

THE EFFECT OF EARNINGS PER SHARE, RETURN ON EQUITY, AND DEBT TO EQUITY ON BUMN COMPANIES

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Vol.16 No.3 | Sept, 2022

Abstract

Submit :

14/06/2022

Accept :

27/09/2022

Publish :

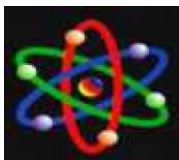
30/10/2022



Background : What we do in this research is to find out the influence, investigate, and get an understanding or understanding of whether Earning Per Share, Return On Equity, and Debt To Equity together or individually have an effect on Stock Prices in State-Owned Enterprises for the period 2018-2020. **Method :** Quantitative approach is an approach used in our research. The type of research that we use for research is descriptive research, because it is based on the quantity and analysis of data obtained from statistical data processing. Linear Regression Analysis is a method or technique used by researchers to examine the results of our research. **Result :** There are 50 population of State-Owned Enterprises in 2018-2020 with a sample of 60 State-Owned Enterprises for the period 2018-2020. The variables in this study also affect the independent variables, on the other hand, partially EPS and ROE have no effect on stock prices in State-Owned Enterprises for the 2018-2020 period, while the DER variable has a negative and significant effect on prices. shares of State-Owned Enterprises for the period 2018-2020. **Conclusion :** From the research that we have done, we can conclude that the result of the coefficient of determination R-Squared (R2) is 0.084 or a value of 8.4% and the remaining 91.6% does not include the variables in this study.

Keywords : Earning Per Share, Return On Equity ,Debt to Equity and Share Prices

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INTRODUCTION

Technology continues to develop and the birth rate in Indonesia continues to increase, this causes competitiveness in the community to increase, some are unemployed, some are doing business or trading, some are private employees and some are employees in state-owned companies[1]. Law No. 19 of 2003 Article 1 states that a State-Owned Enterprise, which is more often referred to by the name BUMN, is a business entity whose funds are mostly owned by the state, originating from state assets. Another easy way to earn income is by investing. Investment is an activity or activity to save or secure funds within a predetermined period and it is hoped that the deposit of funds will get or generate profits and the value of the investment has increased, the party making the investment is called the investor or investor. If you want to start an investment, you can learn about the capital market[2].

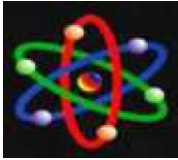
The capital market is an action or activity related to the trading securities of public companies. The important thing that needs to be considered when investing is to look at the company's financial ratios by doing calculations[3].

The first calculation can be done by looking for the Earning Per Share of a company, a company that gets company profits that are continuously increasing can be called growing because the value of Earning Per Share increases. Second, pay attention to the company's Return On Equity, usually companies with an increasing Return On Equity value can control capital so as to generate large profits. Finally, by looking at

Debt To Equity or what is often called DER, this is a way to measure the ratio to capital, or by dividing the amount of debt and existing equity. If the company's DER is small, it means that the company's debt is still tolerable. This method of measuring financial ratios has a major influence on the stock price of a company[4][5].

One of the online news sites favored by the public, namely *kompas.com*, has recorded a different price difference every year, or since December 30, 2019 until the closing of the last trade on March 24, 2020. Below are 3 State-Owned Enterprises whose value is the price has fallen quite dramatically at the end of 2019 until now: PT Bank Negara Indonesia Tbk (BBNI) is one of the many State-Owned Enterprises whose price value has greatly decreased. On December 30, 2018 the closing price was at the level of Rp. 8,800, and the closing price at Rp. 7,850 was on December 30, 2019 and finally, December 30, 2020, the price was at the level of Rp. 6,175. PT Bank Rakyat Indonesia Tbk (BBRI) felt the collapse of the share price, its share price was at Rp. 4,170 in the last trade on December 30, 2020[6][7]. Meanwhile, at the close of December 30, 2019, the value per share was Rp. 4,400. PT Bank Mandiri Tbk (BMRI) also felt a very drastic decline in stock prices. On 30 December 2019 it was at IDR 7,675 while at the last closing price on 30 December 2020 it was at IDR 6,325. To see more clearly, it can be seen from the table of research phenomena like this:





