

Intellectual Capital and Firm Value: The Role of Financial Performance as Intervening Variable



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ABSTRACT: This study aims to determine the effect of intellectual capital on firm value with financial performance as an intervening variable. This study is a quantitative study using related methods. The goal is for all commercial banks in Indonesia to be listed on the Indonesia Stock Exchange (IDX). The sampling used the purposive sampling method and resulted in 42 commercial banks in Indonesia. The data in this study is secondary data in the form of annual financial reports from 2017 to 2021. Path analysis is used with SPSS version 23 software for data analysis. The results showed that Intellectual Capital (VAICTM) had a significant effect on Financial Performance (ROE), Intellectual Capital (VAICTM) had no significant effect on Firm Value (PER), Financial Performance (ROE) had a significant effect on Firm Value (PER), Intellectual capital (VAICTM) has an indirect impact on firm value (PER) through financial performance (ROE) as an intervening variable.

KEYWORDS: Intellectual Capital, Firm Value, Financial Performance

1. INTRODUCTION

Indonesia is currently preparing itself to take massive changes towards the golden generation of 2045, one aspect of which is the economy. In 2045, the government strives that Indonesia will become the center of the economy because, at this time, there is a more productive age than on-productive age. So, in this case, regeneration is needed that is intellectually superior, skilled, and highly competitive to face the dynamics of the global economy.

As a center for financial institutions, banking is a place for individuals, private business entities, government institutions, and the like to store funds with various services offered. Banks serve the financing and payment system to expedite the economic mechanism because of the functions and roles that banks have, namely as a transmission function, storing and distributing funds, distributing financial risks, and an instrument in stabilizing the economy (Simatupang, 2019).

In connection with the skyrocketing economic development and all-digitalization, the company is currently paying more attention to developing and understanding intellectual capital. Intellectual capital, abbreviated as IC, is a method and approach used in measuring and assessing the knowledge assets owned by the company. The company's main goal is to maximize the company's value; the value will be reflected in its share price. If there is a process of increasing stock prices in a company and it is different from the asset book, it shows a hidden value (Hadiwijaya, 2013). Companies that want a lot of consumers and generate profits, then the company will pay attention to their value in the eyes of society and continue to increase it. Firm value is an investor's perception of the company's level of success which is often associated with stock prices and profitability (Husnan, 2008).

According to Kusumandari (2019), company performance is a progressive process that affects the company's value. This performance is measured by a financial performance system that will determine the company's achievements, both profit, and intelligence, in managing company assets. The instrument for measuring financial performance is the financial report. The function of financial statements is as a reference and information data as a form of evaluation and changes made by the company in the future. Companies aware of the importance of intellectual capital will make the company more superior and competitive. Intellectuals can be measured by Human Capital, Structural Capital, and Capital Employed (Ulum, 2009). Human capital is a resource seen from the human perspective by the company's employees. Companies with good resources will also manage assets well (Ulum, 2007).

Structural capital is a resource in the form of infrastructure such as infrastructure systems and the like to support the performance of company employees to compete. Another important thing is the customer, apart from involving people in the

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business. And something that can help a business it can move forward is the customer. Customers are entities outside the company, such as suppliers or customers; companies must create good relationships with customers because they are very loyal to increase business profits (Ulum, 2007).

The influence of intellectual capital on financial performance shows that intellectual capital is a valuable asset for the company and occupies an urgent position in adding value and helping to improve the financial performance of banking companies in Indonesia (Yuskar & Novita, 2014). Financial performance has a positive effect on firm value, which indicates that return remains a benchmark for investors to assess whether the company is still performing well or not. The existence of complementary intellectual capital reports and good financial performance will help the company gain more trust in the market due to good prospects.

About intellectual capital research, many previous studies have discussed it. Auliyah & Asyik (2016) examined intellectual capital, and the results showed that intellectual capital had a positive effect on firm value and financial performance. However, different results were presented by Septiana (2018) in the results of his research that intellectual capital affects financial performance (ROA) but not firm value (PBV). At the same time, financial performance affects firm value. And intellectual capital (VAIC™) affects financial performance (ROA) and firm value (PBV) if on the intervening variable.

