

Intellectual Capital Influence on Firm Value: Does Financial Health Performance Have Mediating effect? (Evidence from Manufacturing Companies in Indonesia)

Sumiati¹, Risna Wijayanti² and Cicik Retno Wati³

Abstract

The aim of this study is to determine the relationship between Intellectual Capital, Financial Health Performance, and Firm Value. This research analyzed 132 manufacturing companies listed on the Indonesian stock exchange over five years (2016–2020), with data sourced from corporate annual and financial reports. Regression analysis tested direct relationships, while path analysis with the Sobel test assessed mediation effects. The findings indicate that both intellectual capital and financial health performance significantly affect firm value directly; however, financial health performance does not show a significant mediation effect between intellectual capital and firm value. The results suggest that market participants consider information related to intellectual capital and financial health performance in their valuations, yet financial health performance does not reflect intellectual capital's capability to generate financial health. This study highlights the importance of intellectual capital and financial health performance for market participants.

Keywords: *Intellectual Capital, Firm Value, Financial Health Performance, Manufacturing Company.*

INTRODUCTION

Firm value is a reflection of shareholder and company wealth exhibited through stock prices as the implementation of investment policies, funding policies, and company asset management, so the higher the firm value, the more prosperous the shareholders (Soewarno et al., 2020). Previous literatures have underlined that firm value is not only determined by physical assets but also by intangible assets such as intellectual. In addition, companies are increasingly paying attention to increase the firm value by maximizing the role of valuable and rare resources. Currently, intellectual capital – not physical capital, or even financial capital – is gradually becoming more important as a critical strategic asset of companies. Companies need to produce their products and/or services that can always adapt to the development of the business environment, in terms of both technology and changes in market demand trends (Petrenko et al., 2019). Therefore, companies are required to have valuable resources in order to continuously have competitive advantage which in turn to increase corporate performance. This is in line with the concept of Resource-Based View explaining that managing company resources effectively and efficiently is the main basis for companies to achieve sustainable competitive advantage, growth, and superior performance (Barney, 1991).

In general, the concept of intellectual capital referred to collections of valuable knowledge or collective brainpower (Stewart, 1997) including possession of knowledge, applied experience, organizational technology, customer relationships and professional skills. Intellectual capital commonly can be divided into three components namely human capital (employee skills, experience, and competencies), structural capital (corporate basic structure, company processes, and methods), and relational capital (relationship with external stakeholders). These components have been widely accepted and become main subject of academic discussion in previous literatures.

In the era of Fourth Industrial Revolution, innovation and technology are undeniable key factors to achieve corporate goals. In this era, intellectual capital is strategic source that is capable of utilizing technology to accelerate corporate innovation for generating competitive advantage and creating corporate value. The ability

¹ Management, Faculty of Economics and Business, Brawijaya University Indonesia, E-mail: sumiati@ub.ac.id

² Management, Faculty of Economics and Business, Brawijaya University Indonesia, E-mail: risna@ub.ac.id

³ Management, Faculty of Economics and Business, Brawijaya University Indonesia, Email: cicikwati.1212@gmail.com

to manage intellectual capital as superior assets brings about unique and quality resources to increase a competitive advantage, and in the long term will affect the firm value (Barney & Clark, 2007; Kozlenkova et al., 2014). Efficient intellectual capital is also recognized as one of the approaches to acknowledge the ability of company resources to create added value for the company performance and shareholder wealth.

Issues on the effect of intellectual capital on firm value have attracted many researchers' interests in recent years. Previous literatures showed that intellectual capital plays important role in influencing firm value (Afroze, 2011; Baroroh, 2013; Bemby S. et al., 2015; Chen et al., 2012; Deep & Narwal, 2014; Feimianti & Anantadjaya, 2014; Ferraro & Veltri, 2011; J. Barney, 1991); Matinfard & Khavari, 2015; Nguyen & Doan, 2020; Salvi et al., 2020). Therefore, it can be argued that attributes of intellectual capital are considered by investors (Hashim et al., 2015; Nuryaman, 2015; Tan et al., 2007).

