Profitability Analysis and Asset Structure Against Company Value with Intellectual Capital as Moderation

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ABSTRACT

This study aims to analyse the effect of profitability and Asset Structure on the Value of Companies with Intellectual Capital as Moderation of Empirical Studies on Manufacturing Companies in the Food and Beverage Industry Sub-Sector Listed on the Indonesia Stock Exchange for the 2016-2020 Period. The total population are 32 companies, and the sampling technique with purposive sampling collected sample was 16 companies. This research used analysis multiple linear regression with moderation variable. Statistical software for calculated data is Rstusio. The results showed that profitability and asset structure proved to have an influence on firm value. Variable intellectual capital moderating has also been shown to have a moderate effect on profitability and asset structure on firm value.

Keywords: firm value; profitability; asset structure; intellectual capital; moderating

1. INTRODUCTION

Food and beverage company are some of sub-sectors that consistently make a significant ante to the development of the national economy (Rabbi, 2021). This is evidenced by the increase in food and beverage export activities throughout 2021 which reached 465 trillion rupiah or an increase of 52% when compared to the export level in 2020 (Rabbi, 2021). The increase in food and beverage export activities throughout 2021 also resulted in an increase in share prices in each of the food and beverage subsector companies, one of which was PT Akasha Wira International, Tbk (ADES). According to www.idx.com (2021) the share price of ADES increased by 92.95% over the past year, the increase in the share price of ADES jumped high especially in 2021.

The first factor that is indicated to affect firm value is profitability. As stated by

Yustyarani and Yuliana (2020) in their operations, several companies have strategies to increase their profitability ratios, including optimizing their resources both through operational activities and investments that can generate added value for the company.

The second factor which is indicated to affect the firm value is the asset structure. According to Farizki et al (2021) asset structure is the fortune owned by the corporation which is intended to provide advantage in the forthcoming. Companies with good asset structure are considered to have large assets.

The last factor that is indicated to influence the value of the corporate is intellectual capital. According to Yustyarani and Yuliana (2020) intellectual capital is one of the approaches taken by the company in the process of measuring and appraising the intangible assets owned by the company.

2. LITERATURE REVIEW

Pamungkas (2020) states that the value of the company can be measured, one of which is by looking at the company's share price, an assessment through the share price is considered more appropriate because the company's share price is a form of investor assessment of the overall equity owned. Karlina et al (2019) added that company value is a determination of the corporates level of achievement which is generally connecting with the corporate stock price. This means that the peak stock price of corporate reflects the good value, which gives a good signal that the prospects for the company's current and future performance are guaranteed.

$$Tobin's\ Q = \frac{MVS + Debt}{TA}$$

Profitability is competence of corporate to earn return related on the sale of assets and of one's capital (Farizki et al, 2021). If a company has low sales, automatically the profit generated will be small and result in a decrease in the company's stock price. Pamungkas (2020) added that the profitability ratio is one of the ratios used by investors in determining their investment decisions, the better the profitability ratios owned by the company, the more investors are interested in investing, which is related to the escalate in the corporate stock price. Profitability can reflect the advantages of financial investment with greater internal sources, meaning that profitability affects the value of the company (Prima, 2018).

$$ROE = \frac{Net\ Income}{Equity}$$

According to Pamungkas (2020) the asset structure is a stability or comparing among fixed assets and total assets owned by the company. According to (Farizki et al, 2021) companies that have a good asset structure are considered to have a large number of fixed assets. The greater the number of fixed assets in a company, the more profitable it is in the future. In this case, it way the number of fixed assets owned by the corporate is considered an investment that can generate profits in the future, the preferable the asset structure of a corporate, the peak the corporates stock price (Pamungkas, 2020).

$$Asset\ Structure = \frac{fixed\ asset}{total\ asset}$$

According to Yustyarani and Yuliana (2020) intellectual capital is one of the approaches taken by the company in the process of measuring and appraising the intangible assets owned by the company. Intellectual Capital is a way to gain competitive advantage and become a very important component for the prosperity, growth and development of companies in the new knowledge-based economy, (Irawati, Sugiyanto, & Nadi, 2019). Intellectual capital is basically considered to have a role that can increase the value of the corporate and the financial performance. In this case, the high intellectual capital owned by the corporate is considered indicate the efficiency in utilizing its capital so that it can produce added value for the company (Dzahabiyya et al., 2020). Apply efficient of intellectual capital is considered to escalated value of the company. According to Yustyarani and Yuliana (2020) the discrepancy among stock market price and stock book price is intellectual capital is appreciated and avowed by the stock market. One method of measuring intellectual capital with non-

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monetary assessment is the Balanced Scorecard, while the method of measuring intellectual capital with monetary assessment, one of which is the Pulic model known as value added intellectual capital (Budianto, et. Al, 2018).

