DETERMINANTS OF FIRM VALUE WITH FINANCIAL PERFORMANCE AS MODERATING VARIABLE

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ABSTRACT: Intellectual capital, measured by VACA, VAHU, STVA, is several factors that influence fluctuations in firm value. This study uses a moderating variable with the ROA ratio to determine whether intellectual capital plays a significant role in increasing firm value. Data analysis used quantitative descriptive methods with Eviews 10 on Property and Real Estate sectors listed on the Indonesia Stock Exchange in 2017-2019. The results showed the importance of the role of Intellectual VACA, VAHU, STVA simultaneously having a significant effect on Firm Value (PBV) and Company Performance (ROA) but failed to moderate VAHU, STVA, and VACA in 16 companies.

Keywords*: Intellectual Capital; ROA; Firm Value; Company Performance*

INTRODUCTION

The competitive global economic conditions trigger significant challenges for every business actor. Advances in information technology that are increasingly sophisticated and modern and rapidly access to information require all companies to increase their capacity to be much better (Hillemane, 2013). In applying knowledge-based business concepts, companies must make special efforts to improve their managerial aspects (CHENG et al., n.d.). Current knowledge and information-based business are also expected to increase excellence in expanding the organizational and administrative items presented by the organization (Hashmani, M., Ali, S. M., Naveed & Khan, 2016). Thus, organizations must utilize and work on the nature of organizational assets.

The company is not an entity that only operates for its interests but must provide benefits to stakeholders (shareholders, employees, creditors, consumers, suppliers, government, society, and other parties). Companies must maintain relationships with their stakeholders by accommodating their wants and needs, especially stakeholders who have power over the availability of resources used for company operational activities, for example, labor, markets for company products, and others. Stakeholder theory aims to help corporate managers understand the stakeholder environment and manage the relationships in their corporate environment more effectively. In explaining the concept of intellectual capital, stakeholder theory must be viewed from both the ethical (moral) and managerial fields (Ulum, 2009).

Adjusting the business atmosphere to information-based business, enterprises need to transfer their assets to intangible assets (Mendes et al., 2016). In the current era of globalization, competition between companies is getting tighter and unavoidable. To win the business competition, not only rely on tangible assets but also must take advantage of intangible assets. The primary source and abundance of organisms today is Intellectual Capital (IC) which contains essential components, especially the power of thought or information. Intellectual capital is an intangible asset that contains knowledge, information, and other intellectual material owned by company employees that can be used by the company in obtaining profits and can also affect the company's performance in making decisions for now and in the future (Aprianti, 2018). Intellectual capital has become the focus of attention in various fields, such as management, information technology, sociology, and accounting (Octabriansyah, 2012).

According to Susanto (2007), companies need two main things to compete. First, it has advantages in its resources, both in the form of tangible and intangible assets. Second is the ability to manage its resources effectively. Over time, the rapid development of technological devices has been considered significant for organizations. The existence of financial changes mediated by knowledge-based businesses triggers changes in the formation of corporate values (Ismail et al., 2018). The company's profits are not only determined by regular and monetary assets and other actual resources. The capital that depends on science, progress,

and innovation becomes the primary source of finance and the determining variable in creating company value (Ebongkeng, 2018). It can provide sustainable benefits for the company.

The knowledge-based business and corporate value formation create the foundation for the changes in corporate finance. Regular assets do not determine the advantage that today's companies drive, monetary assets, and other actual resources, but rather by capital that depends on science, progress, and innovation because science is the primary financial resource and the determining variable in creation. The value of the firm will thus give the organization a sustainable advantage.

In Indonesia, IC began to attract much attention because of the issuance of PSAK No. 19 on intangible assets. Based on PSAK No. 19, intangible assets are non-monetary assets that can be identified and have no physical form and are used in producing or delivering goods or services, rented out to other parties, or for administrative purposes (Aprianti, 2018). In addition, intellectual capital is also believed to increase the market value of companies that can utilize their intellectual assets efficiently (Nurdina & Sidharta, 2020). The long-term goal of a business is to maximize business value. So, if a company is considered valuable, it must also be valuable in terms of its prospects.

