## The Influence Of Intellectual Capital And Environmental Disclosure On Firm Value

#### Naning Sundari& Erna Setiany

<sup>1</sup>Department of Accounting, Universitas Mercu Buana, Jakarta, Indonesia <sup>2</sup>Faculty Economics and Business, Universitas Mercu Buana, Jakarta, Indonesia

## IJMSSSR 2021 VOLUME 3 ISSUE 5 SEPTEMBER - OCTOBER

**Abstract:** This study aims to analyze the effect of intellectual capital elements as a proxy by VACA, VAHU, STVA, RCE and the effect of environmental disclosure on firm value in manufacturing companies listed on the Indonesia Stock Exchange. Firm value is measured using Tobins'Q. The sample in this study was 54 companies for the period 2017-2019, using a purposive sampling method, the analysis technique to test the hypothesis was regression analysis using The E views 9 program. The results of this study indicate that the elements of intellectual capital VACA, VAHU and STVA have no effect on firm value, while RCE and environmental disclosure have a significant effect on firm value. This shows that a company that is able to maintain good relations with its partners and the more environmental information disclosed by the company will encourage stakeholder trust so that the value of the company will increase.

Keywords: Intellectual Capital, Environmental Disclosure, Firm Value, Tobins'q

# **1. INTRODUCTION**

Brigham and Houston (2017), an important goal of a company is to optimize shareholder wealth and to maximize the value of its shares. Firm value can be interpreted as the company's performance which can be seen from the stock price due to supply and demand in the capital market and becomes a benchmark for public assessment of the company's financial performance. The increasing value of the company has the potential to increase investor confidence in investing in a company because it illustrates the company has the potential to have good prospects in the future and bring high returns on equity. There are times when companies experience a decline in company value, as happened to manufacturing companies which showed that the average company value decreased in 2019. Since the beginning of 2019 the manufacturing sector index has not been able to show excellent performance. The index, which consists of manufacturing companies, has corrected 9.33% year-to-date. Some stocks show a less than optimal movement on this index. Shares of PT Unilever Indonesia Tbk (UNVR), for example, are down 8.31% so far from the beginning of the year. PT Astra International Tbk (ASII) shares fell 15.81%. Furthermore, the shares of PT Sri Rejeki Isman Tbk (SRIL) fell 27.37% from the beginning of the year. Likewise, the shares of the 2 (two) largest cigarette companies, PT Gudang Garam Tbk (GGRM) and PT Hanjaya Mandala Sampoerna Tbk (HMSP), decreased by 36.50% and 43.40% respectively from the beginning of the year (kontan.co. en, December 22, 2019). With this description, it is known that there is very tight market competition, so to overcome this competition the company will try to direct all its resources or capabilities. There are several factors that cause the value of the company to decline, for example, companies only focus on tangible assets without paying attention to intangible assets. Overcoming this competition, the company continues to make changes that are adapted to technological developments, one of which is the transformation into a knowledge-based company, then the characteristic structure of the company becomes a science-based company. This changing strategy forces companies to focus more on human resources and science, because both have created added value and competitive advantages in today's companies (Chen et al., 2005). One way to evaluate and measure knowledge assets is through the Intellectual Capital (IC) approach.

PSAK No. 19 (revised 2015) with reference to intangible assets, it is explained that intangible assets are nonmonetary assets that can be identified without physical form and are held for use in the production process or supply of goods or services, rented out to third parties, or for administrative purposes. Intellectual capital according to (Moeheriono (2012: 305) is knowledge and abilities possessed by a social collectivity, such as intellectual community groups/organizations, or professional practice as well as intellectual capital that has highvalue resources and the ability to act based on knowledge, intellectual capital consists of 3 (three) main elements,



namely human capital, structural capital, and relational capital. Intellectual Capital cannot be separated from Resource Based Theory. Werner felt (1984) in Widarjo (2011) describes the vision of Resource-Based Based on the theory, the company will excel in facing business competition and will obtain good financial performance by owning, controlling and utilizing all strategically important assets in the form of tangible assets and intangible assets.

There are other factors related to company value, one of which is environmental disclosure. A company also cannot be separated from the environment in which the company operates. Currently, companies in Indonesia only focus on the disclosure of annual financial statements. If the company provides additional information, the company can offer higher value and attract investors to invest. According to the Ministry of Environment and Forestry (KLHK), the manufacturing industry has low compliance with environmental management requirements, only 597 companies in the Service Infrastructure Manufacturing industry, which is 29.15% of the number of industries that are considered feasible (Ekonomi.Bisnis.Com February 9, 2020). Environmental accounting is an accounting concept that is concerned with the transparency of disclosure of environmental and social information regarding company activities, thus disclosure of information by companies is not only company financial information, but disclosures related to information about the social environment and environmental impacts on company activities (Rizkan et al., 2017).

The triple bottom line (TBL) concept was introduced by John Elkington for the first time in 1988. Triple bottom line (TBL) is also known as People, Planet, and Profit (3P). TBL is a concept to measure a company's success through three criteria, namely environmental, social and economic. The implication is that it prioritizes the interests of stakeholders (all parties with an interest in the company), not only the interests of shareholders (Elkington, 2013). The concept of corporate social responsibility is commonly known as stakeholder theory. Stakeholder theory begins with the assumption that value is a clear and indisputable part of business operations (Parmar et al., 2010). Stakeholder theory has an important role because it can be used as an assessment to regulate governance in a company in disclosing information in financial statements. Thus it can be considered by investors when determining the policy of choosing in which company they invest their capital. Signaling theory according to Morris (1987) and Spence (2002) in Heryana (2020) is a form of communication between two parties using various means of communication. Investors get information from every action taken by the company. Thus the information available from the company is positive information so that investor decisions can have a positive impact on the company.