No	Issuer Code	Year	Earning Per Share		Return On Equity	Debt To Equity	Stock price
			Net profit	Number of shares outstanding			
1	BBNI	2018	15,015,118,000	18,462,169,893	110,373,789,000	671,237,546	8,800
		2019	15,384,476,000	18,462,169,893	125,003,948,000	688,489,442	7,850
		2020	3,280,403,000	18,462,169,893	112,872,199,000	746,235,663	6,175
2	BMRI	2018	25,015,021,000	46,199,999,998	184,900,305,000	1,025,749,580	7,375
		2019	27,482,133,000	46,199,999,998	209,034,525,000	941,953,100	7,675
		2020	17,119,253,000	46,199,999,998	193,796,083,000	1,151,267,847	6,325
3	BBRI	2018	32,351,133,000	122,112,351,900	185,275,331,000	1,090,664,084	3,600
		2019	34,372,609,000	122,112,351,900	208,784,334,000	1,183,155,672	4,400
		2020	18,654,753,000	122,112,351,900	199,911,376,000	1,278,346,276	4,170

Table 1. 2018-2020 research phenomena data

Based on table 1, it shows that PT. Bank Negara Indonesia Tbk (BBNI) has the number of outstanding shares in 2018-2020 of 18,462,169,893 while the share price in 2020 is at the lowest level of Rp.6,175 per share, the decline in share prices is caused by a decrease in bank profits[6][7].

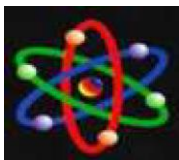
PT. Bank Rakyat Indonesia Tbk (BBRI) in 2019 had a net profit of 34,372,609,000 and a total debt of 1,183,155,672 While in 2020 it experienced a decrease in net profit to 18,654,753,000 with total debt increasing by 1,278,346,276 and experiencing a decrease in share prices at the level of Rp. 4,170 per share, the decline in share price was due to the increasing total debt[7].

PT. Bank Mandiri Tbk (BMRI) had a net profit of 27,482,133,000 and a total equity of 209.034.525,000 in 2019 while in 2020 there was a decrease in net profit of 17,119,253,000 and a total equity of 193,796,083,000 and the lowest share price was Rp. 6,325 per share, a decrease in price This stock was caused by the corona pandemic which made PT Bank Mandiri Tbk in 2020 slump[8].

METHOD

Quantitative research methods are such as research methods based on the principle of positivism, which are used to examine populations or samples, generally sampling is carried out randomly, data acquisition is quantitative with the aim of testing predetermined hypotheses". For this reason, we chose a quantitative approach method for this study. The method of examining objects using samples and data that have been collected, to describe or





clarify in detail. Therefore, we chose descriptive research in the hope of describing the results of the research clearly and in detail.

RESULT AND DISCUSSION

Descriptive statistics have the use of calculating data and describing in detail the results of data processing. Descriptive statistics can be seen from the sum of the minimum, maximum, mean and standard deviation research samples. Below you can see the descriptive analysis.

	N	Minimum	Maximum	Mean	Std. Deviation
Ln_X1	60	-2.81	6.69	3.4883	2.23577
Ln_X2	60	-.99	6.86	2.2173	2.02073
Ln_X3	60	-3.22	6.37	1.5309	3.33404
Ln_Y	60	5.48	9.43	7.4812	1.13292
Valid N (listwise)	60				

Figure 1. Descriptive Statistic

Figure above shows the smallest value, the largest value, the average value and standard deviation of the Earning Per Share (X1), Return On Equity (X2), Debt to Equity Ratio (X3) and Stock Price (Y) variables [10]. explained as follows:

1. Earning Per Share (X1) a total sample of 60 companies, the smallest value of -2.81 is located at PT Bank Syariah Indonesia Tbk in 2020; the largest value of 6.69 is located at PT Aneka Tambang Tbk in 2019, and the average value is 3.4883 and the standard deviation is 2.23577.
2. Return On Equity (X2) with a total sample of 60 companies, the smallest value of -0.99 is located at PT Wijaya Karya Beton Tbk in 2020; the greatest value of 6.86 is located at PT Jasa Marga (Persero) Tbk in 2019, and the average is

2.2173 and the standard deviation is 2.02073.