The long-term goal of a business is to maximize business value. If a company is considered valuable, it is valuable in terms of its prospects in the future. Optimizing the company's value as the organization's primary goal can be achieved by implementing a financial management function where financial decisions will affect other decisions and the company's value (Tui, 2018). Intangible assets can increase the company's potential value, known as intellectual capital or intellectual capital.

The company's efforts to maximize its value can be reflected in the market price of its shares; The higher the value of the company, the more prosperous the owner is. Firm value means the prospective price buyers are willing to pay if the company is sold (Aprianti, 2018). The higher the share price, the richer the owner. Higher firm value means better owner wealth because firm value reflects optimal stock price and performance (Markauskas & Saboniene, 2015). Rizescu et al. (2016), many factors influence changes in the company's state, which can cause a decrease in value, one of which is because it only focuses on hard assets without paying attention to the intangibles they have. Intangible assets can increase the company's potential value, known as intellectual capital (Zulkifli et al., 2017). It is believed that several factors influence the rise and fall of firm value, including the use of intellectual capital (VACA, VAHU, and STVA).

All aspects of the industry have experienced a decline due to the Covid-19 Pandemic. In Indonesia, the Property and Real Estate business sector still has good value due to its rapid development and supporting facilities, such as the construction of road access to office buildings, apartments, and housing (Commercial., 2020). Therefore, this line of business still attracts the attention of many investors to invest their capital. In describing the company's value related

to good or bad management in managing its assets, it can be seen by measuring financial performance achieved (Babalola, Y. A., & Abiola, 2013).

The company's value describes how well or poorly management manages its assets. This measurement of financial performance is achieved. Several financial ratios can measure financial performance. The company's financial ratios used in this study are profitability ratios used to measure whether it can effectively manage all the funds invested in its assets and generate profits. Several financial ratios can measure financial performance (Al-Nasser, 2014). The financial ratio used in this study is the profitability ratio, which aims to measure whether the company can effectively manage all the funds invested in its assets and generate profits (Tulsian, 2014). The profitability ratio used is Return on Assets (ROA).

The researcher uses a moderating variable, namely the financial performance variable with the ROA ratio because the firm value is not solely a direct result of the intellectual capital of VACA, VAHU, and STVA but also other factors that affect the development and value of the company (Kabajeh et al., 2012). Researchers are motivated to determine whether intellectual capital plays an essential role in increasing company value (Madyan & Fikir, 2019). The research is limited to properties listed on the Indonesia Stock Exchange and companies that provided audited financial statements from 2017 to 2019. It is limited to Intellectual Capital, Firm Value, and Company Performance.

The research objectives are: (1) to analyze whether intellectual capital has a positive and significant effect on firm value (PBV); (2) to analyze whether Intellectual Capital has a positive and significant effect on firm value through firm performance (ROA) as a moderating variable; (3) analyzing the effect of Value Added Human Capital (VAHU) on Company Value (PBV) with Corporate Performance Moderator (ROA); (4) analyze the effect of Structural Capital Value Added (STVA) on firm value (PBV) with firm performance (ROA) as the moderating variable, and; (5) Analysing the effect of Value Added Capital Employed (VACA) on firm value (PBV) with firm performance (ROA) as the moderating variable.

This research is expected to produce several benefits through a more comprehensive discourse on the influence of Intellectual Capital and firm value. This study highlights other research related to the influence of Intellectual Capital on the value of property companies. It provides evidence of the influence of intellectual capital on market value with the correlation of the company's financial performance. It is a consideration for management in managing resources effectively to create better value and provide information to investors regarding the actual condition of the company as a basis for making decisions. This study assesses the level of application of intellectual capital in various companies in the Indonesian property sector and as a basis for consideration for companies in utilizing intangible resources to compete in the current era of globalization.