# 2. RESEARCH BACKGROUND AND HYPOTHESIS DEVELOPMENT

There are research results related to the correlation of intellectual capital to firm value as in the research of Mulya and Prabowo (2018) which shows that simultaneously, the economy, labor, and human rights have a significant influence on firm value. In contrast to the research of Subaida et al (2018) which obtained the results of the disclosure of elements of intellectual capital (VACA, VAHU and STVA) it did not have an effect on firm value while the research of Wahyuni, Suratno and Anwar (2017) found that VACA, VAHU had a significant effect on firm value., on the other hand STVA does not have a significant effect on firm value. Hervana et al (2020) research shows that the wider the disclosure of IC information by the company, the better the investor's perception of the company can be seen from the value of the company. Previous research from Alabass (2019), and Sakinah, Sadalia and Silalahi (2020) regarding the relationship between the influence of intellectual capital on financial performance stated that components of intellectual capital such as using capital efficiency, HR efficiency and structural capital efficiency have a positive and significant relationship with ROA and ROE. Similarly, what was done by Bayraktaroglu et al (2019) found that structural capital efficiency (SCE) had an effect on company profitability and innovation capital efficiency (CEE) had a positive direct impact on company productivity. The different results from the research on the influence of intellectual capital on company performance by Rahayu and Ramadhanti (2019) explained that intellectual capital had no effect on company performance. Meanwhile, research conducted by Forte, Matonti and Nicolo (2019) and Surjandari and Minanari (2019) stated that IC gave a positive value to the company's financial performance which was measured as company profitability but when considering its components, only human capital efficiency showed a positive influence on performance. corporate finance, while structural capital efficiency and capital use efficiency have a negative effect. In addition, research on the effect of intellectual capital on firm value studied by Nafiroh and Nahumury (2016), Li and Zhao (2018), Ghasemi, Rostami and Mahdavirad, (2019) and Anjani and Dillak (2019) obtained the results of elements of intellectual capital (VACA). , VAHU and STVA) have an effect on firm value. Previous research on the effect of

environmental disclosure on firm value studied by Li et al., (2018), Setiadi and Agustina (2019) and Yang, Wen and Li, (2020) stated that environmental disclosure has a positive effect on firm value. Setiany's research (2020) shows that profitability and company size have a positive influence on environmental disclosure. The results are different from the research conducted by Mumtazah and Purwanto (2020) and CahyaUtami (2019) which states that environmental disclosure cannot significantly affect the value of the company. Previous research on the relationship of the influence of environmental disclosure on financial performance conducted by Lastiningsih, Aswar and Ermawati (2020) and Haninun, Lindrianasari and Denziana (2018) found that environmental disclosure has a positive and significant effect on financial performance. Research conducted by Longoni and Cagliano (2018) states that the more inclusive the practice of environmental disclosure, the greater and more positive the impact on financial performance.

Based on a number of previous studies with different results, it is necessary to conduct further research so that it can provide clarity regarding the influence of elements of intellectual capital and environmental disclosure on firm value in the category of manufacturing companies. The research was conducted using 3 (three) control variables, namely ROA, DER and Type of Industry. It is hoped that this research can contribute theory to academics, so that this research is expected to be a reference in developing company value, as one of the media for accounting science literature and adding knowledge to researchers in the future, while in terms of practical contributions, it is expected to provide input to the company. not only presenting the company's financial information, but also presenting information about the social and environmental impacts resulting from the company's operational activities. And in terms of policy contributions, it is expected to be able to assist and provide information for companies in making policies in managing corporate governance in order to support the achievement of good financial reporting that can increase company value.

Referring to previous research, the following research hypotheses are formulated as follows:

H1a Value Added Capital Employed (VACA) has an effect on firm value H1b Value Added Human Capital (VAHU) has an effect on firm value H1c Structural Capital Value Added (STVA) has an effect on firm value H1d Relational Capital Efficiency (RCE) has an effect on firm value H2 Environmental Disclosures have a significant effect on firm value

Based on the development of the following hypotheses, the conceptual framework in this study:



## Figure 1 Conceptual Framework

# 3. METHODOLOGY, DATA AND RESEARCH MODELS

This study uses quantitative research methods. This study was designed as a confirmatory study with the aim of verifying the hypothesis regarding the effect of the independent variable on the dependent variable. The population of this study is the manufacturing sector companies listed on the Indonesia Stock Exchange for the period 2017-2019. The research population consisted of 177 companies. The technique of determining the sample

## International Journal of Management Studies and Social Science Research

is purposive sampling, using the criteria, namely (1). The sample selected from all manufacturing companies listed on the IDX during the 2017-2019 period for 3 (three) consecutive years did not enter the stock exchange. (2). A company that publishes financial statements in rupiah currency. (3) Companies that provide financial statements for 3 (three) consecutive years have positive profits and equity. (4). Manufacturing companies that make environmental disclosures in their annual reports during the 2017-2019 period. From these criteria, the manufacturing companies that can be sampled are 54 companies. The statistical analysis technique in this study used E-Views version 9.

