

# Relationship between Intellectual Capital and Corporate Profitability

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## Abstract

This study aims to empirically evaluate the partial effect of Intellectual Capital Profitability. This research is quantitative, with hypotheses derived using the Resources-Based Theory and supported by prior studies employing the same variables. Listed Property and Real Estate Companies on the Indonesia Stock Exchange are the focus of this study. Value Added Capital Employed (VACA), Value Added Human Capital (VAHU), Structural Capital Value Added (STVA), and Profitability are research variables (ROI). The data utilized is secondary data published in the company's financial statements. 168 samples were collected from 42 property and real estate companies on the Indonesia Stock Exchange. Data analysis utilizing descriptive statistical techniques and panel data regression with the assistance of eviews. In addition, to maintain the normality of the data, the Classical Assumption test is employed in this study. The findings indicated that Intellectual Capital with VACA, VAHU, and STVA assessments positively and statistically significant impact on Profitability (ROI) in Property and Real Estate companies listed on the Indonesia Stock Exchange. The profitability of the company can be increased by optimizing Intellectual Capital. Intellectual Capital that cannot be optimized will have a negative impact on the company's profitability.

**Keywords:** Intellectual Capital, VACA, VAHU, STVA, Profitability.

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## Introduction

As a result of the industrial revolution 4.0, technological advancements and competition among businesses have occurred. Companies must increase their capacity for innovation and creativity in business operations. To survive, companies are transitioning from a labor-based business (labor-based industry) to a knowledge-based business (knowledge-based sector) based on science. According to the Resource-Based View Theory (Barney, 2001), an organization is a collection of assets with the capacity and experience to develop its organizational culture to

distinguish itself from other organizations (Kholik & Laeli, 2020). To increase the added value of a business, companies must pay close attention to intellectual abilities when managing their resources. Intellectual Capital is the company's most valuable intangible asset due to the results it produces.

In the early 1990s, Intellectual Capital became the focus of academics, businesses, and investors. It is one of the most critical factors contributing to the company's value creation (Edvinsson, 1997). Intellectual Capital is viewed as the company's knowledge used to generate wealth. Intellectual Capital is a measurable resource for enhancing competitive advantage; by utilizing Intellectual Capital, companies will be able to use company resources efficiently, economically, and effectively, which will positively affect company profitability (Castro et al., 2019). Typically, the Value-Added-Intellectual-Coefficient (VAIC) is applied when calculating a company's Intellectual Capital. Whereas the Value Added Intellectual Coefficient has three components, namely; Value Added Capital Employed (VACA) is understood as the added value created from the capital that is managed efficiently in the company, Value Added Human Capital (VAHU) is defined as a combination of knowledge, expertise, innovation and the ability of individual company employees to complete, and Structural Capital Value Added (STVA) is the ability of the organization or company to fulfill the coefficient's requirements (Ulum, 2009). Frequently, the relationship between Intellectual Capital and Profitability is comprehended through the resource-based theory (Kengatharan, 2019). According to the understanding of Resources-based theory, the company's profitability results from utilizing all its resources. Intellectual capital is among the assets owned by the company. Intellectual Capital, according to (Ulum, 2009), contributes to a company's profitability through its financial performance. Intellectual Capital generates efficient financial performance, and efficient performance enhances the profitability of a business.

Several of our observations indicate that the profitability of businesses frequently demonstrates a flat or even declining trend. The company has not optimally increased the value-added. As previously explained, the company's intellectual capital contributes to its propensity for suboptimal resource utilization. Companies in the property and real estate sector experience this circumstance frequently. According to research (Muasiri & Sulistyowati, 2021; Erzha et al., 2019; Yao et al., 2019), intellectual capital affects company profitability. However, the results of this study are not entirely authoritative because they have been refuted by previous research (Mariani & Suryani., 2018; Rahayu et al., 2020), which concluded that intellectual capital does not affect company profitability. Theoretically, this study employs the Resources-based theory (Barney, 2001) to investigate how organizations can process and utilize their resources. To gain a competitive advantage, businesses must utilize and cultivate sources of company capital, including intellectual capital. When the business has superior resources, it will gain a competitive advantage. Intellectual resources are an essential resource that contributes to creating a competitive advantage. In addition, Resources-based theory addresses how businesses can process and employ all their resources to gain a competitive advantage. The company must then utilize and develop its sources of capital, including intellectual capital.

