

## **INTELLECTUAL CAPITAL, COMPANY'S PERFORMANCE AND GROWTH: AN EMPIRICAL STUDY AT BANKING COMPANIES IN INDONESIA**

**Eko Suyono  
Popy Dian Indira  
Rina Lesmanawati**

Faculty of Economics and Business, Jenderal Soedirman University  
Prof. dr. HR. Boenjamin Street 708, Purwokerto 53122, Central Java, Indonesia  
Email: ekyo75@yahoo.com

### **ABSTRACT**

*In a very competitive business environment, the competitive advantage would be in the company favor if It can manage both capitals, i.e., physical and intellectual capitals. The objectives of this research are to examine the influence of intellectual capital on company's performance and growth. This research used the banking companies listed on Indonesia Stock Exchange for period 2008-2012. Applying the purposive sampling method, the total samples consists of 8 companies. By simple linier regression analysis, the result show that the intellectual capital has positive and significant influence on the company's performance and growth.*

**Keywords:** *Intellectual Capital, Company Performance, Growth, Banking Companies*

### **INTRODUCTION**

#### **Background of the Study**

A very strong competitive business environment requires the company to manage well both the tangible and intangible assets. One factor used in the assessment and measurement of intangible assets is the intellectual capital that has been the focus of attention in various fields, such as management, information technology, sociology, and accounting (Petty and Guthrie 2000; Sullivan and Sullivan 2000). Historically, the distinction between intangible assets and intellectual capital (IC) is not clear because IC is connected as goodwill when they are different (Accounting Principles Board, 1970; Accounting Standards Board, 1997; Hong, 2007; The Indonesia Institute of Accountants, 2012; Hong). According to the facts, IAS (International Accounting Standard) 38 on Intangible Assets prohibit the recognition of brand that created internally as publishing titles and customer lists (International Accounting Standards Board, 2004). Intangible assets may include goodwill, copyright, innovation, and much more. Intellectual capital is the capital of science, innovation, and enterprise skills possessed. Intellectual capital (IC) is a unique resource that not all companies can emulate (Pramelasari, 2010). Therefore intellectual capital provides the value added for the company.

The difficulty of directly measuring the intellectual capital, then Pulic (1998) proposed an indirect measurement of IC with a measure to assess the efficiency of value added as a result of the company's intellectual ability (Value Added Intellectual Coefficient-VAIC). The concept of added value is the overall objective indicators of business success and demonstrates the ability of firms to create value by including the investment of resources, including wages and interest rates for financial assets, dividends, taxes and the cost of research and development.

The main components of VAIC that developed by Pulic (1998) can be seen from the company's resources, the physical capital (VACA - value added capital employed), human capital (VAHU - value added human capital), and structural capital (STVA - structural capital value added). VAIC is considered to meet the basic needs of the contemporary economy "measurement system" that shows the true value and performance of a company. Creation of value added to the company enables benchmarking and the company's ability to predict the future.

This study measures the effect of intellectual capital (using VAIC) to the financial performance of companies in the banking sector in Indonesia. The selection of the banking sector as a sample refers to researches of Kamath (2007); Mavridis (2004); Firer and Williams (2003); and Ulum (2007). The banking sector is chosen because according to Firer and Williams (2003), banking industry is one of the most intensive sectors of its IC. In addition, from an intellectual aspect, the overall banking sector employees are more homogeneous compared to other economic sectors (Kubo and Saka, 2002). VAIC model selection as a proxy for IC refers to research by Firer and Williams (2003); Chen et al. (2005); and Tan et al. (2007). We use profitability ROA, income to total assets ratio (ATO), and growth revenue (GR) as proxies for financial performance.

The selection of performance indicators refers to the study by Chen et al. (2005) and Firer and Williams (2003). Research on intellectual capital has been committed by several researches including Kuryanto and Safrudin (2008), that intellectual capital has a positive influence on company performance. On the other hand according to Ulum (2007), intellectual capital (VAIC) affects the company's financial performance. According to Appuhami (2007) there is also a positive relationship between intellectual capitals and financial performance. Based on the research performed, intellectual capital research in Indonesia is showing inconsistent results. Therefore, this study tries to reexamine The Influence of Intellectual Capital On Company's Performance and Growth.

