Does Intellectual Capital Affect Financial Performance? An Empirical Evidence from Financial Companies in Indonesia

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Abstract

Intellectual Capital (IC) has been widely studied in various countries, especially Indonesia. However, there are still inconsistencies in research results. Some researchers find evidence that IC has an effect on financial performance. Some other researchers found results that IC had no effect on the company's financial performance. Therefore, the researchers tried to conduct research on the effect of IC on the company's financial performance. This study uses a case study on the financial sector listed on the Indonesia Stock Exchange (IDX) for the period 2012-2021. The financial sector was chosen because it is considered to have the most intensive IC. In addition, this study also attempts to prove that each sub-sector has a different IC contribution to the company's financial performance. IC is measured using value added intellectual capital (VAIC) while financial performance is measured using return on assets (ROA), return on equity (ROE) and market to book value (M/B). The control variables used in this study are size and leverage. This study uses panel regression analysis with the help of E-views. The results of the study are able to prove that IC has an effect on the company's financial performance as measured by ROA and ROE. Meanwhile, IC has no effect on the company's financial performance as measured by using M/B. In addition, this study proves that each sub-sector has a different IC contribution to the company's financial performance.

Keywords
Financial Performance, Intellectual Capital, VAIC, ROA, ROE, M/B, Size, Leverage.

1. Introduction
Many companies in Indonesia, especially in the financial sector, experienced increases and decreases in financial performance. According to Tan et al. (2007), One of the factors that influence the increase and decrease in financial performance is intellectual capital (IC). IC is an intangible resource owned by a company such as knowledge possessed by employees, innovations made by the company, customer relations, computer technology systems used by the company, and the ability to master technology (Firer dan Williams, 2003). Currently, all information can be accessed quickly and easily, thus encouraging high competition among business players. Companies are now starting to focus on effective and efficient IC management to increase competitiveness among business players. According to Shaneeb and Sumathy (2021), companies that intend to increase their profits or profits should pay more attention to IC. Many companies believe that increasing IC will increase the value and competitive advantage of the company. According to Nazir et al (2020), investors do not only consider the company's financial statements, but also the management of intangible assets in the form of non-financial. This triggers the company to focus on developing IC to attract more investors to increase the value of the company.

Since the 1990s, IC has begun to be in great demand and is considered important, therefore it has become the focus of research in various fields such as accounting and information technology. This happens because there is a shifting in business from being initially focused on labor (labor-based business), to a business that focuses on knowledge (knowledge-based business). Many studies have proven that IC affects financial performance. Research conducted by Tan et al (2007), Ting and Lean (2009), Alipour (2012), Nazir et al (2020), Shaneeb and Sumathy (2021), and Zhang, et al, (2021) has proven the effect of ICon the company's financial performance. Eventhough the effect of IC on company performance has been widely proven in various countries, there are still studies that show inconsistent results inconsistency. Firer and Williams (2003), Joshi et al (2013), Chowdhury et al. (2018), Dženopoljac et al. (2016), Cindiyasari (2017) and Mollah and Rouf (2022) have investigated the effect of IC on financial performance. The results show that there is no effect of IC on the financial performance of companies in various countries such as Africa, Australia, Bangladesh, and Indonesia.

Based on inconsistent results that have been conducted by several previous researchers, this study aims to examine the effect of IC on the company's financial performance. This study uses financial sector companies listed on the Indonesia Stock Exchange (IDX) using a research period of 10 years (2011-2020). The financial sector was chosen because it is one sector that is still needed during the pandemic. This is evidenced by the growth of the financial sector in GDP throughout 2020, therefore there is still room for acceleration for the development of the national financial sector (OJK, 2021). Companies engaged in the financial sector such as banking, insurance, investment, and others require a lot of innovation to be able to improve their financial performance. Therefore, optimal IC management is very influential in the financial sector because if the company can manage its resources well it will improve the company's financial performance (Zhang, et al, 2021).

This study uses an independent variable, namely IC which has been developed by Pulic (2000) using value added intellectual capital (VAIC) and the dependent variable is financial performance as measured by using return on assets (ROA), return on equity (ROE) and market to book value (M/B) which has been studied by Chen et al (2005), Firer and Williams (2003), Sardo and Serrasqueiro (2016) and Tan et al (2007). This study also uses control variables, namely firm size (size) and leverage which has been carried out by Firer and Williams (2003) to control for other variables not examined that may affect the results of the study. Based on the background above, this study proposed research questions: does intellectual capital affect the financial performance of financial sector companies in Indonesia? Does each sub-sector have a different contribution of IC to financial performance?

