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THE FACTORS EFFECTING FIRM PERFORMANCE EVIDENCE FROM INDONESIA

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ABSTRACT

This study aims to validate and quantify the simultaneous and partial effects of Intellectual Capital, Firm Size Liquidity, on Financial Performance in real estate and property companies, based on the Indonesia Stock Exchange (IDX) 2021-2023 as a limitation field. This study uses a data processing method with the EViews version 12 application. This research determined 120 observational data that were taken using purposive sampling method with a total of 40 companies. The data used in this research is secondary data, collected through a literature review. The results show that Intellectual capital and Liquidity has a negligible impact on the Financial Performance, while firm size has a positive and substantial impact on the Financial Performance. Therefore, it can be inferred that Firm Size are accepted and Intellectual Capital and Liquidity is rejected.

Keywords: *Intellectual Capital, Liquidity, Firm Size, Financial Performance*

1. INTRODUCTION

The last several years, the acceleration of digitization has significantly impacted business operations across various sectors, including the property & real estate industry. Businesses that successfully adapt to these changes and improve their operational efficiency tend to achieve better financial performance. According to recent reports, 772 listed companies reported a financial growth of 4.02% in Q2 2024, with the property and real estate sector showing an impressive growth rate of 6.33% compared to the previous year (Safitri & Djumena, 2024). Despite this positive trend, the property sector, particularly in Indonesia, has faced challenges in 2024, such as rising interest rates and inflation, which have led to increased construction costs and reduced consumer demand for property (pureperty, 2024; Sidik, 2023)

Financial performance is a crucial aspect measures of a firm's well-being, health and success. It reflects how well a company manages its resources, navigates risks, and achieves its financial objectives. This is especially relevant in the competitive real estate & property industry, where they strive to enhance their efficiency and innovation to maintain a competitive edge (Brigham & Ehrhardt, 1979; Tanor et al., 2015). Among the key factors influencing financial performance is intellectual capital, which includes knowledge, innovation, skills, and the company's relationships with stakeholders. Effective management of intellectual capital can create added value and drive business performance (Asutay & Ubaidillah, 2024; Liu et al., 2022). Furthermore, liquidity and firm size have also been identified as significant determinants of financial performance. Liquidity indicates a company's ability to meet its short-term obligations, while firm size can impact access to resources and cost advantages, contributing to overall performance (Adiputra et al., 2020; Sinamo et al., 2024)

Indonesia have faced substantial challenges in the real estate & property sector from 2021 to 2023, driven by economic uncertainty, policy changes, and global trends. As such, it is crucial to explore the factors that influence the company's financial performance in this sector, particularly the role of intellectual capital, liquidity, and firm size. Previous studies have shown mixed results regarding the impact of these factors on financial performance across various industries, and further research is needed for understanding their specific effects in the property and real estate fields (Acuña-opazo & Gonz, 2019; Adiputra et al., 2020; Kim & Tran, 2024).

This study seeks to analyse the impact of intellectual capital, liquidity, and firm size on the financial performance of real estate & property companies listed on the Indonesia Stock Exchange for the period 2021-2023. By identifying the impact of these factors, this research intends to provide valuable insights for management decisions, as well as offer guidance to investors and stakeholders in making informed decisions. Moreover, the results of this research are expected to aid in the advancement of financial theory and best practices in financial management within the real estate and property industry in Indonesia.

This research utilizes quantitative methodology in addition to cause and effect. Analysis of the correlation or influence between two or more variables is known as associative causation. Both independent and dependent variables are among the variables under examination. The study data collection took place in the IDX between 2021 and 2023.

Agency Theory

As stated by Jensen & Meckling, (1976), agency theory describes the interaction between one or more individuals, referred to as principals, and other parties known as agents. In a company, there is a clear separation of the rights and obligations between principals and agents. Principals are those who invest in the company by providing capital, while agents are responsible for managing business activities and serving the interests of the principals.

