The Influence of Intellectual Capital and Rate of Growth of Intellectual Capital on Financial Performance in Financial Institution Sub-Sector Companies on the Indonesia Stock Exchange

Indah Sary Sakinah[1], Isfenti Sadalia[2], Amlys Syahputra Silalahi[2]

[1]Postgraduate Students at Universitas Sumatera Utara, Indonesia
[2]Postgraduate Lecturer at Universitas Sumatera Utara, Indonesia

Corresponding Author: Indah Sary Sakinah

ABSTRACT

The purpose of this study is to examine the effect of intellectual capital and rate of growth of intellectual capital (ROGIC) on financial performance on financial performance in Financial Institution Sub-Sector Companies on the Indonesia Stock Exchange. Variable independent on this research are intellectual capital and rate of growth of intellectual capital (ROGIC) while the independent variable sectors are financial performance. This type of research is quantitative research. The data in this research are secondary data which are the annual financial statements of each company from 2014 to 2018, and the data collection methods use the documentation method. Hypothesis testing was tested using the significance of 10% because it had gone through the first difference. The number of companies in this research consisted of 13 companies in the Financial Sector in the Indonesian Stock Exchange and a total of 52 data. Hypothesis testing in this study uses t-test and F test. The results of this research have shown that the influence of intellectual capital has a significant positive effect on financial performance (ROA and ATO) and rate of growth of intellectual capital (ROGIC) has no effect on financial performance (ROA) and has a significant positive effect on financial performance (ATO). The simultaneous intellectual capital and rate of growth of intellectual capital (ROGIC) have an effect on financial performance (ROA and ATO).

Keywords: Intellectual Capital, Rate of Growth of Intellectual Capital, Financial Performance

INTRODUCTION

The global economy of the past two decades marked by the emergence of new knowledge-based industries has complemented the physical resource-based industries that previously dominated. Along with economic changes that have the characteristics of a science-based economy with the application of knowledge-based industries, the prosperity of a company will depend on a creation of transformation and capitalization of the knowledge possessed.

Problems in implementing a management system based on knowledge in knowledge based business have an impact on financial reporting (Yudianti, 2000). Financial reporting, which is usually focused on the company's business performance, is starting to feel inadequate in reporting company performance.

The company's financial performance is an outcome that utilizes resources. Therefore, profits are needed by a company for the survival of the company. Earnings will give a positive signal to the company's prospects in the future about the company's financial performance so that with the continued growth of earnings, it will give a positive signal to the company's financial performance.

Measurement of the company's financial performance becomes a reference that can be profitable or unprofitable in a business. Companies that have achieved the

goals can be seen from the results of their performance so that various efforts will be made to achieve good performance, namely by developing quality human resources, reliable technology, and good relationships with customers.

The financial performance used is profitability (ROA), and ratio of total asset income (ATO). The value of ROA and ATO shows the company's ability to use assets to generate revenue. ROA value uses net income while ATO uses total revenue as a comparison of assets.

Return on assets (ROA) is a ratio that is used to measure the ability of company management to obtain overall benefits. The greater the ROA of a company, the greater the level of profits achieved by the company and the better the company's position in terms of the use of assets. ATO is the ratio of total income to the book value of total assets (Firer and William, 2003). The faster the company's assets spin the greater the company's revenue. In other words, this ratio shows how efficiently a company can use its assets to generate sales.

The era of globalization, technological innovation and increasingly fierce business competition now forces companies to change the strategies used in conducting business. The company's value is also influenced by how the company utilizes the invisible values of intangible assets in this case as intellectual capital. Awareness of the importance of the role of intellectual capital for company growth makes the company's attention towards managing intellectual capital even greater.

LITERATURE REVIEW
2.1 Intellectual Capital

Brennan (2001) defines intellectual capital is knowledge that is transferred to produce high asset values in order to increase company value.

Measuring intellectual property is very important for the organization. Most organizations know what they have but don't understand the processes needed to achieve competitive advantage using IC. In this connection, it is necessary to measure intellectual property. IC is the final result of the process of transformation of knowledge that turns into intellectual property. IC is also a broad concept so it is divided into different categories namely human capital, relational capital, and structural capital (Ting and Lean, 2009).

2.2 Rate of Growth of Intellectual Capital (ROGIC)

Rate of growth of intellectual capital (ROGIC) which states the average growth of intellectual capital. Rate of growth of intellectual capital (ROGIC) is the growth rate of VACA, VAHU and STVA from year to year (Ulum, 2007), ROGIC which states the average of the difference in intellectual capital growth is also included in this study. As Ulum (2007) said, companies that have a higher IC (VAIC) will tend to have better future performance, so logically, the average growth of ICs will also have a positive relationship with future financial performance.

