The Effect of Net Profit Margin, Return on Asset, Return on Equity on Share Prices in The Southeast Asian Metal Industry

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Abstract.

This study aims to see the effect of Net Profit Margin, Return On Assets and Return On Equity. This study uses secondary data. The sample used is nine metal companies that are on the Southeast Asian Stock Exchange. The independent variables in this study are Net Profit Margin, Return On Assets and Return On Equity. Sampling in this study using purposive sampling technique. The data analysis method used is the classical assumption test, hypothesis test, F test and t test. Based on the research results, it is known that Net Profit Margin, Return On Assets and Return On Equity do not have a significant effect on stock prices. The results of the F test indicate that Net Profit Margin, Return On Asset and Return On Equity together do not have a significant effect on stock prices. Recommendations for further research should be able to convince investors by increasing the value of Net Profit Margin (NPM), Return On Asset (ROA), Return On Equity (ROE). Because the higher the value of Net Profit Margin (NPM), Return On Asset (ROA), Return On Equity (ROE) and similar research is expected to increase the research sample or replace other variables related to stock prices and use a test tool other than multiple regression.

Keywords: NPM, ROA, ROE

1. INTRODUCTION

The metal industry has an important role, because this industry produces the main raw material for the activities of other industrial sectors. such as machinery, manufacturing equipment, maritime automotive and electronics. the metal industry has the potential to contribute to economic development through added value as well as a multiplier effect. growth of domestic industry, especially in the absorption of labor.

Metal and steel trade fair, indomental in Southeast Asia will be held again in 2018. The exhibition which lasts for 3 days will showcase new products, latest innovations and international exhibitions in foundry, casting, metallurgy and thermo process technology by 200 participants from 23 countries, including from China, Germany, Italy, Taiwan and Indonesia as hosts. This exhibition will showcase a wide range of

products consisting of the latest solutions, machines and technologies in the metalwork industry. Indonesia could surpass India as the second country in the world to produce stainless steel in the next few years. The growth of raw materials and steel production benefited all metal and steel industries. In order to invite investors to invest in various infrastructure projects. Indometal is the only place for industry players to meet suppliers. This exhibition will be a momentum for the ASEAN economic community to deepen trade cooperation and integration, and become an accelerator of manufacturing opportunities in Southeast Asia. This exhibition phenomenon aims to socialize the company's ability to encourage domestic industrial growth to increase promotion and dissemination of information on the metal industry in Southeast Asia.

The index is one of the guidelines for investors to invest in the capital market, especially stocks. The correlation of the composite stock price index in the long run between the capital markets of a country is used to determine the level and development of capital market integration. The composite stock price index is an index for all shares traded on the IDX, which reflects the movement trend and the average value of all shares of issuers in Indonesia. The JCI reflects a value that functions as a measure of the performance of a joint stock on the stock exchange. The purpose of the combination itself is the performance of the shares that are included in the calculation of more than one, even all shares listed on the stock exchange. The movement of the Composite Stock Price Index in Southeast Asia does not occur simultaneously. Therefore, if the domestic market has a composite stock price index that is lower than the composite stock price index in other countries, it will offer greater benefits for both domestic and foreign investors by diversifying their investments. The share price is an indicator of the success of company management. If the stock price of a company always increases, then investors or potential investors will judge that the company is successful in managing its business.

Several studies have been conducted and resulted in various differences regarding Net Profit Margin (NPM), Return On Assets (ROA), Return On Equity (ROE) on stock prices. Research among them was conducted by Muhammad Reza Handyansyah and Dina Lestari (2016), the results of the study stated that Return on Asset (ROA), Return on Equity (ROE) had a significant effect on stock prices. Meanwhile, Net Profit Margin (NPM) has no significant effect on stock prices. According to Ina Rinati (2009), Return On Asset (ROA) has a significant effect on stock prices. Meanwhile, Net Profit Margin (NPM) and Return On Equity (ROE) have no significant effect on stock prices. According to Priastriningrum (2017) Return On Asset (ROA) has a significant and significant effect on stock prices. Meanwhile, Net Profit Margin (NPM) and Return On Equity (ROE) have a negative and significant effect on stock prices. According to Chairunisa Mawarni Putri (2013) Net Profit Margin (NPM) and Return On Asset (ROA) have no significant effect on stock prices. According to Astri Wulan Dini (2012) Net Profit Margin (NPM) and Return On Assets (ROA) have no significant effect on stock prices. Meanwhile, Return On Equity (ROE) has a significant effect on stock prices.

