$

4.5. Hypothesis Testing Summary
    The hypothesis testing results are summarized in Table 6:

Table 6. Hypothesis Testing Results

Hypothesis	Relationship	Result
H1	GIC → Firm Value	Supported (positive)
H2	DAR → Firm Value	Supported (negative)
H3	EQ → Firm Value	Not supported
H4	SIZE → Firm Value	Not supported
H5	SIZE moderates GIC → Firm Value	Supported (negative moderation)
H6	SIZE moderates DAR → Firm Value	Supported (positive moderation)
H7	SIZE moderates EQ → Firm Value	Not supported

    The results indicate that green intellectual capital significantly enhances firm value, while leverage ratio negatively impacts valuation. Firm size demonstrates significant moderating effects on both GIC and leverage ratio relationships, but not on earnings quality.

5. Conclusion

    This study examined the effects of Green Intellectual Capital (GIC), leverage ratio (DAR), and earnings quality on firm value, with firm size as a moderating variable, in palm oil plantation companies listed on the Indonesia Stock Exchange during 2017–2024. The findings provide several key insights.

1) Green Intellectual Capital (GIC) exerts a positive and significant influence on firm value, suggesting that greater disclosure of GIC enhances corporate valuation. This result underscores the relevance of sustainability-oriented intellectual resources as strategic assets that contribute to market appreciation.

2) The leverage ratio (DAR) shows a negative and significant effect on firm value, indicating that higher levels of debt are perceived by investors as financial risk, thereby reducing firm valuation.

3) Earnings quality does not significantly affect firm value, implying that investors may rely more on other signals such as sustainability disclosures or financial structure rather than earnings persistence in assessing firm performance.

4) Firm size does not have a direct significant effect on firm value, suggesting that asset scale alone does not guarantee higher valuation in the palm oil sector.

5) Firm size negatively moderates the relationship between GIC and firm value, meaning that the positive impact of GIC tends to weaken in larger firms. This could reflect investors' perception that larger firms are already expected to implement sustainability practices, thereby reducing the incremental value of GIC disclosures.

6) Firm size positively and significantly moderates the relationship between leverage and firm value, demonstrating that larger firms are considered more capable of managing debt and sustaining market confidence, thus leveraging debt financing more effectively to enhance value.

7) Firm size does not moderate the relationship between earnings quality and firm value, confirming that the role of earnings quality in firm valuation remains unaffected by organizational scale.

    Overall, these findings contribute to the literature by highlighting the dual role of firm size dampening the effect of intellectual capital while strengthening the effect of leverage within the context of sustainability and financial performance in emerging markets. From a practical perspective, managers in the palm oil industry should strategically integrate

GIC into corporate reporting and adopt prudent leverage policies, particularly in larger firms, to optimize firm value.

References

Anjani, N. K. D., Suyanto, & Charisma, F. D. (2023). The Effect of Profitability and Leverage on Firm Value with Earnings Quality as a Moderating Variable. Journal of Finance and Accounting, 11(2), 45-58.

Aviany, R., & Rifandi, A. (2024). Corporate Valuation and Investment Analysis. Penerbit Ekonomi Press.

Brigham, E. F., & Houston, J. F. (2019). Fundamentals of Financial Management (15th ed.). Cengage Learning.

BPS Indonesia. (2024). Statistik Kelapa Sawit Indonesia 2024. Badan Pusat Statistik.

Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. Journal of Business Ethics, 77(3), 271–286.

Dewi, N. L. P. S., & Ananda, C. P. (2024). Green Intellectual Capital: Konsep dan Pengukurannya. Jurnal Akuntansi dan Bisnis Kontemporer, 6(1), 77-89.

GAPKI. (2023). Indonesian Palm Oil Industry Annual Report 2023. Gabungan Pengusaha Kelapa Sawit Indonesia.

Hakim, L., & Setiawan, J. (2024). Sustainable Investment: Trends and Prospects in Emerging Markets. Journal of Sustainable Finance, 12(3), 112-125.

Haryono, S., & Iskandar, T. (2015). Manajemen Kinerja Perusahaan. Penerbit Universitas.

Hidayah, N. (2025). Environmental Economics of the Palm Oil Industry. Green Publishing.

Kurniawati, E., & Widiayana, M. (2024). Green Innovation and Corporate Sustainability: Evidence from Indonesia. Asian Journal of Business and Environment, 8(2), 34-47.

Mohd, S., Rahman, A., & Rasid, S. (2019). The Role of Green Intellectual Capital on Business Sustainability. Journal of Intellectual Capital, 20(5), 621-635.

Nanang, A., & Tanusdjaja, E. (2019). Teori Akuntansi: Kualitas Laba dan Manajemen Laba. Salemba Empat.

Nur Aeni, S., & Murwaningsari, E. (2023). The Effect of Environmental Performance and Environmental Disclosure on Firm Value. Journal of Environmental Accounting and Management, 11(1), 22-35.

Penman, S. H., & Zhang, X. J. (2002). Accounting conservatism, the quality of earnings, and stock returns. The Accounting Review, 77(2), 237–264.

Pratama, B. C., & Wiksuana, I. G. B. (2016). Pengaruh Size Perusahaan pada Kualitas Laba. E-Jurnal Ekonomi dan Bisnis Universitas Udayana, 5(12), 3907-3936.

Putra, I. G. B. W., & Anwar, M. K. (2021). Firm Size, Profitability, and Firm Value: Evidence from Indonesia. International Journal of Science and Research, 10(4), 1122-1127.

Rahmah, S., & Suyanto. (2020). Earnings Management and Its Impact on Earnings Quality. Jurnal Riset Akuntansi dan Keuangan, 15(3), 45-60.

Serrano, A. (2024). Financial Management in Agribusiness: A Capital Intensive Industry. Agribusiness Press.

Spence, M. (1973). Job Market Signaling. The Quarterly Journal of Economics, 87(3), 355–374.

Supriyadi, A., & Ghoniyah, N. (2022). Corporate Social Responsibility and Sustainable Development. Penerbit Universtas.

Triyani, L., & Rusmanto, T. (2023). The Effect of Sustainability Reporting on Firm Value with Profitability as a Moderating Variable. Journal of Economics and Business, 17(2), 201-215.

USDA. (2024). Oilseeds: World Markets and Trade. United States Department of Agriculture, Foreign Agricultural Service.

Yulimtinan, P., & Atiningsih, S. (2021). The Effect of Company Size, Leverage, and Profitability on Firm Value. Journal of Accounting and Investment, 22(2), 345-362.

Zalfa, A., & Novita, D. (2021). Resource-Based View: Green Intellectual Capital as a Strategic Asset for Competitive Advantage. Journal of Strategic Management, 9(4), 123-135.