3. Debt to Equity Ratio (X3) with a total sample of 60 companies, the smallest value of -3.22 is located at PT Bukit Asam Tbk in 2018; the greatest value of 6.37 is located at PT Adhi Karya (Persero) Tbk in 2020 and the average value is 1.5309 and the standard deviation is 3.33404.
4. Share prices with a total sample of 60 companies, the smallest value is PT Wijaya Karya Gedung Tbk in 2018; the largest value of 9.43 was found at PT Semen Baturaja (Persero) Tbk in 2020 and an average of 7.4812 and a standard deviation of 1.13292.

Classic assumption test

Normality test

To obtain research data, a normality test is carried out. The normality test method with non-parametric statistical properties Kolmogorov-Smirnov Test used by researchers is as follows:

N		Unstandardized Residual	60
Normal Parameters ^{a,b}	Mean		0E-7
	Std. Deviation		1.05627548
Most Extreme Differences	Absolute		.135
	Positive		.095
	Negative		-.135
Kolmogorov-Smirnov Z			1.049
Asymp. Sig. (2-tailed)			.221

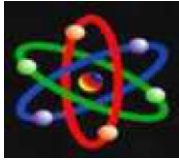
a. Test distribution is Normal.

b. Calculated from data.

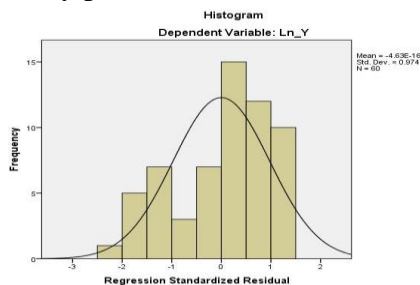
Figure 2. Kolmogorov-Smirnov Uji Test Results (After Ln) Source:SPSS 20

The characteristic of the Kolmogorov-Smirnov normality test is that if the significance is < 0.05 , it can be called abnormal, while if the significance is > 0.05 ,





it can be called normal. The results of the normality test in table 5 show that the regression model is normal, because the significance value of Asymp.Sig.(2-tailed) Kolmogrov-Smirnov $0.221 > 0.05$. Apart from the normality test using Kolmogrov-Smirnov, the researchers also used histogram analysis and normal probability plots. Below is what it looks like.



Source: SPSS 20

Figure 3. Histogram Normality Test Results(After Ln)

In the histogram image above, which after or after Ln is done, it can be seen that the data is normally distributed because the histogram graph displays the data following the trail of the diagonal line. Furthermore, it can be seen the normality of the probability plot:

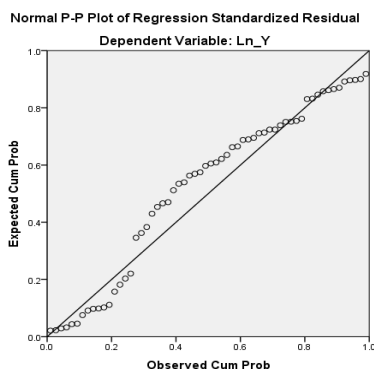


Figure 4. P-P plot normality test results (After Ln) Source: SPSS 20

From Figure 4 above, the normality probability plot graph, which after Ln is done, shows the points that are located near the diagonal line. So the conclusion is that the probability plot graph is normally distributed. Therefore, the data is normally distributed because the results of the normality test, histogram graph, P-P Plot and Kolmogrov-Smirnov have met the normal assumption requirements.

Multicollinearity Test

The multicollinearity test is useful for testing in the data whether there is a large relationship between the independent variables or not in the regression model. The multicollinearity test does not show multicollinearity, that is, if the tolerance value is > 0.10 and the VIF value is < 10 . The results of the multicollinearity test can be seen in the display below:

Coefficients^a

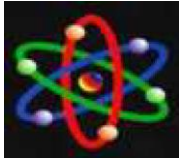
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.475	.282		26.515	.000		
	Ln_X1	.015	.071	.029	.211	.834	.796	1.256
	Ln_X2	.056	.079	.099	.706	.483	.785	1.275
	Ln_X3	-.110	.047	-.324	-2.336	.023	.805	1.243

a. Dependent Variable: Ln_Y

Figure 5. Multicollinearity Test Results (After Ln) Source: SPSS 20

The table above shows the tolerance value generated by EPS (X1), ROE (X2), and DER (X3) not less than 0.10. The VIF value generated by EPS (X1), ROE (X2), and DER (X3) is less than 10. From the tolerance and VIF values, it can be concluded that there is no multicollinearity among the independent variables. Durbin-Watson value of 0.804. For table data D-W





"k" = 3 (independent variable with sample = 60), the value of dl (lower limit) = 1.5144 and du (upper limit) = 1.6518. From the D-W criteria, it can be found that $4-du < d < 4-dl$, so it can be concluded that there is no real or definite decision that can be taken from the Durbin-Watson test. To further confirm whether or not there is autocorrelation in a regression model, a Run Test is used.

