

Conference Paper

Intellectual Capital Influence on Financial Performance and Company Value

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Abstract

The purpose of this study is to examine the influence of intellectual capital (human capital, structural capital, capital employed) on financial performance and corporate value. The population in this study is a banking company listed on the Indonesia Stock Exchange during the period 2011-2015. The sample is taken by purposive sampling technique that is based on certain criteria. Data analysis in this research use multiple linear regression analysis. The result of hypothesis test shows that human capital and capital employed have positive effect to financial performance, while structural capital does not have positive influence to financial performance. Human capital and capital employed also positively affect the value of the company, while structural capital does not have a positive influence on the value of the company. Thus, companies should pay more attention to the existence of intangible assets that have the potential to improve the financial performance and value of the company. Companies must improve human capital by engaging in budgeting for trainings to improving and developing the employee knowledge. The company must also utilize all its assets so as to maximize the company's financial performance and value.

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1. Introduction

In order for companies to continue to survive in modern business competition, companies must quickly change their traditional strategies from businesses that are only based on labor-based business towards knowledge based business, so that the main characteristics of the company become a science-based company. knowledge. Along with economic changes that have economic characteristics based on science with the application of knowledge management, the prosperity of a company will depend on a creation of transformation and capitalization of knowledge itself (Sawarjuwono, 2003).

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According to Pramelasari (2010: 18), labor-based business holds the principle of labor-intensive companies, in the sense that more and more employees are owned by the company, it will increase the productivity of the company so that the company can develop. Meanwhile, companies that apply knowledge based business will create a way to manage knowledge (knowledge management) as a means of earning corporate income.

Knowledge-based theory considers knowledge as a very important resource for companies, because knowledge is an asset that if managed properly will improve company performance [11]. Pulic (1998) argues that the main goal of a knowledge-based economy is to create added value. To be able to create added value, it requires an appropriate measure of physical capital in the form of financial funds and intellectual potential represented by employees with all the potential and capabilities inherent in them.

Ulum (2007) also explained that with economic changes characterized by a science-based economy with the application of knowledge management, the prosperity of a company will depend on a creation of transformation and capitalization of knowledge itself.

In the context of explaining intellectual capital to the financial performance, growth and market value of the company, Wernerfelt (1984) explains that according to resource-based theory the company gains competitive advantage and good financial performance by possessing, controlling and utilizing important strategic assets.. These strategic assets include tangible assets and intangible assets. Intellectual capital is a company resource that has an important role in common with physical capital and financial capital. Therefore, intellectual capital can be used as a unique competitive strategy for business competition so that corporate value will be created. The better the company can manage and utilize its intellectual capital, it is hoped that it will create competencies that are unique to the company that are expected to be able to support the company's ability to meet customer needs.

According to Simarmata (2015), intellectual capital is a resource owned by a company, provides a competitive advantage for the company and is used to develop and implement corporate strategies so as to improve the company's performance to be better. A company is said to have a competitive advantage if it can create higher economic value than other companies in its industry.

H1a: human capital has a positive effect on financial performance

H2a: structural capital has a positive effect on financial performance

H3a: capital employed has a positive effect on financial performance

The main objective of the company is to increase the value of the company through increasing the political prosperity of the shareholders. Shareholders, creditors and managers are parties who have different interests and perspectives regarding the company [1]. The development of a company will depend on how the management's ability to process the company's resources in creating corporate value will provide a sustainable competitive advantage for the company [8].

Companies should be able to integrate competitive strategies and various resources they have in order to create competitive advantage. With competitive advantage, the value for the company will also be created [17]. The value of the company or also referred to as the company's market value is the price that the prospective buyer is willing to pay if the company is sold.

The discussion in explaining VAIC's relationship with financial performance, growth and market value of the company, stakeholder theory is seen from both fields, both in the field of ethics (moral) and managerial fields. The field of ethics argues that all stakeholders have the right to be treated fairly by the organization, and managers must manage the organization for the benefit of all stakeholders [4]. The managerial field of stakeholder theory argues that the power of stakeholders to influence corporate management must be seen as a function of the level of stakeholder control over the resources needed by the organization (Watts and Zimmerman, 1986).