2. Literature Review
The influence of Intellectual Capital (IC) on the company's financial performance has been widely studied in various countries including Indonesia. In Taiwan, Chen, Cheng, and Hwang (2005) examined the influence of IC using a sample of 4,254 firms during 1992-2002. This study proves that IC influences market to book value (M/B), return on equity (ROE), return on assets (ROA), growth revenue (GR), and employee productivity (EP). In addition, this study also proves that investors have different value placements between the three components of value creation (VAIC) and R&D expenditure illustrates additional information on structural capital and has a positive and significant effect.

In Singapore, Tan, Plowman, and Hancock (2007) examined the influence of IC on 150 issuers in SGX for the period 2000-2002. This study proves that there is a positive correlation between IC and financial performance as proxied by ROE, EPS, and ASR. In addition, this study also proves that an increase in IC value will influence increasing company performance in the future. In addition, this study also proves that the contribution of IC to financial performance differs from one industry to another.

Ting and Lean (2009) examined the influence of IC on 20 financial sector companies from 1999-2007 in Malaysia. The results showed that VAIC had a positive effect on ROA. In Australia, Clarke, Seng and Whiting (2011) examined the effect of IC on 1,676 companies listed on the Australian Stock Exchange. In this study, IC has an influence on ROE, ROA, EP, and RG by using control variables, namely leverage, R & D, year¸and industry.

In Iran, Alipour (2012) examined the influence of IC in 39 insurance companies active on the Iran Stock Exchange for the period 2005-2007. The results of this study indicate a positive relationship between the components of VAIC (VAHU, VACA, and STVA) and ROA using control variables, namely size, leverage, and ROE. In addition, VAIC has a positive effect on ROA by using control variables, namely size, leverage, and ROE. In Indonesia, Supriatna, Triantoro and Rustandi (2013) examined the influence of IC in seven retail companies listed on the IDX from 2009-2011. In this study, it was found that the higher the IC, the higher the profitability (as measured by ROA). In addition, IC has a negative effect on productivity as measured by ATO and IC has no effect on market value (M/B). Soetedjo and Mursida (2014) conducted a study on the influence of IC using 26 banking companies listed on the IDX from 2010-2012. This study resulted in proving that VAIC and its three components have a positive effect on ROA.

In Western Europe, Sardo and Serrasqueiro (2016) examined the influence of IC using a sample of 2,090 non-financial firms registered in 14 countries in Western Europe (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal, Spain, Sweden, and United Kingdom) from 2004-2015. This study proves that there is a positive relationship between IC with ROA and Tobin's Q.

2.1 Resources Based View Theory
Resource Based View (RBV) is a theory that combines components of resources and capabilities to utilize resources to create added value for the company. This theory emphasizes the company's ability to use company resources effectively and efficiently so that it can form competitive advantages and be able to increase company profitability. According to Grant (1991), the company's resources and capabilities are the main considerations in formulating strategy and the main source of company profitability. The key to this theory is understanding the relationship between resources, company capabilities, competitive advantage, and profitability. The profit of a company depends on two factors: (1) industry attractiveness and (2) competitive advantage. The availability and ability to control a company's resources can shape the attractiveness of the industry and the company's competitive advantage. Competitive advantage is the company's ability to provide more economic value by providing things that are different or better than its competitors. This competitive advantage can be created when the company can manage resources so that it can provide value to customers. Company resources that can create a sustainable competitive advantage are resources that cannot be imitated, rare, and can be well organized by the company. Company resources consist of tangible resources such as products, factories, and others as well as intangible resources such as reputation, brand, loyalty, and others (Grant 1991).

2.2 Intellectual Capital
Intellectual Capital (IC) is a resource, or an intangible knowledge embedded in a company (externally or internally) that can create value for the company. These resources can be in the form of knowledge possessed by employees, innovations carried out, computer systems used, ability to master technology, customer relations, and others (Pulic, 2000). IC has three components, namely: (1) human capital (HC), namely the skills or competencies possessed by employees in a company, (2) structural capital (SC), which is the organizational structure and company mechanism that can support employees in optimizing their overall knowledge, (3) customer capital (CC) which is related to knowledge about relationships with consumers and marketing distribution channels carried out by the company (Bontis, 1998).

