

THE EFFECT OF SALES GROWTH AND OPERATING CAPACITY WITH COMPANY SIZE AS A MODERATION VARIABLE ON PROFITABILITY IN INFRASTRUCTURE COMPANIES

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Abstract: The purpose of this research is to analyze the effect of sales growth and operating capacity on profitability as a moderating variable for firm size. The basic population of this research is all infrastructure companies registered in Indonesia during the 2017 - 2020 period. Purposive sampling is the sampling method used. The information needed for this research was taken from the Indonesian Capital Market Directory (ICMD) 2017-2020. The data collection method used in this study is the documentation method. Statistical testing was carried out using the t-test and multiple linear regression analysis, which was first tested with classical assumptions. The results of this study indicate that: sales growth has no effect on profitability, while operating capacity and company size have a positive effect on profitability. Company size cannot moderate sales growth on profitability, but conversely, company size can moderate operating capacity on profitability.

Keywords: firm size, operating capacity, profitability, sales growth

I. INTRODUCTION

The development of business life in Indonesia is starting to look quite rapid. This is shown by the emergence of various companies, ranging from small businesses owned by individuals to large companies that have subsidiaries. Therefore, competition between companies cannot be avoided, because for that every company must be able to manage its company to achieve company goals, namely. increase the value of the company by generating optimal profits. Company management is required to have the ability to increase efficiency in all fields and manage its resources efficiently and effectively to increase company profitability. The company's ability to earn profits shows whether the company has good future prospects or not (Widhi and Suarmanayasa, 2021).

Profitability is the ability of a business to generate profits or profits. Companies that want to make a profit try to increase profitability, because the higher the level of profit, the more guaranteed the survival of the company. Profitability is the ability to generate profit in relation to sales, balance sheet volume and equity. In general, the problem of profitability is more important for the company than the problem of profit, because the amount of profit earned still does not reflect whether the company has operated efficiently. One of the metrics used in profitability ratios is return on assets (ROA), which shows how much net profit is generated relative to the assets owned by the company. (Pernamasari and sugiyanto, 2022; Widhi and Suarmanayasa, 2021; Kasmir 2019).

Sales growth sometimes reflects the company's ability. The higher the company's sales growth, the more successful the implementation of this strategy will be. Businesses with rapidly growing sales do not really need large funds to finance their business operations. Growth companies prefer to take advantage of investments with good prospects. The higher the expected sales, the better the company's profitability. According to research (Fransisca and Widjaja, 2019), sales growth has a positive effect on profitability, where companies can increase profits with higher sales. In contrast to the results of Aprilia and Kusumawati's research (2020), the results of increased sales did not affect profitability.

The company's operating capacity is of course also a company's asset turnover. The activity ratio, also known as operating capacity, is the ratio used to measure the efficient use of company assets (Harjinto and Martono, 2014).

Asset management where the more efficient the company practices, the less assets the company should have. This is in accordance with research conducted by Husnah and Setiadi (2020), but not in line with research by Angelina et al. (2020), who found different results, namely operating capacity has no effect on profitability.

Company size is a measure of company size, including total sales, average sales level, and total assets. Large companies with large total assets can earn large profits. According to research by Pramest, Wijayanti and Nurlaela (2016) and Rahmawati and Mahfudzi (2018), firm size has a significant effect on ROA. The research results of Tan and Hadi (2019) say that company size has no significant effect on profitability.

Therefore, the purpose of scientific writing is to provide an overview of how sales growth and operating efficiency affect profitability with firm size as a moderating variable. In an infrastructure company. Thus, the formulation of the problem in this study is as follows:

1. Does sales growth affect profitability?
2. Does operational efficiency affect profitability?
3. Does company size affect profitability?
4. Can company size control sales growth and operating capacity with profitability?

II. RESEARCH METHODS

In this population survey, all companies in the infrastructure sector are listed on the Indonesia Stock Exchange (IDX) between 2017 and 2020. Sampling was carried out using purposive sampling where sampling is based on certain facts which can be explained as follows:

1. Infrastructure companies listed on the Indonesia Stock Exchange (IDX) in 2017-2020
2. Companies in the infrastructure sector that are not listed and have just entered the IDX in the year of research.

The current study uses an annual time series from 2017 to 2020. Information was collected using the documentary method from various research sources and financial reports of infrastructure sector companies on the Indonesia Stock Exchange for the period 2017-2020. This research is in the form of quantitative data using secondary data. Although the analysis technique used is multiple linear analysis.