Signalling Theory

Signalling theory was first proposed by Spence, (1973) , which suggests that the company is an information provider (information holder) whose job is to provide signals or cues in the form of information that reflects the company's condition which is useful for users of financial statements (Investors). Signalling Theory describes how financial statement figures can be used to represent signal information about a company. The signal given is information about the state of the company to owners and stakeholders.

Intellectual Capital and Financial Performance

Signalling theory states that companies with high Intellectual Capital (IC) can send positive signals to the market and stakeholders, including investors and creditors, reflecting their outstanding capabilities and competencies. Intangible assets such as employee expertise, innovation, and strong relationships with customers and suppliers provide the market with information that the company has the potential to generate higher profits. When a company actively manages and utilizes its IC, this is reflected in its financial performance, particularly in the Return on Assets (ROA). Better IC management leads to greater efficiency in utilizing assets to generate profits. This positive signal attracts investor interest, increases market value, and ultimately reflects strong corporate performance (Putri et al., 2023).

According to research by Kim & Tran, (2024), financial performance is significantly enhanced by intellectual capital. However, this finding contradicts research by Octaviani &

Azzahra, (2022), which demonstrates a substantial adverse impact of intellectual capital on financial performance. Hidayati & Susilo, (2022) found that intellectual capital has a small but positive impact on financial performance, as businesses tend to rely more on physical assets than on added value from IC. Furthermore, their systems are often underdeveloped, which reduces the effect of Intellectual capital on financial performance.

Liquidity and Financial Performance

According to signalling theory, high liquidity can be a positive indicator for investors, signalling that a business has good financial stability and the Capacity to efficiently fulfil its near-term liabilities.

The findings of Situmorang, (2023) indicate that liquidity exerts a negative but significant influence on financial performance. However, this finding contradicts the study conducted by Etim et al. (2020), which found that liquidity has an insignificant negative impact on financial performance. Meanwhile, Muttaqin & Adiwibowo, (2023) stated that liquidity shows insignificant but positive effect on financial performance, indicating that a high level of liquidity cannot yet be considered strong evidence of a company's financial performance.

Firm Size and Financial Performance

According to agency theory, larger companies tend to have stronger oversight from shareholders and investors, which can reduce potential conflicts of interest between managers and owners.

Hardianto et al. (2023) discovered that firm size significantly enhances financial performance. In contrast, Etim et al. (2020) reported that firm size has a significant negative effect on financial performance. This is attributed to the fact that the total assets of listed companies may have accumulated to an optimal level, which has yet to positively influence financial performance.

Thinking Framework and Hypotheses

The hypothesis in a study can be affected by the measurement method and the relationship between the independent and dependent variables.

The research framework in this study, the following is observed:

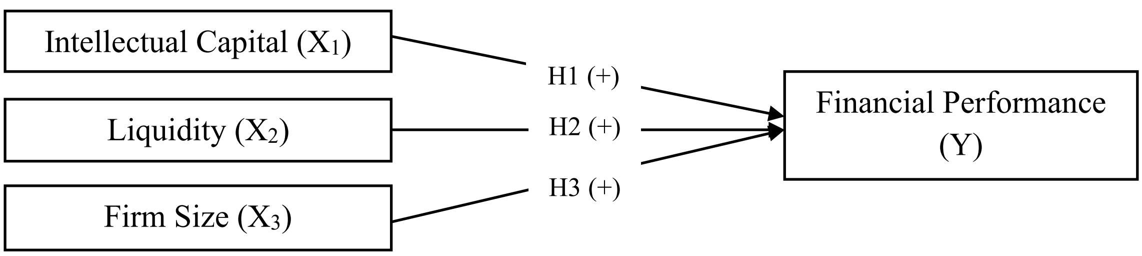

Figure 1. Research Framework

Research Hypothesis
H1: Intellectual capital has a beneficial and substantial effect on financial performance.
H2: Liquidity has a beneficial and substantial effect on financial performance.
H3: Firm size has a beneficial and substantial effect on financial performance.

