THE EFFECT OF INTELLECTUAL CAPITAL ON COMPANY'S PERFORMANCE STUDY ON MANUFACTURING COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE (IDX)

ABSTRACT

This study aims to determine (1) the effect of aggregate intellectual capital (VAIC) on the performance of companies that have unequal intellectual capital intensity. (2) To examine the effect of intellectual capital components (VACA, VAHU, and STVA) individually and simultaneously on the performance of companies that have unequal intellectual capital intensity as well. Intellectual capital is measured by the Value Added Intellectual Capital (VAIC) method and company performance is measured by financial performance (return on assets) and market valuation (market to book value). This study uses manufacturing companies listed on the Indonesia Stock Exchange (IDX) from 2018 to 2022 as samples. Data was collected using purposive sampling method with 30 observation data analyzed. This analysis uses a panel regression model (with dummy) as the primary analytical tool. The results of this study prove that there is a significant difference between the intellectual capital of manufacturing companies in high capital intensive industries and low capital intensive industries. ROA in high IC intensive industrial companies is better than ROA in low IC intensive industrial companies; positive and significant effect because the probability value is less than 0.1. MBV in low IC intensive industrial companies is better than MBV in high IC intensive industrial companies; positive and significant effect because the probability value is less than 0.1. Then, intellectual capital and dummy simultaneously have a significant effect on financial performance and market valuation.

Keywords: Intellectual Capital, Company's Performance

INTRODUCTION

The company's aims are to fulfil the interests of shareholders, improve the value of the company, respond to the needs of society, and create a good company reputation. All of that is determined by the company's performance as an overall assessment of how well a company carries out important parameters. Maryanti & Sari (2018) defines company performance as a result obtained by the company through a series of processes within a certain period of time that leads to standards that have been set by the company as an effort to generate maximum profit. There are several parameters to assess company performance, such as financial indicators and market valuation indicators.

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effort to generate maximum profit. There are several parameters to assess company performance, such as financial indicators and market valuation indicators.

In the company's performance, financial ratio is used as a benchmark in comparing the numbers used to assess financial conditions in the company's performance financial statements (Karen & Susanti, 2019). In this analysis, the profitability inspiration used is Return on Asset (ROA). By Ratih (2022) Return on Asset (ROA) is used as an indicate of the company's financial performance because ROA better represents the interests of shareholders. The increase shows that the company's performance is getting better. Investors prefer companies that are profitable because they have a high rate of return.

Market valuation is given by investors to assess the company itself. Company value is a representation of public trust based on the company's achievements. A company's value is related to its share price. However, it is generally known that the market value of a company's shares can be more or less than its book value. Therefore, it is important for investors to know whether the company is overvalued or undervalued. For this reason, companies need to provide good performance to convince investors and continue to grow by changing from a labour-based business to a knowledge-based business, with the main characteristic of knowledge or so-called intellectual capital (Dianing, 2017).

Zhiceng, et al (2016) stated that good management of intellectual resources can increase the market value of the company. If the three intellectual resources such as physical capital, human capital and structural capital can be utilised optimally, it will create superior intellectual capital in the company. Intellectual capital will facilitate superior companies in fulfilling the interests of all stakeholders, including investors. Investors in the capital market will show appreciation for the excellence of the company's intellectual capital by increasing demand for the company's shares, and will have an impact on increasing the value of the company.

In Indonesia, intellectual capital began to develop since the emergence of PSAK 19 (revised 2010) on intangible assets. Although PSAK 19 does not directly mention the existence of intellectual capital, according to PSAK 19, intangible assets are non-monetary assets that can be identified and lack a physical form. However, PSAK 19 on intangible assets only reveals the definition and characteristics of intangible assets.