2.3 Financial Performance

Performance can be interpreted as the achievements of the company in a certain period that reflects the level of health of a company (Sukhemi, 2007). Financial performance is the determination of certain measures that can measure the success of a company in generating profits. The company's financial performance is the result of many individual decisions that are made continuously by management (Sucipto, 2003).

Financial performance assessments can use certain measurements or benchmarks. The commonly used measure is the ratio or index that links two financial data. Types of comparison of past, current and future ratios for the same company. Financial ratios become the most commonly used data analysis tool in the financial world. This ratio connects various estimates to the financial statements so that they can present their financial condition and results of operations. Financial analysis is a tool for understanding financial statements.

2.4 Return on Assets (ROA)

According to Brigham and Houston (2001), returns on total assets (ROA) are calculated by comparing net income available to ordinary shareholders with total assets. The greater the value of ROA, the better the company's performance shows, because the greater the rate of return on investment. Positive ROA shows that the total assets used for the company's operations are able to provide profits for the company. Conversely, if a negative ROA shows that the total assets used do not provide benefits.

2.5 Asset Turn Over (ATO)

ATO is the ratio of total income to the book value of total assets (Firer and William, 2003). The faster the company's assets spin the greater the company's revenue. In other words, this ratio shows how efficiently a company can use its assets to generate sales. The more efficient a company is in using its assets to earn income, the better profit it will receive, and vice versa, the inefficiency of a company in using its assets will only add to the company's burden in the form of investment that does not bring profit.

RESEARCH METHODS

3.1 Research Place and Time

This research was conducted at the Financial Sector Companies Sub Sector Financing Institutions listed on the Indonesia Stock Exchange (IDX) which is located at Jl. Ir. H. Juanda Baru No. A5 - A6 Medan (IDX Medan Representative). This research was conducted in July 2019 until October 2019.

3.2 Types of Research

This type of research in this research is quantitative research. Referred to as quantitative research methods because in analyzing data using numerical formulas or mathematical models.

3.3 Population and Sample

The population in this study is the Financial Sector Companies that are listed on the Indonesia Stock Exchange based on those contained in the Indonesia Stock Exchange (IDX) for the period 2014 to 2018, amounting to 16 companies.

The sampling technique used was a census study. According to Sugiyono (2012), "census studies are sample collection techniques when all members of the population are used as samples, this is often done when the population is relatively small, ie less than 30 people, or research that wants to make generalizations with very small errors, where all members of the population are sampled ". So the sample taken is not based on random, but with a specific purpose.

From the sampling process, the population consisted of 16 companies. The sample population is a company engaged in the financial sector sub-sector of financial institutions and has never been delisted listed on the Indonesia Stock Exchange in 2014-2018, the company has complete financial statement data after being audited during the 2014-2018 period, and accordingly with the variables studied. So, the sample in this study amounted to 13 companies.

3.4 Data Analysis Methods

The data analysis method used in this study is quantitative. The quantitative approach is a decision model that uses numbers. Numbers have an important role in making, using and solving quantitative models. With this approach it is possible to be able to disclose and provide a picture as a fact that occurs about the influence of intellectual capital and the rate of growth of intellectual capital on financial performance. Quantitative data analysis uses panel data multiple linear regression techniques.

RESULT

Hypothesis Testing

Hypothesis testing aims to determine intellectual capital and rate of growth of intellectual capital directly affect the dependent variable.

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Partial hypothesis testing can be seen from the following Table 1:

Model 1: $Y_1 = a + bX_1 + bX_2 + e$

Table 1. Regression t Test Results Y_1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: Y_1				
Method: Panel EGLS (Cross-section weights)				
Date: 10/06/19 Time: 21:54				
Sample: 2015 2018				
Periods included: 4				
Cross-sections included: 13				
Total panel (balanced) observations: 52				
Linear estimation after one-step weighting matrix				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.168413	0.007001	24.05585	0.0000
X_1	0.080334	0.003815	21.05598	0.0000
X_2	0.002293	0.009876	0.232177	0.8177
	Effects Specification			
Cross-section fixed (dummy variables)				
	Weighted Statistics			
R-squared	0.971058	Mean dependent var		0.134861
Adjusted R-squared	0.960106	S.D. dependent var		0.184339
S.E. of regression	0.011127	Sum squared resid		0.004581
F-statistic	88.67156	Durbin-Watson stat		1.638055
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.885978	Mean dependent var		0.034907
Sum squared resid	0.006072	Durbin-Watson stat		1.627355

Source: Data Processed, 2019

The test results with the Model 1 panel data regression analysis above show that:

1. Intellectual Capital on ROA

The value of the intellectual capital variable coefficient is 0.080334 which has a positive value, with a calculated t value (21.05598) > t table (1.677) and a probability of 0.0000 < 0.10. Thus, it was concluded that intellectual capital had a positive and significant effect on ROA. If X_1 increases 1, Y_1 will increase significantly by 0.08% and vice versa.

