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THE ROLE OF RETURN OF ASSETS MEDIATING INTELLECTUAL CAPITAL TOWARDS CORPORATE VALUE: A STUDY ON FOOD AND BEVERAGES COMPANIES LISTED IN THE INDONESIA STOCK EXCHANGE

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ABSTRACT
This study aims to determine the role of return on assets in mediating the effect of intellectual capital on corporate value. This study uses signal theory as the main theory in research. The population in this study were 26 companies in food and beverages companies listed on the Indonesia Stock Exchange (BEI) in the 2016-2018 period. The method of determining the sample is carried out by nonprobability sampling method, through purposive sampling technique so that the number of samples used is 10 companies with 30 observations. The analysis technique used is the path analysis technique. The results showed that (1) Intellectual capital had a significant effect on return on assets in food and beverages companies. (2) Intellectual capital has a significant effect on corporate value in food and beverages companies, (3) Return on assets has a significant effect on corporate value in food and beverages companies, (4) Return on assets mediates the effect of intellectual capital on corporate value in food and beverages companies. This research can provide practical contributions in the form of information, consideration material, and contribution of thoughts for companies and investors in making decisions related to intellectual capital, corporate value and return on assets.

KEY WORDS
Intellectual capital, return on assets, corporate value.

Corporate value is a reflection of a company's ability to manage its knowledge and resources. Investor’s perceptions of the company are often linked to the stock price. The higher the share price in a company, the higher the corporate value and provide prosperity and welfare for shareholders and attract investors to invest their shares in the company.

The food and beverages subsector is one of the sub-sectors in the manufacturing sector on the Indonesia Stock Exchange (IDX). Food and beverages subsector is one of the sectors that survives during a crisis in Indonesia because some food and beverage products are the basic needs of the community. Food and beverages subsector has an important role in the development of the industrial sector.

The future outlook for the organization will depend on management's ability to use the intangible values of its intangible assets. An intangible asset represents a lawsuit against future benefits, the value it holds is not related to its physical form. Intangible assets in this case are intellectual capital (Chen et.al, 2005). Intellectual capital is an intangible asset that is able to provide value to companies and communities including patents, intellectual property rights, copyrights and franchises (Mavridis, 2004).

The development of the intellectual capital phenomenon began to appear in Indonesia after the existence of PSAK No. 19 (revised 2000) regarding intangible assets. According to PSAK No. 19, an intangible asset is an identifiable non-monetary asset that has no physical form and is held for use in the production or delivery of goods or services, leased to other parties, or for administrative purposes. However, in reality intellectual capital is still not widely applied in Indonesia. Until now, companies in Indonesia tend to use conventional based in building their business so that the products produced by these companies still lack technological content (Abidin in Kuryanto, 2008).

Investors tend to see profit as an indicator of a company's success. The company's ability to generate profits is measured by the profitability ratio. Return on assets is a measure of the profitability ratio. Corporate value is closely related to an increase in company profits. In addition to being an indicator of the company's ability to fulfill its obligations for its funders, it is an element in the creation of corporate value that shows the company's prospects in the future. Good utilization and management of intellectual capital will further increase the company's profitability (Kuspinta and Husaini, 2018).

Research on intellectual capital on corporate value with return on assets as the mediating variable has been carried out with different results. Research conducted by Suparno (2017) and Ahmed et.al (2019) regarding intellectual capital has an effect on corporate value, where the results of this study state that intellectual capital affects corporate value. Different from the results of research conducted by Madyan and Fikir (2019) and Forte et.al (2019) which state that intellectual capital has no effect on corporate value.

Research on intellectual capital on return on assets conducted by Kuspinta and Husaini (2018) states that intellectual capital affects return on assets. Research conducted by Yilmaz and Acar (2018) states that intellectual capital, which is proxied by VACA and VAHU, has a positive effect on ROA, while STVA has no effect on ROA.

