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Intellectual Capital and Firm Value with Managerial Ownership as Moderating Role: Indonesia case

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Abstract:

This paper investigates how intellectual capital impacts firm value, with managerial ownership as a moderating factor. The empirical data comprises companies listed on the Indonesia Stock Exchange (IDX) over the 2020–2024 period, marked by post-pandemic economic recovery and escalating geopolitical conflicts between Russia and Ukraine. Using a purposive sampling technique, 108 firms yielding 540 observations were chosen from an initial population of 951 companies. The examination was conducted with multiple linear regression implemented via EViews 13. The findings show that intellectual capital significantly influences firm value. However managerial ownership fails to moderate the impact of intellectual capital on firm value significantly. Theoretically, this study adds to the Resource-Based View and Agency Theory. It shows that intellectual capital directly increases firm value, even when managers hold very few shares in emerging markets. Practically, these findings highlight the need for management to enhance intellectual capital through Knowledge Management practices and urge companies to improve transparency by disclosing intangible assets using integrated reporting frameworks.

Keywords: *Intellectual Capital; Managerial Ownership; Firm Value*

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1. Introduction

Increasing shareholder wealth through increasing firm value remains a foundational goal of financial management (Brigham & Ehrhardt, 2011). Firm value extends beyond tangible assets to encompass market valuation. The gap between market value from book value reflects "hidden value," representing a major component of intangible resources (Edvinsson & Malone, 1997; Stewart, 1999). This concealed value, termed intellectual capital by Edvinsson and Malone (1997), consists of employee skill sets and institutional frameworks. In the same way, Stewart (1999) describes that high market-to-book ratios demonstrate that physical assets play a subordinate role in driving firm value relative to intangible capital.

Intellectual Capital (IC) helps companies use their hidden abilities to deal with economic problems (Haji, 2016). The COVID-19 pandemic accelerated the corporate

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shift toward digital technology, which became a strict need to meet people's expectations around the world (Kraus et al., 2022). Nowadays in the business world, organizations use digital technology in all parts of their work to improve their intellectual capital (Yilmaz & Tuzlukaya, 2024). IC is very important in this digital era because the economy has changed from relying on physical resources to relying on knowledge, where intellectual capital becomes the main energy for successful technology adoption.

According to the 2025 World Digital Competitiveness Ranking by IMD Business School, Indonesia continues to lag behind its Southeast Asian peers in digital readiness. This report measures how ready different countries are to use digital technology for their economy and society. Overall, Indonesia ranks 51st out of 69 countries. It stays behind Singapore (3rd), Malaysia (34th), and Thailand (38th). The study looks at three main areas: knowledge, technology, and future readiness. Indonesia's biggest problem is in the knowledge category, where it ranks 62nd out of 69, making it the weakest among these neighboring countries.

Because of the knowledge crisis and the important role of Intellectual Capital (IC) in company success, companies must manage their IC well. Traditional accounting systems usually focus only on money and physical assets but fail to measure a company's IC properly (Stewart, 1999). Conventional accounting frameworks present a major obstacle in today's business world because financial reports are too rigid and cannot show complex modern activities (Edvinsson & Malone, 1997). The big gap between market value and book value shows that we need better accounting rules to explain the value of invisible assets to investors clearly (Lev, 2001). Even though there is PSAK No. 19 about reporting invisible assets, many IC components made inside the company are still not written in financial reports, creating "hidden values" that investors cannot see. Current accounting rules, such as PSAK 19 (IAI, 2012) and IAS 38 (IASB, 2004), focus on goodwill and do not cover IC completely as a whole system (Arifin, 2023; Ulum, 2015).

Intellectual Capital (IC) can be measured using different methods. One common method was created by Pulic (1998), called the VAIC™ model. According to Ulum (2022), this tool shows how effectively a firm uses its IC rather than its total amount. VAIC™ includes three components: CEE, HCE, and SCE. Even though it's simplicity, the model has weaknesses because it doesn't count R&D costs and intellectual property (Tran & Vo, 2022). Therefore, researchers developed the M-VAIC model by using concepts from Nazari & Herremans (2007) and Ulum et al. (2014). The M-VAIC model adds an extra part, that is Relational Capital Efficiency (RCE).