Based on several previous studies above, there are differences in the influence of intellectual capital on firm value and financial performance. Based on these differences, the researcher hypothesizes that intellectual capital does not always have implications for firm value and financial performance. This research represents several previous studies related to the influence of intellectual capital on firm value and financial performance. The difference between this study and previous research is to examine the direct effect of intellectual capital on firm value and the indirect impact of intellectual capital on firm value through the financial performance of the banking sector listed on the Indonesia Stock Exchange from 2017 to 2021.

The reason for choosing the intervening variable in this study is to determine the indirect effect of financial performance between the Intellectual Capital variable on firm value. In addition, the banking sector companies are the focus of this research because the banking sector is classified as an intellectual-based sector that innovates in products and services. Published financial reporting services and data (balance sheet, profit/loss), which can be accessed. In addition, the banking industry has a broad scope, so a lot of capital is involved, including intellectual capital.

In this study, financial performance is used as an intermediary variable to determine the indirect relationship of Intellectual Capital to firm value. Firm value as the dependent variable does not change direction with the intellectual capital it has, but the effect or change in weight is achieved through financial performance as an intervening variable. The form of difference between this research and previous research is the intervening variable proxied by Return on Equity (ROE). Therefore, based on the description of the background, the researcher took the title "The Influence of Intellectual Capital on Firm Value with Financial Performance as an Intervening Variable (Study of Banking Sector Companies listed on the Indonesia Stock Exchange (IDX) 2017-2021 Period)".

2. LITERATUR RIVIEW

2.1 Intellectual Capital

Intellectual Capital is an asset in the form of knowledge or intellectual capital owned by a company whose form is invisible or intangible. (Maaloul, 2010) says IC is knowledge used by companies in business processes to create added value in the company's progress. Meanwhile, Sawarjuwono (2003), said that IC is a machine that manages three main elements of an organization which includes customer, structural and human capital. And the role of IC in the three main elements is as an added value for the company to have advantages and be competitive. Based on the VAIC method, there are three constituent elements or components, namely Employed Capital Value Added (VACA), Value Added Human Capital (VAHU), Structural Capital Added Value (STVA)

2.2 Firm Value

Firm value is the market value of the company's debt and equity. Keown (2010) The concept used to represent the company's value is the intrinsic concept, which is where this concept discusses the value of assets and the value of the company in obtaining profits in the future. Some corporate institutions often use the ratio as a reference/basic assessment in determining company values. And as for the value of the company, this research is to use the price-earnings ratio (PER) to measure the company's value.

2.3 Financial Performance

Financial performance is related to financial ratios, which are company performance analysis instruments that explain various relationships and financial indicators in past conditions and help describe the trend of these changing patterns

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and then show the risks and opportunities inherent in the company concerned (Aisyah, 2015). One of the financial ratios used is the profitability ratio with ROE.

2.4 Hypotesis

2.4.1 The Influence of Intellectual Capital on Financial Performance

Financial performance is a form of financial development over time in a company. Intellectual Capital has a positive influence or impact on the company. Because empowering the company's knowledge can provide creativity and innovation, and every action is carried out with search and research efforts first. So that is what was expressed by (Auliyah & Asyik, 2016) in their research that says that intellectual capital positively influences company empowerment.

Many research results show that intellectual capital positively affects a company's financial performance perusahaan (Al-musali et al. 2014; Arslan & Zaman, 2015; Auliyah & Asyik, 2016). The measure of intellectual capital uses the VAIC formulated by Pulic. The higher the VAICTM, the higher the company's financial performance. The higher this ratio, the better the productivity of assets to generate net income. In contrast to the research of Auliyah & Asyik (2016) and Putri (2019) examines the influence of intellectual capital on financial performance and firm value (a case study on a manufacturing company listed on the Indonesian stock exchange in 2012-2017).

