# Value Added Human Capital and Firms' Financial Performance

Ria Arum Oktavina and Sedianingsih Sedianingsih

Universitas Airlangga, Jl. Airlangga No. 4 – 6, Surabaya, Jawa Timur, Indonesia {ria.arum-13, sedianingsih}@feb.unair.ac.id

- Keywords: Firm's Financial Performance, Intellectual Capital, Return on Asset (ROA), Value Added Human Capital (VAHU).
- Abstract: This study aims is to analyze the influence of value added human capital (VAHU) as one of the intellectual capital components on firms' financial performance. Samples used are 299 manufacturing companies listed in Bursa Efek Indonesia (BEI) that complies with certain criteria in the period of 2013-2015. This research uses a quantitative approach with linear regression analysis for the hypothesis test. The result shows that value added human capital is influencing positively and significantly on firms' financial performance. It is proved that total expenditures for employees, including salaries, allowances, bonuses, education and training has the ability to create an added value, which then increase the firms' financial performance that is measured by ROA. It provides a practical contribution for companies as one of the considerations in human capital decision-making.

## **1 INTRODUCTION**

Current competition era with fast changes in the quality of technology, the impacts of global markets, and closed competition can create threats while providing opportunities for companies (Hosseini and Sheikhi, 2012). Therefore, it is necessary to develop the business to help maintain and increase the company's competitive advantage in the current global business competition.

Knowledge and expertise are some examples of soft asset, which is one of the intellectual capital. Intellectual capital is intangible resources that the companies use to generate profit and value (Djamil et al., 2013). Intellectual capital (IC) enables companies to compete globally and face the turbulent international environment. The businesses nowadays need not only tangible assets, but also intangible assets to gain sustainable competitive advantages. Broadly speaking, intellectual capital can be categorized into three; human capital, structural capital, and relational capital. VAICTM approach which was triggered by the police (1998) is often used to assess and measures the intellectual capital. This approach calculates the efficiency of intellectual capital value in generating some added value. Some advantages of this concept are the ease of data acquisition and the data can be compared among several companies. Human capital can create

some added value for the company because the knowledge of the employees is able to create effectiveness and efficiency to improve the company's productivity when responding to changes in consumer needs. Several previous studies have already proven the relationship between human capital as one of the components of intellectual capital with the company's financial performance (Chen et al., 2005; Gogan et al., 2016).

The existence of human capital reflects the company's collective ability to produce the best solution. Human capital in a company is formed from human resources it owned. Bontis et al (1999) describes human capital as the resource of innovations and strategies realized by brainstorming in research labs, thinking in the office, composing new structures, improving personal skills or developing sales. Based on the knowledge-based theory, people change their knowledge into routines, job descriptions, plans, and strategies (Starbuck, 1992) to become the leading role of their business. The value added human capital coefficient (VAHU) indicates how much value added has been created by one financial unit invested in employees (Zeghal and Maaloul, 2010). VAHU measures the added value generated by company's human capital. The higher the VAHU, the more efficient the cost is incurred by the company to improve employees' productivity when managing corporate resources. Effective and

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In Proceedings of the 1st International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP 2017) - Transforming Islamic Economy and Societies, pages 312-315 ISBN: 978-989-758-315-5

efficient resource management can create some added values that will impact on the company's profitability and ultimately impact on improving the company's financial performance.

#### 2 METHOD

The type of data used in this research is quantitative data. The population of this study is manufacturing companies listed on the Indonesia Stock Exchange during the period of 2013-2015. The sample is selected by using purposive sampling. In the end, we got 299 manufacturing companies that have met some criteria. The secondary data sources used in this research, including the list of manufacturing companies listed on the Indonesia Stock Exchange during the period 2013-2015 are from www.sahamok.com and financial statements of the companies from www.idx.co.id.

The data collection procedures in this study consist of literature study and documentation. Literature study is done by reading and recording important information, understanding, and reviewing information from reading sources, while documentation is obtained from the data acquisition from the previous secondary data sources.

The method used in this study is a quantitative method with an explanatory approach that aims to explain the relationship between variables by using hypothesis testing. Value added human capital is measured by using VAICTM method and company's financial performance is measured using ROA (Return on Assets), while linear regression analysis is used to process the data.

Data analysis of linear regression is used to measure the influence of VAHU on financial performance, which is depicted on ROA, at manufacturing company listed in Indonesia Stock Exchange during the period of 2013-2015. After that, the data are processed with SPSS program version 20.0. The regression model in this research can be written as follows:

Model 1:  $ROA = a_0 + a_1 VAHU + e_1 \dots \dots \dots (l)$ 

### **3 RESULTS AND DISCUSSION**

Total manufacturing companies listed on the BEI during the period of 2013-2015 amounted to 424 companies, but the sample obtained after the enactment of purposive sampling or sampling with certain criteria is 299 companies (unbalance samples). The data are processed using regression analysis after being tested by using classical assumptions.

