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### The Effect of Capital Employed, Human Capital And Structural Capital on Financial Performance on The Consumer Goods Sector Period 2015-2019

Yerisma Welly<sup>1\*</sup>, Arfan Ikhsan<sup>2</sup>, Chandra Situmeang<sup>3</sup>

<sup>1,2,3</sup> Accounting, State University of Medan, Medan

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#### ABSTRACT

*This study aims to examine the effect of Capital Employed Efficiency (CEE), Human Capital Efficiency (HCE) and Structural Capital Efficiency (SCE) on the financial performance of Return On Equity (ROE) of companies in the consumer goods industry sector. The population in this study is the financial statements of companies in the consumer goods industry listed on the IDX during the 2015-2019 period. This study used purposive sampling with 31 companies and 155 observations. The method of data analysis in this study is panel data regression with a panel that is more appropriate to use is the Fixed Effect Model (FEM) method using the Eviews 9 program as a data processing program. The results showed that CEE and SCE had a positive and significant effect on financial performance. If the higher the CEE and SCE, the higher the ROE of the company, so this can create stakeholder trust in the company. Meanwhile, employee costs are costs that have relatively no effect on income, while ROE is indicated by income, thus proving that HCE has a positive effect, but does not have a significant effect on financial performance.*

#### 1. INTRODUCTION

The success of a company can be seen from the company's financial performance. The company has the goal of earning a profit with the company's resources (short-term goals) and prospering the welfare of the company and its investors (long-term goals), so that the financial performance of a company becomes the company's first face and the main one of an investor. Chakravarthy (1986) states that superior financial performance is a way to satisfy investors. So in maintaining financial performance, various business opportunities and challenges that exist are tried to be exploited and faced by business people in order to be able to compete with competitors. This encourages business people to compete not only on ownership of their resources, but also on innovation, information, skills and knowledge of the company's human resources, known as intellectual capital. Intellectual capital is defined as an intangible asset that is not listed explicitly on the company's balance sheet, but has a positive impact on the company's financial performance, because it reveals the relationship between employees, ideas and information and measures what is not measured (Edvinsson, 1997).

Corresponding Author.

\*Email: [welly.yerisma@gmail.com](mailto:welly.yerisma@gmail.com)

Intellectual capital plays an important role in every company regardless of the nature and operating environment, in that sense, investment in human capital development is considered more important than in physical and financial assets even though in reality these expenditures are not expressed in monetary terms but in narrative form (Saidu and Oyedokun, 2018). Along with that, intellectual capital is one of the important factors and a major contributor to economic success and value creation in business. Intellectual capital as a driver of intangible value in companies that brings benefits in the future. In today's market, competition is high and buyers are becoming more informed. The modern business environment is quite dynamic and companies face many changes. The survival of many businesses depends on their willingness and ability to adapt to these changes (Chrisman et al., 2015; Azmi et al., 2020 ). Companies can quickly adapt to change and remain competitive in the market through intellectual capital (Obeidat et al., 2017).

In Indonesia itself, intellectual capital began to develop after the emergence of PSAK No. 19 (revised 2000) regarding intangible assets. However, in reality, disclosure of intellectual capital in Indonesia is still low. This is due to the low awareness of Indonesian companies on the importance of intellectual capital in creating and maintaining competitive advantage and shareholder value (Suhardjanto and Wardhani 2010). Meanwhile, many manufacturing companies, especially those in the consumer goods industry, have recently emerged which has resulted in a high level of competition among manufacturing companies in the consumer goods industry sector in Indonesia. With this high competition, a company must maximize its intellectual capital which will certainly affect the company's financial performance. The company's adequate intellectual capital will enable the company to compete with other companies. With good and effective utilization and management of intellectual capital, the company's financial performance will also increase (Angeline, 2020; Tiurma & Gantino, 2020).

The relationship of intellectual capital to financial performance can be seen from the perspective of Resource-Based Theory (Ahangar, 2011; Gan and Saleh, 2008; Smriti and Das, 2018). According to this theory, IC resources such as skills, competencies, knowledge and experience can be considered strategic resources that are rare, company-specific and difficult to imitate, which are the main drivers of the company's competitive advantage and financial performance advantages (Ahangar, 2011; Zéghal and Maaloul, 2010). Based on the Resource-Based Theory's view, Wernerfelt (1984) explains that companies will be more superior in business competition and get good financial performance by owning, controlling, and utilizing important strategic assets (tangible and intangible assets).