### Problem Statement

1. Does intellectual capital have influence on company performance?
2. Does intellectual capital have influence on company growth?

## LITERAURE REVIEW

Stakeholder's theory explains the company relationships with all stakeholders. Based on stakeholder theory, organizational management is expected to perform activities that are considered important by stakeholders and report back on these activities on stakeholders. In the context to explain the relationship VAIC with financial performance, growth and company market value, stakeholder theory is seen from these two fields, both the field of ethics (morals) and managerial. Field of ethics argues that all stakeholders have the right to be treated fairly by the organization, and managers must manage the organization to benefit all stakeholders (Deegan, 2004). Managerial field of stakeholder theory argues that stakeholder power to influence corporate management should be viewed as a function of the level of stakeholder control over the resources needed by organization (Watts and Zimmerman, 1986).

Resource-Based Theory (RBT) is a growing idea in the theory of strategic management and competitive advantage of companies that believe the company will get the excellence achievement if it has an excellent resource. In the context of intellectual capital is to clarify the effect of financial performance, growth and market value of the company, Wernerfelt (1984) explains that in view of Resource-Based Theory companies gain competitive advantage and financial performance by having, controlling and using the important of strategic assets.

The value of an enterprise is made of physical assets, various financial assets and, finally, intangible assets, i.e., intellectual capital (IC). The term intellectual capital conventionally refers to the difference in value between tangible assets (physical and financial) and market value (Paolo, 2002). Measuring the real value and the total performance of intellectual capital's components is essential for any corporate head who knows how high the stakes have become for corporate survival in the knowledge and information (Sveiby, 1997). Intellectual capital is normally classified as follow:

#### a. Human Capital

Human capital is an organization's combined human capability for solving business problems (Maddocks & Beaney, 2002). Human capital is inherent in people and cannot be owned by an organization. Therefore, human capital can leave an organization when people leave.

b. Structural Capital

Structural capital includes such traditional things as buildings, hardware, software, processes, patents, and trademarks. Because of its diverse components, structural capital can be classified further into organization, process and innovation capital (Maddocks & Beaney, 2002).

c. Relational Capital

It consists of more identifiable items such as trademarks, licenses, franchises, and less definable such as customer interactions and relationships. The notion of relational capital is separate from human and structural capital indicates its central importance to an organization's worth (Skyrme, 1998).

### Value Added Intellectual Coefficient (VAIC)

Value Added Intellectual Coefficient (VAIC) is a method developed by Pulic (1998, 1999, 2000) to present information on the value creation efficiency of tangible assets and intangible assets owned by the company. VAIC is a tool to measure the performance of company intellectual capital. Calculation was started with the company's ability to create value added (VA). VA is the most objective indicator to assess the success of the business and demonstrate the ability of firms to create value (value creation). The process of value creation is influenced by the efficiency of Human Capital (HC), Capital Employed (CE), and Structural Capital (SC).

a. Value added of Capital Employed (VACA)

Value Added of Capital Employed (VACA) is an indicator for the VA created by one unit of physical capital. Pulic (1998) assumes that if one unit of the CE (capital employed) produces a greater return than other firms, it means the company better utilize its CE. VACA is a form of the company's ability to manage its resources in the form of capital asset.

b. Value Added Human Capital (VAHU)

Value Added Human Capital (VAHU) shows how much the VA can be generated by the funds expended for labor. The relationship between VA with HC indicates the HC ability to create value in company.

c. Structural Capital Value Added (STVA)

Structural Capital Value Added (STVA) shows the contribution structural capital (SC) in value creation. STVA SC measures the amount needed to produce 1 rupiah from VA and SC is an indication of how success in value creation.

### Growth in Revenue (GR)

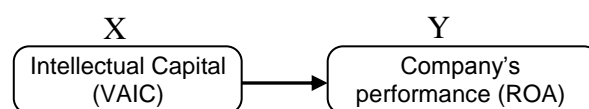
Increased revenue is usually the signal for the company to grow and develop (Chen et al., 2000). The better the companies can manage and exploit intellectual capital will be provided by more value and competitive advantage and the earnings will also increase.