Managerial ownership is one way to increase firm value (Sembiring & Trisnawati, 2019). When managers have more shares in a company, they will have less reason to manipulate financial outcomes for their own interest (Jensen & Meckling, 1976). Different goals in investment sometimes lead to low innovation, which is part of the agency problem. Because managers usually want to avoid risks, they tend to be more careful and stay away from risky decisions, which can reduce innovation in the

company (Pu & Zulkafli, 2024). On the other hand, managers who have shares in the firm care more about its future growth. They choose wise investments to boost market valuation (Noradiva et al., 2016). Previous research proves that managerial ownership strongly influences firm value (Artantiwi & Hamidah, 2018; Hakim et al., 2025; Ifada et al., 2021; Rafsanjani et al., 2024). This indicates that investors give positive reactions when managers have company shares. Therefore, managerial ownership plays as a key element that can moderate the link between intellectual capital and firm value.

Many researchers have analyzed the impact between Intellectual Capital and firm value. Several articles show that Intellectual Capital impacts firm value greatly (Ahmed et al., 2019; Noradiva et al., 2016; Paputungan et al., 2020; Restuti et al., 2019; Saminem & Eka, 2022; Sardo & Serrasqueiro, 2017; Ur Rehman et al., 2022; Wulandari & Purbawati, 2021). On the other hand, different articles reveal that Intellectual Capital does not impact significantly on firm value (Abbas et al., 2021; Baskoro et al., 2020; Shubita, 2019; Gracia & Lukman, 2023; Odat & Bsoul, 2022; Soetanto & Liem, 2019). Regarding the moderating effect, several articles argue that managerial ownership cannot moderate the relationship (Gracia & Lukman, 2023; Noradiva et al., 2016). Reversely, others find a significant moderating role of managerial ownership (Ahmed et al., 2019; Saminem & Eka, 2022). Therefore, a clear research gap exists regarding how Intellectual Capital influences firm value under the moderating role of managerial ownership, particularly during the 2020–2024 period marked by post-pandemic recovery and geopolitical tensions.

To address these empirical inconsistencies, this research focuses on firms listed on the Indonesia Stock Exchange during 2020–2024, a timeframe characterized by post-pandemic economic recovery and geopolitical conflict between Russia and Ukraine. It analyzes how intellectual capital influences firm value while evaluating managerial ownership as a moderating factor. This study offers an important contribution to corporate governance and finance literature by filling the research gap. By applying the M-VAIC framework in an emerging market, it explains how intellectual capital creates firm value, especially in business environments with low managerial ownership and concentrated shareholding.

2. Theoretical Background

Resource-Based View (RBV) Theory: The Resource-Based View (RBV), introduced by Penrose (1959), suggests that companies get a competitive advantage if they possess distinct competences. Furthermore, RBV explains that businesses rely on their own assets to gain a market advantage (Ahmed et al., 2019). Internal factors are more critical than external conditions because internal resources help reduce risks and create new opportunities (David et al., 2020). Intellectual Capital is a unique and superior asset, that competitors cannot easily copy, which creates a strong advantage for the firm (Soewarno & Tjahjadi, 2020). Specifically, this resource enables organizations to utilize hidden strengths during uncertain economic times (Haji, 2016).

Signaling Theory: Complementing RBV, Signaling Theory, introduced by Spence (1973), explains how companies reduce information gaps to the public. High-performing companies tend to release financial and non-financial information to signal their good condition to the market (Godfrey, 2010 ;Ulum, 2022). Annual reports act as a key signal to provide important data for internal and external stakeholders (Ulum, 2022). By applying signaling theory can lead to higher stock values (Godfrey, 2010). Moreover, Intellectual Capital functions as an optional disclosure that clearly indicates a company's competitive advantage for generating future wealth (Ihyaul Ulum, 2022).