H1: Intellectual Capital has a significant effect on the company's financial performance.

2.4.2 The Influence of Intellectual Capital on Firm Value

The value of the company can be reflected in the price that investors pay for their shares in the market. Research conducted (Putri, 2019) shows that intellectual capital has a positive effect on the market value of the company. If intellectual capital increases, in the sense that it is managed properly, Septiana (2018) the market perception of firm value will increase. Contrary to this research, it fails to show that intellectual capital has an effect on the market value of the firm.

Septiana's (2018) research shows that financial performance significantly affects firm value, indicating that the higher the financial performance, the more likely the firm value will increase. Vice versa, the weaker the financial performance, the company's value will decrease. Thus, return on assets (ROA) is one factor that affects firm value. Financial performance has a significant positive effect on firm value.

H2: Intellectual Capital has a significant positive effect on firm value.

2.4.3 The Effect of Financial Performance on Company Value

Research conducted by Septiana (2018) proves that financial performance significantly affects firm value. So that the higher the financial performance, the more likely the firm value will increase. And conversely, the lower the financial performance, the company's value will also decrease. Therefore, return on assets is one of the factors that influence the company's value. Based on the description above, the hypotheses proposed in this study are as follows:

H3 : Financial performance has a significant effect on firm value.

2.4.4 The Influence of Intellectual Capital on Firm Value With Financial Performance as an Intervening Variable

In resource-based theory, it is assumed that companies can compete if they can manage and use resources according to their abilities. The company's resources are supported by good i-business intelligence; when resources are managed effectively and efficiently, it can encourage increased business performance, which will be responded to positively by stakeholders, one of which is an investor. So, the company's value can be reflected in the company's share price. The better the stakeholder response, the better the value of the company.

H4: Intellectual Capital has a significant effect on firm value through financial performance as an intervening variable.

3. METHOD

The research method applies quantitative research with a correlational approach. Commercial banks listed on the IDX as the research population then use a purposive sampling technique to draw samples. The sample in this study were 19 commercial banks in Indonesia, namely Bank Rakyat Indonesia (Persero) Tbk, Bank Negara Indonesia (Persero) Tbk, Bank CIMB Niaga Tbk, Bank Mega Tbk, Bank Danamon Tbk, Bank Tabungan Negara Tbk, Bank Mandiri (Persero). Tbk, Bank BJB, Bank BJTM, Bank Central Asia Tbk, National Pension Savings Bank Tbk, Bank Jtrust Tbk, Bank OCBC NISP Tbk, Bank Woori Saudara Tbk, Bank Pan Indonesia Tbk, Bank Sinarmas Tbk, Maybank Tbk, Bank Jago Tbk, Bank QNB Tbk with 65 observations based on the 2017-2021 annual financial statements. The criteria for selecting the research sample align with Sugiyono (2011).

Table 1. Sampling Criteria

| No | Description | Total |
|----|-----------------------------------------|-------|
| 1 | Commercial Banks in Indonesia 2017-2021 | 42 |

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| | | |
|---|--------------------------------------------------------|-------------|
| 2 | Banks that do not meet the purposive sampling criteria | (23) |
| | Number of samples | 19 |
| | Year of Observation | 5 |
| | Total research data before Outlier | 19 x 5 = 95 |
| | Number of data with Outlier | (30) |
| | Total research data after Outlier | 65 |

Source: Processed Data, 2022

The dependent variable (Y) in this study is firm value; firm value is the market value of the company's debt and equity (Keown, 2010). And to measure the value of the company in this research is to use the Price Earning Ratio (PER).

$$PER = \frac{\text{Market Price per Share}}{\text{Earnings per Share}}$$

Furthermore, the independent variable (X) in this study is intellectual capital; Sawarjuwono (2003) says IC is a machine that manages three main elements of an organization: customer, structural, and human capital. Intellectual capital, as measured by the VAICTM (Value Added Intellectual Capital) method, consists of three components, namely capital employed (VACE), Human capital (VAHU), and Structural capital (SCVA). Combining these three components will form the final calculation with the symbol VAICTM (Value Added Intellectual Capital) (Aisyah & Rosida, 2021).