THEORETICAL REVIEW

Stakeholder Theory

Chairunissa & Dewi (2015) stated that in stakeholder theory, companies are not entities that only operate for their interests but must benefit stakeholders (shareholders, employees, creditors, consumers, suppliers, government, communities, and other parties). Companies must maintain relationships with their stakeholders by accommodating their wants and needs, especially stakeholders who have power over the availability of resources used for its operational activities, such as labor, the company's product market, and others. Stakeholder theory aims to help corporate managers understand the stakeholder environment and manage the relationships in their corporate environment more effectively. The assumption of stakeholder theory is built on the statement that the company grows to be very large and causes the community to be significantly related and pay attention to the company. The company needs to show accountability and responsibility more broadly and not only to shareholders. This means that companies and stakeholders form relationships that influence both internally and well.

Resource-Based Theory

Resource-Based Theory (RBT) discusses the resources owned by the company and how the company can process and utilize the resources it resources. Resource-based theory suggests that resources that are valuable, rare, difficult to imitate, and not substitutable best position a firm for long-term success. These strategic resources can provide the foundation to develop firm capabilities that can lead to superior performance over time. The company's ability to manage resources properly can create profits so that good value can be formed for the company. The existence of physical resources in the form of factories, technology, equipment, geographical location, experienced human resources, team member knowledge, and organizational resources in the form of organizational structures and social relations between the external environment can be used as a competitive advantage for the company (Chairunissa & Dewi, 2015).

Company Value

Firm value shows the value of assets owned by the company, such as securities. The value of a company going public and displaying the value of all assets is also reflected in the market value or stock price so that the higher the stock price reflects, the high value of the company. According to Aprianti (2018), a company is said to have good value if the company's performance is also good. The value of the company can also be reflected in its share price. High stock prices also make the company's value high and increase market confidence in the company's current performance and the company's prospects in the future—substantial value proxied by PBV. PBV is the ratio of price to book value to see

the stock price in the high or low category to help investors find the right stock for their investment. Here is the formula.

$$BV = \frac{\text{Share price per share}}{\text{Book Value per share}} \qquad (1)$$

Where the formula calculates the book value per share:

$$\text{Book value per share} = \frac{\text{Equity}}{\text{Number of shares outstanding}} \qquad (2)$$

Intellectual Capital

Intellectual capital has become a topic of great interest in the investigation. The new knowledge-based economy shifted attention to the intangible assets of organizations and how they are managed, being considered IC as valuable because intangible assets are more important than tangible assets. So for organizations to remain competitive, a systematic approach to the IC assets (Costa et al., 2020). Intellectual capital is defined as knowledge resources in the form of employees, customers, processes, or technology that companies can use to create value for the company (Aprianti, 2018). Intellectual capital refers to capital that does not have a physical or visible form related to all employees' knowledge, experience, and abilities and the technology used by the company. Intellectual capital has the potential for companies to provide competitive advantage and sustainable added value creation.

Value Added Human Capital (VAHU)

Value Added Human Capital is an indicator of the efficiency of value-added human capital. VAHU is the ratio of Value Added (VA) to Human Capital (HC). This relationship indicates the ability of the workforce to generate value relative to the company's funds spent on the workforce. This ratio shows the contribution each rupiah invested in human capital (HC) to the value-added of the organization. VAHU measurement is done by comparing Value Added (VA)—which is the difference between total sales and other income (OUT) with expenses incurred by the company, except for salaries (IN)—with expenses incurred in improving team members' capabilities (HC). It can be concluded that Value Added Human Capital is the ability of company employees to increase the value-added to every rupiah issued by the company for these employees. The following formula can calculate VAHU:

$$\text{VAHU} = \frac{\text{VA}}{\text{HC}} \qquad (3)$$

Note: VA = difference between output and input (OUT – IN)
HC = Employee expenses

H1: It is suspected that there is an influence of Value Added Human Capital (VAHU) on firm value (PBV)