III. RESULTS AND DISCUSSION

Description of Research Data

These descriptive statistics consist of minimum, maximum, mean and standard deviation which are obtained from Table 3 as follows:

1. The maximum value of sales growth is 343% at PT. Alfa Energi Investama Tbk in 2018 with a minimum value of -42% at PT. Apexindo Pratama Duta Tbk in 2020. The mean value is 0.2294 and the standard deviation value is 0.6366. This shows that the sales growth variable is not normally distributed because the standard deviation is greater than the average of these variables.
2. The minimum operating capacity value is 8% for PT Golden Eagle Energy Tbk in 2017, while the maximum value for PT Energi Mega Persada Tbk in 2017 is 362%. The average value is 0.8006. Although the standard deviation value is 0.56706. This shows that the operating capacity variable is normally distributed because the standard deviation is smaller than the average of these variables.
3. The minimum value of company size is ln 26.85 or IDR 457,422,862,654 at PT. Alfa Energi Investama Tbk and a maximum ln 32.06 or a value of IDR 83,496,890,159,390, - PT. Medco Energi Internasional Tbk in 2019. Its average value is 29.6036. The standard deviation value is 1.31082. This shows that the variable company size is normally distributed because the standard deviation value is smaller than the average of these variables.
4. The minimum profitability value is -21% PT in PT. Apexindo Pratama Duta Tbk in 2018 while the maximum value is 46% at PT. Bayan Resources Tbk in 2018 and an average of 0.0701. Although the

standard deviation value is 0.10874. This shows that the profitability variable is not normally distributed because the standard deviation value is greater than the average of these variables.

Table 3, Descriptive Statistics Results Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
GROWTH	108	-,42	3,43	,2294	,63666
TATO	108	,08	3,62	,8006	,56707
SIZE	108	26,85	32,06	29,6036	1,31082
ROA	108	-,21	,46	,0701	,10874
Valid (listwise)	N 108				

Classic hypothesis test

The classic hypothesis test analyzes the state of the existing data to determine which analytical model should be used. The classic hypothesis test performed is as follows:

Multicollinearity test

This method tests the tolerance value or variance inflation factor (VIF) where the limit is. Methods that can be used to test multicollinearity are tolerance value tests with a cutoff of 0.10 and a variance inflation factor (VIF) cutoff of 10 (Hair et al., 1998). From Table 4 below it can be seen that there was no multicollinearity in this study because the tolerance value was greater than 0.1 and the VIF was less than 10.

Table 4, Multicollinearity Test

Coefficients^a

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
GROWTH	,971	1,030
TATO	,911	1,098
SIZE	,887	1,128

a. Dependent Variable: ROA

Normality Test

Based on Table 5 below, the residual values of all regression models show a normal distribution, because the significance level indicates a significance above 0.05.

Table 5, Normality Test Results One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		108
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	,08859926
	Absolute	,079
Most Extreme Differences	Positive	,079
	Negative	-,079
Kolmogorov-Smirnov Z		,826

Asymp. Sig. (2-tailed) ,503

a. Test distribution is Normal.

b. Calculated from data.

Heteroscedasticity Test

The heteroscedasticity test in this study used the Glejser test with a significance greater than 0.05 which indicates that there is no similarity in the variance of the observations in this regression model.

Table 6, Heteroscedasticity Test Results

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	,109	,131		,834	,406
1 GROWTH	,007	,009	,071	,783	,436
TATO	,038	,010	,365	3,866	,090
SIZE	-,003	,004	-,057	-,593	,555

a. Dependent Variable: ABS_RES

Autocorrelation Test

In the autocorrelation test this study showed a value of 1.897, which is based on the Durbin-Watson value if the DW value is between 1.5 – 2.5 then there is no autocorrelation.

Table 7, Autocorrelation Test

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	,580 ^a	,336	,317	,08987	1,897

a. Predictors: (Constant), SIZE, GROWTH, TATO

b. Dependent Variable: ROA

Test the coefficient of determination (R²)

From the table below it can be seen that the coefficient of determination R-squared is 0.336 which when converted into a percentage show that 33.6% of the profitability variable is influenced by sales growth, operating capacity and company size, while the rest is influenced by other variables outside this model.