Test Runs Test

Runs Test is used to determine whether the residual data has a relationship or not. If the significance value is above 0.05, it can be said that among the residuals there is no correlation or it can be said that there are no symptoms of autocorrelation.

Runs Test	
	Unstandardized Residual
Test Value ^a	1.51457 ^b
Cases < Test Value	59
Cases >= Test Value	1
Total Cases	60
Number of Runs	3
Z	.186
Asymp. Sig. (2-tailed)	.853

a. Mode
 b. There are multiple modes. The mode with the largest data value is used.

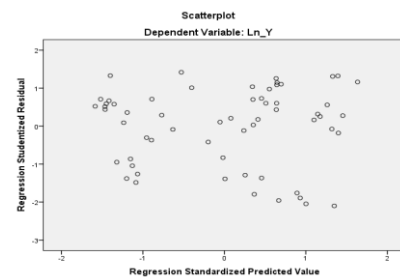
Figure 6. Runs Test Results

From the run test table, it can be stated that there is no autocorrelation symptom because the Asymp.Sig.(2-tailed) value is $0.085 > 0.05$.

Heteroscedasticity Test

In order to test the regression model data whether there is a difference in the data from the residuals of one observation to

another observation. The decision to use the heteroscedasticity test by paying attention to the scatterplot graph:



Source: SPSS 20

Figure 7. Scatterplott Heteroscedasticity Test Results (After Ln)

From the scatterplot image that has been carried out by Ln, it shows that the research data spreads randomly between 0 lines, so it can be concluded that there is no heteroscedasticity in this research.

Data Analysis Results

Multiple Regression Analysis

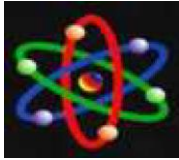
Having the goal of taking into account the increase or decrease in the independent variable described by more than one dependent variable in an effort to consider whether it has an influence between the independent and dependent variables.

		Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	7.475	.282		26.515	.000		
	Ln_X1	.015	.071	.029	.211	.834	.796	1.256
	Ln_X2	.066	.079	.099	.706	.483	.785	1.275
	Ln_X3	-.110	.047	-.324	-2.336	.023	.805	1.243

a. Dependent Variable: Ln_Y

Figure 8. Multiple Regression Equation (After Ln) Source: SPSS 20





From figure 9, the formula for multiple linear regression is obtained:

$$Y = a + b1.X1 + b2.X2 + b3.X3 + e$$

$$\text{Share Price} = 7.475 + 0.015 \text{ Ln_X1} + 0.056 \text{ Ln_X2} + -0.110 + e$$

Based on the equation of the multiple linear regression model, it can be described as follows:

- 1) The value of constant a has a value of 7.475 showing that the variables EPS, ROE and DER are considered constant, so the share price is 7.475.
- 2) The EPS value has a value of 0.015, showing that each EPS increase once, there will be an increase in the share price of 0.015.
- 3) The ROE value has a value of 0.056 showing that each ROE increases once, there is an increase in stock prices of 0.056.
- 4) The DER value has a value of -0.110 showing that once the DER shrinks, the stock price also shrinks by -0.109.

Coefficient of Determination

Having the aim of observing the independent variable whether there is an effect on the dependent variable, the researchers conducted a coefficient of determination test. Below you can see the results of the coefficient of determination:

ANOVA ^a					
Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	9.899	3	3.300	2.807	.048 ^b
Residual	65.827	56	1.175		
Total	75.726	59			

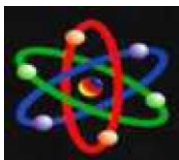
Table 2. Coefficient of Determination (After Ln)

In table 2, the resulting R^2 of 0.084, which means the value of Earning Per Share, Return On Equity and Debt to Equity Ratio describes 8.4% of the relationship with stock prices and 91.6% again has an influence with other variables (such as ROA, per, pbv) which the researcher did not include in this research.