# Variables and Variable Operational Definitions

# The independent variables used are Intellectual Capital and Environmental Disclosure.

# Intellectual Capital

Intellectual Capital is measured by 4 (four) elements, namely VACA, VAHU, STVA and RCE developed by Ulum (2016)Value Added (VA) is the amount of difference that comes between the output and input. VA = OUT - INValue Added Capital Employed (VACA) shows the efficiency of each unit of CE to value added. VACA = VA/CEDescription: Capital Employed (CE): Total Assets - Total Liabilities Value Added Human Capital (VAHC) shows how much Value Added (VA) can be generated with the funds spent on labor. VAHU = VA/HCDescription: Human Capital (HC): Employee expenses Structural Capital Value Added (STVA) measures the amount of SC needed to generate 1 rupiah from VA and is an indication of how successful SC is in value creation. SC = VA - HCSTVA = SC/VANote: Structural Capital (SC) : The difference between value added (VA) and human capital (HC) Relational Capital (RCE) the efficiency of relational capital as the ratio of VA to marketing, sales and advertising costs. RCE= Marketing and Advertising Costs/VA

## **Environmental Disclosure**

Environmental Disclosure is a form of responsibility from the company to take part in preserving and having benefits for the environment contained in its annual report. Indicators for environmental disclosure use the GRI 4 standard which consists of 34 environmental indicators.

# The Dependent variable studied is Firm Value.

# Firm Value

Firm value is called the company's ability to maximize shareholder wealth. This study uses Tobin's q to measure the value of the company. According to Yocam & Choi (2010) Tobin's q formula is:

```
Equity Market Value + Debt
Total Asset
```

This study uses three control variables, namely Return On Assets, Debt Equity Ratio and Type of Industry. Return On Assets (ROA)

ROA is used to show the company's ability to earn a return on the use of assets. The ROA formula according to Ross et al., (2015) is:

$$ROA = \frac{Net \ Income}{Total \ Assets}$$

# Debt Equity Ratio (DER)

DER is used to determine how effective the capital is used as collateral for debt and to determine the company's ability to pay its obligations or pay debts. The ROA formula according to Ross et al., (2015) is:

$$DER = \frac{Total \ Debt}{Total \ Equity}$$

# Industry Type

Type of Industry is a classification of industrial sub-sectors. The industrial classification used is the classification issued by the IDX.

Table 1. List of Research variable Operationalization
---

No	able	Dimension	Indicator	Measuring Scale
1	Intellectual Capital (Ulum, 2016)	Capital     VACA     VACA =       (Value Added Capital     Value Added (VA)       Employed)     Capital Employed       VAHU     VAHU =       (Value Added     Value Added (VA)       Human Capital     Value Added (VA)		Ratio Ratio
		STVA (Structural Capital Value Added)	$STVA = \frac{VA - HC - Marketing Exp}{VA}$	Ratio
		RCE (Relational Capital Efficiency)	RCE = Marketing & Advertising Exp Value Added	Ratio
2	Enivironmental Disclosures	GRI 4	$\frac{\sum Xij}{Nj}$ EDIj : Environmental Disclosure Company Index Nj : no of indicator dislosed	Ratio
3	Firm Value (Y) (Yocam and Choi, 2010)	Tobins'q	Tobins'q = <u>Equity Market Value + Debt</u> Total Asset	Ratio
3	ROA (Ross et all, 2015)	ROA (Return On Assets)	$ROA = \frac{Profit after tax}{Total Asset}$	Ratio
4	DER (Ross et all, 2015)	DER (Debt Equity Ratio))	DER = Total Liability Total Equity	Ratio
5	Industry Type	Industrial Sector	Using number 1,2,3, for industrial sector	Ordinal

# 4. RESEARCH RESULTS

Table 2 illustrates the maximum, minimum, standard deviation and number of observations for all variables seen in this study.

	TQ	VACA	VAHU	STVA	RCE	ED	ROA	DER	IND
Mean	1.2989	0.2896	1.7385	0.3356	0.3789	0.3428	0.0604	0.9068	2.0185
Median	1.0775	0.2661	1.4808	0.3144	0.3112	0.2941	0.0500	0.6650	2.0000
Maximum	5.5408	0.9809	4.5444	0.7800	1.7403	0.9706	0.2300	5.4400	3.0000
Minimum	0.3597	0.0002	1.0079	0.0052	0.0047	0.1177	0.0003	0.0900	1.0000
Std. Dev.	0.7896	0.1718	0.7335	0.1961	0.3235	0.1790	0.0514	0.8073	0.8523
Observations	162	162	162	162	162	162	162	162	162