However, there are inconsistent findings showing that investors did not consider information related to intellectual capital so that the intellectual capital did not show significant effect on firm value. Evident on electronic companies in Taiwan showed that there was insignificance effect of intellectual capital on firm value (Ting et al., 2020). Other evidence in Indonesia also showed that investors did not consider information related to intellectual capital (Badingatus, 2010). Therefore, this study tries to find out whether there is a variable mediating the relationship between intellectual capital and firm value.

Referring to utility theory, investors will provide higher value to a company if the company is considered to deliver benefits or profits to investors. Company should be able to convince their investors that the company have financial health performance in order to generate higher income for their shareholders. Therefore, company with financial health performance are expected to make sure their investors that the company have valuable intellectual capital in managing company's resources to generate profit which in turn build financial health performance. Previous finding has shown that investors considered the capability of company to generate profit (Afroze, 2011). Meanwhile, other literature approved that intellectual capital has positive correlation with corporate capability in generating profit (Poraghajan, 2013). Deep (2014) also found that value added capital had significant effect on the capability of company in generating profit.

Financial health performance reflects the capability of intellectual capital in managing company's resources to generate higher income or profit. Previous studies suggested that financial health performance reflected company's performance measured by company profitability (Al-Omush, 2014; Anifowose et al., 2018; Lai et al., 2020). The concept of financial health performance is considered more relevant and reliable in evaluating company performance (Anifowose et al., 2018). Therefore, it can be concluded that the better the company's performance, the better the financial health performance of the company.

By considering the research gap associated with the linkage between intellectual capital and firm value, this study attempts to examine whether financial health performance can mediate the relationship between intellectual capital and firm value. This study attempted to enrich the Resource Base Theory by adding financial health performance as a variable reflecting the capability of intellectual capital to generate financial health performance.

This study aims to acknowledge the relationship between intellectual capital and firm value, as well as the role of financial health performance as a mediator in the relationship between intellectual capital and firm value. Intellectual capital is expected to increase efficiency level of company in managing its resources increasing financial performance, which in turn to strengthen financial health performance. Information regarding financial health performance is expected will be attributed by investors as a reflection of the efficiency of intellectual capital in managing company's resources.

LITERATURE REVIEW

Intellectual Capital and Firm Value

Previous research indicates that intellectual capital as an intangible asset has a positive influence on firm value (Afroze, 2011; Baroroh, 2013; Bemby S. et al., 2015; Chen et al., 2012). Intellectual capital refers to intellectual

material knowledge, information, intellectual property, and experience that can be used as internal resources to improve performance, which in the end creates shareholder wealth. Based on the resource-based view theory, the management and disclosure of intellectual capital as an intangible resource provides external benefits (such as improving the company's reputation, creating or consolidating relationships with external partners) and internal benefits related to the development of new resources and skills, introduction of procedures and effective routines as well as increasing employee motivation (Salvi et al., 2020), which then leads to the increase of the firm value. According to Chowdhury et al., (2019); Pulić (2008), intellectual capital, which consists of human capital, structural capital, and rational capital, can be a critical strategic asset for companies. The research by Salvi et al (2020) concludes that the disclosure of intellectual capital by companies can increase the firm value. In this regard, intellectual capital is related to the cost of equity capital. More specifically, the study explains that the impact of intellectual capital on firm value allows companies to reduce information asymmetry about intangible assets, lower valuation risk, and weaken investors' perceptions of the risk of the company's future cash flows. The reduction in information asymmetry and risk assessment can later bring about the reduction of the company's cost of equity, which leads to an increase in firm value (Salvi et al., 2020).

Soewarno et al. (2020) also explain how intellectual capital management affects the firm value reflected in the increase of the stock price. Capital market players indirectly need information about intellectual capital to add value to the company's financial statement information to assess future firm value and profitability (Orens et al., 2009). This condition indirectly explains that intellectual capital management has the opportunity to connect with the market and determine market needs to achieve a competitive advantage (Caputo et al., 2016). Effective and efficient management of company assets can indirectly cause high-quality intellectual capital, thereby reducing the market perception that the company will be forced to bear future costs, which may increase future net cash flows, and in turn brings an impact on the company's stock price (Bachoo et al., 2013). So, it is no wonder that intellectual capital becomes one of the important factors of the increase in the firm value. Therefore, this study examines the following hypothesis:

H1: Intellectual capital significantly affects firm value.