**H1:** VACA has a positive and significant effect on Company Profitability

Value Added Human Capital (VAHU) illustrates the amount of value-added generated

with labor expenditures. This ratio indicates how much each rupiah invested in Human Capital contributes to the organizations value-added. From the Resource-Based View, Intellectual capital is a crucial component of a company's source of capital for achieving a competitive advantage. Profitability improvement is one of the objectives of gaining a competitive advantage. Therefore, the causal relationship between Intellectual capital measured by VAHU and profitability can be established. Profitability increases are brought about by intellectual capital. If the company can maximize its intellectual capital, its profitability will increase, and vice versa. The relationship between VAHU and Profitability is consistent with the findings of previous research (Alipour, 2012; Wong & Ku, 2015), indicating that Intellectual Capital, as measured by VACA, influences a company's profitability. These results suggest that the greater the VAHU value, the greater the profitability.

## **H2: VAHU has a positive and significant effect on Company Profitability**

Value Added Human Capital (VAHU) illustrates the amount of value-added generated with the labor expenditures. This ratio indicates how much each rupiah invested in Human Capital contributes to the organizations value-added. From the Resource-Based View, Intellectual capital is a crucial component of a company's source of capital for achieving a competitive advantage. Profitability improvement is one of the objectives of gaining a competitive advantage. Therefore, the causal relationship between Intellectual capital measured by VAHU and profitability can be established. Profitability increases are brought about by intellectual capital. If the company can maximize its intellectual capital, its profitability will increase, and vice versa. The relationship between VAHU and Profitability is consistent with the findings of previous research (Alipour, 2012; Wong & Ku, 2015), indicating that Intellectual Capital, as measured by VACA, influences a company's profitability. These results indicate that the greater the VAHU value, the greater the profitability.

## **H3: STVA has a positive and significant effect on Company Profitability**

## **Research Design and Method**

This study determines the effect of Intellectual Capital as measured by VACA, VAHU, and STVA on Profitability as measured by ROI in Property and Real Estate Companies listed on the Indonesia Stock Exchange in 2018-2021. The population in this study is property and real estate companies listed on the Indonesia Stock Exchange for the 2018-2021 period, a total of 46 companies. Based on the sampling criteria, the number of samples used in this study is 42 (companies) x 4 (period) = 168 because only 42 Property and Real Estate companies report their finances on the IDX within four years of observation. The type of data used in this research is quantitative data. Quantitative data is data in the form of numbers taken from data related to the discussion. The data in this study are in the form of annual financial reports of Property and Real Estate Companies listed on the Indonesia Stock Exchange for the 2018-2021 period. The method of data collection in this study used archival techniques. The archiving process is to collect data that is already available or has been documented in the form of annual financial

reports of Property and Real Estate Companies listed on the Indonesia Stock Exchange during the 2018-2021 period published by the Indonesian Capital Market Directory (ICMD) and IDX Statistics. Through the IDX Investment Gallery, Faculty of Economics, Muslim University of Indonesia, and the official website of the Indonesia Stock Exchange.

The data analysis of this research used the panel data regression analysis method. Panel data regression is a study that combines cross-sections such as households, countries, companies, and so on with a period. Meanwhile, (Suliyanto, 2011) revealed that what is meant by panel data regression analysis is a regression that uses panel data or pool data, a combination of time series data and cross-section data. The author uses Eviews 10 software as an aid in conducting data analysis. To determine the suitable panel data model, the examiner needs to test several stages; the first stage is to carry out the Chow Test, Hausman Test, and Lagrange Multiplier Test to determine the suitable panel data model; after that, the Classic Assumption Test is carried out which is a statistical requirement that must be met on multiple linear regression analysis based on ordinary least squares (OLS); and for significance, testing using t-test, F test, and coefficient of determination.

**Table 1. Research Sample**

No.	Criteria	Number of Companies
1.	Property and Real Estate Companies listed on the IDX according to the observation year 2018-2021	46
2.	The company publishes annual reports periodically according to the 2018-2021 observation year.	(4)
3.	The company has financial statements for the 2018-2021 period, which can be uploaded in the summary of the company's financial information on the Indonesia Stock Exchange.	42
Number of Samples		42
Total samples sampled during 2018-2021 = (46x4)		168

**Table 2. Operational Definitions of Variables and Measurements**

Variable	Indicator	Scale
Value Added Capital Employed	VACA= VA+CE	Ratio
Value Added Human Capital Efficiency	VAHU = VA+HC	Ratio
Structural Capital Value Added Efficiency	STVA = SC +VA	Ratio
Profitability	ROI = Profit after Tax /Total Asset	