2.3 The Effect of Intellectual Capital on the Company's Financial Performance
Research conducted by Zhang, et al, (2021), Nazir et al (2020), Alipour (2012); Chen et al (2005); Sardo and Serrasqueiro (2016); Tan et al (2007) and Ting and Lean (2009) prove that IC has a positive and significant effect on

financial performance. Financial performance is used to determine the achievements of the company for each year (whether it is in accordance with the objectives and in line with the established rules). This performance is used to assess the company's success in managing its capital and the company's ability to increase profits every year (IAI, 2012). RBV theory supports that IC influences the company's financial performance. RBV is a theory that combines components of resources and capabilities to create added value for the company. A company can create a competitive advantage, if the company has the ability to manage and maintain company resources. If the company has a competitive advantage, it will have the potential to improve the company's financial performance in the future (Grant 1991). In addition, stakeholder theory will provide opportunities for stakeholders to obtain information related to company activities that can affect the decision-making process (Freeman et al, 2018). This theory will encourage companies to manage and maintain company resources to create value for the company so that it can improve its financial performance to provide benefits to stakeholders (Freeman et al, 2018). Based on the explanation above, this study develops the first hypothesis as follows:

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

Every company has a different strategy in determining the range of intangible assets and their capabilities to compete effectively. Therefore, companies from different industries will have different ranges of assets and capabilities to operate their businesses. Some companies will rely on financial assets or physical assets, while others will rely on IC to build their success (Tan et al, 2007). Based on research conducted by Joshi et al (2013) and Tan et al (2007). The second hypothesis is developed as follows:

H2: Each sub-sector of financial companies has a different IC contribution to financial performance.

3. Methods

3.1 Independent and Dependent Variable Measurement
This study measures financial performance as a dependent variable by Return on Asset (ROA), Return on Equity (ROE), and Market to Book Value (M/B) (Bringham et al., 2014). Intellectual capital as an independent variable is measured by Pulic's VAIC Model with five steps (Pulic, 2000). (Table 1)

Table 1. Variables Measurement

Variable	Measurement	Source
Intellectual Capital	VA = Output-input	Pulic (2000)
	$VACA = \frac{VA}{CE}$	
	$VAHU = \frac{VA}{HC}$	
	$STVA = \frac{SC}{VA}$ SC = VA – HC	
	VAIC = VACA + VAHU +STVA	
Financial Performance	$ROA = \frac{net\ income}{total\ assets}$	Bringham et al. (2014)
	$ROE = \frac{net\ income}{common\ equity}$	
	$M/B = \frac{market\ value\ of\ common\ stock}{book\ value\ of\ common\ stock}$	

VA   = Value Added

VACA   = Value Added Capital Employed
CE   = Capital Employed
VAHU   = Value Added Human Capital
HC   = Human Capital
STVA   = Structured Capital Value Added
SC   = Structured Capital
VAIC   = Value Added Intellectual Coefficient

3.2 Control Variable Measurement

As mentioned above, this study uses size and leverage as control variables. Size or company size is a form of grouping companies into several categories including large, medium, and small (Firer and Williams 2003). The size formula is:

$$Size = Ln\ Total\ Assets.$$

Leverage is a ratio used to determine the company's ability to manage long-term debt financed by company assets (Firer and Williams 2003). The leverage formula is:

$$Lev = Total\ Debt/Book\ Value\ of\ Total\ Asset.$$

4. Data Collection

This study uses data from Financial Sector Companies listed on the Indonesia Stock Exchange (IDX) during years of 2012-2021. Data were obtained from financial statements of each company, IDX website, and Yahoo Finance. The number of companies are 27 for 10 years, therefore the total of observations are 270. This study uses a purposive random sampling method with some sample characteristics as Table 2 follows:

Table 2. Sample and Characteristics of Sample

No	Sample Characteristics	Number of Sample
1	Companies that are included in the financial sector listed on the IDX.	105
2	Companies that are included in the financial sector listed on the IDX from 2012 to 2021.	63
3	The company publishes complete and audited financial statements from 2012 to 2021	63
4	The company did not report negative profit from 2012 to 2021	37
5	The company did not have a negative VAIC value from 2012 to 2021	31
6	The number of minimums in each subsector is three companies (30 observations)	27 (Number of samples used)