Pulic (1998) introduced the measurement of intellectual capital using the "Value Added Intellectual Coefficient" (VAICTM) method. The VAICTM method is designed to provide information about the efficiency of value creation (value creation) from tangible and intangible assets owned by the company. IC is divided into three main components namely Capital Employed Efficiency / CEE (relationships with customers, other stakeholders and society as a whole, as well as brand-consumer relationships), Human Capital Efficiency / HCE (knowledge, skills, training or innovation), and Structural Capital Efficiency / SCE (efforts in R&D, technological infrastructure, culture and organizational values) (Bontis, 1998; Edvinsson and Malone, 1997; Martín-de-Castro et al., 2011). These components are very different in nature but interrelated with each other within the company, which in turn provides a competitive advantage in line with RBT (Barney et al., 2011; Bollen et al., 2005; Han and Li, 2015).

Many companies have not paid much attention to CEE, HCE and SCE. In fact, these components are the building blocks for the company's intellectual capital (Sawarjuwono and Kadir, 2003). Various empirical studies on the components of intellectual capital using the Pulic (1998) method linking each component of intellectual capital to financial performance have been carried out in many countries. However, it shows inconsistent empirical results. Various results of empirical studies of Indonesian researchers show inconsistency, the results of research by Silvy and Rasyid (2020) show that HCE partially has no effect on the company's financial performance, while SCE and CEE partially have a positive influence on

the company's financial performance. In Sulaksono (2012) research, the empirical results of CEE have a positive effect on ROE but HCE, SCE, have no positive effect on ROE.

While the various results of empirical studies from outside researchers show inconsistencies, in the study of Amin, et al. (2018) who examined the Australian Stock Exchange (ASX) found that each component of intellectual capital, namely HCE, HCE, and SCE has a significant influence on financial performance and is also considered an integral part of gaining and maintaining a competitive advantage. Mohammad et al. (2018) conducted a study on Bursa Malaysia companies showing that CEE has a positive and significant effect on financial performance, however HCE and SCE have a negative effect on financial performance, this suggests that companies with higher CEE but not HCE and SCE tend to affect performance. corporate finance. Research of Forte, et al. (2019) on 135 samples of Italian companies from 2008 to 2017 show that only HCE has a positive effect on the company's financial performance, while SCE and CEE show a negative effect. Tefera (2018) shows that there is a significant positive effect on the relationship between the human capital efficiency coefficient (HCE), SCE, CEE in Ethiopian commercial banks on financial performance measures. The findings of Nimtrakoon (2015) who examined Asean technology companies stated that CEE was considered the most significant component of VAIC in increasing the value of company profitability. This implies that physical capital is important in generating profitability. Rehman et al. (2012) in their research provide empirical evidence that HCE, SCE, and CEE have a positive substantive relationship to ROE. In Dominique and Anggreni's (2011) research, only the SCE variable has a positive effect on financial performance, this shows that only the efficiency of structural capital contributes to an increase in financial performance.

The findings of Ozkan, et al. (2017) on Turkish banks imply there is a statistically significant positive relationship between CEE and profitability. In other words, increasing CEE increases profitability. There was also a statistically significant positive relationship between HCE and profitability, but CEE had a more statistically significant effect on profitability than HCE. These results indicate that the profitability of banks in Turkey is more influenced by CEE than by HCE. In other words, banks operating in the Turkish banking sector use their financial and physical assets efficiently in an effort to achieve higher levels of profitability. The SCE results show no statistically significant relationship between SCE and profitability. Ting and Lean (2009) and Joshi et al. (2013) also show that SCE does not have a statistically significant effect on the profitability of financial institutions in Malaysia and Australia. Whereas Ercan, et al. (2003) argue that there is a positive relationship between SCE and profitability, and a negative relationship between HCE / CEE on profitability. On the other hand, research by Albertini and Berger-Remy (2019) uses a meta-analysis of 75 empirical studies from 1992 to 2017, showing that HC, SC and RC have no effect on the company's financial performance at the same level. So this study aims to add empirical evidence of the effect of CEE, HCE, and SCE on financial performance

## **2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

Wernerfelt (1984) explains that according to RBT's view, companies will be more superior in business competition and get good financial performance by owning, controlling, and utilizing important strategic assets (tangible and intangible assets). In line with the opinion of Belkaoui (2003) which states that a potential strategy to improve company performance is to combine tangible assets and intangible assets. In RBT, resources can be generally defined to include assets, organizational processes, company attributes, information, or knowledge controlled by companies that can be used to understand and implement their strategies (Daft, 1983).