Descriptive statistical results in both variables can be explained as follows:

Table 1: Descriptive statistical results.

	N	Min	Max	Mean	Std. Deviation
ROA	299	0.0056	79.6825	8.153051	9.3426220
VAHU	299	0.7304	19.3377	2.034988	1.4456455
Valid N (listwise)	299				

Return on Assets (ROA) is the effectiveness of the company's ability to generate profits by optimizing the assets owned. Based on the Table, the highest ROA value of 79.6825 is owned by PT. Semen Gresik, Tbk in 2015, while the lowest ROA of 0.0056 is owned by PT. Indofood Sukses Makmur, Tbk in 2014. The average value of ROA in all sample companies is 8,153051 with the standard deviation of 9.3426220. The level of data distribution on Return on Assets (ROA) has 114.59% level of variation. This shows that the distribution of ROA values generated by companies in this research is relatively different (heterogeneous), with the rate of ROA ratio changes between manufacturing companies are relatively different during the observation period. This indicates that there are differences in the ability of one company with the others to generate profits with their assets.

Highest Value Added Human Capital (VAHU) in this study is amounted to 19.3377, which is owned by PT Pelangi Indah Canindo in 2014, while the lowest value of 0.7304 is owned by PT Berlina Tbk in 2015. The average VAHU value generated in this research is equal to 2.034988 with a standard deviation of 1.4456455. The level of data distribution for companies' Value Added Human Capital (VAHU) has a level of variation of 71.04%. This explains that the distributions of the value of VAHU generated by manufacturing companies in this research is homogeneous. The ability of one manufacturing company to generate some added values by total employees' expenditures such as salary, allowances, bonus, education and training when compared to other company is relatively the same.

Table 2. Result of the regression analysis.							
Model	Unstandardized Coefficients		t	Sig			
Widder	В	Std. Error	L.	515			
(Constant)	-5.632	0.191	-29.433	0.000			
VAHU	1.320	0.175	7.551	0.000			

Table 2: Result of the regression analysis.

Based on result of regression analysis, we can establish an equation as follows:

#### $ROA = -5,632 + 38,431 VACA + \varepsilon$

Based on Table 2, we can draw a conclusion that VAHU affects the companies' financial performance that is measured by ROA. The significant value of VAHU which is 0.000 is smaller than the error rate of 0.05 or 5% shows that VAHU has a significant effect on financial performance at 95% confidence level.

VAHU's (value added human capital) regression coefficient value is 1.320. It means that any increase in the value of human capital will make the value of ROA as a proxy of financial performance also increase by 1.32 times with the assumption that other variables are constant. Based on that result, it can be concluded that VAHU can improve ROA and will impact positively to the companies' financial performance. The significance value and regression coefficient above show that VAHU has a significant and positive effect on firms' financial performance and. Therefore, a decision can be made that hypothesis 1 (one) which states that there is a positive relationship between value added human capital (VAHU) on the firms' financial performance is not rejected.

This result is consistent with previous studies by Chen et al. (2005) and Gogal et al. (2016). The results of these studies also prove that VAHU has a positive and significant influence to the companies' financial performance, which is depicted by ROA.

VAHU generated in this research is a value added from expenditures for the human capital in a company. Such expenses include salaries, benefits, and other expenses such as education and training provided to employees. Based on the results of this study, it can be concluded that VAHU is a manifestation of corporate expenditures for human capital, and VAHU is also able to generate some added values while improving the sample performance. company's financial These expenditures create some added values because they increase employees' knowledge, motivations, and collective abilities in producing the best solution for the company.

The importance of the role of human capital is believed to be associated with the company's goal to generate profit. Good knowledge will increase cost efficiency because more decisions will be made by considering their costs and benefits. In addition, companies will be able to create better products through innovations generated by human capital, thus leads to increasing company's sales and profit. Therefore, human capital is believed to be one of the company's intangible resources that can improve the financial performance of the company.

#### 4 CONCLUSIONS

Value Added Human Capital (VAHU) has a positive and significant impact on the financial performance of the 299 sample companies, which is projected in their Return on Assets (ROA). The result of this study supports the previous studies done by Chen et al. (2005) and Khanqah et al. (2012).

There are several research limitations in this study. First, there are many manufacturing companies listed on the Indonesia Stock Exchange that do not disclose the value of intellectual capital they owned. Measurement of the appropriate intellectual capital needs accurate data to measure VAHU (value added human capital) as one of the components of intellectual capital. Other than that, only ROA (Return on Assets) is used to measure companies' financial performances, so we only able to assess the companies' ability to generate profits using assets owned.

It is the author's hope that many manufacturing companies will disclose their value of intellectual capital, as it will also help the investors to make their investment decisions. The disclosure of company's intellectual capital to the public will enable the market to assess the actual performance of the company's intellectual capital, and it will improve the market perception on the overall performance of the firm. In addition, independent variables should be added as a proxy to the company's financial performance, so it can reflect the influence of actual intellectual capital on the company's financial performance.

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