## Results and Discussion

### *Statistical Result*

This data is secondary data obtained from the official website of the Indonesia Stock Exchange and the Company's website, which is being researched in the form of reports or other data that support this research. As well as the results of regression assumption testing and hypothesis testing using the Eviews 10 data processing program. The results of this study were obtained based on the processing of 168 VACA, VAHU, STVA, and Profitability (ROI) data in the financial statements of Property and Real Estate companies. One hundred sixty-eight financial statement data were obtained by multiplying the number of research samples: 42 companies with four years (2018-2021) of research observations. The descriptive statistics of

Property and Real Estate Companies' results are based on words of the VACA, VAHU, STVA, and Company Profitability (ROI) values. This study's first testing stage was to perform a descriptive statistical test that provided a description or description of the research subject based on variable data obtained from certain subject groups.

**Table 3. Descriptive statistics**

	VACA	VAHU	STVA	Profitabilitas
Mean	0.210100	2.905792	0.796400	4.153580
Maximum	2.470000	27.450000	21.640000	35.890000
Minimum	-0.500000	-9.390000	-3.470000	-7.720000
Std. Dev.	0.25167	4.02679	2.07021	6.49671

Based on the description of the Descriptive Statistics in table 3, the Property and Real Estate Companies above show that VACA shows a minimum value of -0.50, a maximum value of 2.47, and a mean value of VACA 0.2101. VAHU offers a minimum value of -9.39, the maximum value of VAHU 27.45, and the mean value of VAHU 2.9057. STVA value shows the minimum value is -3.47, the maximum value of STVA is 21.64, the mean value is 0.7964, and Profitability shows the minimum value is -7.72, the maximum value of Profitability is 35.89, and the mean value is 4.1535.

Furthermore, the second stage is to determine the Panel Data Regression model, which can be done through 2 tests, namely the Chow test and the Housman test, each of which helps to choose the best model that should be used. The hypotheses for each test are as follows: The Chow test is used to determine whether the panel data regression technique with the Fixed Effect method is better than the panel data model regression without dummy variables or the Common Effect method. The criteria for this test are seen from the p-value of the F statistic. If the probability value is  $< 0.05$ , then  $H_0$  is rejected, meaning that the effect in the panel regression estimation model that is appropriate to use is the fixed-effect model, and conversely, if the probability value is  $> 0.05$ , then  $H_0$  is accepted, meaning that the appropriate panel regression estimation model is the Common Effect model (CEM). From table 4, the empirical results state that  $H_0$  is accepted because it is seen from the significance value, namely the probability of cross-section  $F < 0.05$  or  $0.0158 < 0.05$ . So, it can be concluded that with a 95% confidence level, it can be concluded that the Fixed Effect Model is better to use than the Common Effect Model.

**Table 4. Chow test**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.157598	(38,126)	0.0158
Cross-section Chi-square	17.055421	38	0.0019

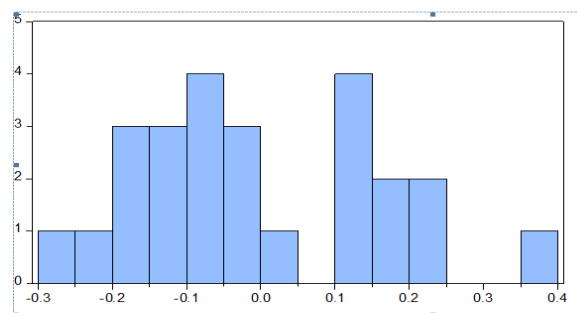
Furthermore, the Hausman test determines whether the correct panel data regression technique uses a random or fixed effect. The criterion for this test is that if the probability value is  $< 0.05$ , then  $H_0$  is rejected, meaning that the effect in the panel regression estimation model that is appropriate to use is the fixed-effect model, and vice versa if the probability value is  $> 0.05$ , then  $H_0$  is accepted, meaning that the appropriate panel regression estimation model is the Random Effect Model. From table 5, the empirical results state that  $H_0$  is accepted because it is

seen from the significance value, namely probability  $< 0.05$  or  $0.0016 < 0.05$ . So, it can be concluded that with a 95% confidence level, it can be concluded that the Fixed Effect Model is better to use than the Random-Effect Model. Based on the results of the Chow and Hausman tests, the same results are obtained, so there is no need to do the LM test. Lagrange multiplier testing is carried out to determine the most appropriate common effect or random-effect model used in estimating panel data. After selecting the best model by testing the Chow test, LM, and Hausman test, it was concluded that the best model to explain the relationship between the independent and dependent variables was the Fixed Effect Model.