The awareness of the importance on intellectual capital in Indonesia is increasing along with the high level of competition and the entry of the globalisation and free trade regime. To maintain its market, according to Pulic in Rahmadhanty (2021), companies must change their business strategy. The main activity in the company is no longer just producing goods and services, but competing with knowledge which is then formed into goods and services. This is because the knowledge-based economy in the last decade has focused on knowledge and intellectual capital as the main production factors that influence the economic prosperity of a company. according to Leny (2019) Intellectual capital is something that is

produced by the three main elements contained in intellectual capital, which are human capital, structure capital, and employed capital. These three elements have to do with knowledge and technology that can provide more added value for companies that are useful for competing with other companies.

IC is important to companies for the following reasons: First, IC information provides an indication of the future potential of the firm (Berzkalne and Zelgalve 2014), this usually occurs when the market value of the company exceeds its book value, or there is a large difference between the market value and book value of the company, and this can be explained by intellectual capital. Second, IC makes a very important contribution in create and sustain competitive advantage and firm value. By Nadeem et al. (2018) IC is a vital contributor to company performance, companies that manage IC will be more effectively able to secure a very strong competitive advantage and perform better over other companies.

The strategic role of intellectual capital is as the company's potential to improve competitive capabilities that may not be owned by other companies or difficult to imitate by competing companies. Intellectual capital with all its knowledge and technology will be able to anticipate and adapt to all forms of uncertainty that can threaten the existence of the company. This condition will provide benefits to increase company value through profit creation, strategic positioning (market share, leadership, and reputation), technological innovation, customer loyalty, cost reduction, and increased productivity. According to Kurniawan in Dianing (2017) investors need IC to assess the company's capabilities. This information is needed to better create wealth in the future.

The above statement is in line with the Resource-based view (RBV). This theory explains that companies have resources that can make companies have competitive qualities and are able to direct companies to have good long-term performance. Valuable and rare resources can be directed to create competitive quality, so that the resources owned can last a long time and are not easily imitated, transferred, or replaced (Ulum, 2016). Therefore, companies must realise that intellectual capital is an important resource, because every company has unique intangible resources that can create value in the market. This must be managed properly to improve the company's competitive ability.

Various studies that have been conducted previously show mixed results regarding the effect of intellectual capital on company performance. Xu et.al (2018) examined the relationship between Intellectual Capital (IC) and company performance contained in Korean companies in 2012-2016 using the dependent variable sustainable growth and company performance, namely return on assets (ROA) and return on equity (ROE). The results showed that intellectual capital affects company performance. In addition to research conducted abroad, research on intellectual capital was also conducted in Indonesia, one of which was conducted by Santoso (2017). The results showed that intellectual capital has no influence on Growth (EG), Market Value (PER) and Productivity (ATO). Similar results were also found by Kuryanto and Syafruddin (2008), there is no positive influence between the intellectual capital of a company and its performance.

Then based on research conducted in 2016 by Zicheng et al. which this study empirically measures the impact of IC as measured by VAIC and its components on business performance in the context of selected MAKE award winners and comparable non-MAKE recipient companies. This study compares MAKE and non-MAKE winners to measure the impact of IC and business performance, the results of which show that non-MAKE companies are more influenced by IC than MAKE winning companies based on utility theory.

It was concluded that aggregate intellectual capital (VAIC) has a significant positive effect on firm performance, while the individual components of IC gave different results. However, the above studies generally involve companies in general or only use industries that have high IC as samples. There are only a few studies that use companies or industries based on their intellectual capital intensity such as research by Zhiceng, et al (2016) which uses companies that participate in the MAKE award. However, the study by Zicheng, et al. itself took a comparison between companies that have implemented a knowledge base. Therefore, it is still rare to find research that compares the effect of IC on company performance between industries that have high intensive IC and industries that have low intensive IC.