Structural Capital Value Added (STVA)

Structural Capital Value Added is the ability of an organization or company to fulfill the company's routine processes and structures that support employees' efforts to produce optimal intellectual performance and overall business performance. They are present in its operational systems, manufacturing processes, organizational culture, management philosophy, and intellectual property forms owned by the company. STVA measurement compares Structural Capital (SC)—the difference between VA minus the expenses incurred in improving team member capabilities (HC)—with Value Added. It can be concluded that the Structural Capital Value Added is the company's ability to meet the company's structural needs that the company can use in creating Value Added. The formula calculates this ratio:

$$\text{STVA} = \frac{\text{SC}}{\text{VA}} \qquad (4)$$

Note: VA = difference between output and input (OUT – IN)
 SC = The difference between value-added and human capital (VA-HC)
H2: It is suspected that there is an influence of Structural Capital Value Added (STVA) on firm value (PBV)

Value Added Capital Employed (VACA)

Value Added Capital Employed is an indicator for the VA created by one unit of physical capital. This ratio shows the contribution made by each unit of CE to the value-added of the organization. VACA measurement is done by comparing Value Added (VA)—which is the difference between total sales and other income (OUT) with expenses incurred by the company, except for salaries expense (IN)—with Capital Employed (CE), which is a fund that available to the company, namely equity and profit for the year. It can be concluded that Value Added Capital Employed is an indicator of Value Added created by a unit of physical capital that shows the company's ability to manage its capital assets. The following formula can calculate VACA:

$$\text{VACA} = \frac{\text{VA}}{\text{CE}} \qquad (5)$$

Note: VA = Difference between output and input (OUT – IN)
 CE = Funds available (equity, net income)
H3: It is suspected that there is an effect of Value Added Capital Employed (VACA) on firm value (PBV)

Financial Performance

Nurdin & Suyudi (2019) revealed that financial performance is an analytical activity to see how the company has used the rules for implementing finance correctly and adequately. The financial implementation in question is the activity of making financial reports that have met applicable standards and regulations.

The company's financial statements can reflect the condition of the company's profitability in a certain period. A company's profitability can be measured by linking the profits obtained from the company's main activities with the wealth of assets used to generate profits—types of financial ratios, including liquidity ratios, profitability ratios, activity ratios, and leverage ratios. In general, it can be said that financial performance is an achievement that a company in the financial sector can achieve within a certain period, which reflects the level of health of the company.

On the other hand, financial performance describes the strength of a company's financial structure and the extent to which assets are available. On the other hand, financial performance describes the strength of a company's financial structure and the extent to which assets are available, and the company can profit. This is closely related to the management's ability to manage the company's resources effectively and efficiently—financial performance as proxied by ROA. ROA is a financial ratio to measure a company's profitability with the following formulation.

$$\text{ROA} = \frac{\text{Net profit after tax}}{\text{Total Assets}} \qquad (6)$$

H4: It is suspected that there is an influence of Intellectual Capital (VAHU, STVA, and VACA) on firm value (PBV) with moderating firm performance (ROA)
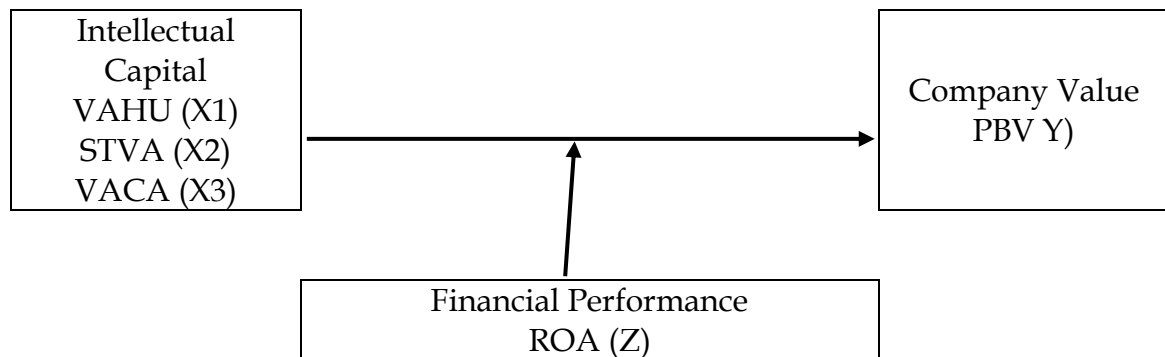