$$VA = OUT - IN$$
$$HCE = VA/HC$$
$$SCE = SC/VA$$
$$CEE = VA/CE$$
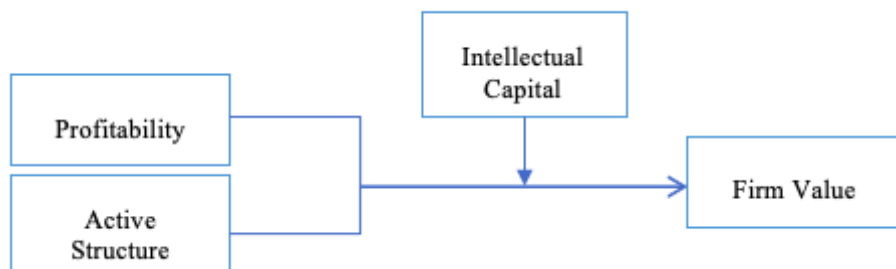$$VAIC = HCE + SCE + CEE$$

Figure 1. Research Model

The profitability ratio is one of the ratios used by investors in determining their investment decisions, the better the profitability ratios owned by the company, the more investors are interested in investing, the higher the stock price in corporate. Profitability can explain that the company's ability to generate profits is dependent on the size of the sale, the investment of assets (investment) and the absorption of equity (equity), (Irawati, 2018) The peak of profitability ratio owned by company means that the corporate can generate profits well so that the corporates stock price is workup.

H₁: Profitability has an effect on firm value

Corporates that have a good asset structure are considered to have a large number of fixed assets. The greater the number of fixed assets in a company, the more profitable it is in the future. The better the structure of assets owned by corporate, the more profitable it should be in future to increase firm value.

H₂: Asset structure affects firm value

These intangible assets can be used by companies to gain competitive advantage or competitive advantage that will make the company's profits increase. Profits can be assessed by profitability and indirectly it can increase investor interest in the company. Which causes the company's stock price Profits can be assessed by profitability and indirectly it can increase investor interest in the company which causes the company's stock price. Customer capital can be defined as the company's ability to identify the market needs, so it will create the good relation with the external parties (Giovanni, 2020).

H₃: Intellectual capital can moderate the effect of profitability on firm value

The number of fixed assets owned by corporate is considered an investment that can generate profits in the future, the better the asset structure of a corporate, the peak the corporates stock price. Intellectual capital is considered as a wealth generator and a driver of financial performance so as to create competitive advantage and corporate sustainability (Agustia, 2021).

H₄: Intellectual capital can moderate the effect of asset structure on firm value

3. RESEARCH METHOD

Operational Definitions of Variable

1. Dependent Variable

   Firm value in this research was quantified by Tobin's Q which was build by James Tobin in Weston and Copeland (2001). According to Naqsyabandi (2015), stated that Tobin's Q is the ratio of the firm value to value of assets. Value is very important because high values will be followed by high prosperity for the company's shareholders (Arfianto, 2016).

2. Independent Variable

   Profitability is the company's ability to earn profits at a certain level of sales, assets and share capital (Puspitasari, 2020). This ratio as well present a quantify of the tier of potency a corporate management. This is represented by the income produced through sales and investment revenue. The fundamentals are that make use of this ratio disclose the efficiency the corporate.

   Asset structure is a stability or comparing in infallible terms and in relational terms among current assets and fixed assets. When manager ownership decreases in the firms, he tends to use the firm resources for his own privileges (Sahabuddin, 2017). Absolute meaning is comparing in nominal establish, whereas what is meant by comparative purpose is comparing in percentage.

3. Moderating Variable

   Intellectual capital is one of the approaches taken by the company in the process of measuring and appraising the intangible assets owned by the company. VAICTM is a methode build by Pulic (1998) to quantify intellectual capital, which observes and measures efficiency of value invention. The VAICTM index usually spacing among 1 and 3 (Stahle et al., 2011).

Sample Collection Techniques

The sampling technique common in this study was purposive sampling by specific considerations.

Table 1 Research Sample

No.	Selection Criteria	Total
1.	Companies in the food and beverage industry sub-sector listed on the Indonesia Stock Exchange (IDX).	32
2.	Food and beverage industry sub-sector companies that did not conduct Initial Public Offering (IPO) before 2016.	(14)
3.	Have incomplete data needed in research during the 2016-2020 period.	(2)
	The number of companies that meet the sample criteria.	16

Data Analysis Techniques

This Research uses multiple linear regression analysis with moderating variables. The statistical analysis tool used Rstudio Software with query. The tests carried out include the classical contention test which be composed of normality test, multicollinearity test, heteroscedasticity test, autocorrelation test. Then performed a hypothesis test consisting of determination test, correlation test, model feasibility test and t test. Based on the results of hypothesis testing, multiple linear

regression equations can be obtained (Budiaji, 2019).

4. RESULTS AND DISCUSSION
Descriptive

Results Descriptive statistics can provide an overview of each variable regarding the average value (Mean), Standard Deviation, and number of samples studied.