Various studies that have been conducted previously show mixed results regarding the effect of intellectual capital on company performance. So In this study, researchers conducted research on High-IC Intensive Industry and Low-IC Intensive Industry in Manufacturing Companies Listed on the Indonesia Stock Exchange (IDX) in 2018 - 2022. Based on the background that has been explained, this study aims (1) to examine the effect of aggregate intellectual capital (VAIC) on the performance of companies that have different intellectual capital intensity. (2) To examine the effect of intellectual capital components (VACA, VAHU, and STVA) individually and simultaneously on the performance of companies that have different intellectual capital intensity.

METHOD, DATA, AND ANALYSIS

Population and Sample

The population of this study were all manufacturing companies listed on the Indonesia Stock Exchange during the study period, totalling 143 companies. However, only sectors that have high IC intensive industry categories and low IC intensive industries in one sector are used as samples to maintain a balanced number of comparisons. then the sample of this study amounted to 16 from the high IC Intensive Industry that met the criteria and 14 from the low IC Intensive industry that met the criteria.

Data Analysis

The sample data in this study was processed using Microsoft Excel version 20019 and Eviews 10. The Microsoft Excel programme was used to calculate intellectual capital (VAIC method) and Market to Book value (MBV) for each manufacturing company listed on the Indonesia Stock Exchange in five years (2018-2022). Then, the Eviews programme was used to conduct statistical tests for hypothesis testing.

Operational Definition and Variable Measurement

The type of data used in this study is secondary data consisting of annual report data, audited financial statements, notes on the financial statements of each manufacturing company listed on the Indonesia Stock Exchange for five periods (2018-2022).

Variable x in this study is intellectual capital. IC is the ownership of experience, knowledge, professional expertise, good relationships, and technological capacity which will provide a competitive advantage in the organisation because knowledge-based companies will benefit in the form of profits and increased company value from innovation (intellectual assets such as patents and trademarks along with structural capital such as technology, procedures, processes, and so on (Hery, 2014: 191).

This study uses the VAIC (Value Added Intellectual Capital) measurement developed by Pulic in Christina (2019) which consists of human capital (VAHU), physical capital (VACA), and structural capital (STVA).
VAIC formulation:

1. VA = OUT - IN, where OUT is all total sales and other income and IN is all expenses except wages and salaries.
2. Human capital is defined as employee expenses and Value Added Haman Capital (VACA) is calculated by dividing VA (value added) by HC (human capital).
3. Structural capital is the difference between value added generated (VA) and human capital (HC). Structural Capital Value Added (STVA) is calculated by dividing SC (structural capital) by VA (value added).
4. Capital employed is defined as financial capital and Value Added Capital Employed (VACA) is calculated by dividing VA (value added) by CE (capital employed).
5. Value added intellectual coefficient VAIC is the sum of HCE, SCE and CEE.

Variable y in this study is company performance. There are two dependent variables used in this study, company profitability as measured by Return on Assets (ROA) and company market value as measured by Market to Book Value (MBV). Return on assets is the comparison between profit after tax and total assets or it can be said that the comparison between net income and total assets (Sartono, 2016). ROA is used in this study as an indicator of company profitability because of its ability to describe the extent of the return on all assets owned by the company. ROA is also used to measure the ability of capital invested in total assets to generate profits for all investors. This is shown by the formula below:

ROA = Net Income / Total Assets

Market Book Value is a ratio to determine the value of a company by comparing the book value of a company with its market value. Pandu (2020) Market to Book Value (MBV) shows the value of the company by comparing the company's market value with its book value. This ratio is able to signal to investors whether the company is overvalued or undervalued. The formula is shown below:

MBV = Market Price / Book Value

Book Value = Total Equity / Number of Shares Outstanding

RESULT AND DISCUSSION

Normality Analysis

1. Normality Test (VAIC and ROA): The probability value is 0.066> α (0.05), this indicates that the ROA and VAIC data in this study are normally distributed.
2. Normality Test (IC Component and ROA): The probability value is 0.87> α (0.05), this indicates that the ROA and IC component data in this study are normally distributed.
3. Normality Test (VAIC and MBV): The probability value is 0.795> α (0.05), this indicates that the MBV and VAIC data in this study are normally distributed.
4. Normality Test (MBV and IC) The probability value is 0.417> α (0.05), this indicates that the MBV and IC component data in this study are normally distributed.

