The Effect of Intellectual Capital on Financial Performance (Case Study: Pharmaceutical Industry Sector Companies in IDX)

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Abstract: This research aims to find out the influence of Intellectual Capital (Capital Employed, Human Capital, and Structural Capital) on Financial Performance (ROA). This type of research is quantitative research. This study uses secondary data obtained from the Indonesia Stock Exchange (IDX) website. This study sample was as many as 40 pharmaceutical companies with a period of 2016-2020. The study used purposive sampling techniques as sample selection. This research analysis method uses the Regression Data Panel with the EView 11 Statistics Program. This study shows that Human Capital has a significant influence on Financial Performance (ROA). Furthermore, Capital Employed and Structural Capital have no significant effect on Financial Performance (ROA).

Keywords: Intellectual Capital, Pharmaceuticals, Financial Performance, ROA, VACA, VAHU, STVA

1. INTRODUCTION

Financial performance is an organizational effort to evaluate the achieved progress. Financial performance information is used as an investment consideration and business strategy. Continued increases in financial performance will have positive implications for employees, management, company owners, and prospective inventors. Investors typically focus on net income and cash flow being important for assessing a company's liquidity, financial flexibility, and overall financial performance (Kieso, 2019:247). According to Dwi&Minnari (2019), financial performance can be seen from financial ratios, such as liquidity, profitability, solvency, and other ratios, In that case, ROA numbers are high for a while and will remain high or improve, that proves the strongness of the company in generating returns from investment (Kieso, 2019: 1424).

But in reality, the company does not always show good financial performance. The financial performance of pharmaceutical industry sector companies, where financial performance is declining and stagnant. Net sales, current year profit, and ASSETS of KAEF Q1 2021 decreased compared to last year. Sales and revenues of SCPI and TSCP also decreased in Q1 2021 (Ramadhani, 2021).Financial performance is influenced by many factors and economic conditions, one of which is the business strategy implemented by a company. Companies that have innovations in intangible assets in such a way will affect the company's performance (Stewart, 2019: 60). When the company makes increased investment in intangible assets will make the company superior and competitive and competitive.

Intellectual Capital refers to intangible assets that contribute to a company's profits. These assets include employee expertise, organizational processes, and the amount of knowledge contained within the company's organization. Intellectual Capital is used to describe the intelligence of individuals who developed, nurtured, and used knowledge to develop innovation in the form of business strategies (Martín-de-Castro et al., 2011 in Hidayah, 2019). This continues to encourage companies to compete fiercely in carrying out business strategies with science-based to create value-added for the organization.

In the previous empires study researched by Maji & Goswami (2017); Sidhartha&Affandi (2016); Dzenopoljac et. al., (2016); Ousama& Fatima (2015) and Nimtrakoon (2015), stated that Capital Employed (VACA) has a significant effect on Financial Performance (ROA). Then research Rizkyanti et. al., (2020); Khoiruddin& Karina (2019); Kevin (2019), and Ozkan et. al., (2017), stated that Human Capital (VACA) has a significant effect on Financial Performance (ROA). Furthermore, the research of Chowdhury et. al., (2019); Dwi&Minanari

(2019); Nadeem et. al., (2018), and Smriti & Das (2018), stated structural capital (STVA) has a relationship with financial performance (ROA).In addition, there isgap research where Dwi&Minanari (2019) and Ravika&Asril (2019) research state that Capital Employed (VACA) does not affect Financial Performance (ROA). Then research Astari&Darsono (2020); Bayraktaroglu et al., (2019), and Dwi&Minanari (2019), stated that Human Capital (VAHU) does not affect Financial Performance (ROA). Furthermore, the research of Zhang et. al., (2019) and Wang et. al., (2018), stated Structural Capital (STVA) does not affect Financial Performance (ROA).

From the explanation of phenomena, literature, and previous research, this researcher is more empirical and analyzes how the company's performance is influenced by Capital Employed, Human Capital, and Structural Capital. The research will be conducted on pharmaceutical industry sector companies registered with the IDX. Furthermore, the condition of the Covid-19 pandemic triggered pharmaceutical companies in Indonesia to continue to compete in efforts to produce Covid-19 vaccine or antiviral drugs by optimizing their resources, especially science and technology (intangible assets). Meanwhile, uncertain pandemic conditions when it ends can be the momentum of pharmaceutical companies to reap large sales and profits. This is of course with superior resources owned by pharmaceutical companies to create added value for the company to improve better financial performance.