Intellectual Capital: Intellectual Capital (IC) refers to intellectual assets, which are information, knowledge, and intellectual property, that help generate wealth. It represents the combined knowledge or group intelligence within an organization (Stewart, 1999). Bontis et al. (2000) explain that researchers usually divide IC into three core dimensions: Human Capital, Structural Capital, and Customer Capital. Human Capital stands for the individual knowledge stored by workers. Structural Capital remains inside the firm through routines, procedures, systems, and databases. Customer or Relational Capital involves knowledge related to customer relationships and marketing channels. To measure IC performance, Pulic (1998) introduced the Value Added Intellectual Coefficient (VAIC™), which use data directly from financial statements (Ulum, 2009). The standard VAIC™ framework includes Human Capital Efficiency (HCE), Capital Employed Efficiency (CEE), and Structural Capital Efficiency (SCE). Later, Nazari & Herremans (2007), Ulum et al. (2014) created the M-VAIC (Modified Value Added Intellectual Coefficient) model by adding Relational Capital Efficiency (RCE) as an additional element.

Managerial Ownership: Managerial ownership is an important element of corporate that helps reduces conflicts between managers and shareholders (Ahmed et al., 2019). This term refers to percentage of shares controlled by management members who actively join in business decisions (Sintyawati & Dewi, 2018). When managers own shares, their goals align with shareholder interests, which encourages them to manage the firm carefully to increase long-term returns (Jensen & Meckling, 1976; Noradiva et al., 2016). Consequently, higher managerial ownership reduces opportunistic behavior and financial manipulation.

Hypothesis Development

Intellectual Capital on Firm Value: Because Intellectual Capital is unique and superior, competitors cannot easily replace it, which builds a solid competitive advantage (Soewarno & Tjahjadi, 2020). Signaling theory suggests that giving information to the public can increase firm value (Godfrey, 2010), and managers share it because they believe the company has a strong advantage. Furthermore, Edvinsson & Malone (1997) state that intellectual capital plays a key role in raising firm value. The gap separating a firm's book value from its market price indicates the existence of intellectual capital. Previous empirical studies show that Intellectual Capital has a significant influence on Firm Value (Ahmed et al., 2019; Noradiva et al., 2016;

Paputungan et al., 2020; Restuti et al., 2019; Saminem & Eka, 2022; Sardo & Serrasqueiro, 2017; Ur Rehman et al., 2022; Wulandari & Purbawati, 2021). Therefore, the following hypothesis is proposed:

H1: Intellectual Capital has a significant influence on Firm Value

Moderating Role of Managerial Ownership: When managers own company shares, they focus more on future firm value. Therefore, they are more likely to make investment choices that boost the firm's market price (Noradiva et al., 2016). Equity-based incentives align the strategic goals of management with shareholder interests, mitigating agency costs and encouraging long-term investments in innovation, such as research and development (R&D) (Pu & Zulkafli, 2024). Prior empirical research confirms that managerial ownership significantly moderates the relationship between Intellectual Capital and firm value (Ahmed et al., 2019; Saminem & Eka, 2022). Therefore, the following hypothesis is proposed:

H2 : Managerial Ownership moderates the influence of Intellectual Capital on Firm Value

3. Methodology

The population of this study consist of public firms registered on the Indonesia Stock Exchange (IDX) between 2020 and 2024. Records from idx.co.id show that 951 companies were listed as of February 2025. This research uses a purposive sampling technique, choosing the subjects based on specific requirements which are set by the author as follow:

a) Firms listed on the Indonesia Stock Exchange (IDX) that faced no delisting actions throughout the 2020–2024 timeframe.
b) Businesses that did not report financial losses during the 2020–2024 period.
c) Companies providing complete financial data needed for this research, covering M-VAIC and its parts, managerial ownership, alongside firm value.

Companies with financial losses during the study period are excluded to avoid error in the value-added calculations. In the M-VAIC model, negative financial performance or negative value added can create abnormal efficiency scores. This condition can distort statistical results and bias the panel regression estimates.

This research uses secondary sources, which include yearly financial reports and closing stock prices of public firms registered on the Indonesia Stock Exchange between 2020 and 2024. Out of 951 total firms, 108 companies qualified as the research sample, resulting in 540 total observations (108 firms multiplied by five years).