In this context, stakeholders have the authority to influence management in the process of utilizing all the potential possessed by the organization. Because only with good and maximum management of all of this potential will the organization be able to create value added to then encourage financial performance and corporate value which is the orientation of stakeholders in intervening in management. Value added which is considered to have higher accuracy associated with returns that are considered as a measure for shareholders. In essence, stakeholder theory lies in what will happen when the corporation and stakeholders run their relationship.

When managers are able to manage the organization maximally, the resulting value creation will be better. Value creation is the use of all the potential of the company, both employees (human capital), physical assets (physical capital), and structural capital. Good management of all this potential will create added value for the company which can then encourage the company's financial performance for the benefit of stakeholders [15].

This stakeholder theory explains how stakeholders play a role in corporate managerial decision making. An information presented in a financial report is the basis for the actions of future stakeholders. Disclosure of intellectual capital, can be added value for stakeholders because it shows the level of efficiency in maximizing company resources. Thus, the more efficient a company is, the higher the return will be, and this will increase the company's value in the eyes of stakeholders.

H1b: human capital has a positive effect on the value of the company

H2b: structural capital has a positive effect on firm value

H3b: capital employed has a positive effect on firm value

2. Research Methods

The population in this study were all banking companies listed on the Indonesia Stock Exchange. Banking companies listed on the Indonesia Stock Exchange are grouped into one, namely the banking services sector. The population in this study were all banking companies listed on the Indonesia Stock Exchange. Banking companies listed on the Indonesia Stock Exchange are grouped into one, namely the banking services sector. Service sector companies have dominant intellectual capital and carry out operational activities with more intangible assets than physical capital.

The sample determination method used is purposive sampling method. The companies selected as samples in this study were companies that were registered in the banking sector in a row during the observation period and issued financial reports in the 2011-2015 period as many as thirty companies.

Intellectual capital is an independent variable in this study. Intellectual capital is measured by VAIC developed by Pulic (1998). VAIC calculation formulation consists of several stages including:

1. Value added (VA) is the difference between output and input. $VA = OUT - IN$

Information: Output (OUT): Total sales and other income. Input (In): Expenses and costs (other than employee expenses).

2. Value added Capital Employed (VACA) shows the value added (VA) to capital employed (CE) ratio. This ratio shows the contractions made by each unit of the CE towards the company's value added. $VACA = VA/CE$

Information: Capital Employed (CE): Available funds (equity)

3. Value Added Human Capital (VAHC) shows the contribution made by each rupiah invested in HC to the organization's value added. $VAHC = VA/HC$

Information: Human Capital (HC): Employee expenses

4. Value Added Structural Capital (VASC) measures the amount of SC needed to generate 1 rupiah from VA and is an indication of how SC is successful in value creation.

$$SC = VA - HC$$

$$VASC = SC/VA$$

Information: Structural Capital (SC): Difference between value added (VA) and human capital (HC)

5. Value Added Intellectual Coefficient (VAIC) indicates the intellectual ability of the organization. VAICTM is calculated by the formula:

$$VAIC = VACE + VAHC + VASC$$

The dependent variable in this study is as follows:

1. Financial Performance

In this study, financial performance acts as a dependent variable. Financial performance is measured using the ROA financial ratio. Return on total assets (ROA) reflects business benefits and efficiency of changes in total asset utilization [3].

$$ROA = \text{net profit} / \text{total assets}$$

2. Company Value

Company value is the dependent variable in this study which is measured by price to book value (PBV). To see the PBV value of a company is done by comparing the stock market price with the stock book price. This ratio was chosen as a measure of the value of the company because it describes the amount of premium given by the market for intellectual capital owned by the company [13]. $PBV = \text{Stock Market Prices (Current Price)} / \text{Book Value}$.