The purpose of this study is to analyze and determine the effect of Net Profit Margin (NPM), Return On Assets (ROA), Return On Equity (ROE) on stock prices. Because seen from the results of previous studies, they are still contradicting one another.

Literature Review

Net Profit Margin (NPM)

According to Fahmi Irham (2015: 81) NPM is one of the ratios used to measure the profit margin on sales. The method of measuring this ratio is to compare net income after tax with net sales.
The formula for calculating NPM according to Fahmi Irham (2015: 81) is:

$$\frac{Net\ Profit\ After\ Tax}{Net\ Sales}$$

According to Lukman Syamsuddin (2004: 62) NPM is the ratio between net profit (net profit), namely sales that have been reduced by all expenses including taxes compared to sales. The higher the net profit margin, the better the operations of a company.

Return On Asset (ROA)

Return On Asset is a ratio that measures the company's ability to invest in all assets to generate net profit. The ability to get a return on investment is an overall measure of the company's performance, because this ratio shows the return on the sources of funds invested so that it requires efficient use of the resources within the company. According to Brigham and Houston (2010: 148) ROA is the ratio of net income to total assets measuring the return on total assets. According to Sutrisno (2008: 222) ROA is a measure of the company's ability to generate profits with all the assets owned by the company. And according to Fahmi Irham (2015: 82) ROA is the extent to which the investment that has been invested is able to provide returns as expected and the investment is actually the same as the invested or placed company assets. The formula for calculating ROA according to Fahmi Irham (2015: 82) is:

$$\frac{Net\ Profit\ After\ Tax}{Total\ Asset}$$

Return On Equity (ROE)

According to Kasmir (2014: 137) ROE is a ratio to measure net profit after tax with own capital. This ratio shows the efficient use of own capital. The higher this ratio, the better. This means that the position of the owner of the company is getting stronger, and vice versa.

According to Mardiyanto (2009: 196) ROE is a ratio used to measure the success of a company in generating profits for shareholders.

According to Brigham and Houston (2011: 149) ROE is net income on equity which measures the rate of return on investment of shareholders According to Fahmi Irham (2015: 83), this ratio examines the extent to which the company uses its resources to provide a return on equity. The formula for calculating ROE according to Fahmi Irham (2013: 83) is:

$$\frac{Net\ Profit\ After\ Tax}{Equity}$$

Stock Price

The stock price is an indicator of the success of company management. If the stock price of a company increases, then investors or potential investors will judge that the company is successful in managing its business. The stock price is the closing price of the stock market during the observation period for each type of stock sampled and its movements are always observed by investors. Investor trust or potential investors is very beneficial for the issuer, because the more people who trust the issuer, the stronger the desire to invest in the issuer. The more demand for an issuer's shares, the higher the share price, if the high share price can be maintained, the higher the confidence of investors or potential investors in the issuer and this can increase the value of the issuer.

II. METHODS

The research method is defined as a scientific way to obtain data with specific purposes and uses (Sugiyono, 2017: 2). The data obtained through this research is empirical (observable) data which has certain criteria, namely valid, reliable and objective.

In general, the data that has been obtained from research can be used to understand problems, solve problems, anticipate problems and for progress (Sugiyono, 2017: 8).

This research uses quantitative methods. The quantitative method is defined as a research method based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, quantitative or statistical data analysis, with the aim of describing and testing predetermined hypotheses (Sugiyono, 2017: 23).

The sampling technique in this study was to use purposive sampling method. (Sugiyono, 2017: 139) Purposive sampling is a sampling technique with certain considerations. So that not all members of the population will be the object of research and it is necessary to take samples according to certain considerations. So that we get a sample that fits the criteria as many as 9 companies that present complete financial reports with a data observation period of 7 years, then the total sample data is 63 data.

Table 1. List of Companies in the Metal and Similar Sub-Sector in Southeast Asia 2012-2018

No	Code	Name Of Emiten	Year
1	ALMI	PT ALUMINDO LIGHT METAL INDUSTRIES Tbk (INDONESIA)	2012 – 2018
2	BAJA	PT SARANACENTRAL BAJATAMA Tbk (INDONESIA)	2012 – 2018
3	CHOO	CHOO BEE METAL INDUSTRY BERHAD (MALAYSIA)	2012 – 2018
4	PMET	PRESS METALL ALUMINIUM (MALAYSIA)	2012 – 2018
5	EONM	EONMETALL (MALAYSIA)	2012 – 2018
6	STEE	SOUTHERN STEEL (MALAYSIA)	2012 – 2018
7	MILL	MILLCON STEEL (THAILAND)	2012 – 2018
8	T	TKC METALS CORPORATION (FILIPHINA)	2012 – 2018
9	INTN	COMPACT METAL INDUSTRIES (SINGAPURA)	2012 – 2018