One of the most commonly used methods to measure intellectual capital and its components is the VAICTM (Value Added Intellectual Coefficient) method developed by Ante Pulic (Pulic, 1998). This method measures the efficiency of the three components of the company, namely, capital employed efficiency (CEE), human capital efficiency (HCE) and structural capital efficiency (SCE) in the process of creating value (Chen, et al., 2005;

Maditinos et al., 2011). A high VAIC value indicates a good utilization of the company's potential value through the use of intellectual, financial and physical capital (Maditinos et al., 2011). Since the introduction of the VAIC method, the term physical is not understood as part of the intangible (intangible), but instead as part of intellectual potential which is measured in monetary terms such as employee salaries (Pulic, 1998).

### **The Effect of Capital Employed Efficiency (CEE) on Financial Performance**

CEE describes how much value added (VA) is generated from the physical capital used. CEE is a comparison between VA and working physical capital (Capital Employed / CE). This CE shows the harmonious relationship that the company has with its partners, both from reliable and quality suppliers, loyal customers who are satisfied with the services of the company concerned, and the company's relationship with the government and the surrounding community (Belkaoui, 2003). Pulic (1998) assumes that if one unit of CE generates a greater return to a company, then that company is able to make better use of CE.  
*H1: Capital Employed Efficiency (CEE) has a positive and significant effect on financial performance*

### **The Effect of Human Capital Efficiency (HCE) on Financial Performance**

HCE indicates the ability of the workforce to generate value for the company from the funds spent on that labor. The more VA generated from every rupiah issued by the company shows that the company has managed its human resources optimally so as to produce quality workforce which in turn will improve the company's financial performance.

*H2: Human Capital Efficiency (HCE) has a positive and significant effect on financial performance*

### **The Effect of Structural Capital Efficiency (SCE) on Financial Performance**

Structural Capital / SC shows the contribution of structural capital (SC) in value creation. The smaller the contribution of HC in value creation, the greater the contribution of SC (Tan et al., 2007). The creation of this SC is related to the knowledge or value of a person who will not be lost if he leaves the company because his knowledge has been summarized in a database, so that the company will not lose its value.

*H3: Structural Capital Efficiency (SCE) has a positive and significant effect on financial performance*

## **3. RESEARCH METHOD**

This research is an empirical study using secondary data. The population in this study were all companies in the consumer goods industry listed on the Indonesia Stock Exchange for the period 2015-2019. The sampling technique was purposive sampling method based on certain criteria. The criteria established for consideration of sampling are consumer goods industry sector companies listed on the Indonesia Stock Exchange during the 2015-2019 period that present and publish their financial reports at the end of each year in the observation period and disclose and have complete data related to the research. Based on these criteria, there are 31 companies (2015-2019) so that there are 155 research samples.

### **Operational Variables Financial Performance**

The dependent variable in this study is financial performance as represented by profitability which indicates the ability of a company to earn profits in relation to the capital itself. According to Naz, et al. (2016) financial performance is the extent to which the company's financial health is measured over a certain period of time. This means that financial

performance is a financial action that is used to generate high sales, profitability, and company value for its shareholders through the management of current, non-current, financial, equity, income and expenditure assets. This study uses one indicator in assessing profitability, namely Return On Equity (ROE). A higher ROE means that the company's management is increasingly able to provide returns for shareholders (Hery, 2015). The formula for calculating ROE is:

$$\text{ROE} = \text{Net Profit After Tax} / \text{Total Equity}$$

### ***Intellectual Capital***

The independent variable in this study is intellectual capital which consists of three efficiencies, namely capital employed efficiency (CEE), human capital efficiency (HCE) and structural capital efficiency (SCE). The measurement of intellectual capital in this study uses a model developed by Pulic (1998), namely by calculating the Value Added Intellectual Coefficient (VAICTM) to provide information about the efficiency of value creation from tangible and intangible assets within the company.