# Table 2 Descriptive Statistics

## Source : Data processed with eviews 9, 2021

Table 2explain that the Firm Value (TQ) for the highest value is 5.5408 and the lowest value is 0.3597. The mean and median values for firm value are 1.2989 and 1.0775. The standard deviation of the firm value variable is 0.7896. The mean value exceeds the standard deviation value, so that it can be concluded that the average firm value variable can be a good illustration for all firm value data. The highest VACA value is 0.9809 and the lowest value is 0.0002. The mean and median VACA values are 0.2896 and 0.2661, respectively. The standard deviation of the VACA variable is 0.1718. The obtained mean value exceeds the standard deviation value, so it can be concluded that the average VACA variable can be a good description of all value added capital employed data. The highest value of VAHU is 4.5444 and the lowest is 1.0079. The mean and median VAHU values are 1.7385 and 1.4808, respectively. The standard deviation of the VAHU variable is 0.7335. The mean value exceeds the standard deviation value, so it can be concluded that the average VAHU variable can be a good description of all value added human capital data. STVA the highest value is 0.7800 and the lowest value is 0.0052. The mean and median STVA values are 0.3356 and 0.3144, respectively. The standard deviation of the structural capital value added variable is 0.1961. The mean value obtained is greater than the standard deviation value, so it can be concluded that the average STVA variable is able to describe all structural capital value added data well. The highest RCE value is 1.7403 and the lowest is 0.0047. The mean and median RCE values are 0.3789 and 0.3112, respectively. The standard deviation of the RCE variable is 0.3235. The obtained mean value is greater than the standard deviation value, so it can be concluded that the average RCE variable is able to describe all relational capital efficiency data well. The highest value of environmental disclosures (ED) is 0.9706 and the lowest is 0.1177. The mean and median ED values are 0.3428 and 0.2941, respectively.

The standard deviation of the ED variable is 0.1790. The mean value obtained is greater than the standard deviation value, so that the average ED variable is able to describe all environmental disclosures data well. The highest value for ROA is 0.2300 and the lowest is 0.0003. The mean and median ROA values are 0.0604 and 0.0500, respectively. The standard deviation of the ROA variable is 0.0514. The mean value obtained is greater than the standard deviation value, so it can be concluded that the average ROA variable is 0.0900. The mean and median DER values are 0.9068 and 0.6650, respectively. The standard deviation of the Standard deviation of the DER variable is 0.0900. The mean and median DER values are 0.9068 and 0.6650, respectively. The standard deviation of the DER variable is 0.8073. The mean value obtained is greater than the standard deviation value, so it can be concluded that the average DER variable is able to describe all debt to equity ratio data well. The type of industry in the study is classified by using a value of 1 if the company belongs to the basic and chemical industrial sector, a value of 2 for the various industrial sectors and a value of 3 if it includes the consumer goods industry sector. The highest value for the type of industry in manufacturing companies is 3 and the lowest value is 1. The mean and median values for the type of industry are 2.0185 and 2. The standard deviation of the industrial type variable is 0.8523. The mean value obtained exceeds the standard deviation value, so that it can be concluded that the average industry type variable can describe all industry type data well.

The data has a normal distribution and has passed the classical assumption test. Furthermore, testing using multiple linear regression analysis method. Statistical techniques in data processing using E-Views version 9 software.

# $\begin{aligned} \mathbf{Q} &= \alpha + \beta_1 X_{\mathsf{VACA}} + \beta_2 X_{\mathsf{VAHU}} + \beta_3 X_{\mathsf{STVA}} + \beta_4 X_{\mathsf{RCE}} + \beta_5 X_{\mathsf{ED}} + \\ & \beta_6 X_{\mathsf{ROA}} + \beta_7 X_{\mathsf{DER}} + \beta_8 X_{\mathsf{Industri} + \varepsilon} \end{aligned}$

The appropriate Panel Data Regression Model is the Random Effect Model.

Table. 3 Hypotheses ·	Random	Effect Mode	el
-----------------------	--------	-------------	----

Random Effect Model – Nilai Perusahaan (Tobins'q)							
Hypotheses	Independent Variables	Random Effect Model			Result		
		β	<i>t</i> -Statistic	P-value			
Value Added Capital	VACA	0.127788	1,328788	0.1859	Rejected		
Employeed (VACA) has							
effect on firm value							
Value Added Human Capital	VAHU	0,028891	-0,864365	0,3887	Rejected		
(VAHU) has effect on firm							
value							
Structural Capital Value	STVA	-0,184033	-1,423993	0,1565	Rejected		
Added (STVA) has effect on							
firm value	D.O.T.	0.44=0.44		0.0001			
Relational Capital (RCE)	RCE	0,117966	2,302824	0,0226	Accepted		
effect on firm value							
Environmental Disclosure	Environmental	0,205319	2,011112	0,0461	Accepted		
has significant effect on firm	Disclosure						
value							
Control Variables	Return On Asset (ROA)	2,353370	5,041474	0,0000			
	Debt to Equity Ratio	0,035793	1,876140	0,0625			
	(DER)						
	Type of Industry	0,035340	1,439967	0,1519			
Weighted Statistics							
Statistical Model	R-Squared	0.328751					
	Adjusted R-Squared	0.293653	293653				
	Prob(F-statistic)	0,000000					
Unweighted Statistics							
	R-Squared	0.547760					

The results of panel data regression Random Effect Model with the dependent variable Firm Value (Tobin's q) Adjusted R-Square number in Weighted Statistics of 0.293653. This means that the independent variable in this model is able to explain the dependent variable of 29.37% so that the remaining 70.63% can be influenced by variables outside this model. The better R-Squared value in Unweighted Statistics is 0.547760 or 54.77%, indicating that the influence of all independent variables on firm value is quite strong because the score is > 50%.

The results of panel data regression Random Effect Model dependent variable Firm Value (Tobins'q) Prob value (F-statistics) 0.00000 <0.05, it means that the suitability of the Random Effects regression model used jointly affects the variables VACA, VAHU, STVA, RCE and ED to Firm Value.