2. RESEARCH METHOD

Population and Sampling Techniques

This study's population comprises firms in the property and real estate sector that are publicly traded on the Indonesia Stock Exchange (IDX) between 2021 and 2023. The research utilizes a non-probability sampling method, as sample selection is not conducted randomly. A purposive sampling approach is applied with specific criteria: companies must be listed on the IDX, prepare annual financial statements in rupiah, and consistently publish financial reports throughout the 2021-2023 period. Based on these criteria, 40 companies were selected.

Variables in this study include financial performance as the dependent variable, while the independent variables consist of intellectual capital, liquidity, and firm size.
Variables and Measurement Methods

Table 1. Variable Operationalization

Variable	**Measurement**	**Scale**	**Reference**
Financial Performance (ROA)	$\frac{\text{Net Income After Tax}}{\text{Total Assets}}$	Ratio	(Liu et al., 2022)
Intellectual Capital (VAIC)	HCE + SCE + CEE	Ratio	(Kim & Tran, 2024)
Liquidity (CR)	$\frac{\text{Current Asset}}{\text{Current Liabilities}}$	Ratio	(Lestari & Titisari, 2021)
Firm Size (FS)	Ln (Total assets)	Ratio	(Adiputra et al., 2020)

3. RESULTS AND DISCUSSIONS

The research of the descriptive statistical analysis results are as follows:

Table 2. Descriptive Statistical Test Results
Source: EViews 12 Panel Data Processing Results (2024)

	ROA	VAIC	CR	FS
Mean	0.011493	5.597670	17.44364	28.31551
Median	0.006585	4.941797	2.678034	27.73128
Maximum	0.072816	61.89400	492.4075	31.83314
Minimum	-0.031918	-104.5149	0.027474	25.23514
Std. Dev.	0.021698	13.49994	64.85157	1.645937
Skewness	0.547922	-3.569732	5.529371	0.350043
Kurtosis	2.763145	41.00159	34.95336	2.180395
Jarque-Bera	6.284867	7475.465	5716.564	5.809364
Probability	0.043178	0.000000	0.000000	0.054766
Sum	1.379169	671.7204	2093.236	3397.861
Sum Sq. Dev.	0.056024	21687.57	500481.4	322.3840
Observations	120	120	120	120

Table 2 above presents the results of descriptive statistical testing conducted on each research variable: VAIC, CR, FS, and ROA for real estate & property companies.

From the table, Intellectual Capital has a mean value of 5.597670. The highest value (maximum) is 61.89400, recorded by Plaza Indonesia Realty Tbk. in 2021, while the lowest value (minimum) is -104.5149, recorded by Nusantara Almazia Tbk. in 2023. The standard deviation is 13.49994 relative to the mean value, indicating consistency and low variation in the distribution of intellectual capital data around the mean. Liquidity has a mean value of 17.44364. The highest value (maximum) is 492.4075, recorded by Royalindo Investa Wijaya Tbk. in 2021, while the lowest value (minimum) is 0.027474, recorded by Maha Properti Indonesia Tbk. in 2023. The standard deviation is 64.85157 relative to the mean value, also indicating consistency and low variation in the distribution of liquidity data around the mean. Firm Size has a mean value of 28.31551. The highest value (maximum) is 31.83314, recorded by Bumi Serpong Damai Tbk. in 2023, while the lowest value (minimum) is 25.23514, recorded by Andalan Sakti Primaindo Tbk. in 2022. The standard deviation is 1.645937 relative to the mean value, indicating consistency and low variation in the distribution of firm size data around the mean. Financial Performance has a mean value of 0.011493. The highest value (maximum) is 0.072816 or 7.3%, recorded by PT. Pakuwon Jati Tbk. in 2023, while the lowest value (minimum) is -0.031918, recorded by PT. Andalan Sakti Primaindo Tbk. in 2022. The standard deviation is 0.021698 relative to the mean value, again indicating consistency and low variation in the distribution of financial performance data around the mean.

Normality test

According to normality test, obtained Jarque-Bera test result is 4.799939 with a probability value of 0.090721. Since the probability value is greater than 0.05 (0.090721 > 0.05). If the probability is greater than the predetermined significance level of 0.05, the data is considered normally distributed. Conversely, if the probability is smaller than 0.05, the data is considered not distributed normally. In this case we can concluded that the data model for hypothesis testing is distributed normally.