(1) Calculating Value Added (VA). In this study, VA can be calculated by adding up operating profit (OP), Employee costs (EC), Depreciation (D) and Amortization (A).

$$\text{VA} = \text{OP} + \text{EC} + \text{D} + \text{A}$$

(2) Calculating capital employed efficiency (CEE). The CEE referred to in this study is measured based on the VA made by physical capital. This ratio shows the contribution made by each Capital Employed (CE) unit to the VA organization (Pulic, 1998; Ulum, 2007). CE represents available funds, equity, net income. CEE in this study can be calculated by the formula:

$$\text{CEE} = \text{VA} / \text{CE}$$

(3) Calculating human capital efficiency (HCE). The HCE referred to in this study was measured based on the VA made by HC. HC indicates how much VA can be generated by funds spent on labor (employee burden). This ratio shows the contribution per rupiah invested in HC to the VA organization (Pulic, 1998; Ulum, 2007). HCE in this study can be calculated by the formula:

$$\text{HCE} = \text{VA} / \text{HC}$$

(4) Calculating the structural capital efficiency (SCE). The SCE referred to in this study is measured based on the VA made by the SC. This measures the amount of SC needed to produce 1 rupiah and is an indication of the success of SC in value creation (Pulic, 1998; Ulum, 2007). SCE in this study can be calculated by the formula:

$$\begin{aligned} \text{SC} &= \text{VA} - \text{HC} \\ \text{STVA} &= \text{SC} / \text{VA} \end{aligned}$$

### **Data Analysis Technique**

In this study, testing and analysis of panel data used analysis tools in the form of panel regression models and hypothesis testing, namely the coefficient of determination (R<sup>2</sup>), individual tests (t-test), and simultaneous testing (F-test). Hypothesis testing is intended to test the correctness of the previously formulated hypotheses. There are three panel data regression model estimation techniques, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM). To determine the model estimation technique used in this study, there are three tests that must be carried out, namely:

**Chow's test** – The test used to choose whether CEM or FEM is the most appropriate for decision making if the cross-section probability value  $F > \alpha$  (0.05), then CEM is used, conversely if the cross-section probability value  $F < \alpha$  (0.05). then FEM is used.

**Table 1. Chow Test Results**

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.496691	(30,121)	0.0000
Cross-section Chi-square	148.743802	30	0.0000

Source: Eviews 9 Data Processing Output (2021)

**Hausman test** – The test used to choose whether the REM or FEM model is the most appropriate for use with decision making if the probability of random cross-section is  $<\alpha$  (0.05), then the model used is FEM, on the other hand if the probability of cross-section is random  $>\alpha$  (0.05), the model used is REM.

**Table 2. Hausman Test Results**

Correlated Random Effects - Hausman Test			
Equation: Untitled			
Test cross-section random effects			
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	11.210020	3	0.0106

Source: Eviews 9 Data Processing Output (2021)

**Lagrange Multiplier Test** – The test used to select whether a REM or CEM model is most appropriate for use with decision making can be determined based on the Breusch-pagan probability value, if the Breusch-Pagan cross-section probability  $<\alpha$  (0.05), then the model REM is used, on the other hand, if the Breusch-Pagan cross-section probability  $>\alpha$  (0.05), the model used is CEM.

**Table 3. Lagrange Multiplier Test Results**

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	65.74886 (0.0000)	0.117110 (0.7322)	65.86597 (0.0000)

Source: Eviews 9 Data Processing Output (2021)

### Conclusion of Panel Data Regression Model

The analysis result of determining the best model based on the Chow test shows the probability value of Cross-section F of 0.000  $<\alpha$  (0.05), this means that the fixed effect model is more feasible to use than the common effect. Meanwhile, based on the results of the Hausman test, the probability value of random cross-section with the chi square test statistic is 0.0106  $<\alpha$  (0.05), which means that the fixed effect model is more feasible to use than the random effect. The result of the Lagrange Multiplier test shows that the probability value of the

Breusch-pagan Cross-section is  $0,000 < \alpha (0.05)$ , this means that the random effect model is more feasible to use than the random common effect. In summary, here are the test results to determine the most appropriate model to use.

**Table 4. Comparison of the Best Model Determination Results**

No	Method	Test	Result
1	<i>Uji Chow</i>	CEM vs FEM	FEM
2	<i>Uji Hausman</i>	REM vs FEM	FEM
3	<i>Uji Lagrange Multiplier</i>	CEM vs REM	REM

Source: Author Processed Data (2021)

Based on the three test results that have been done, it can be concluded that the panel data regression model that is most appropriate to use is the Fixed Effect Model (FEM).