To test the correlation between Intellectual Capital and Firm Value using Managerial Ownership as a moderator, this paper uses multiple linear regression through EViews 13. Because this study is using panel data which combining cross-section and time series information, selecting the most accurate regression model is necessary. There

are three types of regression models: the Common Effect Model (CEM), the Fixed Effect Model (FEM), and the Random Effect Model (REM). To choose the best type, the research performs the Chow Test, Hausman Test, and Lagrange Multiplier Test. Furthermore, classical assumption tests must be conducted before testing hypotheses to make sure the model satisfies the BLUE (Best Linear Unbiased Estimator) standards. These checks consist of the multicollinearity test via VIF, the autocorrelation test using the Durbin-Watson value, the heteroscedasticity test through the park method, and the normality test utilizing Jarque-Bera statistics.

To evaluate the previous hypotheses, this research uses multiple linear regression alongside Moderated Regression Analysis (MRA). This examination consists of three evaluations: the F-test (Anova Significance Test), the t-test (Individual Parameter Significance Test), and the specific Moderated Regression Analysis (MRA) testing.

Research Instrument (Operational Definition of Variables)

1) **Independent Variable: Intellectual Capital (M-VAIC)**
   Intellectual Capital is measured using the Modified Value Added Intellectual Coefficient (M-VAIC) framework developed by Ulum et al. (2014) based on Pulic (1998) and Nazari & Herremans (2007) to evaluate corporate intellectual performance. Unlike the original VAIC™ model, M-VAIC includes Relational Capital Efficiency RCE as a fourth component.

   The calculation starts with computing the Value Added using the following step:
   - VA = OUT – IN,

   Where,
   OUT : Total Sales and Revenue
   IN : Selling expenses and other operating expenses, excluding employe costs

   The next step is to calculate Capital Employed Efficiency (CEE). CEE is an indicator that measures how much value added is generated by each unit of capital employed by the company.
   - CEE = VA/CE

   Where,
   CE : Total Asset excluding Intangible Assets.

   After obtaining the CEE, the next step is to calculate Human Capital Efficiency (HCE). It is an indicator of how well an organization utilizes its human resources to achieve business goals and generate value added.
   - HCE = VA/HC

   Where,
   HC = Salaries and Benefit (Including Training Expense) form company

   The next step is to calculate Structural Capital Efficiency (SCE). It is an indicator of how efficiently an organization uses its structural capital to create value added.
   - SC = VA – HC

- SCE = SC/VA

The next step is to calculate Relational Capital Efficiency (RCE) as the fourth part of M-VAIC equation. RCE shows the efficiency of money invested in corporate partnerships. Here, Relational Capital (RC) is represented by marketing costs (Ulum et al., 2014).

- RCE = RC/VA

Where,
RC = Marketing expense

Therefore, the comprehensive M-VAIC equation is presented as follows:

- M-VAIC= CEE+HCE+SCE+RCE

2) Dependent Variable: Firm Value (MBV)

In this study, the dependent variable is Firm Value, which is measured by the Market-to-Book Value (MBV) ratio. This metric demonstrates the difference between market valuation and accounting book value for a business.

- MBV = Market Price per Share / Book Value per Share

3) Moderating Variable: Managerial Ownership (MO)

The moderating variable in this study is Managerial Ownership. This variable represents the proportion of shares held by the company's management—including directors and commissioners—out of the total shares outstanding.

- MO = Total Shares Held by Management / Total Shares Outstanding

Econometrics Models

In alignment with the research objectives and hypotheses, various models have been employed for estimation purposes in this study. The regression models used in this study are as follows:

- $MBV=a+b_1MVAIC+e$

The first equation is used for testing the first hypothesis.

- $MBV=a+b_1MVAIC+b_2MO+b_3MO.MVAIC+e$

The last equation is used for testing the second hypothesis.

4. Empirical Findings/Result

Based on the descriptive statistics, this study comprises 540 observations from 108 companies over the 2020–2024 period.