Intellectual Capital and Financial Health Performance

Firm performance can be described with the condition of financial health performance, which is measured by free cash flow. Higher intellectual capital disclosure is associated with lower information asymmetry, lower cost of equity capital, and lower interest rates, which can be exhibited through the free cash flow report. More specifically, changes in the value of free cash flow can explain how companies manage funding, investment, and company costs to generate profits. The link between profitability and intellectual capital is emphasized once again because even in times of crisis, financial health performance depends on the human ability to adapt to changes and learn. Sumedrea (2013) argues that human abilities, knowledge, skills, and experience are factors that explain business development in times of crisis. It is also supported by the research results by Maji & Goswami (2017) that intellectual capital and its components have a significant effect on financial health performance. The presence of intellectual capital forms higher investor expectations, causing an increase in cash flow. Disclosure of intellectual capital as an intangible asset is considered by investors as a key factor to improve financial health performance in the medium and long term. Salvi et al. (2020) also report that intellectual capital has a positive impact on expectations, and financial health performance through future cash flows, such as 1) adequate representation of the knowledge, skills, and abilities of employees working in the company; 2) effective disclosure of the company capital, processes, protocols, systems and procedures; 3) disclosure related to a series of relationships that the company has developed with stakeholders, as well as elements that express the quality of these relationships (reputation, brand, relationship stability, and partnerships), thus indirectly showing the company condition. Based on the explanation, this study proposes the second hypothesis:

H2: Intellectual capital significantly affects financial health performance.

The Role of Financial Health Performance

Financial health performance also indirectly describes the health of the company through the availability of money to run the business operations. A positive free cash flow value indicates that the company has some money after deducting all costs (Lai et al., 2020). Free cash flow value, in addition to showing how the company's funding and investment are managed, can also demonstrate the company's performance throughout the year, so it has a notable role in measuring company profitability, which will affect the value of the company. This opinion can be proven through empirical research by Habib (2011) which suggests that companies with positive free cash flow have a significantly positive relationship with stock returns when earnings are temporary. The results are strong for alternative definitions of free cash flow and growth opportunities. In other words, free cash flow has a prominent effect on firm value which can be viewed from the growth in stock value. Besides, Thamrin (2018) affirms that the firm value is simultaneously affected by investment decisions, financial decisions, and financial performance. Meanwhile, the company's decision-making strategy related to investment decisions, financial decisions, and financial performance can be seen through the free cash flow report. In addition, financial health performance through free cash flow also explains and measures the relationship between capital and income. Rhyne et al (2020) mention in their research that there is a strong correlation between financial health performance and income, which can represent the value of a company in the form of equity. It means investment decisions and financial health performance, viewed through the free cash flow report, hold a positive relationship with firm value, while funding decisions have a negative effect on firm value. Moreover, several previous researchers are committed to the development of accounting financial statements and are expected to provide references and guidelines regarding past and future firm health performance, which investors will then apply in considering investment decisions in a company's shares. Thus, firm health performance also plays a crucial role as a mediator between intellectual capital and firm value, so the hypothesis in this study is as follows:

H3: Financial health performance significantly affects firm value.

H4: Intellectual capital affects firm value through firm health performance.

RESEARCH METHOD

To acknowledge the empirical effect of the relationship between intellectual capital, financial health performance, and firm value in manufacturing companies in Indonesia, this study employs explanatory quantitative approach. It involves 169 manufacturing companies in Indonesia, with non-probability sampling – purposive sampling as the sampling method. Based on the sampling criteria, this study involves 132 companies.

They are primary data accessed from the Indonesia Stock Exchange database of 2016 – 2020 period. The data are combination of cross section data and time series data, when viewed from the research period taken. Besides, it also employed secondary data in the form of articles, journals, research reports, news, books and some other literature to support the research construct. Measurement of research variables is carried out with several indicators described in the next sub-chapter.