#### 4. DATA ANALYSIS AND DISCUSSION

##### Descriptive Statistical Analysis

Descriptive statistical analysis in this study was conducted to determine the general description and pattern of data distribution of all variables used in the study. The independent variables studied are capital employed efficiency (CEE), human capital efficiency (HCE), and structural capital efficiency (SCE), as well as the dependent variable Return On Equity (ROE). The results of descriptive statistical analysis are presented in the form of a table which shows the results of the measurement of the average value, standard deviation, variance, minimum value and maximum value as follows:

**Table 5. Results of Descriptive Statistical Analysis**

	ROE	CEE	HCE	SCE
Mean	0.182905	0.476218	1.889261	0.287291
Median	0.119573	0.373206	1.511553	0.342673
Maximum	2.244585	2.717972	5.863882	4.160586
Minimum	-0.379804	-0.096263	-0.774354	-3.679576
Std. Dev.	0.342684	0.385549	1.168279	0.664656

Source: Author Processed Data (2021)

Based on Table 5 above, it can be explained that the Return On Equity (ROE) as the dependent variable has a minimum value of -0.3798 and a maximum value of 2.2445. The average or mean value is 0.1829 with a standard deviation of 0.3426. Obtained standard deviation value is greater than the average value, this shows the data on the ROE variable spreads more varied. Meanwhile, the independent variable capital employed efficiency (CEE) has a minimum value of -0.0962 and a maximum value of 2.719, the mean value is 0.4762 with a standard deviation of 0.3855. The independent variable human capital efficiency (HCE) shows the minimum and maximum values of -0.7743 and 5.8638, respectively, obtained an average value of 1.8892 with a standard deviation of 1.1682. In the independent variable, structural capital efficiency (SCE) has a minimum value of -3.6795 and a maximum value of 4.1605. The average value of this variable is 0.2872 with a standard deviation of 0.6646.

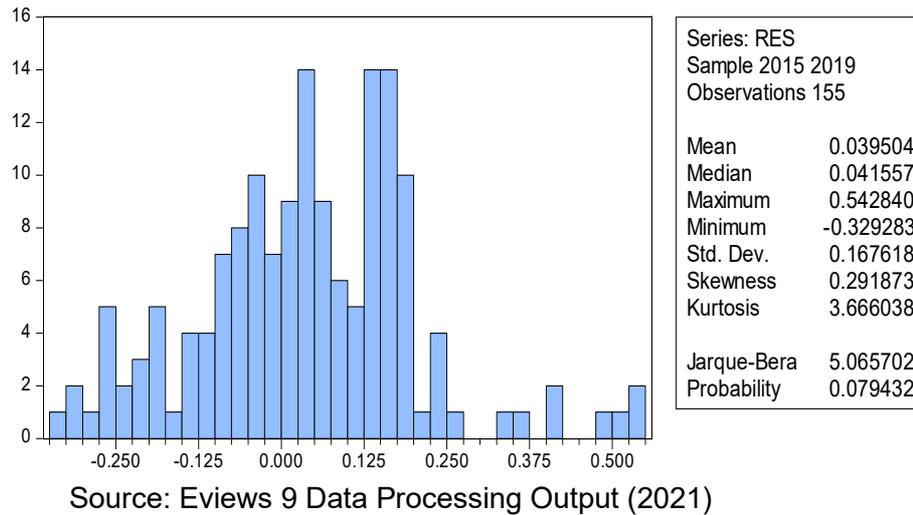
##### Classical Assumption Test

The classical assumption test is a requirement that must be met in regression analysis using the Least Squared Method approach in its estimation technique. Based on the analysis, it can be seen that the Fixed Effect Model (FEM) as the panel data regression model is the most appropriate to be used. The FEM model uses the Least Squared Panel approach so it is necessary to test classical assumptions. In this study, the classic assumption test that is

commonly used is the normality test, multicollinearity test, heteroscedasticity test and autocorrelation test.

**Normality Test**

The normality test is carried out to determine whether the residuals used have a normal distribution. Normality testing is done using the Jarque Bera test. Residuals are normally distributed if the Jarque Bera Probability value is  $> \alpha$  (0.05). Based on the normality test output, the Jarque Bera Probability is obtained  $0.0794 > \alpha$  (0.05). This means that the residuals are normally distributed, so that the assumption of normality is fulfilled, which can be seen in Figure 1 below.