**Table 5. Hausman test**

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	12.265659	4	0.0056

The third stage is to perform a normality test aimed at testing whether, in the regression model, the residual variables are normally distributed or not. Detect whether the residuals are normally distributed or not; can be seen through the Jarque Bera test. Residuals are declared normal if the probability of the Jarque Bera test is greater than the level of significance ( $\alpha$ ). Based on Figure 1, the normality assumption test produces a Jarque Bera test statistic of 1.034367 with a probability of 0.596197. These results indicate the probability  $>$  significance level ( $\alpha = 0.05$ ). This means that the residuals obtained from the regression model are declared normally distributed. This means that the residuals obtained from the regression model are declared normally distributed. Thus, the assumption of normality is met.



**Figure 1. Normality Test**

The fourth stage is to test multicollinearity. This test is conducted to determine multicollinearity in the regression model. To detect the presence or absence of multicollinearity by looking at the Variance Inflation Factor (VIF). VIF is less than ten; then, there is no multicollinearity in the regression model. Based on table 4, there is no independent variable that has a VIF of more than 10. With these results, it can be concluded that there is no multicollinearity in the regression model.

**Table 6. Multicollinearity Test**

Variable	Centered VIF
C	NA
CR	1.17756
DER	1.16832
ROA	1.01041



The fifth stage is to perform a heteroscedasticity test. This test aims to analyze whether the variance of the error is fixed/constant (homoscedastic) or variable (heteroscedastic). To detect the presence or absence of heteroscedasticity in this study, the Breusch Pagan Godfrey test was used by looking at the probability value of Chi-Square in Obs\*R-Squared. If the probability value of Chi-Square in Obs\*R-Squared is greater than the significance level = 0.05 or 5%, then heteroscedasticity's data in this study is unaffected. On the other hand, if the probability value of Chi-Square in Obs\*R-Squared is smaller than the significance level of = 0.05 or 5%, the data in this study is affected by heteroscedasticity. Based on table 7, it can be concluded that H0 is accepted. This is evidenced by the chi-square probability value  $> 0.05$  ( $0.6587 > 0.050$ ), meaning that there is no heteroscedasticity so that it can be continued to the next test.

**Table 7. Heteroscedasticity Test**

<b>Heteroskedasticity Test: Breusch-Pagan-Godfrey</b>			
F-statistic	2.537662	Prob. F(4,164)	0.0842
Obs*R-squared	6.651688	Prob. Chi-Square(4)	0.0839
Scaled explained SS	14.13229	Prob. Chi-Square(4)	0.0027

The sixth stage is to test the autocorrelation; the autocorrelation test aims to test whether, in a linear regression model, there is a correlation between all the confounders (residuals) in period t with errors in period t-1 (previous). The autocorrelation test used in this study uses the Lagrange Multiplier (LM Test) test or also called the Breusch-Godfrey test, by looking at the probability value of Chi-Square. If the probability value of Chi-Square is greater than the significance level of = 0.05 or 5%, then the data in this study is not affected. On the other hand, if the probability value of Chi-Square is less than the significance level of = 0.05 or 5%, the data in this study is subject to autocorrelation. Based on table 8, it can be concluded that there is no autocorrelation in the model. This is evidenced by the chi-square probability value  $> 0.05$  ( $0.6587 > 0.05$ ), which means that H0 is accepted.

**Table 8. Autocorrelation Test**

<b>Breusch-Godfrey Serial Correlation LM Test:</b>			
F-statistic	0.328295	Prob. F(28,131)	0.7242
Obs*R-squared	0.835075	Prob. Chi-Square(28)	0.6587

The seventh stage is panel data regression testing using a fixed-effect model. Based on a series of tests that have been carried out, the final regression model of this study uses the fixed effect model (FEM). This fixed effect model (FEM) approach is a way to include the individuality of each company or each unit cross-section by making the intercept vary for each company but still assumes that the slope coefficient is constant for each company. Although panel data regression with a fixed-effect model approach requires a dummy variable, the Eviews program can be done automatically without creating a dummy variable (Ghozali & Ratmono, 2013). The following is a summary of the results of testing the fixed effect model used in the research model.