Tabel 1. Descriptive Statistic

	MBV	MVAIC	MVAIC.MO	MO
Mean	1.796398	3.641029	0.377466	0.091173
Median	1.117581	2.934383	0.038512	0.013288
Maximum	10.67287	27.23207	13.17178	0.920348

Minimum	0.066219	1.106421	0.000001	0.0000001
Std. Dev.	1.774890	2.642736	1.064301	0.169627
Skewness	1.969674	3.718679	7.348633	2.516726
Kurtosis	7.251154	23.43470	78.07854	9.320973
Jarque-Bera	755.7922	10640.05	131687.9	1469.032
Probability	0.000000	0.000000	0.000000	0.000000
Observations	540	540	540	540

Source: Data Analysis (2026)

Initial observations reveal that the data exhibits high variance and is not normally distributed. Specifically, the skewness values for several variables indicate substantial and severe positive skewness. Consequently, following Ghozali (2021), all variables were transformed into Natural Logarithms (Ln) prior to testing. This transformation aims to ensure the model accurately and reliably captures the researched phenomenon. Therefore, the full equations following the Natural Logarithm transformation are presented below:

- $LN(MBV+1)=a+b_1LN(MVAIC+1)+e$
- $LN(MBV+1)=a+b_1LN(MVAIC+1)+b_2LN(MO+1)+b_3LN((MVAIC.MO)+1)+e$

Panel Data Model Selection Test

Findings from the Chow, Hausman, and Lagrange Multiplier procedures clearly show that the Random Effects Model (REM) serves as the best choice for every regression equation. Based on Gujarati & Porter (2009), this REM structure applies the Generalized Least Squares (GLS) method.

Normality Test

Tabel 2. Jarque-Bera Test

	Jarque Bera	Probability
Equation 1	70.01878	0.000000
Equation 2	71.95561	0.000000

Source: Data Analysis (2026)

The Jarque-Bera normality test reveals that the residuals across all Equations are not normally distributed, with probability values below 0.05. However, following Gujarati & Porter (2009), this abnormality is mitigated by the Central Limit Theorem, which states that a larger sample size causes the data distribution to converge toward normality.

Multicollinearity Test

Tabel 3. Variance Inflation Factors-Equation 2

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.010669	22.23652	NA

LN_MO	0.200080	9.938842	7.440088
LN_MVAIC	0.005118	23.77948	1.723892
LN_MVAIC_MO	0.027769	11.07510	8.473716

Source: Data Analysis (2026)

The Variance Inflation Factors (VIF) analysis confirms that multicollinearity is not an issue in this study. All independent variables in equation 2 present Centered VIF values below the threshold of 10. For equation 1, the test was omitted because the model uses only one independent variable, which precludes any potential correlation among independent predictors.

Autocorrelation Test

Tabel 4. Durbin-Watson Test

	Durbin-Watson stat	**Z-Value**
Equation 1	1.289840	8.25
Equation 2	1.294632	8.20

Source: Data Analysis (2026)

According to the Durbin-Watson autocorrelation test outcomes, every regression equation exhibits positive autocorrelation issues because the computed Z-score exceeds the critical threshold on the Z-table (1.96).

Heteroscedasticity Test

Tabel 5. Park Test

	Variable	**Probability**
Equation 1	LN_MVAIC	0.6489
Equation 2	LN_MO	0.0169
	LN_MVAIC	0.2897
	LN_MVAIC_MO	0.1884

Source: Data Analysis (2026)

The Park test for heteroscedasticity shows different results across the two equations. In Equation 1, the test meets the assumption completely because LN_MVAIC is homoscedastic ($p > 0.05$). In Equation 2, both LN_MVAIC and LN_MVAIC_MO are homoscedastic ($p > 0.05$). However, LN_MO fails the assumption because it has significant heteroscedasticity ($p < 0.05$).

Even though this study uses the Generalized Least Squares (GLS) method, problems with heteroscedasticity and autocorrelation still exist in the equations. To fix these problems, following Gujarati & Porter (2009), this study uses Robust Standard Errors (White's heteroscedasticity-corrected standard errors). This method is statistically correct because this study uses a large sample size.