**Figure 1. Normality Test**

**Autocorrelation Test**

The autocorrelation test aims to determine whether or not there is a correlation between the residuals at the current observation time (t) and the previous observation time (t - 1) which influence each other. One method that can be used to test autocorrelation is the Breusch-Godfrey test. It is said that there is no autocorrelation if the value is  $\text{Prob. F-Statistic} > \alpha$  (0.05). The autocorrelation test results in the table above show the F-Statistic Prob value of  $0.7702 > \alpha$  (0.05). This means that there is no autocorrelation in the panel data regression model, so that the non-autocorrelation assumption is fulfilled. The results of the analysis are shown in table 6.

**Table 6. Autocorrelation Test Results**

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	0.261620	Prob. F(2,120)	0.7702
Obs*R-squared	0.547017	Prob. Chi-Square(2)	0.7607

Source: Eviews 9 Data Processing Output (2021)

**Heteroscedasticity Test**

The heteroscedasticity test aims to determine whether there is an inequality of variants of the panel data regression model residuals. One method that can be used is the Breusch-Pagan-Godfrey test. It is said that heteroscedasticity does not occur if the Prob F-Statistic value is  $> \alpha$  (0.05). The results of the heteroscedasticity test in table 7 show that the Prob F-Statistic value is  $0.8923 > \alpha$  (0.05). This means that there is no heteroscedasticity or variance

in the panel data regression model which is the same or fixed (homoscedasticity), so that the non-heteroscedasticity assumption is fulfilled. The results of the analysis are shown in the following table.

**Table 7. Heteroscedasticity Test Results**

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.205723	Prob. F(3,122)	0.8923
Obs*R-squared	0.634197	Prob. Chi-Square(3)	0.8886
Scaled explained SS	6.160084	Prob. Chi-Square(3)	0.1041

Source: Eviews 9 Data Processing Output (2021)

### Multicollinearity Test

Multicollinearity test is performed on a regression model that uses more than one independent variable. Testing this assumption aims to determine whether there is a high correlation between the independent variables in the model. Multicollinearity detection can be determined based on the results of the correlation analysis between the independent variables, which is shown in the following table.

**Table 8. Multicollinearity Test Results**

	CEE	HCE	SCE
CEE	1.000000	0.530432	0.225440
HCE	0.530432	1.000000	0.456375
SCE	0.225440	0.456375	1.000000

Source: Author Processed Data (2021)

The multicollinearity test results in Table 8 show that all correlation coefficients are below 0.8. This means that there is no multicollinearity between the independent variables, because the correlation coefficient is still below the requirements for multicollinearity.

### Panel Data Regression with Fixed Effect Model (FEM)

Fixed effects models estimate panel data using dummy variables to determine the difference in intercepts. This approach is based on the existence of different intercepts between individuals, but the intercept is the same over time. This can have different effects on the formed model. FEM also assumes that the slope / regression coefficient remains between individuals and over time. The estimation result of panel data regression using FEM shown in Table 9.

### Panel Data Regression Model Equations

Panel data regression analysis in this study used the Fixed Effect model. The results of the analysis show that the variable Capital Employed Efficiency (CEE) and Structural Capital Efficiency (SCE) have a positive and significant effect on Return On Equity (ROE), while the Human Capital Efficiency (HCE) variable does not have a significant effect on Return On Equity (ROE). The panel data regression model is obtained using the Fixed Effect Model (FEM) as follows.

$$Y = \hat{\beta}_0 + 0,791323 * X_1 + 0,008746 * X_2 + 0,047587 * X_3 + \varepsilon$$

Where:

- Y : *Return On Equity (ROE)*
- X<sub>1</sub> : *Capital Employed Efficiency (CEE)*
- X<sub>2</sub> : *Human Capital Efficiency (HCE)*
- X<sub>3</sub> : *Structural Capital Efficiency (SCE)*

with  $\hat{\beta}_0$  for each company listed in Table 10.