Figure 1. Conceptual Framework

METHODOLOGY

This study is associative research with a causal relationship (Yu K. et al., 2011). Cause-and-effect relationships produce cause and effect. So, there are independent variables (influence) and dependent variables (influenced) (Dorestani & Aliabadi, 2017). This study focuses on intellectual capital as an independent variable on firm value and financial performance as the dependent variable. The independent variable is intellectual capital, consisting of three components: VACA, STVA, and VAHU. The formulation and calculation stages are as follows. The dependent variable in this study is the firm value (PBV). The moderating variable in this study is financial performance

This research uses a quantitative approach with survey research methods (Van Meerkerk et al., n.d.). The survey approach consists of the following steps:

1. Research data were collected from samples from a predetermined population,
2. Data relating to an opinion, perception, or something at a time are collected simultaneously in a relatively short time,
3. The collected data can be analyzed using various methods, depending on the conclusions to be obtained.

The population of this study is 35 property companies listed on the Indonesia Stock Exchange. While the sample, which is part of the total population studied in general, must meet the following criteria:

1. Property & real estate sector companies listed on the IDX consecutively from the observation period 2017 to 2019 and have never experienced a loss.
2. Companies are publishing an accessible financial statement by 2017-2019.

Based on these criteria, 16 companies were finally selected as research samples. Data collection utilizes documentation studies (Kabir, 2016). This study collects secondary data from the financial statements of property & real estate companies that have been published by the Indonesia Stock Exchange (IDX). The data was obtained from the IDX's official website at ttp://www.idx.co.id. Table 1. shows the definition of each variable used.

Table 1. Definition of Operational Variables

Variable	Name of Variable	Measurement Scale
PBV	Firm Value	Ratio
VAHU	Value Added Human Capital	Ratio
STVA	Structural Capital Value Added	Ratio
VACA	Value Added Capital Employed	Ratio
ROA	Company Performance	Ratio

Source: IDX Indonesia

To get the best model for forecasting firm value in the future will do some stages that are regression between independent variables (VAHU, STVA, and VACA) with the dependent variable (PBV) using a regression model data panel:

$$PBV_{it} = \alpha + \beta_1 VAHU_{it} + \beta_2 STVA_{it} + \beta_3 VACA_{it} + e_{it} \qquad (7)$$

To get the best model for forecasting firm value in the future will do some stages that are regression between independent variables (VAHU, STVA, and VACA) with the dependent variable (PBV) and moderating variable (ROA) using regression model data panel:

$$PBV_{it} = \alpha + \beta_1 VAHU_{it} + \beta_2 STVA_{it} + \beta_3 VACA_{it} + \beta_4 ROA_{it} + \beta_5 VAHU * ROA_{it} + \beta_6 STVA * ROA_{it} + \beta_7 VACA * ROA_{it} + e_{it} \qquad (8)$$

Where α is a constant, PBV is a Firm Value (Dependent Variable). The $\beta_1, \beta_2, \beta_3$ are regression coefficient. VAHU is Value Added Human Capital, STVA is Structural Capital Value Added, VACA is Value Added Capital Employed. ROA represents Company Performance (Moderating Variable), with X*Z being the interaction between independent and moderating variables; ε is the error term.