Hesteroscedasticity Analysis

Table 1. Heteroskedasticity Test Glejser

Heteroskedasticity Test: Glejser

F-statistic	1.688170	Prob. F(2,142)	0.1885
Obs*R-squared	3.367600	Prob. Chi-Square(2)	0.1857
Scaled explained SS	2.833834	Prob. Chi-Square(2)	0.2425

a) VAIC and ROA

Heteroskedasticity Test: Glejser

F-statistic	1.308003	Prob. F(4,105)	0.2719
Obs*R-squared	5.221000	Prob. Chi-Square(4)	0.2654
Scaled explained SS	5.310161	Prob. Chi-Square(4)	0.2569

b) IC components and ROA

Heteroskedasticity Test: Glejser

F-statistic	1.688170	Prob. F(2,142)	0.1885
Obs*R-squared	3.367600	Prob. Chi-Square(2)	0.1857
Scaled explained SS	2.833834	Prob. Chi-Square(2)	0.2425

c) VAIC and MBV

Heteroskedasticity Test: Glejser

F-statistic	1.688170	Prob. F(2,142)	0.1885
Obs*R-squared	3.367600	Prob. Chi-Square(2)	0.1857
Scaled explained SS	2.833834	Prob. Chi-Square(2)	0.2425

d) IC components and MBV

Source: Data Analyzed, 2022

Decision making based on the prob value. Chi-Square, if this prob value. Chi-Square> 0.05 the assumption is accepted. The Chi-Square value for a) is 0.1857, b) 0.2654, c) 0.1857 and d) 0.1857. So it is concluded that the data is free from heteroscedasticity.

Autocorrelation Analysis

Table 2. Autocorrelation Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VAIC	1.388142	0.135302	10.25954	0.0000
D01	0.306803	0.105436	2.909852	0.0043
C	-4.284004	0.196538	-21.79737	0.0000
R-squared	0.453291	Mean dependent var		-2.425895
Adjusted R-squared	0.444682	S.D. dependent var		0.766556
S.E. of regression	0.571235	Akaike info criterion		1.740776
Sum squared resid	41.44135	Schwarz criterion		1.806950
Log likelihood	-110.1504	Hannan-Quinn criter.		1.767664
F-statistic	52.64958	Durbin-Watson stat		0.547262
Prob(F-statistic)	0.000000			

a) VAIC and ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VACA	1.205841	0.066349	18.17430	0.0000
LN_VAHU	-0.143988	0.128261	-1.122618	0.2642
LN_STVA	1.360059	0.109370	12.43545	0.0000
D01	0.250236	0.060475	4.137808	0.0001
C	-0.183589	0.227252	-0.807865	0.4210
R-squared	0.869959	Mean dependent var		-2.488961
Adjusted R-squared	0.865005	S.D. dependent var		0.796772
S.E. of regression	0.292748	Akaike info criterion		0.425378
Sum squared resid	8.998631	Schwarz criterion		0.548127
Log likelihood	-18.39580	Hannan-Quinn criter.		0.475166
F-statistic	175.6090	Durbin-Watson stat		0.977841
Prob(F-statistic)	0.000000			

b) IC components and ROA

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VAIC	0.845174	0.208450	4.054558	0.0001
D01	-0.458532	0.184516	-2.485057	0.0141
C	-0.092921	0.308030	-0.301664	0.7633
R-squared	0.162018	Mean dependent var		0.727873
Adjusted R-squared	0.150215	S.D. dependent var		1.182320
S.E. of regression	1.089907	Akaike info criterion		3.030534
Sum squared resid	168.6813	Schwarz criterion		3.092121
Log likelihood	-216.7137	Hannan-Quinn criter.		3.055559
F-statistic	13.72736	Durbin-Watson stat		0.456994
Prob(F-statistic)	0.000004			