Hypothesis Testing

The following table presents the EViews 13 Random Effects Model (REM) outputs using White's robust standard errors, evaluating how Managerial Ownership moderates the impact of Intellectual Capital on Firm Value.

Equation 1: $LN(MBV+1)=a+b_1LN(MVAIC+1)+e$

Tabel 6. Regression Analysis – Equation 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.664359	0.086607	7.670933	0.0000
LN_MVAIC	0.150557	0.050041	3.008673	0.0033
R-squared	0.018885	F-statistic		10.35545
Adjusted R-squared	0.017061	Prob(F-statistic)		0.001369

Source: Data Analysis (2026)

Based on Equation 1 in Table 3, Intellectual Capital (LN_MVAIC) has a significant positive impact on Firm Value (MBV), showing a t-statistic of 3.008673 (> 1.96) and a p-value of 0.0033 (< 0.05). These empirical results support and accept the first hypothesis. Additionally, the F-test outcome verifies the joint model significance with a p-value of 0.001369 (< 0.05). With an Adjusted R-squared value of 0.017061, the LN_MVAIC variable accounts for only 1.71% of the change in LN_MBV, whereas other external variables explain the remaining 98.29%.

Equation 2: $LN(MBV+1)=a+b_1LN(MVAIC+1)+b_2LN(MO+1)+ b_3LN((MVAIC.MO)+1)+e$

Tabel 7. Regression Analysis – Equation 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.680141	0.109617	6.204711	0.0000
LN_MO	-0.107224	0.692645	-0.154804	0.8773
LN_MVAIC	0.133449	0.061692	2.163168	0.0328
LN_MVAIC_MO	0.080748	0.165485	0.487948	0.6266
R-squared	0.019825	F-statistic		3.613684
Adjusted R-squared	0.014339	Prob(F-statistic)		0.013201

Source: Data Analysis (2026)

The t-test results in Table 4 (Equation 2) confirm that LN_MVAIC has a significant impact on Firm Value (LN_MBV), with a t-statistic of 2.163168 (>1.96) and a p-value of 0.0328 (<0.05). This result remains aligned with Equation 1. However, Managerial Ownership (LN_MO) does not significantly affect LN_MBV ($t = 0.154<1.96$, $p = 0.877 >0.05$). Similarly, the interaction variable (LN_MVAIC_MO) shows no significant relationship ($t = 0.487 < 1.96$, $p = 0.626 > 0.05$). Therefore, Managerial Ownership cannot moderate how Intellectual Capital affects Firm Value, meaning the

second hypothesis is rejected. The Adjusted R2 for Equation 2 is 0.014339, indicating that LN_MVAIC, LN_MO, and LN_MVAIC_MO together account for only 1.43% of the change in LN_MBV, with other external variables influencing the remaining 98.57%. Furthermore, the F-test probability of 0.013201 (< 0.05) proves that at least one main or interaction variable significantly influences Firm Value.

5. Discussion

The empirical findings demonstrate that Intellectual Capital has a strong impact on firm value. This condition proves that market investors in Indonesia care about how efficiently companies manage intellectual resources to build wealth. Through 2020 to 2024, energy companies made the highest contribution toward the total MVAIC score. This period, known by post-pandemic recovery and the Russia–Ukraine war, increased global commodity costs and triggered energy shortages in Europe. High global prices opened great opportunities for energy suppliers in export countries like Indonesia (Sun et al., 2024). These findings support previous studies by Ahmed et al. (2019), Noradiva et al. (2016), Paputungan et al. (2020), Restuti et al. (2019), Saminem & Eka (2022), Sardo & Serrasqueiro (2017), Ur Rehman et al. (2022), and Wulandari & Purbawati (2021). However, it also contradicts studies by Abbas et al. (2021), Baskoro et al. (2020), Shubita (2019), Gracia & Lukman (2023), Odat & Bsoul (2022), and Soetanto & Liem (2019). Intellectual capital measures "hidden values" and explains market gap that traditional financial reporting cannot show (Sardo & Serrasqueiro, 2017). Today, business growth depends on capitalizing on knowledge from workers, vendors, and clients (Noradiva et al., 2016). Therefore, investing into invisible assets is an important modern strategy to gain investor trust in long-term firm success (Paputungan et al., 2020).