Several studies related to the effect of return on assets on corporate value include: Jayanti and Binastuti (2017) and Pratama and Wiksuana (2016) state that profitability, which is proxied by return on assets, has a positive effect on corporate value. Research conducted by Rahmantio, et al. (2018) states different things, namely return on assets has no effect on corporate value. With the inconsistency of research results regarding the effect of intellectual capital on corporate value, as well as the contribution of different intellectual capital for each industry, it is interesting to review the effect of intellectual capital on corporate value. The inconsistencies in the results of previous research indicate that there are other variables that are able to mediate the effect of intellectual capital on corporate value, namely profitability, which is proxied by return on assets (Jayanti and Binastuti, 2017).

The purpose of this study is to analyze the effect of intellectual capital on corporate value with return on assets as a mediating variable between intellectual capital and corporate value.

According to Brigham and Houston (2011), signal theory is the company's action in giving signals to investors about how management views the company. Signal theory discusses how the signals of success or failure of management (agent) should be conveyed to the owner (principal). The impetus for providing signals arises due to the presence of asymmetric information between the company (management) and outsiders, where investors know that the company's internal information is relatively less and slower than the management.

Companies that have good intellectual capital performance tend to better disclose the intellectual capital owned by the company. The higher the performance of the company's intellectual capital, the better the level of disclosure, because disclosure of intellectual capital can increase stakeholder confidence in the company. Research conducted by Kuspinta and Husaini (2018) states that intellectual capital has a positive effect on return on assets. With proper utilization and management of intellectual capital, the company's profitability level will also increase. In line with that research, the results of research by Ozturk and Demirgunes (2007) also state that intellectual capital has a positive effect on return on assets. Based on the explanation of the effect of intellectual capital on return on assets, the following hypothesis can be formulated:

H1: Intellectual Capital has a significant effect on Return On Assets at Food and Beverages Companies.

Intellectual capital plays an important role in increasing corporate value. With a good corporate value, it will be able to invite investors to invest. There is a positive relationship between intellectual capital and the company's market value (Chen et.al, 2005). According to the stakeholder theory, it is explained that all activities in the company have value creation. The research results of Suparno (2017) and Ahmed et.al (2019) state that intellectual capital has a positive effect on corporate value. Based on the explanation of the effect of intellectual capital on corporate value, the following hypotheses can be formulated:

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H2: Intellectual Capital has a significant effect on Corporate value at Food and Beverages Companies.

Investors make an overview of a company by looking at financial ratios as an investment evaluation tool, because financial ratios reflect the high and low corporate value. If investors want to see how much the company produces a return on their investment, the first thing to look at is the profitability ratio. Return on assets shows the company's ability to generate profits in utilizing the total assets owned by the company. Profits can influence investor interest because a successful company will generate stable profits. With high profits, the level of investor confidence will increase, so that it will have an impact on corporate value (Dwipayana and Agung, 2015). Research conducted by Jayanti and Binastuti (2017), Pratama and Wiksuana (2016) found that ROA has a positive effect on corporate value. Based on the explanation of the effect of return on assets on corporate value, the following hypothesis can be formulated:

H3: Return On Assets has a significant effect on Corporate value at Food and Beverages Companies.

Corporate value can be increased by reducing asymmetric information, by providing signals to outsiders in the form of reliable financial information so as to reduce uncertainty about the company's future growth prospects. A good financial report will increase corporate value, management hopes to provide a signal of prosperity to owners or shareholders in presenting financial information such as information related to profits and intellectual capital. Jayanti and Binastuti's research (2017) found that ROA is able to mediate the effect of intellectual capital on corporate value. Based on the explanation of the effect of the role of return on assets as mediating the effect of intellectual capital on corporate value, the following hypotheses can be formulated:

H4: Return On Assets mediates the influence of Intellectual Capital on Corporate value in Food and Beverages Companies.