- 1) The First Stage is Calculating Value Added/VA

$$VA = OUT - IN$$

- 2) Second Stage is Calculating Value Added of Capital Employed (VACA)

VACA is a VA indicator created by physical capital units. This figure shows each CE unit's contribution to the organization's value creation.

$$VACA = VA/CE$$

- 3) The third stage is to calculate the Value Added Human Capital (VAHU)

AHU shows how much VA can be generated with funds spent on work; this ratio shows the contribution of each Rupee invested in HU adds value to the organization.

$$VAHU = VA/HU$$

- 4) The Fourth Stage is Calculating Structural Value Added Capital (STVA)

This ratio measures the amount of SC needed to generate a dollar of VA and is part of the indicator of SC's success in creating value.

$$STVA = SC/VA$$

- 5) The fifth stage is the Calculation of Value Added IQ (VAIC), VAIC is the sum of VACA, VAHU and STVA

$$VAIC = VACA + VAHU + STVA$$

Description:

VA : Value Added

OUT : Total Sales and Other Income

IN : Operational costs other than salary and employee benefits

CE : Equity, Net Income

HC : Labor load

SC : Difference between VA and HC

The intervening variable is a function of the independent variable, which ultimately explains its effect on the independent variable (Nasution, 2008). The variable used in this research is financial performance. Financial performance is a description of the financial condition of a company. Financial performance in this mini-research uses Return on Equity (ROE). ROE measures the rate of return on shares owned by company shareholders (Aisyah & Pratikto, 2022).

$$ROE = \frac{\text{Net Income}}{\text{Shareholders' Equity}}$$

The data in this study were analyzed using path analysis. Path analysis is a means to examine causal relationships between variables to determine both direct and indirect effects between independent/exogenous variables and dependent/endogenous variables (Sandjojo, 2011).

$$ROE = \rho_1 VAIC + \varepsilon_1 \dots \dots \dots (4)$$

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$$PER = \rho_2 VAIC^{TM} + \rho_3 ROE + \rho_2 \dots \dots \dots (5)$$

Description:

ROE = Return on Asset

VAICTM = Value Added Intellectual Capital

PER = Price to book value

ρ_1 = ROE path coefficient with VAICTM

ρ_2 = PER path coefficient with VAICTM

ρ_3 = ROE path coefficient with PER

ε_1 = Residual on financial performance

ε_2 = Residual on firm value

4. RESULTS AND DISCUSSION

4.1 RESULT

4.1.1 DESCRIPTIVE STATISTIC

Based on the results of descriptive statistics, The VAICTM variable has a minimum value of -1.74, a maximum value of 2.61, an average value (mean) of 0.5978, and a standard deviation of 1.0046. PER has a minimum value of 1.13, a maximum value of 2.36, an average value (mean) of 0.9867, and a standard deviation of 0.5612. ROE has a minimum value of 1.00, a maximum value of 2.04, an average value (mean) of 0.1119, and a standard deviation of 0.5483. The results of statistical tests are presented in table 2 as follows:

Table 2. Descriptive Statistical Test

| | N | Minimum | Maximum | Mean | Std. Dev |
|--------------------|----|---------|---------|--------|----------|
| VAIC TM | 65 | -1,74 | 2,61 | 0,5978 | 1,0046 |
| PER | 65 | 1,13 | 2,36 | 0,9867 | 0,5612 |
| ROE | 65 | 1,00 | 2,04 | 0,1119 | 0,5483 |

Source: SPSS₂₃ output, 2022

4.1.2 Normality Test

Residual normality can be known by looking at the one-sample Kolmogorov-Smirnov test table (Ghozali, 2016). Based on the test data obtained, the results are as follows:

Table 3. Normality Test

| Model | Sig | Description |
|--------------------------------|-------|-------------|
| VAIC TM → ROE | 0,200 | Normal |
| VAIC TM → ROE → PER | 0,200 | Normal |

Source: SPSS₂₃ output, 2022

Based on the analysis results above, it shows that the Asymp Sig (2-tailed) is 0.200 and 0.200, respectively. This value is greater than 0.05. Then the results of the analysis show that the residuals are normally distributed. Therefore, based on the normality test, the data used in this study is feasible to use.