### Discussion

The results of the hypothesis test regression (H1a) obtained value added capital employed (VACA) to Tobins'q in the t-test obtained a significance p-value of 0.1859 which is greater than = 0.05, so it can be concluded that VACA has no effect on the value company. This means that hypothesis H1a is rejected. The results of this study reflect if the company has not been able to optimize the company's tangible assets such as capital assets consisting of total capital or equity and net income in creating added value to company value. The phenomenon of the decline in company value in the manufacturing industry sector that occurs in Indonesia cannot be measured accurately only from capital assets, so this is a challenge for accountants in measuring and disclosing intellectual capital in their financial statements. The results of this study have not been able to support Resource Based Theory (Werner felt, 1984) in Widarjo (2011) explains that according to Resource Based Theory, companies will excel in facing business competition and will obtain good financial performance by owning, controlling and utilizing all strategically important assets. in the form of tangible assets and intangible assets. The results of this study are similar to those of Subaida et al. (2018), which states that VACA has no effect on firm value, in contrast to research conducted by Anjani & Dillak (2019), Wahyuniet al (2017) found that VACA has a significant effect on firm value, which means that the company is able to manage from the available funds sourced from net income and equity in managing physical capital which can provide added value and has an impact as an attraction for investors to have the company is increasing so that it is followed by an increase in the value of the company.

The results of the hypothesis test regression (H1b) obtained value added human capital (VAHU) on Tobins'q in the t-test, the significance of p-value was 0.3887, which was significantly greater than = 0.05, so it can be concluded that VAHU has no effect on the value of the company. This means that hypothesis H1b is rejected. The results of this study reflect that the larger the company spends and allocates funds for employees, the significantly it has not been able to increase the value of the company. So this is proof that manufacturing companies in Indonesia are still not able to manage intangible assets in the form of human resources properly to increase company value. Manufacturing companies in Indonesia tend to still rely on tangible assets such as sophisticated machines to process and process production. Expenditures for labor have not been able to manage human resources optimally, because HR is one of the important factors in running the company's operations. Human capital assets are intangible assets that strongly interact with other physical and organizational assets to contribute to the final product or service the company provides. This shows that the value of the company in the manufacturing industry sector in Indonesia can be influenced by other factors such as capital structure, and leverage. Existing human resources in manufacturing companies have not been able to reflect the company's ability from several parties in the company such as employees as company value creation. The results of this study have not been able to support Resource Based Theory, which is a mindset that develops in the theory of strategic management and competitive advantage of companies that believe companies will achieve excellence if superior resources (Solikhah& Rahman, 2010). The results of this study are in line with the research conducted by Li and Zhao (2017), which states that VAHU does not have a significant effect on firm value, while the results of research by Anjani and Dillak (2019) and Ghasemi et al., (2019), Ali, (2018) shows that VAHU has a significant effect on firm value. Research by Ginesti, Caldarelli and Zampella (2018) states that the efficiency of human resources is the main driver of a company's reputation.

The results of the hypothesis test regression (H1c) show that the structural capital value added (STVA) on Tobins'q in the t-test obtained a significance p-value of 0.1565, which is significantly greater than = 0.05, thus it is concluded that STVA has no effect on the value of the company. So the hypothesis H1c is rejected. This means that the company has not been able to allocate its funds efficiently to implement operational systems, organizational structures, work culture and corporate strategies as well as all forms of structural capital in increasing company value. The results of this study indicate that all the facilities and infrastructure that the company has provided have not been able to improve employee performance in increasing added value for the company. Investors did not respond well to the company's efforts to meet the company's routine operational activities and business structures that support employees' efforts in creating added value. The higher the STVA value does not guarantee that it can trigger an increase in the value of the company. As an element of intellectual capital, in these conditions STVA cannot stand alone in influencing the value of the company, the result is that STVA has no influence on the value of the company in manufacturing companies. This shows that the decline in company value in the manufacturing industry sector in Indonesia can be caused by factors other than the element of intellectual capital. Structural capital which is the company's capital in the form of the company's operational system cannot be used as a measure of company value. The results of this study have not been able to support

Resource Based Theory. The results of this study are in line with research conducted by Wahyuni, Suratno and Anwar (2017) which states that STVA does not have a significant effect on firm value, while the results of research by Anjani and Dillak (2019), Ghasemi et al., (2019) and Ali , (2018) shows STVA has a significant effect on firm value.

The results of the regression hypothesis test (H1d) show that relational capital (RCE) to Tobins'q on the t-test obtained a significance p-value of 0.0226, which is significantly smaller than = 0.05, so it can be concluded that RCE has an influence on firm value. This means that the hypothesis H1d is accepted. This research proves that RCE is a solid and harmonious relationship that the company has with all its business partners such as to customers, suppliers, shareholders, government or with the public. Regarding relational capital, companies that have good and strong relationships with stakeholders will have the ability to obtain important resources to gain competitive advantage, and furthermore, these competitive advantages can increase the value of the company's market share (Park and Luo, 2001). These results indicate that companies that disclose high intellectual capital are seen as having high corporate values by external stakeholders. This shows that the decline in the value of companies in the manufacturing industry sector in Indonesia can be due to the lack of relationships with the parties who are interrelated with manufacturing companies which are very complex because the manufacturing industry has a series of processes in processing from raw materials into finished goods and requires a long process. The results of this study support the theory of RBT and stakeholder theory. According to stakeholder theory, companies are expected to provide information about their activities to stakeholders. This study is in accordance with research conducted by Yilmaz and Acar (2018) which has proven a strong correlation of relational capital, as well as disclosure of relational capital with the company's market value. The results are the same as research by Ghasemi et al., (2019), Ali, (2018) which states that relational capital has a significant effect on Tobins'q.