Simultaneous Hypothesis Testing (F Test)

In use to observe and understand the right or wrong of the hypothesis, the researcher carries out the F test. Which is where the F test has the utility of calculating the independent variables (EARNING PER SHARE , RETURN ON EQUITY, DEBT TO EQUITY RATIO) simultaneously on the dependent variable. Fcount of 2.807 has a significance value of 0.048. In addition, Ftable which is 2.77 has a significance value of 0.05. Where shows $F_{count} > T_{table}$ or $2.807 > 2.77$ and $0.048 < 0.05$ which can be concluded that H_0 is rejected and H_a is accepted which means simultaneously Earning Per Share, Return On Equity, and Debt to Equity Ratio have an influence and





significant to the Share Price of state-owned enterprises for the period 2018-2020.

Partial Hypothesis Testing (t Test)

Used to evaluate each conjecture to identify the impact of the independent variable on the dependent variable, the researcher conducted a t-test:

Table 12

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	7.475	.282		26.515	.000		
Ln_X1	.015	.071	.029	.211	.834	.796	1.256
Ln_X2	.056	.079	.099	.706	.483	.785	1.275
Ln_X3	-.110	.047	-.324	-2.336	.023	.805	1.243

a. Dependent Variable: Ln_Y

Figure 9. Partial Test Results (t)
(After Ln) Source: SPSS 20

Based on figure above, the results for processing the t-test data are described as follows:

1. Earnings Per Share (X1) has tcount 0.211 and ttable 1.67065, then tcount < ttable indicates that Ho is accepted and Ha is not accepted with a significance of 0.834 > 0.05 then Earning Per Share has no impact on share prices and is significant on the price shares of state-owned enterprises for the period 2018-2020.
2. Return On Equity (X2) has tcount 0.706 and ttable 1.67065 then tcount < ttable indicates that Ho is accepted and Ha is not accepted with a significance of 0.483 > 0.05 then Return On Equity has no impact on stock prices and is significant on the price shares of state-owned enterprises for the period 2018-2020.

3. Debt to Equity Ratio (X3) has tcount 2.336 and ttable 1.67065, then tcount > ttable indicates that Ho is not accepted and Ha is accepted with a significance of 0.023 < 0.05 then the Debt to Equity Ratio has an impact on stock prices and is significant on stock prices of state-owned enterprises for the period 2018-2020.

CONCLUSION

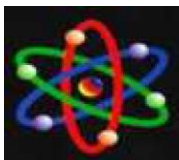
Based on the research that has been described, the following conclusions can be drawn:

- 1) Earnings Per Share have no partial and significant impact on the share price of State-Owned Enterprises for the period 2018-2020.
- 2) Return On Equity has no partial and significant impact on the stock price of State-Owned Enterprises for the period 2018-2020.
- 3) The Debt to Equity Ratio has a partial impact and has a negative and significant influence on the price of State-Owned Enterprises for the 2018-2020 period.
- 4) Earnings Per Share (EPS), Return On Equity (ROE) and Debt to Equity Ratio (DER) have a simultaneous and significant effect on the stock price of state-owned enterprises for the period 2018-2020 with an R2 of 0.084 or 8.4% and the rest of the other 91.6% is influenced by other variables that the researcher did not include in this study.

Suggestion

Based on the research that we have done and described, there are some suggestions that we provide:



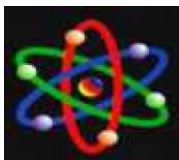


1. For the next research, in order to increase the research time span and use other external variables except earnings per share and return on equity in order to have an impact on the company's stock price and describe the reaction in the capital market.
2. For investors, it is expected that they often read or watch about the development of stock prices, so that if investors want to invest, they can choose and determine companies that are suitable for investment.
3. For companies, to increase the profit or profit earned so that the value of earnings per share increases, if the value of earnings per share increases then the company can be called growing, which means it is suitable for investment.
4. For Prima Indonesia University, the research that we have done has obtained good results and we hope that it can be a reference and add to the existing scientific works in the library, as well as convey useful information or knowledge to readers.

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