The best model is then chosen by looking at the data estimation method, namely the Common Effect, Fixed Effect, and Random Effects approaches. The model selection technique is carried out with two tests, namely (1) the Chow Test, namely when the p-value is smaller than the value of (0.05) so that the model that is better used is the fixed effect model than the standard effect models; and (2) Hausman Test, when the p-value is smaller than the value of (0.05) so that the fixed effect model is better than the random effect model. Furthermore, the relationship between independent and dependent variables employs the significance test in Eviews.

RESULTS

The firm value (PBV) can be influenced by many factors, which can be seen from the financial statements each year. The firm value (PBV) of the property & real estate sector companies was used in this research by selecting the best model among the standard effect model, fixed effect model, or random-effect model.

Table 2. Chow Test Result

Redundant Fixed Effects Tests			
Equation: FIXED			
Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	9.426518	(15,29)	0.0000
Cross-section Chi-square	85.000304	15	0.0000

Based on Table 2. above, it can be seen that the results of the study using the Chow test have a probability value of 0.0000 < alpha of 0.05. So it can be concluded that the best model in this study is the fixed-effect model.

Table 3. Hausman Test Result

Correlated Random Effects - Hausman Test			
Equation: FIXED			
Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	5.116837	3	0.1634

Based on Table 3. above, it can be seen that the results of the study using the Hausman test have a probability value of 0.1634 > alpha of 0.05. So it can be concluded that the best model in this study is the fixed-effect model.

Table 4. Fixed Effect Model Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.363394	0.185019	1.964090	0.0592
VAHU	0.065871	0.059036	1.115773	0.2737
STVA	-0.452488	0.380253	-1.189966	0.2437
VACA	1.595907	0.562484	2.837248	0.0082
R-squared	0.888227			
F-count	12.80301			0.000000
F-tab	3.204317			

Based on Table 4. above, it can be seen that the partial test of each independent variable is as follows: (1) VAHU has a probability value of 0.2737 > alpha of 0.05. So it can be concluded that VAHU has no significant effect on Company Value (PBV); (2) STVA has a probability value of 0.2457 > alpha of 0.05. So it can be concluded that STVA has no significant effect on Company Value (PBV), and (3) VACA has a probability value of 0.0082 < alpha of 0.05. So it can be concluded that VACA has a significant positive effect on Company Value (PBV). Based on Table 4. above, it can be seen that the F-count value is 12.80 > the F-table value is 3.20. The probability value is 0.00 < 0.05, and it can be interpreted that the independent variables are, VAHU, STVA, and VACA have a significant effect on the dependent variable, namely Company Value (PBV). Based on Table 4. above, it can be seen that the independent variables (VAHU, STVA, and VACA) can explain the dependent variable (PBV) in the research model of 0.888227 or 88.82%, and the remaining 11.18% is explained by other variables that are not in the research model.

Regression Results of VAHU, STVA, and VACA on PBV with Moderator ROA

The firm value (PBV) can be influenced by many factors, which can be seen from the financial statements available each year and financial performance as moderating variable. The firm value (PBV) of the property & real estate sector companies was used in this research by selecting the best model among the standard effect model, fixed effect model, or random-effect model.

Table 5. Chow Test Result

Redundant Fixed Effects Tests			
Pool: POOL01			
Test cross-section fixed effects			
Effects Test	**Statistic**	**d.f.**	**Prob.**
Cross-section F	10.566769	(15,25)	0.0000
Cross-section Chi-square	95.680666	15	0.0000

From table 5, it can be seen that the results of the study using the Chow test have a probability value of 0.0000 < alpha of 0.05. So it can be concluded that the best model in this study is the fixed-effect model.