The following is an illustration of the research framework as shown in Figure 1:

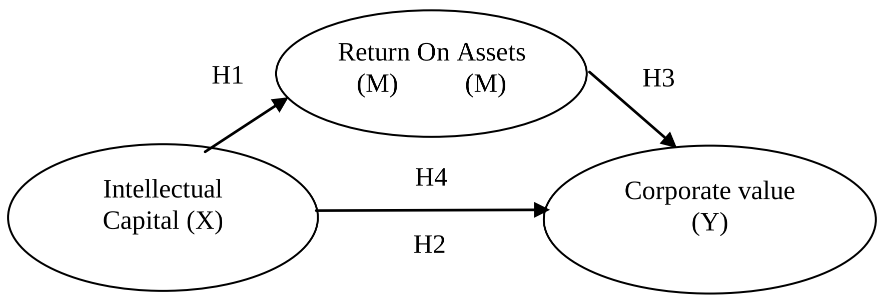

Figure 1 – The Role of Return On Assets Mediating the Influence of Intellectual Capital on Corporate value

RESEARCH METHODS

The research object consisted of Intellectual Capital, Corporate value, and Return On Assets. The research subjects, namely the Food and Beverages sub-sector companies listed on the Indonesia Stock Exchange (BEI). The population of this study were 26 companies in the Food and Beverages sub-sector listed on the Indonesia Stock Exchange (BEI). The sample is part of the number and characteristics of the population. The sample of this study amounted to 10 companies. The sampling method used in this study was purposive sampling. The research hypothesis is tested using the path analysis model.

RESULTS AND DISCUSSION

Table 1 – Path Analysis Results of Equation 1

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	0,026	0,038		0,679	0,502		
Intellectual Capital	0,003	0,001	0,637	4,375	0,000	1,000	1,000

a. *Dependent Variable: Return on Assset*

Based on Table 1, a structural equation can be drawn up, which is as follows:

$$M = a + b_1X + e_1 = 0{,}026 + 0{,}003X + e_{1h}$$

Table 2 – Results of Path Analysis of Equation 2

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1,810	0,700		-2,586	0,015		
Intellectual Capital	0,063	0,018	0,491	3,493	0,002	0,594	1,683
Return on Assset	10,350	3,438	0,423	3,011	0,006	0,594	1,683

a. *Dependent Variable*: Nilai Perusahaan

Based on Table 2, a structural equation can be drawn up, which is as follows:

$$Y = a + b_2X + b_3M + e_2 = -1{,}810 + 0{,}063X + 10{,}350M + e_2$$

The statistical model describes the research concept that is equipped with the path coefficient and the standard error value of each equation. For the path of effect of intellectual capital on return on assets (b1), it has a path coefficient of 0.637. The path coefficient of the effect of intellectual capital on corporate value (b2) is 0.423. The standard error for equation 1 (e1) is 0.594 and for the standard error for equation 2 is 0.316.

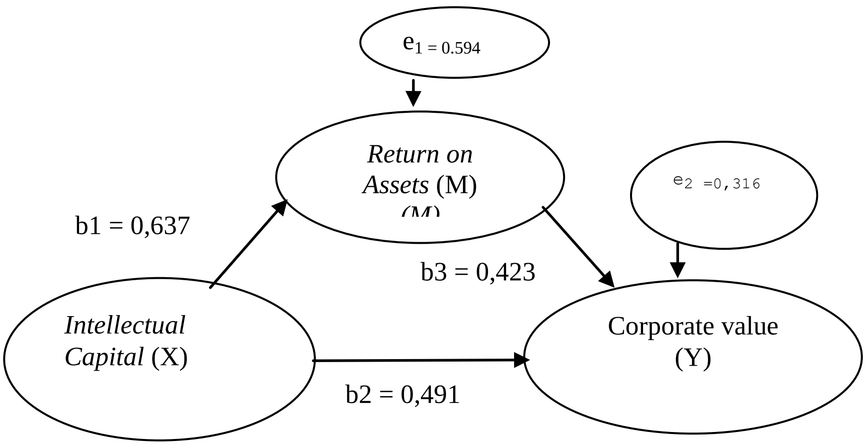

Figure 2 – Statistical Model

This study tested four hypotheses which are described as follows:

1. The first hypothesis testing aims to examine the effect of intellectual capital on return on assets. The test results show that the t-test coefficient is 4.375 with a significance level of 0.000 less than 0.05. This means that intellectual capital has a significant effect on return on assets, so that H1 is accepted.
2. The second hypothesis testing aims to examine the effect of intellectual capital on

corporate value. The test results show that the t-test coefficient is 3.493 with a significance level of 0.002 less than 0.05. This means that intellectual capital has a significant effect on corporate value, so that H2 is accepted.
3. The third hypothesis testing aims to examine the effect of return on assets on corporate value. The test results show that the t-test coefficient is 3.011 with a significance level of 0.006 less than 0.05. This means that return on assets has a significant effect on corporate value, so that H3 is accepted.
4. The fourth hypothesis testing aims to examine the role of return on assets in mediating the effect of intellectual capital on corporate value.