### Return on Asset (ROA)

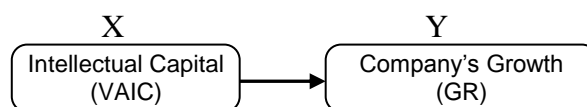
Return on assets (ROA) reflects the company business benefits and efficiency in the utilization of total assets (Chen et al, 2005). This ratio represents the ratio of profitability, which measures the ability of the company in generating profits with total assets of the company.

### Research Model

Theory that explains the relationship between the performance of IC (VAIC) with company's financial performance and company growth are the stakeholder theory and resource-based theory. In the context to explain the relationship VAIC with financial performance and growth, stakeholder theory is seen from these two fields, both the field of ethics (morals) and managerial. In the context of intellectual capital is to clarify the effect of financial performance and growth, Wernerfelt (1984) explains that in view of Resource-Based Theory companies gain competitive advantage and financial performance by having, control and use the important of strategic assets. Strategic assets include tangible assets and intangible assets.



Picture 1  
Model Hipotesis 1



Picture 2  
Model Hipotesis 2

## Hypotheses

### The Effect of IC (VAIC) to The Company's Financial Performance

According to Solikhah (2010), company's financial performance is an appearance or the state as a whole the company's financial during the period / specified period of time. In addition, if IC is a measurable resource for competitive advantages increase, then IC will contribute to the company's financial performance (Harrison and Sullivan, 2000; Chen et al., 2005; and Abdolmohammadi, 2005). While from the standpoint of Stakeholder Theory states that corporate managers will try to get value added which would be distributed back to all stakeholders.

Therefore, the stakeholders would serve as a control in the context of resource use and management of company including intellectual resources (Solikhah, 2010). However, IC is believed to have an important role in increasing corporate value and financial performance. Firer and Williams (2003), Chen et al. (2005) and Tan et al. (2007) in Ulum (2007) have shown that the IC (VAIC™) has a positive effect on company financial performance. According to Ulum (2007) by using Public VAIC (1998; 1999; 2000) formulation as a measure of intellectual ability of company (corporate intellectual ability), then proposed a first hypothesis as follows:

H1: Intellectual capital has a positive significant effect on the company financial performance.

### The Effect of The Intellectual Capital to The Company's Growth

Kallapur and Trombley, 2001 in Solikhah, 2010 states that company growth is the company's ability to increase the size. Under Stakeholder Theory and Resource-Based Theory, success and sustainability of the company growth will be depended on the development of new resources the same as the old exploit the resources (Wernerfelt, 1984). Improvement of Growth in Revenue (GR) showed an increase in corporate earnings, which is caused by the transformation and the capitalization of a good use of intellectual capital, so it will have a positive impact on firm performance (Dewi, 2011).

Thus, the utilization of intellectual resources effectively and efficiently will encourage skills development for the company. The result of Chen et al (2005) research provides empirical evidence that the intellectual capital (VAIC) affects on growth (in this case measured by sales growth). Although the study of growth sales is one indicator of corporate performance (Solikhah, 2010). Furthermore the second hypothesis in this study is formulated as follows:

H2: Intellectual capital has a positive significant effect to the company's growth.

## RESEARCH METHOD

### Population and Sample

Population of this study is banking companies listed in Indonesia Stock Exchange (IDX) during period 2008-2012. This study uses purposive sampling method, with the criteria as follow :

- Companies published annual report continuously during period 2008-2012,
- Companies have financial statement year ended on 31 December,
- Annual report could be accessed via company's website,
- Company has a data related to variables in this research.

The data was collected from the annual report that could be downloaded directly from IDX (www.idx.co.id), or the company's website.

### Operational of variables

In this study there were independent variable and dependent variable. The following were the schematic variables uses in this study.