Table 6. Hausman Test Result

Correlated Random Effects - Hausman Test			
Pool: POOL01			
Test cross-section random effects			
Test Summary	**Chi-Sq. Statistic**	**Chi-Sq. d.f.**	**Prob.**
Cross-section random	31.603756	7	0.0000

It can be observed that the results of the study using the Hausman test have a probability value of 0.0000 < alpha of 0.05. So it can be concluded that the best model in this study is the fixed-effect model.

Table 7. Fixed Effect Model Regression Results

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	0.669023	0.257726	2.595868	0.0156
VAHU	-0.025081	0.085008	-0.295043	0.7704
VACA	-1.754010	4.197303	-0.417890	0.6796
STVA	0.343712	0.480606	0.715164	0.4811
ROA	-7.744169	8.350254	-0.927417	0.3626
VAHU*ROA	0.021081	0.279884	0.075319	0.9406
STVA*ROA	10.83845	12.86079	0.842752	0.4074
VACA*ROA	1.361602	1.715523	0.793695	0.4348

Based on Table 7. above, it can be seen that the partial test of each independent variable is as follows: (1) VAHU has a probability value of 0.7704 > alpha of 0.05. So it can be concluded that VAHU has no significant effect on Company Value (PBV); (2) STVA has a probability value of 0.4811 > alpha of 0.05. So it can be concluded that STVA has no significant effect on Company Value (PBV), and (3) VACA has a probability value of 0.6796 > alpha of 0.05. So it can be concluded that VACA has no significant effect on Company Value (PBV). The interaction variable VAHU with ROA moderator shows a probability value of 0.9406 > 0.05 alpha level, STVA probability with ROA moderator 0.4074 > 0.05 alpha level, and VACA probability with ROA moderator 0.4348 > 0 alpha level,05. This means that the interaction of the three independent variables with the ROA moderator shows that ROA cannot influence the independent variables (VAHU, STVA, VACA) on the dependent variable (company value or PBV).

DISCUSSION

Value Added Human Capital (VAHU) to firm value (PBV) has a coefficient value of 0.065871 with a significance value of 0.2737 greater than 0.05. These results indicate that Value Added Human Capital (VAHU) has a positive and insignificant effect on firm value (PBV). VAHU shows the value Added that could be generated with the funds spent on labor/employees. Human Capital in this study are all costs incurred in improving team member performance or can be measured by the burden of salaries and employee benefits.

VAHU does not appear to be fully supportive of improving the performance of property and real estate sector companies. Human Capital is a source of innovation and improvement, but it is a component that is difficult to measure. Human capital is also a source of beneficial knowledge, skills, and competencies in an organization or company. Human capital reflects the collective ability of the company to produce the best solutions based on the knowledge possessed by the people in the company. If these capabilities can be optimized, the company's efforts to produce high corporate value will be easily realized, and vice versa. This confirms that the human capital indicated by the total expenditure on the employee is a cost component that has relatively no effect on firm value. This cost component is a fixed cost that is difficult to know the amount of its direct contribution to the company's value. Based on the results of this study, it can be concluded that the costs incurred by the company informing human capital have no significant effect on increasing the company's market value. The results of this study are in line with the results of research by Aprianti (2018), (Ahmed et al., 2019), (Zahid, 2021), and Dewi & Isynuwardhana (2014), which state that VAHU has no significant effect on firm value.

Variable Structural Capital Value Added (STVA) to firm value (PBV) has a coefficient value of -0.452488 with a significance value of 0.2437 greater than 0.05. These results indicate that Structural Capital Value Added (STVA) has a negative and insignificant effect on firm value (PBV). Structural Capital is the infrastructure used to support human capital in creating Value Added. It can be said that Structural Capital is the facilities and infrastructure used to support the performance of employees in a company. Based on the results of this study, it can be seen that the facilities and infrastructure provided by the company have not encouraged employees to increase added value for the company. With all its advantages, structural capital must have drawbacks, and this is still considered unable to guarantee value creation. In contrast, the knowledge element in human capital is considered more promising in value creation because knowledge is something that will not be timeless.