2. Rate of Growth Intellectual Capital (ROGIC) on ROA

The coefficient of the variable rate of growth intellectual capital (ROGIC) is 0.002293 which is positive, with a calculated t value (0.232177) < t table (1.677) and probability (0.8177) > α (0.10). Thus, it was concluded that the rate of growth intellectual capital (ROGIC) had a positive but not significant effect on ROA.

Model 2 : Y2 = a + bX1 + bX2 + e

Table 2. Regression t Test Results Y_2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: Y_2				
Method: Panel EGLS (Cross-section weights)				
Date: 10/06/19 Time: 21:57				
Sample: 2015 2018				
Periods included: 4				
Cross-sections included: 13				
Total panel (balanced) observations: 52				
Linear estimation after one-step weighting matrix				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.432858	0.005441	79.55012	0.0000
X_1	0.006112	0.001670	3.659814	0.0008
X_2	0.336591	0.007251	46.41847	0.0000
	Effects Specification			
Cross-section fixed (dummy variables)				
	Weighted Statistics			
R-squared	0.997084	Mean dependent var		0.557872
Adjusted R-squared	0.995981	S.D. dependent var		0.419743
S.E. of regression	0.008249	Sum squared resid		0.002518
F-statistic	903.6752	Durbin-Watson stat		2.470851
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.988177	Mean dependent var		0.198906
Sum squared resid	0.002646	Durbin-Watson stat		3.201727

Source: Data Processed, 2019

The test results with the Model 2 panel data regression analysis above show that:

1. Intellectual Capital to ATO

The value of the intellectual capital variable coefficient is 0.006112 which is positive, with t arithmetic (3.659814) > t table (1.677) and probability (0.0008) < α (0.10). Thus, it was concluded that intellectual capital had a positive and significant effect on ATO. If X_1 increases 1, Y_2 will increase significantly by 0.006% and vice versa.

2. Rate of Growth Intellectual Capital (ROGIC) to ATO

The coefficient of rate of growth intellectual capital (ROGIC) value is 0.336591 which is positive, with t arithmetic (46.41847) > t table (1.677) and probability (0.0000) < α (0.10). Thus, it was concluded that the rate of growth intellectual capital (ROGIC) had a positive and significant effect on ATO. If X_2 increases by 1, Y_2 will increase significantly by 0.33%, and vice versa.

Effect of Intellectual Capital and Rate of Growth of Intellectual Capital (ROGIC) on ROA

The results of this study indicate, simultaneously intellectual capital and rate of growth of intellectual capital have a significant effect on financial performance (ROA). This can be seen from the calculated F value (88.67156) > F table (2,414) and probability value (0.0000) < α (0.10).

Effect of Intellectual Capital and Rate of Growth of Intellectual Capital (ROGIC) on ATO

The results of this study indicate, simultaneously Intellectual capital and the rate of growth of intellectual capital have a significant effect on financial performance (ATO). This can be seen from the calculated F value (903.6752) > F table (2,414) and Probability value (0.0000) < α (0.10).

CONCLUSION AND SUGGESTION
CONCLUSION

The researcher concludes the results of this study as follows:

a)Intellectual capital has a positive and significant effect on return on assets (ROA).
b)Intellectual capital has a positive and significant effect on assets turnover (ATO).
c)Rate of growth of intellectual capital (ROGIC) has positive and not significant effect on return on assets (ROA).
d)Rate of growth of intellectual capital (ROGIC) has positive and significant effect on assets turnover (ATO).
e)Simultaneously, intellectual capital and rate of growth of intellectual capital (ROGIC) have significant and significant effect on return on assets (ROA).
f)Simultaneously, intellectual capital and rate of growth of intellectual capital (ROGIC) have significant and significant influence on assets turnover (ATO).

SUGGESTION

Based on the conclusions and limitations of the research described above, the researcher provides the following suggestions:

a)For managers, especially in financial sector sub-sector companies need to know the importance of knowledge about intellectual capital and the Rate of Growth of Intellectual Capital that can affect the company's ability to compete in the global market.
b)For further research it is recommended to increase the number of samples and the study period so that the results obtained are better
c)For the University, the results of this study are expected to contribute to the development of knowledge and learning to students.

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