Based on the table above, the number of companies used for this study were 27 from the financial sub-sector using an observation period of 10 years (2012 to 2021), therefore the number of observations used was 270. This study uses two hypotheses, so we divide data analysis into two parts. The first part, we combine all financial sector data that has been collected and perform descriptive statistical analysis, classical assumption test, panel data test, selection of the best method, and hypothesis test using the E-views analysis tool. The second part, we break down the data based on each sub-sector that is included in the financial sector. In Indonesia, the financial sector is divided into five sub-sectors: insurance, banks, securities, financial institutions, and another sub-sector. Finally, only three sub-sectors were used, namely insurance, banks, and financial institutions. The securities companies sub-sector and other sub-sectors were not included in the study because they did not meet the predetermined standards (there were at least 3 companies in each sub-sector). After the data collected, we analyzed panel data and tested the best method for each sub-sector by using the E-views tool to answer the second research question, does each sub-sector have a different contribution of IC to financial performance?.

5. Results and Discussion

The classical assumption test was carried out including the normality test, autocorrelation test, multicollinearity test, and heteroscedasticity test to ensure that the data used were free from statistical matters. Based on the results of the test, it was found that all the data used were free from statistical matters, so the regression model has accuracy in estimation, unbiased, and consistent. Table 3 below shows the descriptive statistics.

Table 3. Descriptive statistics

Variable and Measurements		N	Minimum	Maximum	Mean	Standard Deviation
Variabel Dependen	ROA	270	0.000370	0.109040	0.026706	0.021544
	ROE	270	0.003160	1.000000	0.112798	0.082889
	M/B	270	0.007048	6.148515	1.125417	0.933001
Variabel Independen	VAIC	270	0.749990	30.43648	3.708386	2.583328
Variabel Kontrol	SIZE	270	26.30900	35.08400	31.18719	2.185889
	LEV	270	0.052303	1.182156	0.728380	0.209301

Source: Statistical analysis

We form three models of multiple regression analysis as follows:

$$Y = \alpha + \beta1.X1 + \beta2.X2 + \beta3.X3 + e$$

$$ROA_{it} = \alpha + \beta1.IC_{it} + \beta2.SIZE_{it} + \beta3.LEV_{it} + e_{it} \qquad (1)$$

$$ROE_{it} = \alpha + \beta1.IC_{it} + \beta2.SIZE_{it} + \beta3.LEV_{it} + e_{it} \qquad (2)$$

$$M/B_{it} = \alpha + \beta1.IC_{it} + \beta2.SIZE_{it} + \beta3.LEV_{it} + e_{it} \qquad (3)$$

This study uses three methods in the panel data regression model (Basuki and Yuliadi 2015), namely Common Effect Model, Fixed Effect Model, and Random Effect Model. We used an effective model selection method using the Chow test, Hausman test, and Lagrange multiplier test.

5.1 The effect of intellectual capital on company's financial performance

Table 4 describes the results of the panel data regression model and the selection of the effective model for each equation for hypothesis 1.

Table 4. Results of Panel Data Regression Model and Effective Model

Variable	Model 1 (ROA)		Model 2 (ROE)		Model 3 (M/B)	
	Fixed Effect Model		Fixed Effect Model		Random Effect Model	
	coefficient	sig.	coefficient	sig.	coefficient	sig.
Contanta	0.249	0.000	1.349	0.0004	1.367	0.437
VAIC	0.003	0.000	0.0077	0.0001	0.004	0.848
SIZE	-0.0075	0.000	-0.046	0.0001	-0.026	0.657
LEV	-0.0012	0.873	0.250	0.0001	0.782	0.141

R-Squared	0.89	0.52	0.0082
Adjusted R-Squared	0.87	0.46	0.029
F-statistic	68.68	8.996	0.7405
Sig F-statistic	0.000000	0.000000	0.528

Based on Table 2, the coefficients of determination in models 1 and 2 are 0.87 and 0.46, which means the VAIC ability, size, and leverage in explaining financial performance as measured by ROA and ROE are 87% and 46%, and the rest is explained by other variables that are not investigated in this study. The value of R Square in model 3 is 0.029, which means that the ability of VAIC, size, and leverage in explaining financial performance as measured using M/B is only 2.9%, therefore this variable can only slightly explain the effect of VAIC, size, and leverage on financial performance. In model 1, the significant value of size is 0.0000 (<0.05), therefore size has an effect on the company's financial performance as measured by ROA. The leverage value is 0.873 (>0.05) which shows that leverage has no effect on the company's financial performance as measured by ROA. In model 2, the size and leverage significant value is 0.0001 (<0.05), therefore these two control variables influence the company's financial performance as measured using ROE, whereby size has a negative effect and leverage has a positive effect on ROE. In model 3, the significant value of size and leverage are 0.657 and 0.141 (>0.05) and it can be concluded that these two control variables have no effect on the company's financial performance as measured using M/B.