2. RESEARCH BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1 Agency Theory

Agency theory was first proposed by Jensen &Meckling (1976). In agency theory called principal is the party that gives a mandate to the other party and the agent is the party given the mandate to carry out all activities on behalf of the principals in his capacity as a decision-maker (Jensen &Meckling, 1976). Reporting about financial information and company activities to principals is important, as it is the basis for decision-making about the company's performance. However, there is often information that is not disclosed by management that is not disclosed to external parties due to differences in interests. Therefore, supervision is needed so that the financial information provided by the company can be disclosed in full. If the relationship between the two is to maximize their respective interests, then there is a good reason to believe that agents do not always make the best decisions for the principals.

2.2 Resource-Based Theory

Resource-Based Theory (RBT) first presented by Wernerfelt (1984) in his pioneering article entitled "A Resource-based view of the firm", is a theory developed to describe an advantage for companies that states that competitive advantage will be created if a company has professional resources that do not exist in other companies. This theory is about companies being able to utilize and optimize resources in the form of both tangible and intangible assets, and one of the intangible assetsis intellectual capital. The better the company can manage and utilize intellectual capital owned; it is expected to create distinctive competencies for the company.

2.3 Financial Performance

According to Prastowo quoted by Fajrin et al., (2016), mentioning elements of a company's financial performance is an element that is directly related to the measurement of a company's performance presented on the income statement, net income is often used as a measure of performance or partly basic for other measures. The company's performance shows indicators of the efficiency and effectiveness of the use of all resources in the company that can be measured from both financial and non-financial aspects. A new measure of profitability for cash operating returns on assets has proposed a better performance calculation i.e., cash flow from operations as a percentage of total assets is the best ratio of pure profitability measures (Kieso, 2019:1424). ROA values are high for a while and will remain high or improve, proving the company's strength in generating returns from investment (Kieso, 2019:1424). Here's the formula for finding Return on Assets (ROA)

$$\text{ROA} = \frac{\text{et Income}}{\text{Total Assets}}$$(Kieso, 2019:261)

2.4 Intellectual Capital

Intellectual Capital was first introduced in 1969 by Galbaraith. Another term for intangible assets is Intellectual Capital. According to Brookling, (1997) in Ulum (2009:20), defining that Intellectual Capital is material that has been compiled, captured, and used to produce a higher asset value. Meanwhile, according to Bukh et al., (2005) in Ulum (2009: 23), Intellectual Capital as a knowledge resource in the form of employees, customers, processes, or technology that companies can use in the process of value creation for the company. Furthermore, according to Edvisson& Malone (1997) in Ulum (2009: 21), define Intellectual Capital as the hidden value of a business. Hidden terminology has two related things. First, Intellectual Capital is especially intellectual assets or knowledge assets and second, such assets are usually not seen also in financial statements (Ulum, 2009: 22). Intellectual Capital is used to describe the intelligence of individuals who developed, nurtured, and used knowledge to develop innovation in the form of business strategies (Martín-de-Castro et al., 2011 in Hidayah, 2019). While Ulum (2015), mentioned that investors will provide high value to companies that have greater Intellectual Capital. In addition, if Intellectual Capital is a measurable resource for increasing competitive advantages, then Intellectual Capital will contribute to the company's financial performance (Ulum, 2015). Furthermore, IC plays an important role in creating added value for the company and improving the company's performance to be able to provide a competitive advantage (Diah, 2019).

The recognition and application of Intellectual Capital is a prerequisite for organizational success in a competitive environment (Wang et al., 2015). Bontis (2001) in Ulum (2009:23), reveals that efforts have been made to estimate the value of knowledge to gain true corporate value. In general, it is assumed that the improvement and better use of knowledge will lead to beneficial influences on the company's performance. According to Ulum (2015), confirmed that statistically proven there is an influence of Intellectual Capital on the financial performance of the company. Intellectual Capital statistically affects the future financial performance of the company. Ulum (2015), can be a strong foundation on which Capital Employees (CE), Human Capital (HC), and Structural Capital (SC) influence the Company's performance.Bontis et al., (2000) in Ulum (2009:30), stated that in general there are three constructions of Intellectual Capital, namely Customer Capital (CC), Human Capital (HC), and Structural Capital (SC).