**Table 7. Panel Data Regression Results (Fixed Effect Model)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.099602	.559890	0.178279	0.8590
VACA	4.729370	1.659591	2.851879	0.0052
VAHU	0.863393	0.103999	8.355494	0.0005
STVA	0.694096	0.187013	3.717598	0.0007
<b>Effects Specification</b>				
<b>Cross-section fixed (dummy variables)</b>				
R-squared	0.651504	Mean dependent var		4.153520
Adjusted R-squared	0.424888	S.D. dependent var		6.496711
S.E. of regression	0.194309	Akaike info criterion		2.184396
Sum squared resid	0.641852	Schwarz criterion		1.205644
Log likelihood	10.30496	Hannan-Quinn criter.		2.076216
F-statistic	4.265667	Durbin-Watson stat		2.442679
Prob(F-statistic)	0.001824			

The eighth stage is testing the coefficient of determination. The coefficient of determination is used to determine how much the ability of the model in the study to explain the dependent variable. Based on table 9, the value of R-squared is 0.651504. This shows that profitability can be explained by variables (VACA, VAHU, STVA) of 65.15%. At the same time, the remaining 44.85% is explained by other factors outside the research variables.

The ninth stage is conducting F (simultaneous) testing. Simultaneous testing or the F test is used to determine the effect of the independent variables on the dependent variable. Simultaneous testing or the F test is used to determine the effect of the independent variables on the dependent variable. If the probability is  $< 0.05$ , then  $H_0$  is rejected, and  $H_a$  is accepted so that it can be concluded that the independent variable has a significant simultaneous effect on the dependent variable. Meanwhile, if the probability value is  $> 0.05$ , then  $H_0$  is accepted, and  $H_a$  is rejected. Based on the results of the F test, the probability value of the F-statistic is 0.021824  $< 0.05$ , so  $H_0$  is rejected, and  $H_a$  is accepted. Thus, it can be concluded that simultaneously there is a significant effect between the independent variables (VACA, VAHU, STVA) on profitability.

The tenth stage is to perform a statistical test (t) to find out how far the influence of one independent variable on the dependent variable by assuming the other independent variables constant in this study can be seen in the probability value of the t-statistic. A statistical t-test was conducted to show how far the influence of VACA, VAHU, and STVA individually on profitability. If the probability value of the t-statistic is less than the significance level of  $= 0.05$  or 5%, then partially, the independent variable has a significant effect on the dependent variable. The test results with panel data regression analysis showed a VACA probability value of 0.0052  $< 0.05$  causing  $H_a$  to be accepted and  $H_0$  to be rejected. So, it can be concluded that VACA has a positive and significant effect on profitability. The VAHU probability value of 0.0005  $< 0.05$  causes  $H_a$  to be accepted and  $H_0$  to be rejected. So, it can be concluded that VAHU has a positive and significant effect on profitability. STVA probability value of 0.0005  $< 0.05$  causes  $H_a$  to be accepted and  $H_0$  to be rejected. So, it can be concluded that STVA positively and significantly affects company profitability.



## **Discussion**

Profitability is significantly influenced by Intellectual Capital as measured by Capital Employed Efficiency. This indicates that Intellectual Capital, as measured by Capital Employed Efficiency, is a determining factor in boosting a company's profitability. The effect of Capital Employed Efficiency on the Profitability of property and real estate firms is attributable to the optimal use of Capital Employed in boosting Return on Investment. Capital Employed functions effectively, thereby increasing the company's Return on Investment. Theoretically, the Resources-based theory supports the research results. According to the Resources-based theory, the significance of the influence entails that, to achieve a competitive advantage, the company must process and utilize all its capital resources efficiently and effectively. Return on Investment is a component of the firm's competitive advantage, whereas Capital Employed Efficiency is a component of the firm's resources. The Return-on-Investment value will increase if the Capital Employed Efficiency is positive. In other words, the company's competitive advantage grows as the ROI value rises, because the Capital Employed Efficiency is positive. Vice versa. Thus, based on the definition of the theory of Resources-based theory, Profitability, as measured by ROI, is positively and significantly valued because of the company's positive Capital Employed Efficiency. This study's findings are consistent with those of previous research (Gani et al., 2020; Mehralian et al., 2012; Ilmiyono, 2019), indicating that Intellectual Capital as measured by Capital Employed Efficiency influences company profitability.