Intellectual Capital

Intellectual capital is defined as the company's intangible assets, which is measured by the number of human capital and organizational capital (Li & Zhao, 2018). Intellectual capital calculation procedure refers to the proxy used by Öztürk & Demirgüneş (2007), namely Value-Added Intellectual Capital Coefficient (VAIC). The formula for VAIC is as follows:

$$VAIC=RCE+HCE+SCE.....(1)$$

Note:

VAIC = Value added intellectual capital

RCE = Relational Capital Efficiency

HCE = Structural Capital Efficiency

SCE = Human Capital Efficiency

Human Capital

The procedure for calculating Human Capital, Structural Capital and Relational Capital refers to the proxy used by Öztürk & Demirgünes (2007):

$$\text{HCE} = \text{EVA} / \text{HC} \dots \dots \dots (2)$$

Note:

HCE = Human Capital Efficiency Coefficient

EVA = Economic Value Added

HC = Total Wages and Salaries/total employees

EVA calculation is as follows:

$$\text{EVA} = \text{NOPLAT} - (\text{WACC} \times \text{CE}) \text{ or} \dots \dots \dots (3)$$

$$\text{EVA} = (\text{ROI} - \text{WACC}) \times \text{CE} \dots \dots \dots (4)$$

Note:

NOPLAT = Net operating profit Less Adjusted Taxes

CE = Capital Employed/Invested Capital

The CE calculation is obtained from financial capital value as measured by total equity or market to book value or the amount of net working capital plus tangible assets value.

Structural Capital

The procedure for calculating structural capital:

$$\text{SCE} = \text{SC} / \text{EVA} \dots \dots \dots (5)$$

Note:

SCE = Structural Capital Efficiency Coefficient,

SC = Structural Capital (EVA – HC)

EVA = Economic Value Added

Relational Capital

Relational capital calculation procedure is as follows:

$$\text{RCE} = \text{EVA} / \text{CE} \dots \dots \dots (6)$$

Note:

RCE = Capital Employed Efficiency Coefficient,

EVA = Economic Value Added

CE = Capital Employed/Invested capital

Financial Health Performance

Financial health performance in this study refers to the company's financial performance throughout the year which describes the management of investments, company operations, and company funding. Financial health performance is measured through free cash flow (Al-Omush, 2014; Anifowose et al., 2018; Lai et al., 2020). According to Lai et al. (2020), free cash flow is the corporate backbone reflecting financial performance

throughout the year, so free cash flow is highly significant for companies to measure the company's profitability after all expenses and reinvestments. Financial health performance is measured with free cash flow proxy which refers to the formula by Brigham & Houston (2019) as follows:

$$FCF = EBIT(1 - T) + Depreciation - \left[\left(\frac{\text{Capital Expenditure} + \text{Increase in net working capital}}{\dots} \right) \dots \dots (7) \right]$$

Note:

FCF = Free Cash Flow

EBIT = Earnings Before Interest and Taxes

T = Income Taxes

Firm Value

Firm value is defined as a reflection of shareholder wealth and company wealth exhibited through the company's share price in describing selling values in the eyes of investors. The measurement of firm value is represented by the Tobin's Q proxy referring to Coleman & Wu (2021) with the following equation:

$$\text{Tobin's Q} = \frac{\text{Market Value of Equity} - \text{Book Value of Common Equity} + \text{Total Asset}}{\text{Book Value of Asset}} \dots (8)$$

Market Value of equity is obtained from the multiplication of the firm's stock price and the outstanding share's. Total assets are obtained from the sum of total current assets, total fixed assets, and total other assets.

DATA ANALYSIS METHOD

Data analysis in this study used a regression approach and path analysis. The regression approach is an analysis conducted to determine the effect of the independent variable on the dependent variable (Pederson, 2017; Shaikh, 2017). The regression approach in this study was used to determine the effect of intellectual capital, financial health performance, and firm value. There are two regression model equations in this study. The regression first equation model aims to find the relationship between intellectual capital and financial health performance with firm value. The regression second equation model is used to find the relationship between intellectual capital and financial health performance. An independent variable is said to have an influence on the dependent variable in the regression analysis if the p-value or significance value of the research model is less than 0.05 (<0.05), and the test is said to have no effect if the p-value or significance value is more than 0.05 (>0.05) (Pederson, 2017; Shaikh, 2017).