2.4.1 Customer Capital (CC)

CustomerCapitalisthe knowledge inherent in marketing channels and customer relationships where anorganizationdevelops it through business (Bontis et al., 2009 in Ulum, 2009: 30). Good customer capital management will cause competence in organizational activities or respond to market changes can be developed, while viewed from the level of organizational analysis, customer capital will be related to business performance (Ulum, 2009: 107). According to Pulic (1998) in Ulum (2009: 87), assumes that if one unit of capital employed or physical capital generates a greater return than another company, then the company is better at utilizing capital employed or physical capital. Thus, better utilization of capital employed or physical capital is part of the company's Intellectual Capital. According to Bontis (2000) in Ulum (2009: 30), Capital Employed is financial capital, which is the total capital utilized in fixed assets and current assets in the form of tangible capital such ascash, marketable securities, receivableaccounts, inventories, land, buildings, machinery, equipment, furniture, fixtures, and vehicles ownedby the company.

The VACA formula is as follows:

$$\text{VACA} = \frac{\text{VA}}{\text{CE}} (\text{Ulum}, 2009: 89)$$

CE = Capital Employed: available funds (equity and net income)

2.4.2 Human Capital (HC)

Human Capital represents individual knowledge stock which is a combination of genetic inheritance, education, experience, and attitude about life and business (Ulum 2009: 30). The term Human Capital refers to the economic value of workers' experience and skills. The concept of Human Capital recognizes that not all workers are equal. But management can improve the quality of that capital by investing in employees. This can be done

through the education, experience, and ability of employees. Human Capital is the competence, knowledge, skills, and personality possessed by employees to perform useful activities that generate economic value for the company. In addition, Human Capital includes assets such as education, training, intelligence, skills, health, and other things that employers value such as loyalty and punctuality. Value Added Human Capital (VAHU). VAHU is the relationship between value-added (VA) and Human Capital (HC). VAHU shows how much VA can be generated with funds spent on labor. VAHU indicates HC's ability to create value within a company. Total salary and wage costs are the main indicators of corporate HC (Tan et al., 2007). The VAHU formula is s follows:

$$\text{VAHU} = \frac{\text{VA}}{\text{HC}} \text{ (Ulum, 2009: 89)}$$

HC = Human Capital: employee expenses

2.4.3 Structural Capital (SC)

Structural Capital encompasses all non-human storehouses of knowledge in an organization namely databases, organizational charts, process manuals, strategies, routines, and everything that makes a company's value greater than its material value (Ulum, 2009: 30). Bontis et al., (2000) in Ulum (2009:30), mention that structural capital includes all non-human storehouses of knowledge in organizations. Structural capital consists of everything except human knowledge in an organization, including databases, corporate routines, procedures, systems, culture, and the provision of value beyond physical assets to an organization. Structural Capital Value Added (STVA) shows the contribution of Structural Capital (SC) in the formation of values. In the VAIC model popularized by Pulic, Structural Capital Value (SC) is obtained using Value Added (VA) minus Human Capital (HC). STVA measures the amount of Structural Capital (SC) needed to generate one Rupiah of Value Added (VA) and is an indicator of Structural Capital (SC)'s ability in value creation. Structural Capital (SC) is not an independent measure like Human Capital (HC), but Structural Capital (SC) is dependent on value creation (Pulic, 1999 in Ulum, 2009: 88). The STVA formula is as follows:

$$\text{STVA} = \frac{\text{SC}}{\text{VA}} \text{ (Ulum, 2009: 90)}$$

SC = Structural Capital: VA – HC

2.5 Research Hypothesis

2.5.1 The Effect of Capital Employed on Financial Performance (ROA)

If one unit of capital employed generates a greater return than another company, then the company is better at utilizing capital employed or physical capital. Meanwhile, judging from the level of organizational analysis, capital employed or customer capital will be related to business performance (Ulum, 2009: 107). Research Maji & Goswami (2017), Sidharta&Affandi (2016), Dzenopoljac et. al., (2016), Ousama& Fatima (2015), and Nimtrakoon (2015) said that VACA has a significant effect on Financial Performance (ROA). Based on the analysis, the proposed hypotheses are:

H1: Capital Employed positively affects Financial Performance (ROA)

2.5.2 The Impact of Human Capital on Financial Performance (ROA)

Companies that have innovation in intangible assets in such a way will affect the company's performance. (Stewart, 2019:60). Employee creativity is needed to spark the kinds of innovations that enable organizations to stay ahead of the competition (Colquitt, 2018:33). Research Rizkyanti et. al., (2020); Khoiruddin& Karina (2019); Kevin (2019), and Ozkan et. al., (2017) say that VAHU has a significant effect on Financial Performance (ROA). Based on the analysis, the proposed hypotheses are:

H2: Human Capital positively affects Financial Performance (ROA)

2.5.3 Effect of Structural Capital on Financial Performance (ROA)

Structural Capital is needed to connect human capital in increasing the value-added of the company as a whole (Bontis, 2000 in Ulum, 2009: 30). Better organizational behavior policy practices can benefit a company's performance (Colquitt, 2018:13). Research Chowdhury et. al., (2019), Smriti & Das (2018), Dwi&Minanari (2019) and Nadeem et. al., (2018) said that STVA has a significant and positive effect on Financial Performance (ROA). Based on the analysis, the proposed hypotheses are:

H3: Structural Capital positively affects Financial Performance

Based on the explanation of the thoughts above, the research describes the relationship of interconnectedness and the purpose of research, namely:

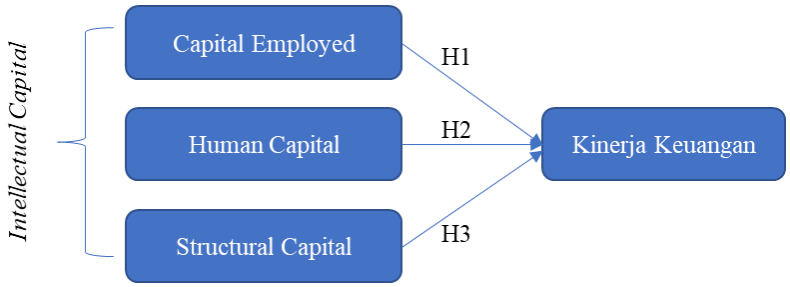


Figure 1 Framework

3. METHODOLOGY, DATA, AND RESEARCH MODELS

This research is a causal quantitative study, which is research that aims to find out the influence between independent variables (influencing variables) on dependent variables (affected variables). The research was conducted using secondary data in the form of financial statement data of eight pharmaceutical companies listed on the Indonesia Stock Exchange during the period 2016-2020. The sampling technique used is purposive sampling. The data analysis technique used in analyzing this research data is a regression analysis of panel data which is a combination of time-series data and latitude series data (cross-section) using the EViews 11 statistic program.

The operational variables along with the dimensions and indicators used in the study are as follows:

Table 1 Variable Operationalization

No	Variable	Dimensions	Indicator	Measuring Scale
1.	Modal Intelektual (Ulum, 2009:89)	VACA	$\frac{VA}{CE}$	Ratio
		VAHU	$\frac{VA}{HC}$	Ratio
		STVA	$\frac{SC}{VA}$	Ratio
2.	Kinerja Keuangan (Kieso, 2019:261)	ROA	$\frac{\text{Laba setelah Pajak}}{\text{Total Aset}}$	Ratio

(Source: data processing results, 2021)

4. RESEARCH RESULTS

The analysis of the description of the data taken for this study is the financial statements from 2016-2020 with a sample of 8 (eight) pharmaceutical sector companies listed on the IDX. The description of variables in descriptive statistics used in these variables includes the minimum value, maximum value, mean, and standard deviation of the financial performance variable as dependent variables and three independent variables namely Capital Employed, Human Capital, and Structural Capital. Descriptive statistics describe the character of the sample used in the study. Here's a descriptive statistics table:

Table 2 Descriptive Analysis Results

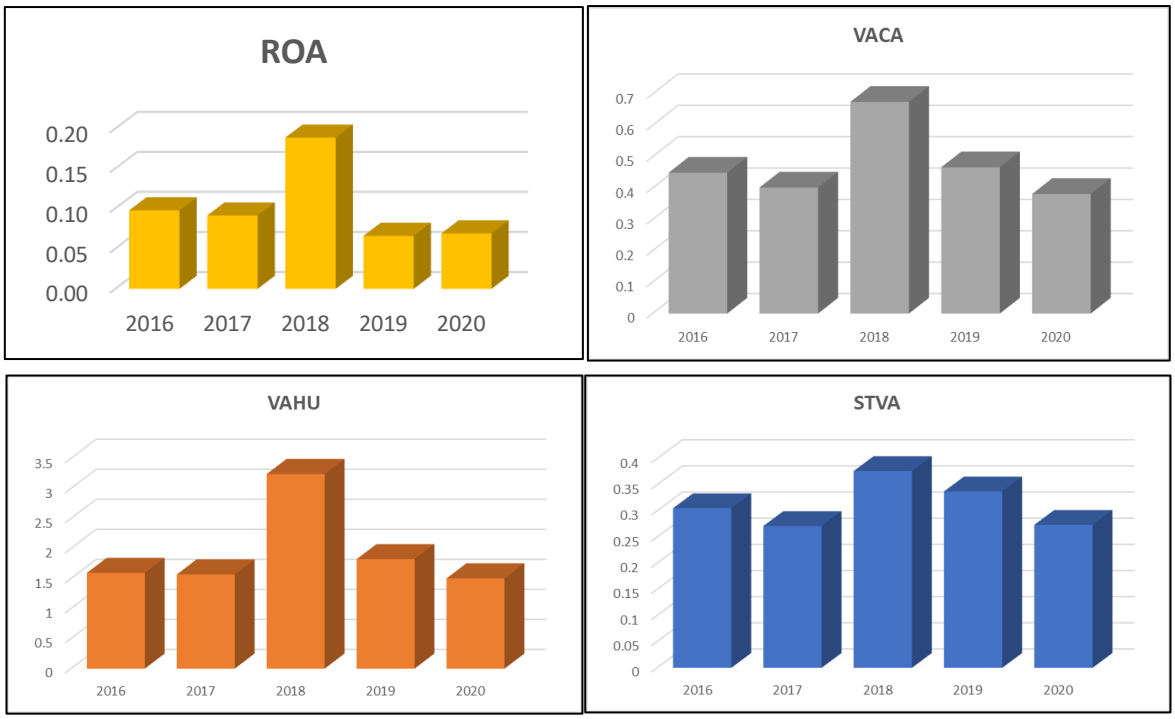
Variable	Minimum	Maximum	Mean
ROA	-0.03	0.92	0.10
VACA	0.17	2.41	0.47
VAHU	0.75	15.05	1.95
STVA	-0.33	0.93	0.31

Source: Data results (2022)

Table 3 Mean Descriptive Analysis Results per Year

Year	ROA	VACA	VAHU	STVA
2016	0.10	0.45	1.59	0.31
2017	0.09	0.40	1.57	0.27
2018	0.19	0.67	3.24	0.38
2019	0.07	0.47	1.82	0.34
2020	0.07	0.38	1.50	0.27

Source: Data results (2022)



Source: Data results (2022)

Figure 2 DescriptiveAnalysisResult

4.1. DescriptiveAnalysis

4.1.1 Financial Performance (ROA)

Based on the results of descriptive analysis output in Table 2 it can be seen that during the period of observation of financial performance-dependent variables (ROA) in 8 (eight) pharmaceutical sector companies during the period 2016-2020 the minimum value of -0.031 owned by INAF in 2017 and the maximum value of 0.92 owned by MERK in 2018. In Table 3 can be seen the mean value of ROA in the data is 0.10 and the number of samples is below the mean value of 24 samples or 60%. The lowest ROA mean value was in 2019 and 2020 at 0.07 and while the largest mean was in 2018 at 0.19.

4.1.2 Capital Employed (VACA)

Data during the observation period for VACA independent variables from 8 (eight) pharmaceutical sector companies during the period 2016-2020 minimum value of 0.17 owned by KLB in 2020 and a maximum value of 2.41 owned by MERK in 2018. The VACA mean value in the data is 0.47 and the sample number is below the mean value of 24 samples or 60%. In Table 2 can be seen the lowest VACA mean value is in 2020 at 0.38 and while the largest mean is in 2018 at 0.67.

4.1.3 Human Capital (VAHU)

Vahu variables of 8 (eight) pharmaceutical sector companies during the period 2016-2020 minimum value of 0.75 owned by INAF in 2017 and a maximum value of 15.05 owned by MERK in 2018. The mean value of VAHU in the data is 1.95 and the number of samples is below the mean value of 30 samples or 75%. In Table 2 can be seen the lowest VAHU mean value is in 2020 at 1.50 and while the largest mean is in 2018 at 3.24.

4.1.4 Strutural Capital (STVA)

The STVA variable of 8 (eight) pharmaceutical sector companies during the period 2016-2020 was a minimum value of -0.33 owned by INAF in 2017 and a maximum value of 0.93 owned by MERK in 2018. The mean value of STVA held in the data is 0.31 and the number of samples is below the mean value of 17 samples or 43%. In Table 2 can be seen the lowest STVA mean value was in 2017 and 2020 at 0.27 and while the largest mean was in 2018 at 0.38.