In this study, the data used is secondary data. Data is obtained from the financial statements of companies listed on the IDX and has been published. Data collection in this study uses documentation techniques. The data collected is audited annual financial statements through www.idx.co.id.

The analytical method used in this study is a multiple linear regression method. Before conducting multiple linear regression analysis, the classical assumptions are

tested for the data used to be free from classical assumptions. The multiple linear regression equations used in this study are as follows:

$$ROA = \beta_0 + \beta_1VAHC + \beta_2VASC + \beta_3VACA + \varepsilon \quad (\text{Model 1})$$

$$PBV = \beta_0 + \beta_1VAHC + \beta_2VASC + \beta_3VACA + \varepsilon \quad (\text{Model 2})$$

Information:

ROA = PBV financial performance = company value

β_0 = constant

β_1VAHC = constant human capital

β_2VASC = structural capital constant

β_3VACA = constant capital employed

ε = error of term or confounding variable

3. Results and Discussion

In this study, the object used is a banking company listed on the Indonesia Stock Exchange (IDX). Banking companies recorded in 2011-2015 totaled 43 companies. The number of banking companies that issued financial statements for five consecutive years from 2011, 2012, 2013, 2014 and 2015 were 30 companies. So that the sample used in this study was 150 observational data.

3.1. Test of F statistics (Overall significance test)

The F statistic test (Overall Significance Test) basically shows whether all independent variables entered into the model have a joint or simultaneous effect on the dependent variable, with the provisions if the prob value. <from the significance of level 5%, it can be said that the independent variables influence simultaneously on the dependent variable (Ghozali and Ratmono, 2013).

Based on the results of the F model 1 statistical test in table 5, it is obtained that the calculated F value is 23.75654 with a probability (Prob F-Statistics) of 0.000. Because the probability is much smaller than 0.05, this means that the independent variables VAHC, VASC, and VACA simultaneously affect the dependent variable ROA. Thus, it can be said that VAIC affects financial performance. Based on the results of the F model 2 statistical test in table 5, it is obtained that the value of F count is 10.08193 with a probability (Prob F-Statistics) of 0.000. Because the probability is much smaller than

0.05, this means that the independent variables VAHC, VASC, and VACA simultaneously affect the dependent variable PBV. Thus, it can be said that VAIC affects the value of the company.

3.1.1. Regression test

Linear regression analysis is used to determine the effect between the independent variable and the dependent variable. Based on the results of the processing obtained, it can be concluded that the regression model in this study is as follows:.

$$ROA = 0,491158 + 0,214346VAHC + 0,193459VASC + 0,821356VACA \quad (1)$$

$$PBV = 0,793870 + 0,151485VAHC - 0,090252VASC + 0,408937VACA \quad (2)$$

3.1.2. Hypothesis testing

1. The influence of human capital on financial performance Based on table 1, the t-value of human capital independent variable (VAHC) was 4.687502 with a significance level of $0.0000 < 0.05$. This means that Hypothesis 1a which states that human capital has a positive effect on financial performance is accepted.a. The influence of human capital on company value. Based on table 1, it is obtained the value of t counts human capital independent variable (VAHC) of 4.428621 with a significance level of $0.0000 < 0.05$. This means that Hypothesis 1b which states that human capital has positive effect on company value is accepted.
2. The influence of structural capital on financial performance. Based on table 1, it is obtained that the t value of the structural capital independent variable (VASC) is 1.287439 with a significance level of $0.2005 > 0.05$. This means that Hypothesis 2a which states that structural capital has a positive effect on financial performance is rejected.
3. The influence of structural capital on firm value. Based on table 1, it is obtained that the t value of the structural capital independent variable (VASC) is -0.509773 with a significance level of $0.6110 > 0.05$. This means that Hypothesis 2b which states that structural capital has a positive effect on the value of the company is rejected.
4. The influence of capital employed on financial performance. Based on table 1, it is obtained the value of t calculated independent capital employed variable

(VACA) of 3.028738 with a significance level of $0.0030 < 0.05$. This means that Hypothesis 3a which states that capital employed has a positive influence on financial performance is accepted.