After the regression analysis was performed, this study conducted a path analysis to determine the role of financial health performance as a mediation using the Sobel test application. A variable is said to have a mediating role when the p-value or significance value of the test results is less than 0.05 (<0.05), and the test is said to have no mediating role when the p-value or significance value is more than 0.05 (>0.05) (Neiheisel, 2017). However, before conducting regression analysis and path analysis, the research model must first be tested for classical assumptions. The classical assumption test is used to determine whether the regression equation model is unbiased or to obtain a good fit model. The classical assumption contains a normality test, heteroscedasticity test, multicollinearity test, and autocorrelated test. Analysis of research data was carried out with the help of IBM SPSS 26.0 software.

RESULT AND DISCUSSION

Estimates Model Test

Testing the regression estimation model first tested the classical assumptions. First, tested the classical assumptions must test the normality test. Normality test is adopted to see whether the research data is normally distributed. The normality test in this study refers to the Kolmogorov-Smirnov test with the Monte Carlo approach according to Mehta & Patel (2013). The equation model can be perceived to be normal if the significance value is $> .05$ (Mehta & Patel, 2013). The result of the normality test shows that the equations one and two have a significance value above 0.05 (>0.05), so the data are normal (Table 1).

Table 1. Normality test with Kolmogorov-Smirnov

		Unstandardized First Residual Model	Unstandardized Second Residual Model
N		250	250
Normal Parameters ^{a,b}	Mean	0.000000 0	0.000000
	Std. Deviation	0.303643 08	0.87377704
Most Extreme Differences	Absolute	0.057	0.072
	Positive	0.055	0.055
	Negative	-0.057	-0.072
Test Statistic		0.057	0.072
Asymp. Sig. (2-tailed)		.045 ^c	.056 ^c
Monte Carlo Sig. (2- tailed)	Sig.	.371 ^d	.478 ^d
	99% Confidence Interval	Lower Bound	0.358
		Upper Bound	0.383

(Source: Primary data, 2022)

Test distribution is Normal.

Calculated from data.

Lilliefors Significance Correction.

Based on 10000 sampled tables with starting seed 1502173562.

After the normality test, the researchers conduct a heteroscedasticity test. Heteroscedasticity test is used to determine if the regression equation model 1 and 2 have the residual variance inequality (Ghozali, 2018:139). According to Ghozali (2018:139), a model is said to meet the criteria for heteroscedasticity testing if there is no certain pattern in the scatterplot graph around the X and Y values. The results of the heteroscedasticity test in Figure 1 and 2 explain that there is no certain pattern and spreads on the scatterplot.