Intellectual Capital has a positive regression coefficient as measured by Human Capital Efficiency, indicating that Human Capital Efficiency influences the growth of Profitability. This indicates that the influence of Human Capital Efficiency on a company's profitability increases with its quality. In the meantime, based on the partial test, it is known that Intellectual Capital, as measured by Human Capital Efficiency, has a significant impact on Profitability. This indicates that Intellectual Capital, as measured by Human Capital Efficiency, is a determining factor in the profitability of a business. The effect of Human Capital Efficiency on the Profitability of property and real estate firms is attributable to the optimal utilization of Human Capital in maximizing Return on Investment. Human Capital increases the Return On Investment (ROI) of the company through efficient performance. Theoretically, the Resources-based theory supports the research results. According to the Resources-based theory, the significance of the influence entails that, to achieve a competitive advantage, the company must process and utilize all its capital resources efficiently and effectively. Human Capital Efficiency is part of the company's resources, while Return on Investment is part of the company's competitive advantage. If Human Capital Efficiency is positive, the Return On Investment value will increase. In other words, the company's competitive advantage increases as ROI value increases, and ROI value increases as Human Capital Efficiency Improves-Vice versa. Thus, according to the definition of the theory of Resources based theory, Profitability, as measured by ROI, is positively and significantly valued because of the company's Human Capital Efficiency having a positive value. According to previous research (Alipour, 2012; Wong & Ku, 2015), Intellectual Capital, as measured by Human Capital Efficiency, influences the profitability of a business. These findings indicate that the greater the Human Capital Efficiency, the greater the profitability. The findings of this study are consistent with those of previous research (Prawitasari et al., 2018; Maharani & Fuad., 2020): Intellectual Capital, as measured by Structure Capital Efficiency, affect company profitability.

## Conclusions

Intellectual Capital with an assessment of Capital Employed Efficiency (VACA) has a positive and significant effect on the profitability of Property and Real Estate Companies listed on the Indonesia Stock Exchange. In other words, the company's competitive advantage increases as the ROI value increases, during the ROI value increases because the Capital Employed Efficiency is positive. Vice versa. Intellectual Capital with an assessment of Human Capital Efficiency (VAHU) positively and significantly affects profitability in Property and Real Estate Companies listed on the Indonesia Stock Exchange. In other words, the company's competitive advantage increases as the ROI value increases, during the ROI value increases because Human Capital Efficiency is positive. Vice versa. Intellectual Capital with an assessment of Structure Capital Efficiency (STVA) has a positive and significant effect on the profitability of Property and Real Estate Companies listed on the Indonesia Stock Exchange. In other words, the company's competitive advantage increases as the ROI value increases, while the ROI value increases due to the better management of the company's Structure Capital Efficiency. Vice versa.

Property and Real Estate Companies listed on the Indonesia Stock Exchange pay attention to Intellectual Capital with VACA, VAHU, and STVA assessments because they can positively and significantly impact the Company's Profitability. This is by the research findings that Intellectual Capital with the assessment of VACA, VAHU, and STVA has a positive and significant effect on profitability. Property and Real Estate Companies are listed on the Indonesia Stock Exchange to increase Profitability consistently. This is important to increase the company's competitive advantage. In future research, it is hoped that researchers will add other variables to explain the remaining 57.6% of the determination test of this study, that it is better to need a formulation of the SEM method and variables and increase the number of research samples to ensure the level of accuracy and consistency of research results. In order to achieve superior financial performance, it is hoped that the company will be able to improve and manage intellectual capital in all its forms and dimensions.

## Reference

- Alipour, M. (2012), The effect of intellectual capital on firm performance: an investigation of Iran insurance companies. *Measuring Business Excellence*, 16(1), 53-66. <https://doi.org/10.1108/13683041211204671>
- Barney, J. B. (2001). Resource-based theories of competitive advantage: A ten-year retrospective on the resource-based view. *Journal of management*, 27(6), 643-650. <https://doi.org/10.1177/014920630102700602>
- Edvinsson, L. (1997). Developing intellectual capital at Skandia. *Long range planning*, 30(3), 366-373. [https://doi.org/10.1016/S0024-6301\(97\)90248-X](https://doi.org/10.1016/S0024-6301(97)90248-X)
- Erzha, E. L., Sudarma, M., & Rahman, A. F. (2019). The Effect of Loan and Intellectual Capital on Profitability with Credit Risk as Moderating. *Jurnal Economia*, 15(2), 159-171. <https://dx.doi.org/10.21831/economia.v15i2.23725>
- Gani, A. S. M., Machmud, R., & Selvi, S. (2020). The Influence of Intellectual Capital on the Profitability of Banking Companies. *Jambura Science of Management*, 2(1), 01-07. <https://doi.org/10.37479/jsm.v2i1.4433>
- Ghozali, I., & Dwi Ratmono. 2013. Analisis Multivariat dan Ekonometrika, Teori, Konsep, dan Aplikasi dengan EvIEWS 8. Semarang. Badan Penerbit Universitas Diponegoro.