c) VAIC and MBV

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VACA	0.823343	0.176793	4.657093	0.0000
LN_VAHU	-0.544978	0.308225	-1.768114	0.0792
LN_STVA	0.851945	0.261098	3.262930	0.0014
D01	-0.549886	0.174991	-3.142374	0.0020
C	3.009505	0.509876	5.902423	0.0000
R-squared	0.243009	Mean dependent var		0.727873
Adjusted R-squared	0.221381	S.D. dependent var		1.182320
S.E. of regression	1.043272	Akaike info criterion		2.956474
Sum squared resid	152.3782	Schwarz criterion		3.059120
Log likelihood	-209.3444	Hannan-Quinn criter.		2.998183
F-statistic	11.23571	Durbin-Watson stat		0.767438
Prob(F-statistic)	0.000000			

d) IC components and MBV

Source: Data Analyzed, 2022

From the table above, the value of Durbin-Watson Statistics a) 0.547, b) 0.978, c) 0.457, and d) 0.767 is in the range between -2 and 2, so the assumption of non-autocorrelation is accepted.

Independent T – Analysis Statistic

1. The result of t-independent sample VAIC test shows a significant value of 0.056 < α (0.10) which means there is a significant difference between the aggregate IC value in high IC intensive industrial companies and low IC intensive industrial companies.
2. The t-independent sample MBV test results show a significant value of 0.010 <α (0.10) which means there is a significant difference between the value of MBV in high IC intensive industrial companies and low IC intensive industrial companies.

3. The t-independent sample test result for ROA shows a significant value of 0.766>α (0.10), meaning that there is no significant difference between the value of ROA in high IC intensive industrial companies and low IC intensive industrial companies.

Linear Regression Panel

The hypothesis developed in this study is to find whether there is an influence between the independent variable and the dependent variable, as shown below:

1. H1: The overall measure of intellectual capital (VAIC) has a significant effect on financial performance and the financial performance of companies in high intellectual capital intensive industries is better than low intellectual capital intensive industries.
2. H2: The overall measure of intellectual capital (VAIC) has a significant effect on market valuation and the market valuation of companies in high intellectual capital intensive industries is higher than in low intellectual capital intensive industries.
3. H3: Intellectual capital components (VACA, VAHU, and STVA) both individually and simultaneously have a significant effect on financial performance.
4. H4: Intellectual capital components (VACA, VAHU, and STVA) individually and simultaneously have a significant effect on market valuation.

Multiple linear regression analysis (least squares panel method with dummies) is used in this study to test the hypothesis.

Table 3. Panel Linear Regression (VAIC and ROA)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VAIC	1.388142	0.135302	10.25954	0.0000
D01	0.306803	0.105436	2.909852	0.0043
C	-4.284004	0.196538	-21.79737	0.0000
R-squared	0.453291	Mean dependent var		-2.425895
Adjusted R-squared	0.444682	S.D. dependent var		0.766556
S.E. of regression	0.571235	Akaike info criterion		1.740776
Sum squared resid	41.44135	Schwarz criterion		1.806950
Log likelihood	-110.1504	Hannan-Quinn criter.		1.767664
F-statistic	52.64958	Durbin-Watson stat		0.547262
Prob(F-statistic)	0.000000			

Source: Data Analyzed, 2022

Ln ROA= -4,28 +1,388 VAIC + 0,31 Dummy

From the regression model, it is interpreted that the regression coefficient for VAIC is 1.388 with a positive sign (+) meaning that there is a positive or unidirectional correlation between dependent and free variables, which means that for every increase in VAIC of 1 percent, it will increase the ROA value by

1.388 percent. A probability value of 0.001 < α (0.10) indicates that VAIC has a positive and significant effect on ROA.