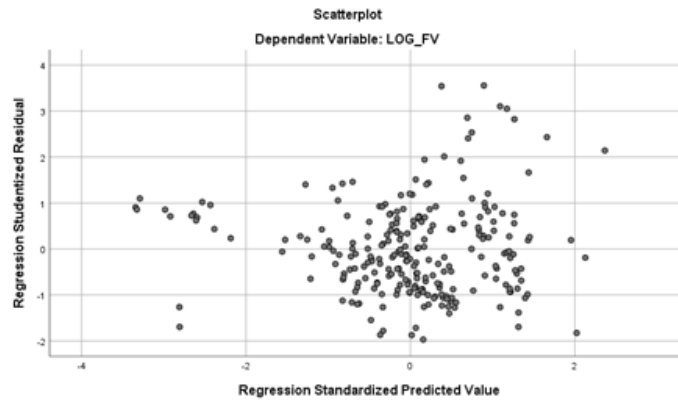


FIGURE 1. Heteroscedasticity Test Result, First Equation Model

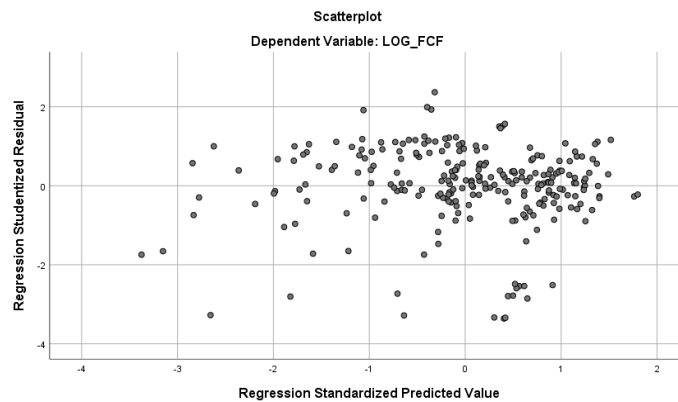


FIGURE 2. Heteroscedasticity Test Result, Second Equation Model

The next is multicollinearity test. Multicollinearity test is intended to examine the correlation between research data on more than two independent variables in a single study. The data should meet the criteria for the multicollinearity test if the value of VIF (Variance Inflation Factor) is < 10 or the value of tolerance is > 0.10 (Ghozali, 2018:125). The results of the multicollinearity test suggest that the VIF value is $1 < 10$ or the tolerance value is $0.999 > 0.10$ (Table 2) for the first equation model. The second equation model also obtains similar test results that the VIF value is $1 < 10$ or the tolerance value is $0.999 > 0.10$. Thus, it declares that the research data are free from multicollinearity.

TABLE 2. Multicollinearity Test Result

Collinearity Statistics First Equation Model		Collinearity Statistics Second Equation Model	
Tolerance	VIF	Tolerance	VIF
0.999	1.001	0.999	1.000
0.999	1.001		

(Source: Primary data, 2022)

The following test is autocorrelation test. Autocorrelation test is conducted to acknowledge if the data have a correlation variable with the changes in time. According to Ghozali (2018:135), data should be free of autocorrelation if they meet the requirements of $dU < dw < 4 - dU$, where dU refers to the Durbin-Watson test table. The result of the autocorrelation test demonstrates that the Durbin-Watson value is 2.085 (Table 3) for the first equation model, and 2,025 for the second equation model. Referring to the Durbin-Watson table, with 3 variables and 250 samples, the dL value is 1.769 and the dU is 1.817. Based on the Durbin-Watson value and

the Durbin Watson table between dU and $4-dU$, the Durbin Watson value for first equation model is $1.817 < 2.085 < 4 - 1.817$ or $1.817 < 2.085 < 2.183$, while the Durbin Watson value for second equation model is $1.817 < 2.025 < 4 - 1.817$ or $1.817 < 2.025 < 2.183$. Therefore, in general the research data are free of autocorrelation. They meet all the criteria for normality, heteroscedasticity, multicollinearity, and autocorrelation tests.

Table 3. Autocorrelation Test Result

Model	Durbin-Watson
1	2.085
2	2.025

(Source: Primary data, 2022)

Hypothesis Test

Hypothesis test is conducted to know the relationship between intellectual capital and financial health performance with firm value, as well as the relationship between intellectual capital and financial health performance. Table 5 and 6 shows the result of the hypothesis test with the following equation:

Regression First Equation Model:

$$\text{Firm Value} = \alpha + \beta(\text{IC}) + \beta(\text{FHP}) + e \dots \dots \dots (9)$$

$$\text{Firm Value} = -8.445 + 0.094(\text{IC}) + 0.367(\text{FHP}) + e$$

Regression Second Equation Model:

$$\text{Financial Health Performance} = \alpha + \beta(\text{IC}) \dots \dots \dots (10)$$

$$\text{Financial Health Performance} = 27.286 - 0.018 (\text{IC})$$

The results of data analysis in tables 4 and 5 demonstrate that the probability (sig.) of the constant of first equation model and second equation model is $.000 < .05$, which explains that when there are no other variables in this study, the firm value in the first equation model is -8.445, and the second equation model is 27,286. The probability (Sig.) for Intellectual Capital to Firm Value (H1) is $.005 < .05$, and financial health performance to firm value (H3) is $.000 < .05$, so H1 and H3 are accepted. It concludes that intellectual capital and financial health performance give a significant effect on firm value. The beta value of intellectual capital (β_1) is .094 and the beta value of financial health performance (β_2) is 0.367, which means that if intellectual capital or financial health performance increases by 1 unit, the firm value will increase by 0.094 and 0.367 respectively, assuming other independent variables are constant or fixed. The magnitude of the probability (Sig.) of intellectual capital on financial health performance is $0.586 > .05$, so H2 is rejected. In other words, intellectual capital has no significant effect on financial health performance.