5. The influence of capital employed on the value of the company. Based on Table 1, it is obtained the value of t calculated independent capital employed (VACA) variable of 2.489084 with a significance level of $0.0139 < 0.05$. This means that Hypothesis 3b which states capital employed has a positive influence on the value of the company received.

TABLE 1: Regression Test Results.

Variabel	ROA			PBV		
	Coefficient	t-Statistic	Prob	Coefficient	t-Statistic	Prob
C	0.491158	3.280855	0.0014	0.794604	4.486379	0.0000
VAHC	0.214346	4.687502	0.0000	0.149710	2.767301	0.0066
VASC	0.193459	1.287439	0.2005	-0.091673	-0.515654	0.6071
VACA	0.821356	3.028738	0.0030	0.423498	1.319960	0.1894
Durbin-Watson		2.108564			2.185813 stat	
Prob(F-statistic)		0.000000			0.000000	

Source: Processed secondary data, 2017

3.2. Influence of human capital on financial performance

The results of hypothesis testing show that the variable human capital proxied by VAHC has a regression coefficient of 0.214346. By using a significance level of 5%, a value of $0.0000 < 0.05$, meaning that H_0 is rejected and H_{1a} is accepted. Hypothesis 1a which states "human capital has a positive influence on financial performance" is accepted. Means that the variable human capital has a positive influence on financial performance. The higher the value of human capital of a company, the higher the value of the company's financial performance.

The results of this study are similar to the research conducted by Chen et. al. (2005) and Ulum (2007) which state that human capital affects financial performance. However, the results of this study are not similar to the research conducted by Bontis et al. (2016) and Santoso (2012). A new view of the Resource-Based Theory, Knowledge-Based Theory, considers knowledge as a very important resource for companies, because knowledge is an asset that if managed properly will improve company performance. The more efficient the company is in utilizing human capital, the better the company's performance will be in meeting customer needs.

3.3. Influence of human capital on company value

The results of hypothesis testing show that the variable human capital proxied by VAHC has a regression coefficient value of 0.203850. By using a significance level of 5%, a value of $0.000 < 0.05$ is obtained, meaning that H_0 is rejected and H_{1b} is received. Hypothesis 1b which states that "human capital has a positive influence on company value" is accepted. Means that the variable human capital has a positive influence on the value of the company. The higher the value of a company's human capital, the higher the value of the company.

The results of this study are similar to research conducted by Chen et al. (2005) which states that human capital has an influence on firm value. Regarding the concept of RBT (Resource Based Theory), so that companies can compete, companies must have a strategy to create competitive advantage. The resources owned by the company affect the company's performance which in turn will increase the value of the company.

3.4. The influence of structural capital on financial performance

The results of hypothesis testing show that the structural capital variable proxied by the VASC has a regression coefficient of 0.193459. By using a significance level of 5%, the value of $0.2005 > 0.05$ means that H_0 is accepted and H_{2a} is rejected. Hypothesis 2a which states "structural capital has a positive influence on financial performance" is rejected. Means that structural capital variables do not have a positive influence on financial performance. The high and low structural capital value of a company will not affect the value of the company's financial performance.

The results of this study are similar to the research conducted by Maditinos et. al. (2011) and Ulum (2007) which states that structural capital does not have a positive influence on financial performance. However, the results of this study are not similar to the research conducted by Chen et. al. (2005) and Puspitosari (2016). An individual can have a high level of intellectuality, but if the organization has a bad system and procedures, intellectual capital cannot achieve optimal performance and the existing potential cannot be maximally utilized.