The effect of the independent variable on the dependent variable in this study was analyzed using the t test. Based on the table above, the significant value of VAIC models 1 and 2 is 0.0000 (<0.05). This means that VAIC has an effect on the company's financial performance as measured by ROA and ROE. In model 3, the VAIC significant value is 0.848 (>0.05), which indicates that VAIC has no effect on the company's financial performance as measured by M/B. Based on the results of the tests that have been carried out, intellectual capital has a positive and significant effect on the company's financial performance as measured by ROA and ROE. Meanwhile, VAIC has no effect on the company's financial performance as measured by M/B.

The positive effect of IC on financial performance as measured by the profitability ratio indicates that companies that are included in the financial sector have used intellectual capital optimally to be able to provide value added to the company. Companies are starting to realize the importance of using intellectual assets to build a company's competitive advantage, so many companies in the financial sector have started investing in intellectual capital. If the company's intellectual capital increases, the company's financial performance will also increase. The results of this study are in accordance with the resources-based view (RBV) theory which supports that intellectual capital affects the company's financial performance. RBV views that a company that can manage its resources optimally will have an impact on the creation of a company's competitive advantage. If the company has a competitive advantage, it will have the potential to improve the company's financial performance in the future (Grant 1991).

The effect of intellectual capital on the company's financial performance is also supported by stakeholder theory. This theory will encourage companies to manage and maintain their resources in order to create value added for the company to be able to improve its financial performance and provide benefits to stakeholders (Freeman, Harrison and Zyglidopoulos 2018). In addition, Alipour (2012); Alfraih (2018); Chen, Cheng and Hwang (2005); Clarke, Seng and Whiting (2011); Sardo and Serrasqueiro (2016); Supriatna, Triantoro and Rustandi (2013); Tan, Plowman and Hancock (2007) Ting and Lean (2009) also support the results of this study which is able to prove that IC has a positive effect on the company's financial performance.

However, the regression results show that intellectual capital has no effect on M/B. This means that companies in the financial sector have not been able to optimize the management of intellectual capital so they cannot provide optimal value added for the company. In addition, investors still do not understand and take into account the intellectual capital owned by the company and it is possible that investors still place greater trust in physical capital assets as well as

financial assets than intellectual capital assets. This result contradicts Chen, Cheng and Hwang (2005), Firer and Williams (2003).

5.2 Each sub-sector has a different contribution of intellectual capital to financial performance.

Table 5. Results of Panel Data Regression Model and Effective Model of Insurance Sub-sector

Variable	Model 1 (ROA)		Model 2 (ROE)		Model 3 (M/B)		
	Fixed Effect Model		Fixed Effect Model		Random Effect Model		
	coefficient	sig	coefficient	sig	coefficient	sig	
Contanta	0.741	0.0028	1.359	0.032	-4.591	0.4615	
VAIC	0.002	0.000	0.0054	0.0005	0.0013	0.9255	
SIZE	-0.024	0.0043	-0.047	0.0289	0.19	0.34	
LEV	-0.009	0.6296	0.205	0.0004	-0.18	0.7421	

Based on Table 5 in the insurance sub-sector, VAIC in model 1 and model 2 have significant values of 0.000 and 0.0005 (<0.05), which means that intellectual capital has a positive effect on ROA and ROE with coefficient values of 0.002 and 0.0054. However, in model 3, the regression results show that intellectual capital has no effect on M/B (>0.05).