Table 4. The Result of Hypothesis Testing First Equation Model

Hypothesis	Note	Coefficient (β)	S.E	Sig.	Decision
	(Constant)	-8.445		0.000	Significant
H1	Intellectual Capital → Firm Value	0.094	0.034	0.005	Significant
H3	Financial Health Performance → Firm Value	0.367	0.064	0.000	Significant

(Source: Research data, 2022)

Table 5. The Result of Hypothesis Test for Second Equation Model

Hypothesis	Note	Coefficient (β)	S.E	Sig.	Decision
	(Constant)	27.286		0.000	Significant
H2	Intellectual Capital → Financial Health Performance	-0.018	0.033	0.586	Insignificant

(Source: Research data, 2022)

Mediation Test

Mediation test is performed with Sobel test. The test result in Figure 3 explains that the significance value (p-value) of intellectual capital on firm value through financial health performance is 0.587. It shows that the p-value > .05, then H4 is rejected. Thus, intellectual capital on firm value through financial health performance has no significant effect.

Input:		Test statistic:	Std. Error:	p-value:
a	-0.018	Sobel test: -0.54300357	0.01216567	0.58712734
b	0.367	Aroian test: -0.53500145	0.01234763	0.59264885
s _a	0.033	Goodman test: -0.55137585	0.01198094	0.58137605
s _b	0.064	Reset all	Calculate	

Figure 3. Sobel Test Result

DISCUSSION

The study result confirms that intellectual capital brings about a significant effect on firm value (H1), which is in line with some previous studies (Berzkalne & Zelgalve, 2014; Iranmahd et al., 2014; Veltri & Silvestri, 2011). Furthermore, it suggests that the manufacturing companies in this study can create added value through their investment in intangible assets, thus having an impact on firm value. The success indicators of a company or business are traceable through the way the company creates value so that the firm value increases. The study result illustrates that most manufacturing companies in Indonesia have managed their human resources or intellectual capital effectively and efficiently, so it exerts an effect on increasing company value. The higher value of intellectual capital in the company shows that the more potential company has the potential for maximum human resource and knowledge management, good company systems and company relationships with other parties to achieve the company's competitive advantage (Chan, 2009b, 2009a; Fakhrudin & Mildawati, 2017; Putra, 2012). The result of the descriptive analysis also suggests that the intellectual capital value of the INRU company with the HCE component has the highest value, so the lower the company's investment in human capital, the lower the employee cost level, so that the company's profit increases.

Theoretically, intellectual capital is closely related to the company's performance both in the past and in the future, which is then adopted by investors to consider their investment decision in company shares. Previous researches explain that an effective evaluation of intellectual capital will improve the company's performance. The improvement can occur once the company's intangible assets are always managed through every aspect of the company's development and can be used to manipulate and extract (Ciprian et al., 2012; Gogan et al., 2015). However, this study goes on the other way around, where intellectual capital does not have a significant effect on financial health performance (H2). It is possible because investors in the research do not see the condition of the intellectual capital in the company's performance to invest. Their consideration to the intellectual capital is not a top priority. As long as the company's financial health performance is good, the company can still generate profits and pay for the company's operating costs. The A negative and insignificant correlation between intellectual capital and financial health performance is also possible negative and insignificant because one of the values of the intellectual capital components (HCE, SCE, and RCE) contributes unequally to financial health performance. The study result is similar to that conducted by Ting et al. (2020) that the negative correlation of intellectual capital with company performance is possible because the negative CEE value is high even though HCE and SCE have a positive effect. A negative CEE value can hamper the overall intellectual capital performance although HCE and SCE contribute to performance improvement, yet this condition happens in certain accounting time periods (Ting et al., 2020). Therefore, if a company wants to improve financial health performance for a short period, the company can reduce the CE allocation accordingly, and shift the allocation to other components. The study result is also in line with that of several previous studies that Value Added Intellectual Capital (VAIC) has no significant effect on company performance (Appuhami, 2007; Chan, 2009b, 2009a; Firer & Mitchell Williams, 2003; Kehelwalatenna, 2016; Seyed Alireza Mosavi, 2012).