Data source processed in 2019 (Website of the Stock Exchange in Southeast Asia)

III. RESULT AND DISCUSSION
Descriptive statistics
Table 2. Statistical Descriptive Results

Descriptive Statistics	N	Range	Min	Max	Sum	Mean		Std. Deviasi	Varian
	Statstic	Statstic	Statstic	Statstic	Statstic	Statstic	Std. Error	Statstic	Statstic
NPM	48	15.65	-9.52	6.13	-10.47	-.2181	.27553	1.90896	3.644
ROA	48	9.22	-9.10	.12	-9.61	-.2002	.19058	1.32036	1.743
ROE	48	57.20	-44.30	12.90	-55.54	-1.1571	1.12176	7.77179	60.401
SHARE PRICE	48	2.23	.02	2.25	46.79	.9747	.08820	.61109	.373
Valid N	48								

Source: Processed Data

1. Stock price

It is known that the stock price variable has a value range from 0.02 to 2.25. The lowest value of 0.02 was owned by the Compact Metal Industries (Singapore) company in 2018.The highest value of 2.25 was owned by the Southern Steel (Malaysia) company in 2017. The mean (average) share price was 46.79 and the deviation value standard of 0.61109.

2. Net Profit Margin

It is known that the variable net profit margin (NPM) has a value range of -9.52 to 6.13. The lowest value of -9.52 was owned by Millcon Steel (Thailand) in 2014. The highest value of 6.13 was owned by Millcon Steel (Thailand) in 2015. The mean (average) net profit margin (NPM) was -0, 2181 and the standard deviation value is 1.90896.

3. Return On Asset

It is known that the return on assets (ROA) variable has a value range of -9.10 to 0.12. The lowest value of -9.10 was owned by the company PT Sarana Central Bajatama (Indonesia) in 2013.The highest value of 0.12 was owned by the company TKC Metals Corporation (Philippines) in 2013. The mean (average) return on assets (ROA) was -0,2002 and the standard deviation value is 1.32036.

4. Return On Equity

It is known that the variable return on equity (ROE) has a value range of -44.30 to 12.90. The lowest value of -44.30 was owned by the company PT Sarana Central Bajatama (Indonesia) in 2013. The highest value of 12.90 was owned by the Millcon Steel (Thailand) company in 2015. The mean (average) return on equity (ROE) was - 1.1571 and the standard deviation value is 7.77179

Classic assumption test

   1. Normality test

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test

			Unstandardiz ed Residual
N			48
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.60530483
Most Extreme Differences	Absolute		.111
	Positive		.106
	Negative		-.111
Test Statistic			.111
Asymp. Sig. (2-tailed)			.180[c]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.

The results of the normality test above indicate that the normality test results show a significance value of 0.180 greater than 0.05, it can be concluded that the data used in this study are normal distribution data.

   2. Autocorrelation Test

Table 4. Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.137[a]	.019	-.048	.62560	2.308

a. Predictors: (Constant), ROE, NPM, ROA

b. Dependent Variable: SHARE PRICE

The autocorrelation test results show that the Durbin-Watson test value is 2.308. This means that the DW is between du (1.71874) to 4-du (2.28126). The DW value is in an area where there is no positive or negative autocorrelation.

3. **Multicollinearity Test**

Table 5. Multicollinearity Test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.962	.092		10.415	.000		
	NPM	-.039	.093	-.121	-.418	.678	.265	3.776
	ROA	-.013	.204	-.027	-.062	.951	.114	8.744
	ROE	-.001	.040	-.017	-.034	.973	.085	11.739

a. Dependent Variable: SHARE PRICE

It is known that all independent variables, namely Net Profit Margin (NPM), Return On Asset (ROA), Return On Equity (ROE), have a tolerance value greater than 0.10 and a VIF value less than 10 (except ROE because it is ROE and ROA theories and concepts tend to be the same or not much different). This means that there is no multicollinearity, so the data is good to use in the regression model.