**Table 9. Panel Data Regression Estimation with Fixed Effect Model (FEM)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.224133	0.028440	-7.881026	0.0000
CEE	0.791323	0.061275	12.91425	0.0000
HCE	0.008746	0.022101	0.395752	0.6930
SCE	0.047587	0.014484	3.285540	0.0013

Source: Eviews 9 Data Processing Output (2021)

**Table 10. Intersep Model**

Company	$\hat{\beta}_0$	Company	$\hat{\beta}_0$	Company	$\hat{\beta}_0$
ALTO	0.131491	KICI	-0.215240	RMBA	0.165881
CEKA	0.133713	KLBF	0.068665	ROTI	-0.013285
CINT	0.051541	LMPI	-0.027016	SIDO	0.119758
DLTA	0.113782	MBTO	-0.186179	SKLT	-0.297083
DVLA	-0.026807	MERK	-0.003946	STTP	0.048191
GGRM	0.137221	MLBI	0.047063	TCID	-0.025440
HMSP	0.100801	MRAT	-0.050399	TSPC	0.035440
ICBP	0.127109	MYOR	0.038406	ULTJ	0.144067
INAF	-0.159190	PSDN	-0.138085	UNVR	0.127178
INDF	0.021886	PYFA	-0.274602	WIIM	0.016592
KAEF	-0.211512				

Source: Author Processed Data (2021)

Based on the equation obtained, it can be explained that:

- If the independent variables X1, X2, and X3 are constant (zero), then the Return On Equity is equal to the  $\hat{\beta}_0$  intercept (according to each company), which is shown in Table 10.
- The coefficient value of the Capital Employed Efficiency (X1) variable is 0.7913. The coefficient is positive, this shows that every 1 unit increase in Capital Employed Efficiency / CEE will increase the Return On Equity by 0.7913.
- The coefficient value of the Human Capital Efficiency (X2) variable is 0.0087. The coefficient is positive, this means that every 1 unit increase in Human Capital Efficiency will increase the Return On Equity by 0.0087.
- The coefficient value of the Structural Capital Efficiency (X3) variable is 0.0475. The coefficient is positive, which means that every 1 unit increase in Structural Capital Efficiency will increase the Return On Equity by 0.0475.

## Hypothesis Testing

The effect of the independent variable on the dependent variable can be determined based on the results of hypothesis testing, namely using the simultaneous test (F test statistic) and partial test (t test statistic). The following describes the hypothesis testing and the goodness of the panel data regression model obtained.

### Simultaneous Test (F Test Statistics)

The simultaneous test explains whether all the independent variables entered into the model jointly affect the dependent variable, with the following hypothesis.

**Table 11. Simultaneous Test (F Test Statistics) Results**

Dependent Variable: ROE			
Method: Panel Least Squares			
Date: 01/07/21 Time: 17:25			
Sample: 2015 2019			
Periods included: 5			
Cross-sections included: 31			
Total panel (balanced) observations: 155			
Cross-section fixed (dummy variables)			
R-squared	0.950892	Mean dependent var	0.182905
Adjusted R-squared	0.937498	S.D. dependent var	0.342684
S.E. of regression	0.085672	Akaike info criterion	-1.885507
Sum squared resid	0.888102	Schwarz criterion	-1.217917
Log likelihood	180.1268	Hannan-Quinn criter.	-1.614347
F-statistic	70.99807	Durbin-Watson stat	1.920649
Prob(F-statistic)	0.000000		

Source: Eviews 9 Data Processing Output (2021)

The results of the analysis in Table 11 show that the Prob. F-Statistic is  $0.000 < \alpha (0.05)$ , it can be concluded that  $H_0$  is rejected. This means that the independent variables of capital employed efficiency (CEE), human capital efficiency (HCE), and structural capital efficiency (SCE) together have an effect on return on equity (ROE).

### Coefficient of Determination ( $R^2$ )

The coefficient of determination is a measure to determine how much variability the independent variables can explain to the formed model. The following are the results of the analysis obtained. The results of the analysis in Table 11 show that the coefficient of determination ( $R^2$ ) is 0.9508. This means that the independent variables in this study, namely capital employed efficiency (CEE), human capital efficiency (HCE), and structural capital efficiency (SCE) are able to explain the variability of the return on equity (ROE) model of 95.08% while the other 4.92% are explained. other variables not included in this study.

### Partial Test (t Test Statistics)

The partial test explains the effect of the independent variable partially on the dependent variable, with the following hypothesis.