- Kengatharan, N. (2019). A knowledge-based theory of the firm: Nexus of intellectual capital, productivity, and firms' performance. *International Journal of Manpower*. <https://doi.org/10.1108/IJM-03-2018-0096>
- Kholik, A., & Laeli, S. (2020). Keunggulan Bersaing Berkelanjutan Sekolah Alam Berbasis Model Resource-Based View. *Tadbir Muwahhid*, 4(1), 73-97. <https://doi.org/10.30997/jtm.v4i1.2540>
- Maharani, T., & Fuad, K. (2020). The effect of human capital, structural capital, customer capital, managerial ownership, and leverage toward profitability of company. *Journal of Advanced Multidisciplinary Research*, 1(1), 46-62. <http://dx.doi.org/10.30659/jamr.1.1.46-62>
- Mariani, D., & Suryani, S. (2018). Pengaruh Enterprise Risk Management Disclosure, Intellectual Capital Disclosure Dan Corporate Social Responsibility Disclosure Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Pemoderasi (Studi Empiris Pada Perusahaan Sektor Industri Baran). *Jurnal Akuntansi dan Keuangan*, 7(2), 119-138. <http://dx.doi.org/10.36080/jak.v7i2.766>
- Martín-de Castro, G., Díez-Vial, I., & Delgado-Verde, M. (2019). Intellectual capital and the firm: evolution and research trends. *Journal of Intellectual Capital*. <https://doi.org/10.1108/JIC-12-2018-0221>
- Mehralian, G., Rajabzadeh, A., Reza Sadeh, M. and Reza Rasekh, H. (2012). Intellectual capital and corporate performance in Iranian pharmaceutical industry. *Journal of Intellectual Capital*, 13(1), 138-158. <https://doi.org/10.1108/14691931211196259>
- Muasiri, A. H., & Sulistyowati, E. (2021). Pengaruh Intellectual Capital Dan Corporate Governance Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Pemoderasi. *Jurnal SEKURITAS (Saham, Ekonomi, Keuangan dan Investasi)*, 4(3), 275-285. <http://dx.doi.org/10.32493/skt.v4i3.10379>
- Prawitasari, D., Pratiwi, R. D., & Tristiarini, N. (2018). The Effect of Intellectual Capital Measurement on Profitability and Market Price. In 1st Economics and Business International Conference 2017 (EBIC 2017). 189-193. *Atlantis Press*. <https://doi.org/10.2991/ebic-17.2018.30>
- Rahayu, D. Y., Kurniati, T., & Wahyuni, S. (2020). Analisa Pengaruh Intellectual Capital, Islamicity Performance Index dan Corporate Social Responsibility Terhadap Profitabilitas Bank Umum Syariah 2014-2018. *Kompartemen: Jurnal Ilmiah Akuntansi*, 18(2). <http://dx.doi.org/10.30595/kompartemen.v18i2.7688>
- Suliyanto. (2011). *Ekonometrika Terapan - Teori dan Aplikasi dengan SPSS*. Yogyakarta. ANDI.
- Ulum, I. (2009). *Intellectual Capital: Kinerja dan Kajian Empiris*. Yogyakarta. Graha Ilmu.
- Wong, M. C., Li, S. C., & Ku, A. C. (2015). Impacts of Intellectual Capital on Profitability: An Analysis on Sector Variations in Hong Kong. *Journal of US-China Public Administration*, 12(8), 614-626. <https://doi.org/10.17265/1548-6591/2015.08.003>
- Yao, H., Haris, M., Tariq, G., Javaid, H. M., & Khan, M. A. S. (2019). Intellectual capital, profitability, and productivity: evidence from Pakistani financial institutions. *Sustainability*, 11(14), 3842. <https://doi.org/10.3390/su11143842>