### Independent Variable

Independent variable in this study is intellectual capital. According to Pramelasari (2010), IC performance is measured by value added created by the physical capital (VACA), human capital (VAHU), and structural capital (STVA). The incorporation of the three measurements value added above is VAIC. Stages of VAIC calculation are :

- a. Calculating the value added (VA)

$$VA = \text{output} - \text{input}$$

- b. Calculating the value added capital employed (VACA)

$$VACA = \frac{VA}{CE}$$

Description:

VACA = Value added capital employed

VA = Value added

CE = Capital employed: available funds (equity, net income)

- c. Calculating the value added human capital (VAHU)

$$VAHU = \frac{VA}{HC}$$

Description:

VAHU = Value added human capital

VA = Value added

CE = Human capital: labor expense

- d. Calculating the structural capital value added (STVA)

$$STVA = \frac{SC}{VA}$$

Description:

STVA = Structural capital value added

SC = Structural capital (VA-HC)

VS = Value added

- e. Calculating Value added intellectual coefficient (VAIC)

Value added intellectual coefficient (VAIC) was a tool to measure the performance of company's intellectual capital and calculating capabilities of the company's intellectual capital ratios. The formula obtained from previous calculations was:

$$VAIC = VACA + VAHU + STVA$$

### Dependent Variable

The dependent variables are growth and company performance.

- a. Earnings growth was the percentage change of increases in corporate profits.

GR measured the changes corporate earnings. Increasing revenue was usually the signal for the company to grow and develop (Chen et al., 2000).

$$GR = \frac{\text{Net Salest} - \text{Net Salest} - 1}{\text{Net Sales t} - 1}$$

- b. While the company performance was by using Return on Assets (ROA). Return on assets was one of the financial ratios to measure profitability of the company's assets.

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

### Data Analysis Techniques

#### Classical Assumption Test

##### Normality Test

Normality test aims to determine whether the observed data are normally distributed or not. To test this assumption, *Kolmogorov-Smirnov* is applied. If the value of the asymptotic significance  $> 0,05$ , the data are distributed normally (Ghozali, 2006). with criteria of:

- If *asymptotic sig.* value  $> 0,05$ , the data are distributed normally
- If *asymptotic sig.* value  $< 0,05$ , the data are not distributed normally.

#### Simple Linier Regression Analysis

Simple linear regression analysis is used for testing the first and second hypothesis. Thus, regression equations model to test first and second hypothesis could be inferred:

##### Model 1

$$CP(ROA) = \alpha + \beta_1 IC (VAIC) + e$$

Description:

CP = Company's Performance

$\alpha$  = Constanta

$B$  = Coefficient regression

IC = Intellectual Capital

$E$  = Error

##### Model 2

$$CG(GR) = \alpha + \beta_2 IC (VAIC) + e$$

Description:

CP = Company's Growth

$\alpha$  = Constanta

$\beta$  = Coefficient regression

IC = Intellectual Capital

$E$  = Error

#### Hypothesis Testing

There are two phases in testing hypotheses in this study:

##### Partially Testing

T test basically indicates how strong influence one independent variable partially in explaining variation of dependent variable. The testing uses the t test one tailed with the steps as follows:

The first hypothesis testing:

H0:  $\beta_1 \leq 0$  = Intellectual Capital does not give significant positive effects on company's growth.

Ha:  $\beta_1 > 0$  = Intellectual Capital gives significant positive effects on company's growth.

Where:

- H0 is accepted if :  $t \text{ calculate} \geq - t \text{ table}$  or  $t \text{ calculate} \leq t \text{ table}$
- H0 is rejected if :  $t \text{ calculate} < - t \text{ table}$  or  $t \text{ calculate} > t \text{ table}$

The Second Hypothesis Testing:

H0:  $\beta_1 \leq 0$  = Intellectual Capital does not give significant positive effects on company's performance.

Ha:  $\beta_1 \leq 0$  = Intellectual Capital gives significant positive effects on company's performance..

Where:

- H0 is accepted if:  $t \text{ value} \geq - t \text{ table}$  or  $t \text{ value} \leq t \text{ table}$
- H0 is rejected if:  $t \text{ value} < - t \text{ table}$  or  $t \text{ value} > t \text{ table}$

### The Coefficient of Determination

From the SPSS output, the regression analysis result will obtain coefficient of determination ( $r^2$ ). The coefficient of determination indicated how large the independent variables affect the dependent variable.