Table 6. Results of Panel Data Regression Model and Effective Model of Bank Sub-sector

Variable	Model 1 (ROA)		Model 2 (ROE)		Model 3 (M/B)		
	Fixed Effect Model		Fixed Effect Model		Random Effect Model		
	coefficient	sig	coefficient	sig	coefficient	sig	
Contanta	0.195	0.000	1.360	0.0267	1.524	0.66	
VAIC	0.0037	0.000	0.028	0.0032	0.055	0.56	
SIZE	-0.0062	0.0000	-0.050	0.0027	-0.062	0.508	
LEV	0.0099	0.2341	0.358	0.0269	1.797	0.258	

Based on Table 6 in the bank sub-sector, model 1 and model 2 have significant values of 0.000 and 0.0032 (<0.05), which means that intellectual capital has a positive effect on ROA and ROE with coefficient values of 0.0037 and 0.028. However, in model 3, the regression results show that intellectual capital has no effect on M/B (>0.05).

Table 7. Results of Panel Data Regression Model and Effective Model of Financial Institution Sub-sector

Variable	Model 1 (ROA)		Model 2 (ROE)		Model 3 (M/B)	
	Fixed Effect Model		Fixed Effect Model		Random Effect Model	
	coefficient	sig	coefficient	sig	coefficient	sig
Contanta	0.741	0.0028	1.359	0.032	-4.59	0.46
VAIC	0.0027	0.000	0.0054	0.0005	0.013	0.92
SIZE	-0.024	0.0043	-0.047	0.0289	0.198	0.34
LEV	-0.0098	0.6296	0.205	0.0004	-0.180	0.74

Based on Table 7 in the financial institution sub-sector, model 1 and model 2 have significant values of 0.000 and 0.0005 (<0.05), which means that intellectual capital has a positive effect on ROA and ROE with a coefficient value of 0.0027 and 0.0054. However, in model 3, the regression results show that intellectual capital has no effect on M/B (>0.05).

This study proves that each sub-sector has a different contribution of intellectual capital to financial performance. This difference is caused by differences in assets and capabilities owned by the company so each sub-sector will have a different strategy in determining the contribution of its assets and capabilities to compete effectively. Some companies will rely on intellectual capital, while others will rely more on financial or physical assets to build on their success. In Indonesia, in general, the sub-sector that has the highest intellectual capital contribution is the financing institution sub-sector, then in the second position is the insurance sub-sector and the last position is the banking sub-sector. The bank has the lowest contribution because this sub-sector has not optimized its intellectual capital yet, resulting in a low contribution of intellectual capital to the company's performance. In addition, companies in the banking sub-sector may still focus on physical capital rather than intellectual capital. Research conducted by Joshi, Cahill and Sidhu (2013) and Tan, Plowman and Hancock (2007) supports these results which state that each sub-sector has a different contribution of intellectual capital to financial performance.

6. Conclusion
Based on the results of hypothesis testing, intellectual capital has a positive and significant effect on the company's financial performance as measured by using ROA and ROE. This is because the company has been able to realize the importance of investing in intellectual capital to increase the company's competitiveness. Companies in the financial sector have been able to optimize their intellectual capital so they can improve their company's financial performance. Meanwhile, intellectual capital has no effect on the company's financial performance as measured by M/B. This means that the investment market in Indonesia has not given trust to companies that invest in intellectual capital assets (intangible assets). This is because investors do not understand and consider the intellectual capital owned by the company as one of the considerations for making investment decisions.

Based on the results of hypothesis testing, each sub-sector has a different effect on intellectual capital on the company's financial performance. This is because each sub-sector has different assets and capabilities, therefore each sub-sector will have a different strategy in determining the contribution of its assets and capabilities to compete effectively. Some companies will rely on intellectual capital, while others will rely more on financial or physical assets to build on their success.

This study has some limitations. This study uses only 27 samples of financial sector companies which include 5 insurance companies, 17 bank companies, and 5 financial institutions and does not include securities companies and other sub-sectors so the sample in this study may not represent all companies in the financial sector. Next, the Intellectual Capital Measurement only uses the VAIC model which still has calculation limitations so it could affect the limited sample that can be used. Future research is expected to use other models such as surveys to represent all financial sectors. In addition, we found inconsistencies in the results regarding the influence of intellectual capital in various countries. Future study can examine the factors that can affect the inconsistency of these results.

The implications of this study are that intellectual capital is considered important to be able to increase value added for the company because it is proven to influence company performance. For the management, it is expected to be able to manage every component of intellectual capital effectively and efficiently to provide value added for the company so as to improve the company's financial performance. For investors, it is hoped that the intellectual capital aspect can be taken into consideration when investing in various companies that enter the financial sector.

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