4.1.3 Multicollinearity Test

Multicollinearity aims to test whether the regression model found a correlation between independent variables (Ghozali, 2016). The results of the multicollinearity test from this study are presented in table 4 below:

Table 4. Multicollinearity Tests

| Model | Tolerance | VIF | Keterangan |
|--------------------------|-----------|-------|-----------------------------|
| VAIC TM → ROE | 1,000 | 1,000 | Multicollinearity fulfilled |
| VAIC TM → PER | 0,937 | 1,067 | Multicollinearity fulfilled |
| ROE → PER | 0,937 | 1,067 | Multicollinearity fulfilled |

Source: SPSS₂₃ output, 2022

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Based on the results of the multicollinearity test in table 4, the tolerance value of the VAICTM variable to ROE is greater than 10% or (1,000 > 0.1), and the VIF value is less than ten or (1,000 < 10). Furthermore, the tolerance value of the VAICTM variable to PER and the ROE variable to PER is greater than 10% or (0.937 > 0.1), and the VIF value is less than 10% or (1.067 < 10). So it can be concluded that there is no multicollinearity in the research regression model.

4.1.4 Autocorrelation Test

Autocorrelation determines whether the equation contains autocorrelation (Ghozali, 2016). This test was carried out using Durbin-Watson.

Table 5. Autocorrelation Test

| Model | Durbin-Watson |
|--------------------------------|---------------|
| VAIC TM → ROE | 2,079 |
| VAIC TM → ROE → PER | 1,921 |

Source: SPSS₂₃ output, 2022

Based on the analysis, results indicate that the value of Durbin-Watson VAICTM to ROE is 2.079. This value is between du and 4-du (du < DW < 4-du or 1.6960 < 2.079 < 2.304). Furthermore, the value of Durbin Watson VAICTM and ROE to PER is 1.921. This value is between du and 4-du (du < DW < 4-du or 1.6960 < 1.921 < 2.304). Thus, the results of the analysis of the two models show that there is no autocorrelation.

4.1.5 Hypotesis Test (F-test)

The result of the simultaneous test of this study are as follow:

Table 6. Simultaneous Test

| Model | Hubungan | F Statistics | Sig. |
|---------|--------------------------------------------------------------------|--------------|-------|
| Model 1 | Intellectual Capital → Financial performance | 4,249 | 0,043 |
| Model 2 | Intellectual Capital → Firm Value Kinerja Keuangan → Firm Value | 6,013 | 0,004 |

Source: SPSS₂₃ output, 2022

Based on the summary results listed in table 6 above, it shows that in model 1, namely the influence of intellectual capital on financial performance, the F statistic is 4.249 with a significance of 0.043. The test results indicate that the significance < alpha (5%). Therefore, it can be concluded that intellectual capital significantly influences financial performance.

Furthermore, in Model 2, namely the influence of intellectual capital and financial performance on firm value, F-statistics is obtained at 6.013 with a significance of 0.043. The test results indicate that the significance < alpha (5%). Therefore, intellectual capital and financial performance simultaneously significantly affect firm value.

4.1.6 Hypotesis Test (t-test)

The result of the partial test of this study are as follow:

Table 7 Partial Test

| Eksogen | Endogen | Koef | T Statistik | Sig. |
|-----------------------|-----------------------|-------|-------------|-------|
| Intellectual Capital | Financial performance | 0,251 | 2,061 | 0,043 |
| Intellectual Capital | Firm Value | 0,151 | 1,255 | 0,214 |
| Financial performance | Firm Value | 0,338 | 2,814 | 0,007 |

Source: SPSS₂₃ output, 2022

In Hypothesis 1, Intellectual Capital on Financial Performance produces a statistical T value of 2.061 with 0.043. The test results indicate that the significance < alpha (5%). That Intellectual Capital has a significant direct effect on Financial Performance. Therefore, hypothesis 1 is accepted.