However, descriptive data reveal a wide gap between the minimum and maximum M-VAIC values among the sampled firms. This result means that companies in Indonesia used Intellectual Capital unequally from 2020 to 2024. While most companies work efficiently, a few companies still struggle to make good use of their intellectual resources. Because the market rewards companies for managing these resources well, managers need to focus more on spending money on intellectual assets. Using Knowledge Management (KM) is a good way to fix this gap (Ramadan et al., 2017; Simalango et al., 2023). It helps turn personal worker ideas into clear company rules and shares them across the firm. Also, to get the highest firm value, managers should share information about their Intellectual Capital with the public (Keter et al., 2024; Salvi et al., 2020). They can use simple reporting systems like the Skandia Navigator (Edvinsson & Malone, 1997) or the modern Integrated Reporting standard (Haji, 2016).

The empirical analysis indicates that Managerial Ownership fails to moderate the relationship between Intellectual Capital and firm value. Descriptive observations show that executive shareholding remains generally low across the sample, with a significant majority of firms maintaining managerial ownership below one percent. Due to these low equity levels, the variable exhibits limited statistical influence in

moderating market valuation. In Indonesian corporate settings, firm are mostly owned by large institutions, families, or single major owners, rather than individual managers (Gracia & Lukman, 2023; Jati, 2020). Agency Theory posits that higher managerial equity aligns executive interests with those of external shareholders (Ahmed et al., 2019; Artantiwi & Hamidah, 2018; Noradiva et al., 2016). However, when managers shareholding is minimal, managers may lack sufficient financial incentives or decision-making power to execute long-term strategic plans, such as developing intellectual capital assets. These results align with Noradiva et al. (2016) and Gracia & Lukman (2023), but contrast from Ahmed et al. (2019) and Saminem & Eka (2022). The findings suggest that managerial shareholding does not fundamentally alter how investors perceive a firm's intellectual capital assets. (Gracia & Lukman, 2023). Granting equity to managers does not automatically signal to investors that human or system assets will be managed better (Noradiva et al., 2016). Furthermore, managers who own shares are often careful and avoid risky investments in intellectual capital to protect their personal wealth from short-term losses (Gracia & Lukman, 2023; Noradiva et al., 2016).

Companies must think carefully about whether managers, who are also company owners, really have the power to make long-term decisions like investing in intellectual capital. This outcome raises an important consideration for governance research: whether increasing managers shareholding genuinely aligns managerial incentives with public shareholder interests in markets characterized by concentrated ownership structures.

6. Conclusions

To summarize, Intellectual Capital significantly influences firm value. This finding shows that capital market investors in Indonesia highly appreciate businesses that effectively manage their intangible resources to generate value. On the other hand, Managerial Ownership fails to moderate the impact between Intellectual Capital and firm value significantly. Due to the generally minimal shareholdings among managers in Indonesian public companies, managerial equity does not serve as a sufficient governance tool to alter market perceptions of intellectual capital investments.

This study contributes to corporate finance and governance literature using evidence from an emerging market. It shows that intellectual capital directly increases firm value regardless of executive shareholding levels. Thus, it clarifies how the Resource-Based View and Agency Theory apply in companies with concentrated ownership. From a practical perspective, management should focus on improving the quality of intellectual capital by using Knowledge Management (KM) practices. Also, companies with strong intellectual capital should share this information with the public by including frameworks like the Skandia Navigator or the Integrated Report in their annual reports.

Despite these results, this study has several limitations. The adjusted R^2 value is quite low, and the analysis does not separate specific industry trends or economic shocks.

Based on these limitations, future research should consider three recommendations. First, test the M-VAIC model in specific business sectors, particularly during commodity booms. Second, examine how much Intellectual Capital information companies disclose in their annual reports. Third, include additional variables, such as profitability, financial leverage, and macroeconomic indicators, to improve the explanation of firm value.

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