## RESULT AND DISCUSSION

### General Overview

#### Population and Sample

The populations of this research are banking companies listed on Indonesia Stock Exchange in the period 2008 until 2012. Based on those criterias, the number of banks included in the population is 36 companies. The number of banks that finally made as the final sample based on criterias consist of 8 companies. Detail on the selection process is presented below:

Table 1.

Sample Selection with Purposive Sampling

Banking companies listed on Indonesia stock Exchange in period 2008-2012	:	36
Banking companies did not published annual report continuously during 2008-2012	:	(20)
Banking companies has not a data related to variables in this research	:	8
Total of banking companies sample	:	8

List of banks including in the sample is shown on table 2:

Table 2.

List of banking companies

No	The Companies	Code
1.	Bank Central Asia Tbk	BBCA
2.	Bank Negara Indonesia Tbk	BBNI
3.	Bank Rakyat Indonesia (Persero) Tbk	BBRI
4.	Bank Tabungan Negara (Persero) Tbk	BBTN
5.	Bank Mandiri (Persero) Tbk	BMRI
6.	Bank CIMB Niaga Tbk Tbk	BNGA
7.	Bank Tabungan Pensiunan Nasional Tbk	BTPN
8.	Bank DKI	BDKI

Statistical Descriptive

Table 3.

Descriptive Statistic

	N	Minimum	Maximum	Mean	Std.Deviation
VAIC	40	.00	2.68	.3425	.55106
ROA	40	.00	.90	.2180	.20342
GROTH	40	.00	.34	.0920	.07453
Valid N (Listwise)	40				

The dependent variables are Growth (GR) and Performance (ROA). Dependent variable of return on assets (ROA) has an average value (mean) of 0.2180 with a deviation standard of 0.20342 and a minimum value of 0.00 and a maximum value of 0.90. Dependent variable of growth (GR) has an average value (mean) of 0.0920 with a deviation standard of 0.07453 and a minimum value of 0.00 and a maximum value of 0.34. It means that the sample has big range from the maximum to minimum in numbers of performance and growth, so samples represent various companies' performance and growth.

The independent variable in this study is intellectual capital. IC performance measured by value added intellectual coefficient (VAIC). Independent variable of value added intellectual coefficient (VAIC) has an average value (mean) of 0.3425 with a deviation standard of 0.55106 and a minimum value of 0.00 and a maximum value of 2.68. It means that the sample has big range from the maximum to minimum in number of intellectual capital so samples represent various companies' intellectual capital.

## Data Analysis and Discussion

### Classical Assumption Test

#### Normality Test

Normality test is done by *Kolmogrov-Smirnov* test, data expressed by the normal distribution if test results have *Asymptotic significant* value greater than the value of alpha 0.05.

#### Model 1

Table 4.  
Normality Test  
One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
N		40
Normal Parameters a.b.	Mean	.0000000
	Std Deviation	.98709623
	Absolute	.151
	Positive	.151
	Negative	-.136
Kolmogorov-Smirnov Z		.958.318
Asymp.Si. g(2tailed)		
a. Test distribution is Normal		
b. Calculated from data.		

Based on the test result on table 4, it is obtained that *Asymptotic significant* value 0.318. This value is greater than value of alpha ( $\alpha$ ) 0.05, so that the data revealed a normal distribution.

#### Model 2

Table 5.  
Normality Test

One-Sample Kolmogorov-Smirnov Test

		Standardized Residual
N		40
Normal Parameters a.b.	Mean	.0000000
	Std Deviation	.98709623
	Absolute	.100
	Positive	.098
	Negative	-.100
Kolmogorov-Smirnov Z		.635
Asymp.Si. g(2tailed)		.818
a. Test distribution is Normal		
b. Calculated from data.		



Based on the test result on table 5, it is obtained that *Asymptotic significant* value 0.815. This value is greater than value of alpha ( $\alpha$ ) 0.05, so that the data revealed a normal distribution.