Hypothesis 2, Intellectual Capital Against Firm Value, produces a statistical T value of 1.255 with 0.214. The test results indicate that the significance > alpha (5%). That Intellectual Capital has no significant direct effect on Firm Value. Therefore, hypothesis 2 is rejected.

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Hypothesis 3, Financial Performance on Firm Value, produces a statistical T value of 2.814 with a significance of 0.007. The test results indicate that the significance < alpha (5%). That financial performance has a significant direct effect on firm value. Therefore, hypothesis 3 is accepted.

Furthermore, the indirect influence of Intellectual Capital on Firm Value is through financial performance. It is known that intellectual capital has a significant effect on financial performance. Financial performance significantly affects firm value, but intellectual capital has no significant impact. Because both paths are declared significant, it can be stated that there is a significant indirect effect on firm value through financial performance. Thus, financial performance can mediate the influence of intellectual capital on firm value.

4.1.7 Determination Test

The result of the determination test of this study are as follow:

Table 8. Determination Test

| Model | R | R Square | Adjusted R Square |
|---------|-------|----------|-------------------|
| Model 1 | 0,354 | 0,126 | 0,097 |
| Model 2 | 0,446 | 0,199 | 0,159 |

Sumber: SPSS 23 (Data Diolah), 2022

The coefficient of determination test aims to see how well a model can explain the dependent variable. The coefficient of determination is the R-Squared value (Ghozali, 2016). The R-Squared value in the table above shows that the Model 1 VAICTM on ROE is 0.126 or 12.6%. That intellectual capital influences financial performance, while the remaining 87.4% is explained by other factors not included in this study. Furthermore, the value of R-Squared Model 2 VAICTM and ROE to PER is 0.159 or 15.9%. That firm value is influenced by intellectual capital and financial performance, while the remaining 84.1% is explained by other factors not included in this study.

4.1.8 Path Analysis

This path analysis uses regression analysis to estimate the causality relationship between variables that have been previously determined based on the theory. The results of the path analysis show the direct and indirect effects of intellectual capital on firm value as follows:

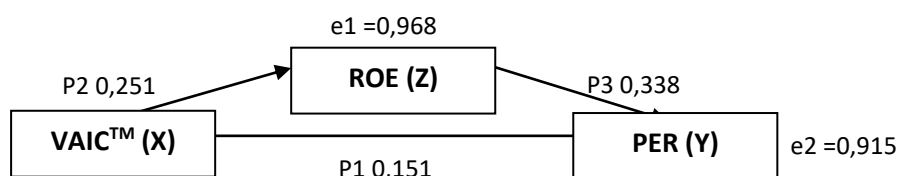


Figure 1. Path Diagram

The following is the interpretation of Figure 1 of the path diagram:

- The direct influence of intellectual capital on firm value is 0.251.
- Meanwhile, the direct influence of financial performance on firm value is 0.338.
- The magnitude of the indirect effect of intellectual capital on firm value with financial performance as an intervening variable is calculated by $P2 \times P3 = 0.251 \times 0.338 = 0.0848$.
- While the total effect = $0.151 + 0.0848 = 0.2358$.

4.2 DISCUSSION

4.2.1 The Effect of Intellectual Capital on Financial Performance

Based on the results of the study indicate that Intellectual Capital has a significant effect on Financial Performance. The significance value is smaller than the specified significance level, meaning that Intellectual Capital has a significant impact on financial performance. The standardized coefficient beta indicates that Intellectual Capital has a positive and significant effect on Financial Performance, meaning that H1 is accepted.