**Tabel 12. Partial Test (Statistik Uji t)**

Dependent Variable: ROE				
Method: Panel Least Squares				
Date: 01/07/21 Time: 17:25				
Sample: 2015 2019				
Periods included: 5				
Cross-sections included: 31				
Total panel (balanced) observations: 155				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.224133	0.028440	-7.881026	0.0000
VACA	0.791323	0.061275	12.91425	0.0000
VAHU	0.008746	0.022101	0.395752	0.6930
STVA	0.047587	0.014484	3.285540	0.0013

Source: Eviews 9 Data Processing Output (2021)

### **The Effect of Capital Employed Efficiency (CEE) on Return On Equity (ROE)**

The prob value is obtained. The t-statistic for the CEE variable is  $0.000 < \alpha (0.05)$ , it can be concluded that  $H_0$  is rejected, which means that the CEE variable in this study has a significant effect on return on equity (ROE). This explains that the use of capital in the consumer goods industry sector will increase profits for these companies. The capital used is the asset value that contributes to the company's ability to generate income. So that if the capital used by a company is relatively large, it will result in relatively large income from the use of the company's assets (Jeneo, 2013). The results of this study are in accordance with the view of Resource-Based Theory, which states that the resources owned by the company have an effect on the company's financial performance which in turn can increase the company's value. Nimtrakoon (2015) states that CEE is considered the most significant component of VAIC in increasing the value of company profitability. This implies that physical capital is important in generating profitability. The results of this empirical study are in line with the results of research by Forte, et al. (2019), Amin, et al. (2018), Mohammad et al. (2018), Tefera (2018), Ozkan, et al. (2017), Rehman et al. (2012), and Sulaksono (2012).

### **The Effect of Human Capital Efficiency (HCE) on Return On Equity (ROE)**

The prob value is obtained. The t-statistic for the HCE variable is  $0.6933 > \alpha (0.05)$ , it can be concluded that  $H_0$  is accepted, which means that the HCE variable in this study does not have a significant effect on return on equity (ROE). These results explain that HCE has not been able to support an increase in the financial performance of the consumer industry sector as proxied by ROE. The larger salaries and allowances that the company provides to its employees do not motivate employees to increase their productivity in generating company revenue and profits. Good human resource management in the consumer goods industry sector will also not increase employee productivity which in turn will also increase company revenues and profits (Imaningati, 2007). The results of this empirical study are in line with the research results of Silvya and Rasyid (2020), Albertini and Berger-Remy (2019), Mohammad et al. (2018), Dominique and Anggreni (2011), Sulaksono (2012), and Ercan, et al. (2003).

### **The Effect of Structural Capital Efficiency (SCE) on Return On Equity (ROE)**

The prob value is obtained. The t-statistic for the SCE variable is  $0,000 < \alpha (0.05)$ , it can be concluded that  $H_0$  is rejected, which means that the SCE variable in this study has a significant effect on return on equity (ROE). The view of Resource-Based Theory (Wernerfelt, 1984) explains that the company will be more superior in business competition and get good financial performance by owning, controlling, and utilizing important strategic assets (tangible and intangible assets) in line with the results of this study. . This explains that the efficiency of structural capital becomes a company infrastructure that helps increase employee productivity, including in this case databases, organizational charts, process manuals, strategies routines, and everything else that makes company value greater than its material (Baroroh, 2013), so that SC can reduce the company's operational costs. Low operating costs will increase company profits resulting in increased Return On Equity (ROE). The results of this empirical study are in line with the results of research by Silvya and Rasyid (2020), Amin, et al. (2018), Tefera (2018), Rehman et al. (2012), Dominique and Anggreni (2011), and Ercan, et al. (2003).

## **5. CONCLUSIONS AND SUGGESTIONS**

Capital Employed Efficiency / CEE and Structural Capital Efficiency / SCE have a positive and significant effect on financial performance. If the higher the CEE and SCE, the higher the ROE of the company, so this can create stakeholder trust in the company.

Meanwhile, employee costs are costs that have relatively no effect on income, while ROE is indicated by income, thus proving that Human Capital Efficiency / HCE has a positive effect, but does not have a significant effect on financial performance in consumer goods industry sector companies listed on the IDX for the 2015-2019 period.

For future researchers who will examine the same field of science, it should not be limited to companies in the consumer goods industry sector listed on the IDX, can add samples or research periods, and can measure financial performance with other proxies such as return on assets, gross profit margin, net profit margin, return on sales ratio, return on capital employed, return on investment, earning per share, and others.

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