Multicollinearity test

The multicollinearity test conducted on the variables Intellectual Capital (X1), Liquidity (X2), and Firm Size (X3) concerning Financial Performance (Y) reveals correlation values below 0.8. Therefore, it can be inferred that these variables do not have multicollinearity issues.

Multiple Linear Regression Test

The result of the multiple regression test show that the regression equation in the research is as follows:

$$\mathbf{ROA = -0.16285349 + 0.0001627\ VAIC + 0.00001198\ CR + 0.00611773\ FS + \varepsilon}$$

Table 2. Result of Multiple Linear Regression Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.162853	0.046124	-3.530746	0.0006
VAIC	0.000163	0.000109	1.487234	0.1397
CR	1.20E-05	3.12E-05	0.383942	0.7017
FS	0.006118	0.001626	3.762155	0.0003

F-Test

The F-Test is a statistical tool used to assess the combined effect of independent variables (X) on a dependent variable (Y). If the F significance value is below 0.05, specifically 0.000, it demonstrates that all independent variables (X) collectively have a significant impact on the dependent variable (Y) with a confidence level of 6.05%. This indicates that factors such as Intellectual Capital (X1), Liquidity (X2), and Firm Size (X3) jointly play a significant role in influencing financial performance (Y).

Adjusted R-Square

The determination coefficient of test yielded an adjusted R-squared value of 0.295105. This adjusted R2 value indicates that the Intellectual Capital (X1), Liquidity (X2), and Firm Size (X3) variables together are able to explain the financial performance variable by 11.2912 % of changes or variations in firm value. While the remaining 88.7088% of the variation in financial performance is influenced by other factors that are not taken into account in this model, namely variables that may be relevant but are not considered in this study.

4. CONCLUSIONS AND SUGGESTIONS

The main independent variable in this study is intellectual capital. The t-test results reveal that intellectual capital does not significantly influence financial performance as the dependent variable. Although intellectual capital encompassing employee expertise, partnerships with business associates, and well-structured internal systems has the potential to boost efficiency and productivity, these advantages typically take time to materialize. Nonetheless, strong intellectual capital can serve as a positive indicator for investors and stakeholders regarding the company's ability to create added value in the long run.

The second independent variable examined is liquidity. Based on the t-test results, liquidity does not significantly affect financial performance. This suggests that if liquidity is not optimally allocated to productive activities such as investment or business expansion, it will not substantially influence a company's financial outcomes.
The third independent variable in this research is firm size. The t-test results indicate that firm size has a positive and significant effect on financial performance. This finding implies that larger companies are subject to greater scrutiny from various stakeholders, including shareholders and creditors. Such oversight ensures that management makes strategic decisions more prudently and responsibly, ultimately leading to improved financial performance.

Based to the findings of the conducted research, there are several limitations to consider. (1) This study only uses a sample of properties & real estate sector companies listed on the Indonesia Stock Exchange, so the results are only relevant to that sector. (2) This study uses a limited observation period of only three years, namely from 2021 to 2023. (3) This study only tests three independent variables as factors that affect financial performance such as intellectual capital, liquidity, and firm size.

Suggestion that can be given for developing research on the same topic are: (1) Future surveys are expected to include companies in other sectors that are not listed on the Indonesia Stock Exchange, such as primary consumers, non-primary consumers, and the transportation and logistics sector. (2) Future research is expected to cover a longer period of three years so that the results obtained will be more accurate and cover even greater variations. (3) Future research may include additional independent variables that can affect financial performance.

Suggestions for future research on the same topic include: (1) Broadening the coverage to encompass companies from various sectors that are not listed on the Indonesia Stock Exchange, such as primary consumer goods, non-primary consumer goods, and the transportation and logistics sectors. (2) Extending the research period to more than three years to achieve more accurate results and capture greater data variations. (3) Incorporating additional independent variables that may influence financial performance to provide deeper insights.

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