4.2 Selection of Panel Data Regression Model

To find out which model is the most efficient of the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) it is necessary to test each of these models through several tests namely the chow test, Hausman test, and Lagrange multiplier test. The Chow test is used to determine the best appROAch between the Common Effect Model (CEM) and fixed-effect model (FEM).

Table 4 Chow Test Results

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistics	d.f.	Prob.
Cross-section F	4.565167	(7,29)	0.0015
Cross-section Chi-square	29.714371	7	0.0001

Source: processed from E-Views 11 output

From Table 4 above, the probability value (Prob.) for Cross-section F is 0.0015. This value is less than the α (0.05), so it can be concluded that H0 is rejected which means the fixed effects model (FEM) is more appropriate than the Common Effects Model (CEM).

The Hausman test is used to determine the best approach between the Random Effects Model (REM) and Fixed Effects Model (FEM).

Table 5 Hausman Test Results

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistics	Chi-Sq. d.f.	Prob.
Cross-section random	5.498584	3	0.1387

Source: processed from E-Views 11 output

From Table 5 above, it can be known that the p-value is 0.1387. This value is greater than α (0.05), so it can be concluded that H0 is accepted which means Random Effect Model (REM) is more appropriate than Fixed Effect Model (FEM).From the two model selection tests, the Chow test and the Hausman test, it can be concluded that:

1) Chow's test results by comparing the approach between the Common Effect Model (CEM) and the Fixed Effect Model (FEM), selected and more appropriately used, namely the Fixed Effect Model (FEM); and
2) Hausman test results by comparing the approach between Fixed Effects Model (FEM) and Random Effects Model (REM), selected and more appropriately used, namely Random Effects Model (REM).

Furthermore, the LaGrange multiplier test is a comparison of the approach between the random-effects model and the common effects model that does not need to be done, this is because in the Hausman test results selected Random Effects Model (REM). Based on this, the authors chose the model used in the follow-up analysis is the Random Effect Model (REM).

4.3 Data Regression Model Hypothesis Testing

The effect of Capital Employed (VACA), Human Capital (VAHU), and Structural Capital (STVA) on Financial Performance (ROA) case studies on pharmaceutical sector companies listed on the IDX during the period 2016-2020 can be seen in the following outputs:

Table 6 Random Effect Model (REM) Panel Data Regression Results

Dependent Variable: ROA

Method: EGLS panel (Cross-section random effects)

Date: 01/13/22 Time: 23:50

Sample: 2016 2020

Periods included: 5

Cross-sections included: 8

Total panel (balanced) observations: 40

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.018593	0.023258	-0.799439	0.4293
VACA	0.026525	0.057538	0.461003	0.6476
VAHU	0.053248	0.010048	5.299631	0.0000
STVA	0.015797	0.051182	0.308639	0.7594
	Effects Specification		S.D.	Rho
Cross-section random			0.036696	0.4422
Idiosyncratic random			0.041217	0.5578
	Weighted Statistics			
R-squared	0.889928	Mean dependent var		0.046018
Adjusted R-squared	0.880755	S.D. dependent var		0.123432
S.E. of regression	0.042623	Sum squared resid		0.065403
F-statistic	97.01930	Durbin-Watson stat		1.771326
Prob(F-statistic)	0.000000			
	Unweighted Statistics			
R-squared	0.862826	Mean dependent var		0.102520
Sum squared resid	0.115622	Durbin-Watson stat		1.001977

Source: processed from E-Views 11 output

4.4 Coefficient of Determination

Based on Table 6 with variable dependent Financial Performance (ROA) figure Adjusted R-Square on Weighted Statistics of 0.880755. This shows that the percentage of independent variables of Capital Employed (VACA), Human Capital (VAHU), and Structural Capital (STVA) can explain Financial Performance (ROA) of 88.07%, and the remaining 11.93% is influenced by variables outside this model. A better R-Squared score on Weighted Statistics of 0.889928 or 88.99% indicates that the influence of all independent variables of Capital Employed (VACA), Human Capital (VAHU), and Structural Capital (STVA) on Financial

Performance (ROA) is quite strong due to a score of more than 50%.