### Simple Linier Regression Analysis

From the estimation results of the research model used, it is obtained simple linear regression calculation with the help of SPSS 16.0 software for windows which can be seen in the following table:

#### 1) Model 1

Table 6.  
Simple Linier Regression Test

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std Error	Beta		
1 (Constant)	.159	.034		4.669	.000
VAIC	.172	.053	.466	3.251	.002

Dependent Variable: ROA

From the table 6, it can be formed the regression equation as follows:

$$CP(ROA) = 0.159 + 0.172 IC (VAIC)$$

In statistical regression equations above, it can be interpreted as follows:

- Constanta value of 0.159 shows that value added of intellectual coefficient (VAIC) is constant or has value of zero so the Return On Asset (ROA) will be 0.159.
- Value added of intellectual coefficient (VAIC) shows positive value 0.172. It means that other variables are constant or have value of zero so when value added of intellectual coefficient (VAIC) has increased by one point. Therefore, the return on asset (ROA) will be having an increase of 0.172.

#### 2) Model 2

Table 7.  
Simple Linier Regression Test

Coefficients <sup>a</sup>					
Model	Unstandardized Coefficients		Std Error of the Estimate	t	Sig.
	B	Std Error	Beta		
1 (Constant)	.159	.034		4.669	.000
VAIC	.172	.053	.466	3.251	.002

a. Dependent Variable: ROA

From the table 7, it can be formed regression equation as follows:

$$CG(GR) = 0.058 + 0.100 IC (VAIC)$$

In statistical regression, the equations above can be interpreted as follows:

- Constanta value of 0.058 shows that value added intellectual coefficient (VAIC) is constant or have value of zero so the Growth Revenue (GR) will be 0.100.
- Value added intellectual coefficient (VAIC) shows positive value 0.100. It means that other variables are constant or have value of zero so when value added intellectual coefficient (VAIC) has increased by one point. Therefore, the Growth Revenue (GR) will be having an increase of 0.100.

## 3. Hypothesis Testing

## a. First hypothesis testing

## 1) T Test

Table 8.  
T test

## Coefficients

Model	Unstandardized Coefficients		Std Error of the Estimate	t	Sig.
	B	Std Error	Beta		
1 (Constant)	0.058	.010		6.067	.000
VAIC	.100	.015	.0737	6.718	.000

a. Dependent Variable: GROWTH

The data are expressed by alpha ( $\alpha$ ) 0.05 and *degree of freedom* (n-k). According to table 6.1, the result shows positive and significant effect of VAIC as the significance value is less than  $\alpha$  0.05. Hence, the first hypothesis which states that value added intellectual coefficient (intellectual capital) has positive significant influence on Return on asset (Company's Performance) is accepted.

## 2) Analysis of Determinant Coefficient

Table 9.  
Determinant Coefficient Model 1

Model Summary				
Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.466 <sup>a</sup>	.218	.197	.18229

Coefficient of determination shows the ability of the model in the series of variable changes in the next variation. From the result of regression analysis, coefficient of determination is 0.218. It means that return on assets (ROA) as dependent variable can be explained by value added intellectual coefficient (VAIC) as independent variable for 21,8%. While the remaining 78.2% is explained by other variables not examined.

## b. Second hypothesis testing

## 1) T Test

Table 10.  
T Test

## Coefficients

Model	R Square	Adjusted R Square	Std Error of the Estimate	t	Sig.
	B	Std Error	Beta		
1 (Constant)	0.058	.010		6.067	.000
VAIC	.100	.015	.0737	6.718	.000

b. Dependent Variable: GROWTH

The data are expressed by alpha ( $\alpha$ ) 0.05 and *degree of freedom* (n-k). According to table 6.2, the result shows positive and significance effect of VAIC as the significance value that is less than  $\alpha$  0,05. Hence, the second hypothesis which states that value added intellectual coefficient (intellectual capital) has positive significant influence on Growth revenue (Company's Growth) is accepted.

## 2) Analysis of Determinant Coefficient

Table 11.  
Determinant Coefficient Model 2

Model Summary				
Model	R	R Square	Adjusted R Square	Std Error of the Estimate
1	.737 <sup>a</sup>	.543	.531	.05105

Coefficient of determination shows the ability of the model in the series of variable changes in the next variation. From the result of regression analysis, coefficient of determination is 0.543. It means that growth revenue (GR) as dependent variable can be explained by value added of intellectual coefficient (VAIC) as independent variable for 54.3%. While, the remaining 45.7% is explained by other variables not examined.