Table 8, R test results

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,580 ^a	,336	,317	,08987

a. Predictors: (Constant), SIZE, GROWTH, TATO

b. Dependent Variable: ROA

Simultaneous significance test (F-Test)

From Table 9 below, the F significance test shows that all independent variables as a whole can explain the dependent variable (profitability) significantly.

Table 9, F test results

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	,425	3	,142	17,556	,000 ^b
Residual	,840	104	,008		
Total	1,265	107			

a. Dependent Variable: ROA

b. Predictors: (Constant), SIZE, GROWTH, TATO

Multiple linear regression

Based on the results of the research hypothesis that there is a relationship between the independent variables and the dependent variable, making an analytical model requires multiple linear regression.

Table 10, Statistical Test Results t

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	,458	,213		2,149	,034
	GROWTH_X1	,005	,014	,029	,362	,718
	TATO_X2	,116	,016	,607	7,249	,000
	SIZE_X3	,015	,007	,177	2,082	,040
	X1_X3	,005	,009	,769	,512	,610
	X2_X3	,043	,011	6,375	3,837	,000

Effect of sales growth on profitability

The results of the t-statistic test in Table 10 show that the t-value of positive sales growth is 0.362 with a probability of 0.718 which is greater than the significance level (0.05), which means that sales growth has no effect on profitability.

This shows that the increase in the level of sales from year to year does not affect the increase or decrease in company profitability. The strategy implemented by the company to increase product sales is not necessarily able to increase company profits because the sales strategy also requires more marketing costs. The results of this study are not in accordance with the author's initial hypothesis, but are in accordance with previous research by Widhi and Suarmanayasa (2021).

Effect of operating capacity on profitability

From table 10 above it can be seen that the t value of work capacity is 7.249 and the probability is 0.000 where the significance level is less than 0.05 which means that operating capacity has a positive effect on profitability. This study shows that operating capacity has a significant positive effect on profitability.

This shows that the increase in the operating capacity variable increases the company's profitability. The higher the level of operating capacity, the better the company's ability to manage its assets. Operating capacity is used to

determine how efficiently a company manages all of its assets. The more efficient asset management a company practices, the less assets a company should have. This is in accordance with the author's initial hypothesis and previous research by Husnah and Setiad (2020).

Effect of company size on profitability

The results of the t test in Table 10 show that the t value of firm size is 2.082 with a probability of 0.040, where the significance level is less than 0.05 indicating that firm size has a positive effect on profitability.

The results of this study indicate that the larger the size of the company, the profitability also increases, because the size of the company is not only determined by the physical size and name of the company. Increasing company size and increasing profitability indicate that the company is able to carry out production activities well, generate high profits and increase sales. The company is able to realize the effectiveness and efficiency of various operations to minimize operating costs. High company productivity, which attracts shareholders to invest their shares in the company.

The results of this study are supported by Supriati et al (2018) which show that firm size has a significant effect on profitability.

Company size moderates' sales growth on profitability

The results of the t test in table 10 show that the positive t value of sales growth is 2.533 with a probability value of 0.512, where the significance level is greater than 0.05, which indicates that company size is unable to moderate the effect of sales growth on profitability

The results of this study indicate that company size cannot moderate the effect of sales growth on company profitability. From the available data it can be seen that companies with large balance sheets do not necessarily earn higher profits compared to companies with smaller balance sheets.

Firm size moderates operating capacity on profitability

The results of the t test in Table 10 show that the t value of disclosure of positive operating capacity is 3.387 with a probability value of 0.000 with a significance level of less than 0.05 which indicates that company size can significantly affect operating capacity on profitability. The effect of operating capacity on profitability as a reducing variable for firm size. The results of this study confirm that company size can moderate (increase) the effect of operating capacity on company profitability, namely the greater the operating capacity, the more companies can use their assets for core activities to increase company sales. With the support of an increasingly large company size, the market share increases, which increases the company's sales, which has an impact on the company's profitability. The size of the company strengthens the effect of operating capacity on company profitability.

IV. CONCLUSION

Conclusion

Based on the results of the analysis and discussion, the following conclusions can be drawn:

1. Sales growth does not affect profitability.
2. Operational capacity and company size have a positive effect on profitability.
3. The size of the company cannot cover the increase in Sales growth with profits
4. The size of the company can limit the ability to operate with profitability

Implications

Future researchers are advised to use a larger sample with more diverse characteristics from different industrial sectors and extend the research time.

Research limitations

In this study a single variable was used and the time limit was only 2017-2020. It is better to add other independent variables in further research which also affects company value and increases research time.

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