The dummy regression coefficient of 0.31, indicates that the ROA in high IC intensive industrial enterprises is 0.31 times better than the ROA in low IC intensive industrial enterprises. Has a positive and significant influence because the probability value is 0.0043 < α (0.10). The test value F 0.0000 < 0.1 in the model regression equation above shows that VAIC and dummy simultaneously have a significant effect on ROA.

The results of the coefficient of determination show that the value of R2 is 0.453, meaning that the dependent variable is able to be explained by the independent variable at 45.3% or in other words, the value of the variable return on assets is able to explain the intellectual capital of the company at 45.3 %, while the rest is explained by other factors that were not included in this study.

Table 4. Panel Linear Regression (VAIC and MBV)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VAIC	0.845174	0.208450	4.054558	0.0001
D01	-0.458532	0.184516	-2.485057	0.0141
C	-0.092921	0.308030	-0.301664	0.7633
R-squared	0.162018	Mean dependent var		0.727873
Adjusted R-squared	0.150215	S.D. dependent var		1.182320
S.E. of regression	1.089907	Akaike info criterion		3.030534
Sum squared resid	168.6813	Schwarz criterion		3.092121
Log likelihood	-216.7137	Hannan-Quinn criter.		3.055559
F-statistic	13.72736	Durbin-Watson stat		0.456994
Prob(F-statistic)	0.000004			

Source: Data Analyzed, 2022

Ln MBV = -0,09 + 0,845 VAIC – 0,45 Dummy

From this regression model, it can be interpreted that the regression coefficient for VAIC is 0.845, which means that for every 1 percent increase in VAIC, it will increase the MBV value by 0.845 percent. The probability value is 0.001 <α (0.10) so, VAIC has a positive and significant effect on MBV.

The dummy regression coefficient is -0.45 with a negative sign (-). That there is a negative relationship between the independent variable and the dependent variable. Increasing the value of an independent variable will reduce the value of the dependent variable. This shows that MBV in industrial companies with high IC is 0.45 times worse than MBV in low IC intensive industrial companies, this has a positive and significant effect because the probability value is 0.0141 < α (0.1). An F test value of 0.0000 in the

above model regression equation indicates that VAIC and dummy simultaneously significantly affect MBV.

The results of the coefficient of determination showed a value of R2 of 0.162, meaning that the dependent variable was able to be explained by the independent variable of 16.2% or in other words the variable of market value to book value was able to explain the intellectual capital of the company of 16.2%, while the rest was explained by other factors that were not included in this study.

Table 5. Panel Linear Regression (IC Components and ROA)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VACA	1.205841	0.066349	18.17430	0.0000
LN_VAHU	-0.143988	0.128261	-1.122618	0.2642
LN_STVA	1.360059	0.109370	12.43545	0.0000
D01	0.250236	0.060475	4.137808	0.0001
C	-0.183589	0.227252	-0.807865	0.4210

R-squared	0.869959	Mean dependent var	-2.488961
Adjusted R-squared	0.865005	S.D. dependent var	0.796772
S.E. of regression	0.292748	Akaike info criterion	0.425378
Sum squared resid	8.998631	Schwarz criterion	0.548127
Log likelihood	-18.39580	Hannan-Quinn criter.	0.475166
F-statistic	175.6090	Durbin-Watson stat	0.977841
Prob(F-statistic)	0.000000		

Source: Data Analyzed, 2022

LN ROA= -0.18 + 1.2 VACA – 0.14 VAHU + 1.36 STVA + 0.25 dummy

From the regression model, it is interpreted that the regression coefficient for VACA is 1.2, which means that for every 1 percent increase in VACA, it will increase the ROA value by 1.2 percent. The probability value is 0.000 <α (0.10) so VACA has a positive and significant effect on ROA.

The VAHU regression coefficient is -0.14, this shows that any increase in VAHU by 1 percent will reduce the ROA by 0.14 percent, with a probability value of 0.26 > α (0.10) so that the VAHU is marked negative and insignificant to the ROA.