4.5 Test F

The F test is often called the goodness of fit. This test is conducted to test whether there is an influence of variable Capital Employed (VACA), Human Capital (VAHU), and Structural Capital (STVA) on Financial Performance (ROA) as a whole. The results of the F test are shown in the following table:

Table 7 Prob (F-statistic) values in the Random Effect Model Analysis (REM)

R-squared	0.889928	Mean dependent var	0.046018
Adjusted R-squared	0.880755	S.D. dependent var	0.123432
S.E. of regression	0.042623	Sum squared resid	0.065403
F-statistic	97.01930	Durbin-Watson stat	1.771326
Prob(F-statistic)	0.000000		

Source: processed from E-Views 11 output

Table 7 shows the results of the F test where prob (F-statistic) can be seen as 0.000000 less than 0.05. Thus it can be concluded that there is a co-variable influence of Capital Employed (VACA), Human Capital (VAHU), and Structural Capital (STVA) on Financial Performance (ROA).

4.6 Partial T-Test

Partial T-test results are used to test the effect of variable Capital Employed (VACA), Human Capital (VAHU) and Structural Capital (STVA) on Financial Performance (ROA) individually. Partial T-test results in this study are as follows:

Table 8 Partial T-Test Value (Prob.) in Random Effect Model Analysis (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.018593	0.023258	-0.799439	0.4293
VACA	0.026525	0.057538	0.461003	0.6476
VAHU	0.053248	0.010048	5.299631	0.0000
STVA	0.015797	0.051182	0.308639	0.7594

Source: processed from E-Views 11 output

Based on Table 8 of regression results of random effect model (REM) panel data with financial performance (ROA) dependent variables as follows:

1) The probability value (Prob.) of Capital Employed (VACA) is 0.6476 greater than 0.05. This shows that the independent variable Capital Employed (VACA) has no significant effect on Financial Performance (ROA).
2) The probability value (Prob.) of Human Capital (VAHU) is 0.0000 less than 0.05. This shows that the independent variable Human Capital (VAHU) has a significant effect on Financial Performance (ROA).
3) The probability value (Prob.) structural capital (STVA) is 0.7594 greater than 0.05. This shows that the independent variable Structural Capital (STVA) has no significant effect on Financial Performance (ROA).

The following is a summary of the results of hypothesis testing:

Table 9 Partial Hypothesis Test Results (T-Test) with Random Effect Model

Hypothesis Description	Result	Decision
Random Effect Model (REM)		
Capital Employedhasnosignificanteffect on Financial Performance	Insignificant	Rejected
Human Capital has a significant impact on Financial Performance	Significant	Accepted
Structural Capitalhas nosignificant effect on Financial Performance	Insignificant	Rejected

Source: Data results (2022)

4.7 Panel Data Regression Equation

Thus, the equation of regression analysis of panel data based on Table 8 is as follows:

ROA = -0.018593 + 0.026525 VACA + 0.053248 VAHU + 0.015797 STVA.

5. DISCUSSION

5.1 Effect of Capital Employed on Financial Performance

The results showed that Capital Employed (VACA) did not significantly affect Financial Performance (ROA). From the sample data in the observation period, that VACA proxy is total equity and net income in generating value-added obtained as many as 28 companies or 70% that have VACA values below the average value. This shows the less-than-optimal use of physical capital to create value-added and is an indication of not being able to have implications for ROA. The use of physical capital is used for the long-term investment purposes of the company and to measure the effectiveness of management in using capital. Companies that use their capital to invest assets with large expenditures make investors want to know how much income is earned from those assets. ROA values are high for a while and will remain high or improve, proving the company's strength in generating returns from investment (Kieso, 2019:1424). This requires management to optimize the use of physical capital effectively to generate value-added to give positive signals to investors. The state of the capital structure will have a direct impact on the company's financial position to affect the company's performance (Fahmi, 2018: 185). The results of this study in line with Gani (2022) stated that Capital Employed (VACA) has no significant effect on Financial Performance (ROA). However, these results are inconsistent with the studies of Maji &Goswami (2017), Sidharta&Affandi (2016), Dzenopoljac et. al., (2016), Ousama& Fatima (2015), and Nimtrakoon (2015) states that Capital Employed (VACA) has a significant impact on Financial Performance (ROA).