4. **Heteroscedasticity Test**

Figure 1. Heteroscedasticity Test

Scatterplot
Dependent Variable: SHARE PRICE
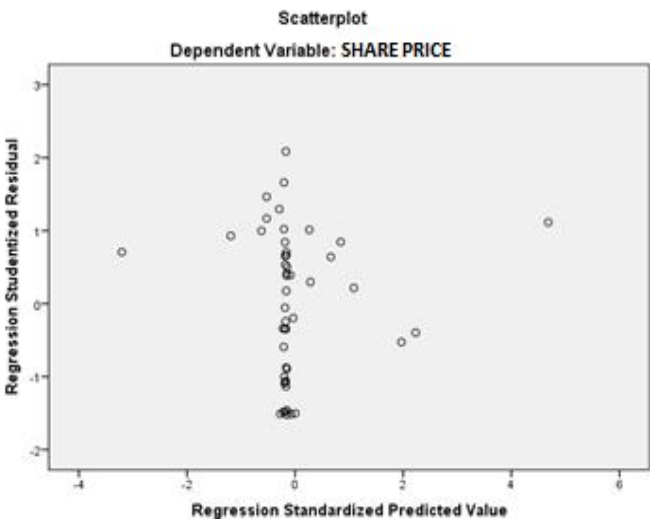
Heteroscedasticity test results show that the data has spread below and above zero and does not form a pattern. This means that there is no heteroscedasticity problem.

5. Partial Significance Test (t test)

Table 6. t-test

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.962	.092		10.415	.000
	NPM	-.039	.093	-.121	-.418	.678
	ROA	-.013	.204	-.027	-.062	.951
	ROE	-.001	.040	-.017	-.034	.973

a. Dependent Variable: SHARE PRICE

Based on the results of the t test (column t) shows that the t value is smaller than the t table in hypotheses 1, 2 and 3 (0.418 / 0.062 / 0.034 <2.01537) and the significance value is greater than 0.05 (0.678 / 0.951 / 0.973> 0.05). This means that hypotheses 1, 2 and 3 are not accepted / supported.

6. Simultaneous Significance Test (Test F)

Table 7. F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.331	3	.110	.282	.838[b]
	Residual	17.221	44	.391		
	Total	17.551	47			

a. Dependent Variable: SHARE PRICE

b. Predictors: (Constant), ROE, NPM, ROA

The results of the F test show that the calculated F value is smaller than the F table value, namely 0.282 <2.82, and the significance value is greater than 0.05 (0.838> 0.05). it means that all NPM, ROA, ROE variables do not simultaneously affect stock prices.

7. Coefficient of Determination (R^2)

Table 9. Coefficient of Determination

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.137[a]	.019	-.048	.62560

a. Predictors: (Constant), ROE, NPM, ROA

b. Dependent Variable: SHARE PRICE

We can see that the Adjusted R^2 value shows that the dependent variable is influenced by all independent variables by 1.9%, the remaining 98.1% is influenced by other variables outside of this study.

Discussion of Data Analysis Results (Proof of Hypothesis)

1. First Hypothesis

    The first hypothesis is to determine whether there is an effect of Net Profit Margin (NPM) on stock prices. Obtained t value of 0.418 and t table value of 2.01537. With a significance value of 0.678. This means that the Net Profit Margin (NPM) variable does not have a significant effect on stock prices. The results of this study are supported by previous research conducted by Muhammad Reza Handyansyah & Dina Lestari (2016), Ina Rinati (2009), Chairunisa Mawarni Putri (2013) and Astri Wulan Dini (2012) where Net Profit Margin (NPM) has no significant effect on stock price.

2. Second Hypothesis

    The second hypothesis is to determine whether there is an effect of Return On Assets (ROA) on stock prices. Obtained t value of 0.062 and t table value of 2.01537. With a significance value of 0.951. This means that the Return On Asset (ROA) variable has no significant effect on stock prices. The results of this study are supported by research conducted by Chairunisa Mawarni Putri (2013) and Astri Wulan Dini (2012) where Return On Asset (ROA) has no significant effect on stock prices.

3. Third Hypothesis

    The third hypothesis is to determine whether there is an effect of Return On Equity (ROE) on stock prices. Obtained t value of 0.034 and t table value of 2.01537. With a significance value of 0.973. This means that the variable Return on Equity (ROE) has no significant effect on stock prices. The results of this study are supported by research conducted by Ina Rinati (2009) where Return on Equity does not have a significant effect on stock prices.

IV. CONCLUSION

Based on the data analysis that has been done, the researcher draws some conclusions as follows:

1. Net Profit Margin (NPM) Partially has no significant effect on stock prices.
2. Return on assets (ROA) partially has no significant effect on stock prices.
3. Partially, Return On Equity (ROE) has no significant effect on stock prices.

V. ACKNOWLEDGMENTS

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