These results also indicate that investors have not adequately appreciated the company's efforts in fulfilling the company's routine processes and structures that support the efforts of employees and company operations to generate added value. This shows the company's lack of ability to manage funds to create suitable routine structures and processes, such as its operating system, organizational culture, procedures, databases, management philosophy, and all forms of structural capital

that the company has in supporting the efforts of its employees. The results of this study are in line with the results of research conducted by Jayanti & Binastuti (2017); Tara (2015); Vebriany (2015); (Suripto & Gunawan, 2019); (Zahid, 2021), which state that Structural Capital Value Added (STVA) has no significant effect on firm value.

The variable Value Added Capital Employed (VACA) to firm value (PBV) has a coefficient value of 1.595907 with a significance value of 0.0082, which is smaller than 0.05. These results indicate that Structural Capital Value Added (STVA) has a positive and significant effect on firm value (PBV). This means that companies with a high VACA value can increase their value. The higher the available capital (equity and net income) of the company, the higher the contribution of available capital to the creation of company value-added, which will affect the company's value. This result aligns with the resources-based theory, where a company with a high value of capital employed (equity and net income) indicates its ability to utilize its physical capital efficiently. It contributes to creating added value for the company, which affects the increase in value company. Companies that can create more excellent added value for the company will also have the ability to increase investor assessment of the company.

The investor's assessment of the company is also influenced by the company's amount of equity and net income. It will increase the willingness of investors to buy the company's outstanding shares based on the price determined by the investor. The price paid by investors is high. It can be said that the value of the company is high. The results of this study are in line with research conducted by Aprianti (2018), Handayani (2015), and Septia (2018), which state that Value Added Capital Employed (VACA) has a significant effect on firm value. In the test results of the influence of Intellectual Capital (VAHU, STVA, and VACA) on firm value (PBV) with financial performance (ROA) as the moderating variable, the probability values for each variable are 0.9406 for VAHU, 0.4047 for STVA, and 0.4348 for VACA. The results showed no significant moderating effect (ROA) of the Intellectual Capital variable on firm value.

Of the three variables of Intellectual Capital, no variable can be moderated by financial performance (ROA). The company's financial performance, which is shown through a high level of profitability, increases investor interest in investing so that it can increase the value of the company in the eyes of investors. In this study, ROA as an indicator of the company's financial performance cannot moderate the Intellectual Capital variable with firm value. This can be explained that investors do not consider intellectual capital in assessing or measuring company performance. Investors tend to look at other factors in measuring the company's value, such as the company's stock price. Investors consider that a good ROA value is not necessarily the company's value as well. The results of this study contradict research by Xu & Liu (2021), which reveals that the more intangible assets a manufacturing company has, the greater the company's profitability and company returns as expressed in ROA.

CONCLUSION

Based on the results of the analysis and discussion of the data described in the previous section, several conclusions can be drawn: (1) Intellectual capital, which consists of Value Added Human Capital (VAHU), Structural Capital Value Added (STVA), and Value Added Capital Employed (VACA), simultaneously has a positive and significant effect on Company Value (PBV) is registered property, and Real Estate Companies. on the Indonesia Stock Exchange in 2017 – 2019; (2) Financial performance as a moderating variable (ROA) cannot strengthen the effect of VAHU on firm value (PBV); (3) Financial performance as a moderating variable (ROA) cannot strengthen the effect of STVA on firm value (PBV); and (4) Financial performance as a moderating variable (ROA) cannot strengthen the effect of VACA on firm value (PBV).

This research is considered less innovative because it is based on annual financial reports. It is recommended for further researchers to use other media. In addition, intellectual capital research primarily uses analytical content, so it does not develop as expected. It would be better and more interesting if the next researcher could come directly to the related company and conduct interviews with stakeholders. Future research can include all employee costs in the calculation of VAHU, such as salaries and wages, training costs, study fees, and bonuses, to enhance further discussions.

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