The results of the regression hypothesis test (H2) show that the environmental disclosure (ED) of Tobins'q on the t-test obtained a significance p-value of 0.0461 which is significantly smaller than = 0.05, so the conclusion is that ED has an influence on firm value. So the hypothesis H2 is accepted. This implies that the environmental disclosures displayed in the company's annual report have an influence on the value of the company. So this is evidence that the more information about the environment disclosed by the company in the annual financial statements, the higher the level of trust and responsibility of stakeholders towards the company, so as to increase the value of the company. Currently, the majority of manufacturing companies in Indonesia have not explicitly presented environmental information, even though if the company can provide detailed environmental disclosures in the annual report, this will be an added value in the face of increasingly fierce business competition. In addition to economic factors, the company also cares about environmental, social and community factors. Currently the manufacturing sector has not complied with all environmental management, this can be a trigger factor for the decline in company value, investor confidence will decrease because the company's annual report does not contain information about the company's concern and participation in the environment which can affect the stock price of manufacturing companies listed on BEI. The results of the research carried out are able to support the stakeholder theory and signaling theory because the company is responsible for the interests of stakeholders by providing positive information. This research is in line with the theory of triple bottom line (TBL) consisting of People, Planet, and Profit (3P). TBL is a concept to measure a company's success through three criteria, namely economic, environmental, and social. The implication is that it prioritizes the interests of stakeholders (all parties with an interest in the company), not only the interests of shareholders (Elkington, 2013). This research is supported by research by Yang, Wen and Li (2020), Setiadi and Agustina (2019), Li et al., (2018), which state that better accountability and transparency as well as increasing trust from stakeholders contribute to increasing the value of Therefore, it is hoped that the disclosure of environmental information can be a positive signal that will attract investors and have an impact on increasing stock prices and company value. In contrast to the research by Deswanto and Siregar (2018), it shows that environmental disclosure cannot affect the company's market value. Meanwhile, research by Lastiningsih, Aswar and Ermawati (2020), Haninun, Lindrianasari and Denziana (2018), (Longoni and Cagliano (2018) environmental disclosure has a positive influence on financial performance.

## 5. CONCLUSION, IMPLICATION, LIMITATION

#### Conclusion

The purpose of this study is to analyze and examine elements of intellectual capital, environmental disclosure with control variables ROA, DER and type of industry on firm value through unit analysis in manufacturing sector companies listed on the Indonesia Stock Exchange for the 2017-2019 period. The results of the study were carried out by regression analysis. Variables VACA, VAHU and STVA do not have a significant effect on the value of the company, it reflects the company has not been able to maximize all the ability to process the 3 (three) elements of intellectual capital properly. The relational capital (RCE) variable has a significant effect on firm value. This reflects that if the company is able to establish a strong and harmonious relationship with all its interrelated partners, the company's reputation will be maintained, then have a significant impact on the views of external stakeholders regarding the company and subsequently have an impact on increasing the company's market value. The results of the study show that environmental disclosure can have an influence on firm value. This illustrates that the more information about environmental disclosures disclosed by companies in the annual financial statements, the higher the responsibility and trust of stakeholders to the company, then investor confidence will increase so as to increase the value of the company. The higher the environmental disclosure displayed by the company, it can encourage an increase in company value.

#### Implication

This research is expected to be an important reference for future research on firm value in Indonesia, which is still very interesting to continue because there are still many different sizes of variables. Companies that disclose environmental information in their annual reports and also maintain strong relationships with all of their partners tend to be more appreciated and gain more value in the market. This research is expected to be a concern for investors to be more careful before investing in a company, the results of this study can be used as a consideration to analyze the prospects and value of a company in terms of intellectual aspects and environmental responsibility, not only from the financial aspect, but pay close attention to all financial information that has been disclosed by the company to take the right decision. Understanding and reading the company's financial statement information completely and thoroughly, not only on the income statement and checking the company's financial statements, but reading existing supporting reports such as the company's environmental performance, this is to find out how well the company pays attention to the surrounding environment.

#### Limitation

Adjusted r squared shows a value of 0.293653 so that there are still other variables that have the potential to affect firm value, further researchers can dig deeper into various factors that influence firm value by adding other variables such as leverage, elements of GCG, it is possible that there are still other unexpected factors have a greater influence on firm value. Furthermore, the environmental disclosure variable can use data from sustainability reports that have assurance standards so that they will obtain more optimal results. The use of industrial type control variables can use other ratios, because in this study the control variables did not have a significant effect on the dependent variable. The stock price to measure the value of the company in this study is the closing stock price at the end of the year so that it does not fully reflect the market reaction, so for future research can use the market price after the annual financial statements are published so that optimal results will be obtained.