Sobel Test for Mediation Role

From the calculation results show that the single test calculation value (z) of 2.07 is more than the z table of 1.96. This result means that return on assets mediates the effect on corporate value, so that H4 is accepted.

The coefficient of determination aims to measure how much the independent variable is able to explain the changes in the dependent variable. Based on the calculation of the effect of error, the results of the effect of the error of model 1 and the effect of the error of model 2 are obtained so that the total coefficient of determination is as follows:

$$R^2m = 1- (Pe_1)^2 (Pe_2)^2 = 81{,}2\%$$

This means that 81.2% of the variation in the fluctuation of changes in corporate value is influenced by the independent variables of intellectual capital and the mediating variable of return on assets, while the remaining 18.8% is influenced by other variables that are not explained in the research model.

The first hypothesis (H1) which is put forward in this study is that intellectual capital has a significant effect on return on assets. The results show that intellectual capital has a significant effect on the return on assets of companies in the food and beverages sub-sector. The higher the level of intellectual capital, the higher the return on assets of the food and beverages sub-sector company. These results are supported by the results of research by Ozturk and Demirgunes (2007) and Kuspinta and Husaini (2018) which state that intellectual capital has a positive effect on return on assets.

The second hypothesis (H2) stated in this study is that intellectual capital has a significant effect on corporate value. The results show that intellectual capital has a significant effect on the corporate value in the food and beverages sub-sector. The higher the level of intellectual capital, the higher the value of food and beverages companies. These results are supported by the research results of Ahmed et.al (2019) and Suparno (2017) which state that intellectual capital has an effect on corporate value. A food and beverage sub-sector company that better discloses the intellectual capital owned by the company, it can increase stakeholder confidence in the company.

The third hypothesis (H3) put forward in this study is that return on assets has a significant effect on corporate value. The results show that return on assets has a significant effect on corporate value in the food and beverages sub-sector. The higher the level of return on assets, the higher the value of the food and beverages sub-sector companies. These results are supported by the results of research conducted by Jayanti and Binastuti (2017), Pratama and Wiksuana (2016) which found that ROA has a positive effect on corporate value.

The fourth hypothesis (H4) put forward in this study is that return on assets mediates the effect of intellectual capital on corporate value. The sobel (z) test results show that return on assets mediates the effect of intellectual capital on corporate value. A food and beverage sub-sector company that has a high level of intellectual capital and return on assets, then the company tends to have a high corporate value as well. This research supports the signaling theory which states that management hopes to provide a signal of prosperity to owners or shareholders in presenting financial information such as information related to profits and intellectual capital.

CONCLUSION AND SUGGESTIONS

Based on the results and discussion of this study, the following conclusions were drawn: (1) Intellectual capital has a significant effect on Return on Assets in the Food and Beverages sub-sector companies, (2) Intellectual Capital has a significant effect on Corporate value in the Food and Beverages sub-sector companies, (3) Return on Assets has a significant effect on Corporate value in the Food and Beverages sub-sector, (4) Return on Assets mediates the effect of intellectual capital on corporate value. Regarding the research results obtained, the authors provide advice to the company, given the importance of the influence of return on assets and intellectual capital in increasing corporate value, the company should optimize profit management and utilization of intellectual capital so that it can attract investors to invest in the company which in the end can have an impact on increasing the corporate value. Some suggestions for further research, namely, can add to the sample by using other sub-sector companies. Further research is also expected to use a longer time span to be able to see the progress of the increase that has occurred in the corporate value under study.

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