### Discussion

The objective of this research is to investigate and obtain evidences whether company's performance and growth in banking companies are affected by intellectual capital. First hypothesis testing shows that intellectual capital has positive and significant effect on company's performance. This result is in accordance with the concept of stakeholder theory which states that corporate managers will try to get value added which would be distributed back to all stakeholders. Therefore, the stakeholders would serve as a control in the context of resource use and management of company including intellectual resources (Solikhah, 2010). However, IC is believed to have an important role in increasing corporate value and financial performance, and also with resource based on theory which states that a growing idea in the theory of strategic management and competitive advantage of companies that believe the company will achieve the excellence if it has an excellent resource. In the context of intellectual capital it is to clarify the effect of financial performance. Wernerfelt (1984) explains that in view of Resource-Based Theory companies gain competitive advantage and financial performance by having, controlling and using the important of strategic assets. Strategic assets include tangible assets and intangible assets.

This result is also in line with several previous researches. Research on intellectual capital has been conducted by Kuryanto and Safrudin (2008). They stated that intellectual capital gives positive influence on company performance. According to Ulum (2007), intellectual capital (VAIC) affects the company's financial performance. Appuhami (2007) found a positive relationship between intellectual capital and financial performance. Firer and Williams (2003), Chen et al. (2005) and Tan et al. (2007) (in Ulum, 2007) showed that the IC (VAIC) has positive effect on company financial performance. According to Ulum (2007) by using Public VAIC (1998; 1999; 2000), the formulation is measured by intellectual ability of company (corporate intellectual ability). Thus, to increase the financial performance, company should enhance the Intellectual capital.

Second hypothesis testing shows that intellectual capital has positive and significant effect on company's growth (GR). It means company's growth is positively influencing on company's intellectual capital (VA, VACA, VAHU, STVA, VAIC). This research shows that the empirical evidence of positive influence of capital intellectual on growth is in line with Stakeholder theory and Resource-Based theory, which states that success and sustainability of the company growth will depend on the development of new resources the same as the old exploit the resources (Wernerfelt, 1984, in Solikhah, 2010).

The second hypothesis shows that the higher company's intellectual capital value, the higher company growth. Company that is able to manage intellectual resources will create value added, so the company is able to grow and to survive. By testing in greater detail, Chen et al. (2005) found that VAHU and VACA indicators have positive effect on sales growth. The result conducted by Chen et.al. (2005) provides empirical evidence that intellectual capital (VAIC) has positive effect on growth (measured by sales growth). Kallapur and Trombley, 2001 (in Solikhah, 2010) state that company growth is the company's ability to increase its size. Improving Growth in Revenue (GR) is showing an increase in corporate earnings, which is caused by the transformation and the capitalization of the good use as intellectual capital, so it gives positive

effect on firm performance (Dewi, 2011). Thus, to increase the growth revenue, company should enhance the Intellectual capital.

### CONCLUSIONS

Based on the results of the analysis and discussion, the conclusions are as follows:

1. Intellectual capital (VAIC) has positive significant influence on company's performance (Return on Asset).
2. Intellectual capital (VAIC) has positive significant influence on company's growth (GR).

This research gives implications for some aspects:

1. Companies are expected to enhance the intellectual capital in order to create better company's performance, because the intellectual capital has important role to influence the company's performance to be more able to compete in globalization era. It could be done by training of human resources, capital structure, gain competitive advantage and financial performance by having, controlling and using the important of strategic assets include tangible assets and intangible assets, etc.
2. Companies are expected to enhance the intellectual capital in order to create better company's growth, because the intellectual capital has important role to influence the company's growth to be more able to increases corporate profits that is usually the signal for the company to grow and develop. It could be done by the utilization of intellectual resources effectively and efficiently that will encourage skills development for the company.

This research is expected to give contribution in company's growth and performance. However, this research has some limitations, first, the small number of samples, and second, This study only measures the influence of intellectual capital on company's performance and growth that proxied by ROA and GR. For the next researches the proxy could be added, for instance by : market book value (MBV), earnings per share (EPS), return on equity (ROE), and annual stock return (ASR) to determine and compare the company's performance.

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