5.2 Effect of Human Capital on Financial Performance

The results showed that Human Capital (VAHU) had a positive and significant effect on Financial Performance (ROA). This shows that companies that spend large working budget funds on employees can improve the achievement of better financial performance. A company evaluating the way employees work has a direct impact on a company's financial performance and performance (Stewart, 2019:112). Unlike physical capital which is easy to find and recorded in the statement of financial position, human capital is often assumed to have an impact on the ROA operating process. Human capital is more than just a brand in a company. Companies that have innovations in intangible assets in such a way will affect the company's performance (Stewart, 2019: 60). Employee creativity is needed to spark the kinds of innovations that enable organizations to stay ahead of the competition (Colquitt, 2018:33). Companies that are at the forefront of competition certainly have productive employees and can increase profits to improve the company's financial performance. Increased profits by management are one strategy to convey a positive signal that the company is in good health and worthy as an investment target. Investors typically focus on net income and cash flow which is important for assessing a company's liquidity, financial flexibility, and overall financial performance (Kieso, 2019:247). Mavrinac and Siesfield (1997), Miller et. al., (1999), and Bornemnn et. al., (1999) in Ulum, (2019:77), say that managers consider indicators of human capital to be the most important in a company. These results are in line with research by Astari&Darsono (2020), Rizkyanti et. al., (2020), Dwi&Minanari (2019), Ozkan et. al., (2017) which showed that Human Capital (VAHU) has a positive and significant effect on Financial

Performance (ROA). However, these results are inconsistent with the study of Idrusa&Hartati (2020) and Bayraktaroglu et. al., (2019) stating Human Capital (VAHU) has no significant effect on Financial Performance (ROA).

5.3 Effect of Structural Capital on Financial Performance

The results showed that Structural Capital (STVA) did not have a significant influence on Financial Performance (ROA). From the sample data, there is a condition of STVA value of minus (below the null value) in one company during the observation period and there are 43% of companies have STVA values below the average value. This indicates that the amount of SC needed to generate 1 rupiah of value-added is not able to have implications for the increase in corporate profits and financial performance. In addition, SC is not an independent measure as HC, but a dependent on value-added (Pulic, 1999 in Ulum, 2009: 88). That is, the greater HC contribution in creating value-added, the smaller the contribution of SC in that regard. This shows that in this study, the high contribution of HC to financial performance causes SC contributions to be not enough to affect financial performance. For Roos et. al., (1997) in Ulum, (2019:77), Intellectual Capital of human capital and not structural capital. Mavrinac&Siesfield (1997), Miller et. al., (1999), and Bornemnn et. al., (1999) in Ulum, (2019:77), say that managers consider structural capital indicators to be unimportant in a company. Structural capital or organizational capital is the value of the organizational structure and knowledge contained in a form of guidelines or concepts so that effective and efficient can be created in the company. The discovery, thinking, and innovation in the company's business strategy can shake the stability of the organization's routine. These factors are constantly changing and updates are needed to fit the new situation. Dynamic strategy changes cause corporate strategy will not be a plan for the future (Ulum, 2009: 88). So top management must integrate human and organizational capital to achieve better financial performance and give a positive signal that the changes that occur will not interfere with the company in generating better profits. These results are in line with the research of Idrusa&Hartati (2020), Rangkuti (2020), Kweh et. al., (2019), Wang et. al., (2018) and Arifa et. al., (2017) states that Structural Capital (STVA) has no significant effect on Financial Performance (ROA). However, these results are inconsistent with research by Chowdhury et. al., (2019), Smriti & Das (2018), and Nadeem et. al., (2018) revealing Structural Capital (STVA) to have a positive and significant effect on Financial Performance (ROA).

5. CONCLUSION, IMPLICATION, LIMITATION

5.1 Conclusion

This study shows that HumanCapital (VAHU) hasasignificantimpactonFinancial Performance (ROA). Furthermore, Capital Employed (VACA) andStructuralCapital (STVA) have no significant effect on Financial Performance (ROA).

5.2 Suggestion

Companies that make the most of human capital can be superior in competition. Human capital is more than just a brand in the company, but a competency, knowledge, skills, and personality owned by employees to perform useful activities that generate economic value for the company. Management that budgets large funds for employee salaries can make employees productive. Employee creativity is needed to spark the kinds of innovations that enable organizations to stay ahead of the competition. Companies that excel in competitiveness because they have human capital that can create added value to increase the company's revenue and profits. This is because human capital is the most important thing in a company.

VACA and STVA variables do not affect ROA, it can be because research in sub-sectors of the pharmaceutical industry has a fairly high challenge, where the number of listed companies is not much to be sampled, so further research can extend the research period or increase its scope in the healthcare sector. or other sectors so that results can be compared and more accurate. The theory supports the contribution of VACA and STVA to ROA but is inconsistent in this study, there are indications caused by the type of industry in a sample of companies or a theory can be influenced by the development of the times and technology, so further research needs to be done empirical studies in-depth and systematic by adding variable moderation or intervening.

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