The results of this study support the results of research conducted by oleh Al-musali et al. (2014); Arslan & Zaman (2015); Auliyah & Asyik (2016), which state that Intellectual Capital has a positive effect on the company's financial performance. The measure of intellectual capital uses the VAIC formulated by Pulic. The higher the VAIC™, the higher the company's financial performance. The higher this ratio, the better the productivity of assets to generate net income.

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4.2.2 The Effect of Intellectual Capital on Firm Value

Based on the results of the study indicate that Intellectual Capital has no significant effect on firm value. The significance value is greater than the specified significance level, meaning that H2 is rejected. The results of this study are different from the results of research conducted by Mardhiana (2020); Nafiroh & Nahumury (2017); Putri (2019), which states that Intellectual Capital affects Company Value. The higher the intellectual capital owned by the company can affect its value. In this case, investors will give a higher assessment of companies with higher intellectual resources than companies with low intellectual resources.

However, this study is by research conducted by Septiana (2018), which states that Intellectual Capital has no significant effect on firm value. And that investors have not given a high assessment of companies with higher intellectual capital because the company's operational activities seem to be still dominated by the use of physical assets to increase the company's value.

4.2.3 The Effect of Financial Performance on Firm Value

Based on the results of the study indicate that financial performance has a significant effect on firm value. The significance value shows that it is smaller than the specified significance level, meaning that Financial Performance has a significant impact on Firm Value. The standardized coefficient beta indicates that financial performance has a positive and significant effect on firm value, meaning that H1 is accepted.

The results of this study are supported by the results of research conducted by Septiana (2018), proving that financial performance has a significant effect on firm value. And that the higher the financial performance, the more likely the firm value will increase. And conversely, the lower the financial performance, the company's value will also decrease. Therefore, return on assets is one of the factors that influence the company's value.

4.2.4 The Effect of Intellectual Capital on Firm Value through Financial Performance

Based on the first significant test results, intellectual capital had a significant effect on financial performance. Then the results of the second test of financial performance significantly affect firm value. This study proved the researcher's assumption that financial performance could mediate the relationship between intellectual capital and firm value. And that good intellectual capital governance will improve the company's financial performance. The company's development attracted many investors to invest their shares in the company. It has a positive effect on firm value. Therefore the company will also increase.

The results of this study are in line with research conducted by Nafiroh & Nahumury (2017) and Septiana (2018), which also states that companies that can manage their intellectual resources efficiently will create value-added and competitive advantages which will lead to an increase in company profits. Profitability growth means that the company's prospects in the future are considered to be getting better, representing the better the value of the company in the eyes of investors, which is an attraction for investors.

5. CONCLUSION

Based on the results of the tests and discussions conducted, conclusions can be drawn, namely: (1) Intellectual capital has a significant effect on financial performance; this shows that intellectual capital plays an important role in the formation of added value and contributes to improving the financial performance of commercial banks in Indonesia. (2) Intellectual capital has no significant effect on firm value; in this case, commercial banks have not been able to manage and develop their intellectual property optimally. (3) Financial performance has a significant effect on firm value; this indicates that the better the growth of the bank's financial performance means that the bank's prospects in the future are considered better in the eyes of investors. (4) Intellectual capital has an indirect effect on firm value through financial performance as an intervening variable; with the ability of financial performance to mediate intellectual capital with firm value, it can be concluded that well-managed intellectual capital will result in good company performance so that it will attract investors to invest in the bank. Thus the market value of the company will increase.

This study has limitations in the independent variables used. Further research on intellectual capital in commercial banks in Indonesia is expected to increase the research period so that the influence of intellectual capital on firm value is more consistent and reflects the actual conditions. In addition, the intervening variables used to proxy financial performance can use ROA, ROI, NPM, and BOPO. Nevertheless, the results of this study can be considered useful for commercial banks in Indonesia, with more efforts that can be made to improve the efficiency of the Intellectual capital of banks, potentially increasing the profitability and firm value of these banks. Therefore, the findings of this study require further research in this area.

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