The result of H3 test concludes that financial health performance has a significant effect on firm value, which is in accordance with that of previous researches (Brush et al., 2000; Hasanudin et al., 2020). It also indicates that financial health performance, as measured by free cash flow, has a close relationship with the company's sales and revenue growth. According to Brush et al. (2000), a low free cash flow and strong corporate governance will increase sales growth. And, the existence of sales growth due to the growth of free cash flow suggests the increase in financial health performance, so the company is healthy. This condition will bring about an increase in the firm value. Capital expenditure, which is one of the components in calculating financial health performance, is closely related to investment policy. Investment policy is a part of the financial policy that leads to the increase in the firm value. The investment policy is carried out when the company expands its business to increase production capacity, modernize or build a factory (Sudiyatno et al., 2012), thus providing investment opportunities for the company. On the other hand, the company also reaches an increase in assets due to capital expenditure activities, where total asset is one of the components of firm value. When the company's asset increases and is supported by a high market value, offset by the condition that company's total debt is lower than the company's total asset, investors will provide more assessment to the company. It can be viewed from the descriptive analysis of the IIKP company, which has the highest Tobin's Q value due to the high market value supported by the higher total asset than total debt.

Even though this study finds that intellectual capital and financial health performance have a relationship with firm value, it suggests that financial health performance does not mediate the relationship between intellectual capital and firm value (H4). Putri & Tartilla (2018) explain that positive financial health performance can be an indicator of company liquidity, so the greater the financial health performance, the more liquid the company, which will affect the firm value. There is an indication that the negative value of financial health performance also affects the role of financial health performance as a mediator. In the relationship between intellectual capital and firm value, financial health performance does not succeed in being the mediator that connects the relationship. The reason is because of the large number of company data that has a negative value and end has a direct impact on the firm value. As depicted from the descriptive analysis result, almost 60 of 132 companies have negative values, which is supported by some influencing factors, such as the company activities. In a manufacturing company, the company's operational activities, such as funding and operational, have a major impact on the company's financial health. The study result contradicts to some previous studies (Deniswara et al., 2017; Dyah Nirmala Arum; Janie et al., 2020; Putri & Tartilla, 2018; Soewarno et al., 2020).

CONCLUSION, LIMITATIONS AND FURTHER RESEARCH

This study is conducted to acknowledge the relationship between intellectual capital, financial health performance, and firm value. The finding affirms that investors do not see the relationship between intellectual capital, financial health performance, and firm value. They will choose the company as long as it can generate profits. It also suggests that financial health performance does not mediate the relationship between intellectual capital and firm value even though intellectual capital and financial health performance exert a significant effect on firm value. The current research is limited to the manufacturing companies that have conducted ipos in 2016 or later. Further researches are expected to have a larger population sample to generalize the study results. Calculation of financial health performance in the following researches can also be made with indicators or other calculation methods, so they can better describe the company's financial health performance.

This study aims to discover the relationship between intellectual capital, financial health performance, and firm value. This research found that intellectual capital and financial health performance had a significant effect on firm value directly, but intellectual capital had an insignificant effect on firm value through financial health performance. Therefore, financial health performance doesn't role in mediation. The results illustrate that market participants just views information related with intellectual capital and the financial health performance independently, while the financial health performance did not show integrative linkage between intellectual capital and firm value. These findings showed that in assessing a company, investors do not pay attention to the ability of intellectual capital in creating the company's financial health. The investors merely consider the effect of the intellectual capital on market valuation. This evident implied that stock market participants do not

really aware on the effectiveness of intellectual capital, the investors may merely look at on the attributes of intellectual capital.

Data from this study was collected from the manufacturing companies that have conducted IPOs in 2016 or later, Consequently, the result is restricted to manufacturing companies from 2016 until 2020 in Indonesia. Therefore, researchers have suggested that future research have more samples or future studies repeat the study in other industries in Indonesia. The study also provides how is the behavior of a market participants in Indonesia, so it helps the market participant take decisions more easily. Future studies are recommended to test financial health performance with different measurements to identify the effect on firm value. Furthermore, the current model just uses a single mediator, we will suggest using of the other variable to find the relationship between intellectual capital and firm value. Yet, given financial health performance as a mediator maybe give similar mediation results in the same model.

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