#### REFERENCE

- 1. Academia Edu. (2019). Global Reporting Initiative, Generation 4 (GRI-G4). 2013. Diaksespadatanggal 20 September 2020 https://www.academia.edu/17948172/GRI\_G4\_Versi\_Indonesia
- 2. Alabass, H. S. H. H. (2019). Intellectual capital and financial performance: Empirical evidence from Iraq Stock Exchange (Ise). *Academy of Accounting and Financial Studies Journal*, 23(1), 1–11.
- 3. Ali, O. A. (2018). The Effect of Disclosure of Intellectual Capital Components on the Market Price of Shares in Jordanian Industrial Companies: An Empirical Study. *International Journal of Economics and Financial Issues*, 8(5), 156–167.
- 4. Anjani, A., & Dillak, V. J. (2019). Pengaruh Intellectual Capital Dan Ukuran Perusahaan Terhadap Nilai

Perusahaan. JASa (Jurnal Akuntansi, Audit Dan Sistem Informasi Akuntansi), 3(3), 306-320.

- Ayu, Ipak. (2020). Pengelolaan Lingkungan, KLHK Soroti Sektor Manufaktur. Di akses pada 20 September 2020 : https://ekonomi.bisnis.com/read/20200209/257/1199097/pengelolaan-lingkungan-klhk-sorotisektor-manufaktur
- Bayraktaroglu, A. E., Calisir, F., & Baskak, M. (2019). Intellectual capital and firm performance: an extended VAIC model. *Journal of Intellectual Capital*, 20(3), 406–425. https://doi.org/10.1108/JIC-12-2017-0184
- 7. Brigham, F, E., & Houston, J. F. (2017). Dasar- Dasar Manajemen Keuangan (Edisi 10 B). Salemba Empat.
- 8. Bursa Efek Indonesia, Laporan Keuangan Tahunan 2017, 2018, dan 2019. (diakses di http://www.idx.co.id
- 9. Cahya Utami, R. L. (2019). Pengaruh Pengungkapan Ekonomi, Lingkungan Dan Sosial Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Antara. *Perspektif Akuntansi*, 2(3), 256–297. https://doi.org/10.24246/persi.v2i3.p256-297
- 10. Chen, M.-C., Cheng, S.-J., & Hwang, Y. (2005). An empirical investigation of the relationship between intellectual capital and firms' market value and financial performance. *Journal of Intellectual Capital*, 6(2), 159.
- Deswanto, R. B., & Siregar, S. V. (2018). The associations between environmental disclosures with financial performance, environmental performance, and firm value. *Social Responsibility Journal*, 14(1), 180– 193. https://doi.org/10.1108/SRJ-01-2017-0005
- 12. Elkington, J. (2013). Enter the triple bottom line. The Triple Bottom Line: Does It All Add Up, 1(1986) (pp. 1–16). https://doi.org/10.4324/9781849773348
- 13. Forte, W., Matonti, G., & Nicolo, G. (2019). The impact of intellectual capital on firms financial performance and market value: Empirical evidence from Italian listed firms. *African Journal of Business Management*, 13(5), 147–159. https://doi.org/10.5897/ajbm2018.8725
- 14. Ghasemi, A., Rostami, V., Mahdavirad, M., & Karkhane, M. (2020). Intellectual Capital, Tobin `s Q Ratio and Stock Return. *Journal Of Management And Accounting Studies*, 8(01), 31–37.
- 15. Haninun, H., Lindrianasari, L., & Denziana, A. (2018). The effect of environmental performance and disclosure on financial performance. *International Journal of Trade and Global Markets*, 11(1–2), 138–148. https://doi.org/10.1504/IJTGM.2018.092471
- Heryana, T., Wahyudi, S., & Mawardi, W. (2020). The mediating effect of intellectual capital disclosure between firm characteristics and firm value: Empirical evidence from Indonesian company with nonrecursive model analysis. *International Journal of Financial Research*, 11(2), 14–25. https://doi.org/10.5430/ijfr.v11n2p14
- 17. Ikatan Akuntan Indonesia. PSAK No. 19 Tentang Aset Tidak Berwujud– edisi revisi 2010. Penerbit Dewan Standar Akuntansi Keuangan: PT. Raja Grafindo
- 18. Ikatan Akuntan Indonesia. 2015. Exposure Draft PSAK 19 (Revisi 2015) : Aset Tak Berwujud. Jakarta: Dewan Standar Akuntansi Keuangan.
- 19. Lastiningsih, N., Aswar, K., & Ermawati. (2020). Financial Performance in Indonesian Companies: The Role of Environmental Performance and Environmental Disclosure. *Journal of Economics and Behavioral Studies*, 12(2), 27–33. https://www.golder.com/insights/block-caving-a-viable-alternative/
- 20. Li, Yang, & Zhao, Z. (2018). The dynamic impact of intellectual capital on firm value: evidence from China. *Applied Economics Letters*, 25(1), 19–23. https://doi.org/10.1080/13504851.2017.1290769
- 21. Li, Yiwei, Gong, M., Zhang, X. Y., & Koh, L. (2018). The impact of environmental, social, and governance disclosure on firm value: The role of CEO power. *British Accounting Review*, 50(1), 60–75. https://doi.org/10.1016/j.bar.2017.09.007
- 22. Longoni, A., & Cagliano, R. (2018). Inclusive environmental disclosure practices and firm performance: The role of green supply chain management. *International Journal of Operations and Production Management*, 38(9), 1815–1835. https://doi.org/10.1108/IJOPM-12-2016-0728
- 23. Moeheriono. (2012). Pengukuran Kinerja Berbasis Kompetensi. Raja Grafindo Persada.
- 24. Mulya, H., & Prabowo, H. (2018). The impact of sustainability reports toward the firm value. *European Research Studies Journal*, 21(4), 637–647. https://doi.org/10.35808/ersj/1150
- 25. Mumtazah, F., & Purwanto, A. (2020). Analisis Pengaruh Kinerja Keuangan Dan Pengungkapan Lingkungan Terhadap Nilai Perusahaan. *Diponegoro Journal of Accounting*, 9(2), 1–11.
- 26. Nafiroh, S., & Nahumury, J. (2016). The influence of intellectual capital on company value with financial performance as an intervening variable in financing institutions in Indonesia. *Quality Access to Success*, 6(2), 159–170. https://doi.org/10.14414/tiar.v6i1.604

- Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & de Colle, S. (2010). Stakeholder theory: The state of the art. *Academy of Management Annals*, 4(1), 403–445. https://doi.org/10.1080/19416520.2010.495581
- Rahayu, S. M., & Ramadhanti, W. (2019). Corporate governance, intellectual capital, and performance of indonesian public company. *Journal of Economics, Business & Accountancy Ventura*, 21(3), 323. https://doi.org/10.14414/jebav.v21i3.1470
- 29. Rizkan, M., Islahuddin, & Nadirsyah. (2017). Pengaruh Environmental Performance dan Environmental Disclosure Terhadap Financial Performance Perusahaan Pertambangan dan Pemegang HPH/HPHTI yang Terdaftar di Bursa Efek Indonesia. *Jurnal Megister Akuntansi Pascasarjana Universitas Syiah Kuala*, 6(3), 35–42.
- 30. Ross, S. A., Westerfield, R. W., Jordan, B. D., Wong, R., & Wong, B. (2015). *Essentials Of Corporate Finance* (Asia Globa). Mc Graw Hill Education.
- 31. Sakinah, I. S., Sadalia, I., & Silalahi, A. S. (2020). The Influence of Intellectual Capital and Rate of Growth of Intellectual Capital on Financial Performance in Financial Institution Sub-Sector Companies on the Indonesia Stock Exchange. *International Journal of Research and Review (Ijrrjournal.Com)*, 7(1), 1.
- 32. Setiadi, I., & Agustina, Y. (2019). Pengungkapan Lingkungan, Profitabilitas Dan Nilai Perusahaan. Kompartemen: Jurnal Ilmiah Akuntansi, XVII(2), 198–207.
- 33. Setiany, E. (2020). The Firm Characteristics And Environmental Disclosure Of South East Asian Countries Erna. EPRA International Journal of Multidisciplinary Research (IJMR)-Peer Reviewed Journal, 6(2). https://doi.org/10.36713/epra2013
- 34. Solikhah, & Rahman. (2010). mplikasi Intelectual Capital TerhadapFinancial Perfomance, Growth dan Market Value; Studi Empiris Dengan Pendekatan Simplistic Specification. *Simposium Nasional Aakuntansi XII*.
- Subaida, I., Nurkholis, N., & Mardiati, E. (2018). Effect of Intellectual Capital and Intellectual Capital Disclosure on Firm Value. Jurnal Aplikasi Manajemen, 16(1), 125–135. https://doi.org/10.21776/ub.jam.2018.016.01.15
- 36. Surjandari, D. A., & Minanari. (2019). The Effect of Intellectual Capital, Firm Size and Capital Structure on Firm Performance, Evidence From Property Companies in Indonesia. *Jurnal Dinamika Akuntansi*, *11*(2), 108–121. https://doi.org/10.15294/jda.v11i2.20270
- 37. Suryahadi, Akhmad. (2019). Ini penyebab anjloknya kinerja indeks sektor manufaktur sejak awal tahun. Diakses pada 20 September 2020. https://investasi.kontan.co.id/news/ini-penyebab-anjloknya-kinerja-indeks-sektor-manufaktur-sejak-awal-tahun
- 38. Ulum, I. (2016). Intellectual Capital: Model Pengukuran, Framework Pengungkapan & Kinerja Organisasi. Universitas Muhammadiyah Malang.
- 39. Wahyuni, W., Suratno, & Anwar, C. (2017). Pengaruh Intellectual Capital Terhadap Nilai Perusahaan Dengan Free Cash Flow Sebagai Variabel Moderating. *Jurnal Ilmiah Ilmu Ekonomi*, 6(11), 61–73.
- 40. Widarjo, W. (2011). Pengaruh modalintelektual dan pengungkapan modal intelektual pada nilai perusahaan yang melakukan Initial Public Offering. Jurnal Akuntansi Dan Keuangan Indonesia,8(2), 157–170.
- 41. Yang, Y., Wen, J., & Li, Y. (2020). The impact of environmental information disclosure on the firm value of listed manufacturing firms: Evidence from China. *International Journal of Environmental Research and Public Health*, *17*(3). https://doi.org/10.3390/ijerph17030916
- 42. Yilmaz, I., & Acar, G. (2018). The Effects of Intellectual Capital on Financial Performance and Market Value: Evidence from Turkey. *Eurasian Journal of Business and Economics*, 11(21), 117–133. https://doi.org/10.17015/ejbe.2018.021.07
- 43. Yocam, E., & Choi, A. (2010). Corporate Governance A Board Director's Pocket Guide Leadership, Diligence and Wisdom. iUniverse, Inc.