3.5. The influence of structural capital on corporate value

The results of hypothesis testing show that structural capital variables proxied by VASC have a regression coefficient of -0.083539. By using a significance level of 5%, the

value $0.6110 > 0.05$ means that H_0 is accepted and H_{2b} is rejected. Hypothesis 2b which states "structural capital has a positive influence on firm value" is rejected. Means the structural capital variable does not have a positive effect on the value of the company. The high and low structural capital value of a company will not affect the value of the company.

The results of this study are similar to the research conducted by Maditinos et. al. (2011) and Simarmata (2015) which states that structural capital does not have an influence on firm value. The main purpose of stakeholder theory is to help corporate managers understand their stakeholder environment and manage more effectively among the existence of relationships within their corporate environment. However, the broader goal of stakeholder theory is to help corporate managers increase the value of the impact of their activities and minimize losses to stakeholders [10].

3.6. Influence of capital employed on financial performance

The results of hypothesis testing show that capital employed variables proxied by VACA have a regression coefficient of 0.821355. By using a significance level of 5%, a value of $0.030 < 0.05$ is obtained, meaning that H_0 is rejected and H_{3a} is accepted. Hypothesis 3a which states "capital employed has a positive influence on financial performance" is accepted. Means that capital employed variables have a positive influence on financial performance. The higher the capital employed value of a company, the higher the value of the company's financial performance.

The results of this study are similar to the research conducted by Chen et. al. (2005) and Ulum (2007) which state that capital employed has an influence on financial performance. With the acceptance of Hypothesis 3a, it is explained that banking companies have been able to utilize resources in the form of capital assets which if managed properly will improve the company's performance. This condition is very beneficial because it shows management's ability to manage company assets.

3.7. Effect of capital employed on company value

The results of hypothesis testing show that capital employed variables proxied by VACA have a regression coefficient value of 0.633118. By using a significance level of 5%, the value $0.0139 < 0.05$, which means that H_0 is rejected and H_{3b} is accepted. Hypothesis 3b which states "capital employed has a positive effect on firm value" is accepted. Means that capital employed variables have a positive influence on the value

of the company. The higher the capital employed value of a company, the higher the value of the company.

The results of this study are similar to the research conducted by Susanto and Siswantaya (2014) which states that capital employed has an influence on firm value. However, the results of this study are not similar to the research conducted by Maditinos et. al. (2011) and Santoso (2012). Based on the Resource-Based Theory, a good company is a company that has a competitive advantage by creating higher economic value with all of its assets compared to other companies. Good asset management will increase the value of the company in the eyes of stakeholders. Thus, capital employed is one variable that can affect the value of the company.

4. Conclusions and Suggestions

Based on the results of data analysis and discussion, it can be concluded that human capital has a positive influence on financial performance. This shows that the intellectual utilization of employees by the company influences the financial performance of the company.

Human capital has a positive influence on company value. This shows that the intellectual utilization of employees by the company has been viewed by stakeholders, thus affecting the company's value. Thus, human capital has an influence on company value. Structural capital does not have a positive influence on financial performance. This indicates that the level of management of the system and company procedures has no influence on the company's financial performance.

Structural capital does not have a positive influence on company value. This shows that the high and low level of management of company systems and procedures is not seen by stakeholders, so it does not affect the value of the company. Thus, structural capital does not have an influence on company value.

Capital employed has a positive influence on financial performance. This shows that the ability of companies in managing asset management has an influence on the company's financial performance. Capital employed has a positive influence on firm value. This shows that the company's ability to manage asset management has been viewed by stakeholders, thus affecting the value of the company. Thus, capital employed has an influence on the value of the company.

The suggestions from the authors are as follows: 1) For companies (issuers), it is better to pay attention to the existence of intangible assets that have the potential to improve financial performance and corporate value. Companies must improve human

capital by budgeting for trainings so that employee knowledge increases. The company must also utilize all of its assets so as to maximize financial performance and company value. 2) For further researchers, the results of this study can be used as additional references to carry out further research, especially in the same field of study. Subsequent research can use different types of samples so that the influence of intellectual capital on financial performance and company value can be known in various sectors of the company.

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