Table 2 Descriptive Statistics

Company Value		Profitability		Intellectual Capital	
Min	:	-1.950	Min	:	-0.68	Min	:	-26.42.06
1st Qu.	:	0.610	1st Qu.	:	0.048	1st Qu.	:	5
Median	:	1.385	Median	:	0.120	Median	:	3.150
Mean	:	2.022	Mean	:	0.155	Mean	:	3.006
3rd Qu.	:	2.612	3rd Qu.	:	0.200	3rd Qu.	:	4.237
Max	:	11.940	Max	:	1.450	Max	:	10.020

Source: Rstudio output

Normality test

Table 3 Shapiro-Wilk Normality test

> Shapiro-Wilk normality test
> data: reg1$residual
> W = 0.91166, p-value = 3.923

Source: Rstudio output

Based on the Shapiro-Wilk test, it produces a p-value of 3.923 which is greater than the significant value, namely $3.923 > 0.05$, so it can be said that the data is normally distributed.

Autocorrelation test

Table 4 Autocorrelation test

> Durbin-Watson test
> data: reg1
> DW = 2.0754, p-value = 0.61

alternative hypothesis: true autocorrelation is grea

Source: Rstudio output

The Durbin Watson test resulted in a p-value greater than a significant value of $0.6 > 0.05$, so it can be said that there was no autocorrelation in the research variables.

Homogeneity test
Table 5 Breusch-Pagan Test

> Breusch-Pagan test
> data: reg1
> BP = 24.26, df = 4, p-value = 7.085

Source: Rstudio output

The Breusch-Pagan test results in a p-value greater than a significant value of $7.085 > 0.05$, so it can be said that the research data is homogeneous and there is no heteroscedasticity.

Multicollinearity test

Table 6 VIF value

Prof	Active_Struc	Prof_IC	AS_IC
1.0213	1.053	3.2626	3.257

Source: Rstudio output

Multicollinearity testing using VIF value results in each variable having a VIF value < 10, so it can be said that the research data does not have multicollinearity problems.

Goodness of fit test

Table 7 F test

> Residual standard eror: 1.32 on 75 degrees of freedom
> Multiple R-squared: 0.7465, Adjusted R-squared: 0.733

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F-statistics: 55.23 on 4 a 75 DF, p-value: < 2.2e-16

Source: Rstudio output

The goodness of fit test using the F test produces a p-value of 2.2e-16 which is smaller than the significant value of the study, which is 0.05, so it can be said that the research model is feasible to use.

Hypothesis test

Table 8 t test

Coefficient:

	Estimate	Std. Error	t value	Pr(>|t|)
(Intercept)	-0.00576	0.37713	-0.015	0.98785
Profitability	6.13117	0.4788	12.805	< 2e-16
Act_Struc	2.77219	0.83943	3.302	0.00147
Prof_IC	0.31104	0.05332	5.833	1.29E-07
AS_IC	-0.20424	0.11842	-1.725	0.08869
Signif. Codes : 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 '' 1				

Source: Rstudio output

The results of hypothesis testing can be explained: The effect of profitability on firm value produces a p-value of 2e-16 < 0.05 so that H0 is rejected, that is, profitability has a significant influence on firm value. Structural influence. assets to firm value produces a p-value of 0.00147 <0.05 so that H0 is rejected, that is, the structure of assets has a significant influence on firm value. Intellectual capital can moderate the effect of profitability with firm value resulting in a p-value of 1.29e-7 so that H0 is rejected, i.e., Intellectual capital can moderate the effect of profitability with firm value.

Intellectual capital can moderate the influence of asset structure with firm value resulting in a p-value of 0.08869 so that H0 is rejected, namely intellectual capital can moderate the effect of asset structure on firm value.

Multiple regression equation

The multiple regression equation can be described as follows:

$$NP = -O,00576 + 6,13117\, prof + 2,27719\, SA + 0,31104\, prof_{Mi} - 0,20424\, SA_{Mi}$$

5. CONCLUSION

The test results produce several conclusions as follows:

Profitability has a positive and significant effect on firm value. The higher the profitability, the higher the value of the company. The better the profitability growth, the corporates prospects for future are consideration preferable, sense the firm value will also be appraise as preferable by investors.

Asset structure has a positive and significant effect on firm value. The better the structure of assets owned by the company, the more profitable it will be in the future so that the value of the company will increase.

Intellectual Capital is proven to moderate the InfluenceProfitability Against

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Company Value.Investors will prefer companies that can create or create more value than other companies. Companies that get more value added than other companies, investors will also benefit. In this context, the use of intellectual capital can escalated the value added the corporate.

Intellectual Capital is proven to moderate the Influence Asset Structure Against Company Value.The greater the number of fixed assets in a company, the more profitable it is in the future. In this case, it means that the number of fixed assets owned by the company is considered an investment that can generate profits in the future.

Suggestion
In relevance with the limits of this research, suggestion for further research include is since the sample of the research was limited, future research can conduct more sector affective on pandemic covid-19 situation and potential investors can take into account various aspects before making an investment.

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