The STVA regression coefficient is 1.36, which means that for every 1 percent increase in STVA, it will increase the ROA by 1.36 percent with a probability value of 0.000 < α (0.10) where STVA has a positive and significant effect on the ROA.

The dummy regression coefficient is 0.25, this shows that the ROA in high IC intensive industrial companies is 0.25 times better than the ROA in low IC intensive industrial companies, this has a positive and significant effect because the probability value is 0.0001 < α (0.10). An F value of 0.0000 in the above model indicates that VACA, VAHU, STVA and dummy simultaneously significantly influence ROA.

The results of the coefficient of determination show that the value of R2 is 0.869, meaning that the dependent variable is able to be explained by the independent variable of 86.9% or in other words, the variable value of return on assets is able to explain the company's intellectual capital component in 86.9%, while the rest is explained by other factors that were not included in this study.

Table 6. Panel Linear Regression (IC Components and MBV)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LN_VACA	0.823343	0.176793	4.657093	0.0000
LN_VAHU	-0.544978	0.308225	-1.768114	0.0792
LN_STVA	0.851945	0.261098	3.262930	0.0014
D01	-0.549886	0.174991	-3.142374	0.0020
C	3.009505	0.509876	5.902423	0.0000

R-squared	0.243009	Mean dependent var	0.727873
Adjusted R-squared	0.221381	S.D. dependent var	1.182320
S.E. of regression	1.043272	Akaike info criterion	2.956474
Sum squared resid	152.3782	Schwarz criterion	3.059120
Log likelihood	-209.3444	Hannan-Quinn criter.	2.998183
F-statistic	11.23571	Durbin-Watson stat	0.767438
Prob(F-statistic)	0.000000		

Source: Data Analyzed, 2022

LN MBV= 3,009 + 0,82 VACA – 0,544 VAHU + 0,85 STVA – 0,54 dummy

From this regression model, it is interpreted that the regression coefficient for VACA is 0.82, meaning that every increase in VACA of 1 percent will increase the MBV value by 0.82 percent. The probability value is 0.000 <α (0.10) so, VACA has a positive and significant effect on MBV.

The VAHU regression coefficient of -0.544 indicates that any increase in VAHU by 1 percent will reduce MBV by 0.544 percent, with a probability value of 0.0792 < α (0.10) so that VAHU is positively marked and insignificant against MBV.

The STVA regression coefficient is 0.85, which means that every 1 percent increase in STVA will increase MBV by 0.85 percent with a probability value of 0.0014 < α (0.10) where STVA has a positive and insignificant effect on MBV.

The dummy regression coefficient is -0.54, this shows that MBV in industrial companies with a high IC is 0.25 times better than MBV in industrial companies with a low IC, this has a positive and significant effect because the probability value is 0.0020 < α (0.10). An F value of 0.0000 in the above model indicates that VACA, VAHU, STVA and dummy simultaneously significantly affect MBV.

The results of the coefficient of determination showed a value of R2 of 0.243, meaning that the dependent variable was able to be explained by the independent variable of 24.3% or in other words the variable of market value to book value was able to explain the intellectual capital component of the company of 24.3%, while the rest was explained by other factors that were not included in this study.

CONCLUSION

Based on the analysis and discussion that has been done in this study, the results of this study have a conclusion that the aggregate size of intellectual capital (VAIC) has a positive and significant effect on

financial performance and financial performance of companies in industries with high IC is better than industries with high IC. Furthermore, the aggregate size of intellectual capital (VAIC) has a positive and significant effect on market valuation and market valuation of companies in industries with high IC is not better than industries with low IC. as for VACA and STVA individually have a positive and significant effect on financial performance and market valuation, while VAHU has an inverse effect. IC components (VACA, VAHU, and STVA) simultaneously have a significant effect on the company's financial performance and market valuation.

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