THE EFFECT OF DEBT TO EQUITY AND EARNINGS PER SHARE ON STOCK PRICES IN THE HOTEL, RESTAURANT, AND TOURISM INDUSTRY SUB-SECTORS LISTED ON THE INDONESIA STOCK EXCHANGE

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Abstract

This study aims to determine the effect of debt-to-equity ratio and earnings per share on stock prices of the property and real estate sectors listed on the Indonesia Stock Exchange for the 2015-2019 period. This research uses the Multiple Linear Regression model, the classical assumption test, and statistical tests. The sample in this study consists of nine major company issuers listed on the Indonesia Stock Exchange in the Property and Real Estate sector. The results showed that the debt-to-equity ratio variable had no significant effect on stock prices, while the earnings per share variable also did not have a significant effect on stock prices. The two variables, debt-to-equity ratio and earnings per share, simultaneously have no significant effect on stock prices.

Keywords: Debt-to- equity; Earning per share; Stock price; Indonesia Stock Exchange

INTRODUCTION

Every business needs more funding, and a corporation may issue securities that are traded on the capital market as a method of acquiring substantial funds. Stock investing is one of the most attractive but high-risk industries of investment. Public company shares are really sensitive to both local and international developments. The corporation has a beneficial and positive influence, which results in a rise in stock prices.

Here is information about how the stock prices, debt-to-equity ratios, and earnings per share have changed for the Hotel, Restaurant, and Tourism Industry Sub-Sectors listed on the Indonesia Stock Exchange from 2015 to 2019:

Table 1: Stock prices on the Indonesia Stock Exchange for the Hotel, Restaurant, and Tourism Industry Sub-Sectors from 2015 to 2019 (in Rupiah)

| No | Issuer code | Year | | | | |
		2015	2016	2017	2018	2019
1.	BAYU	1.250	900	1.400	1.935	1.180
2.	FAST	1.150	1.500	1.400	1.670	1.270
3.	INPP	358	565	650	700	835,22
4.	JSPT	935	2.560	2.500	970	1.025
5.	JIHD	585	492	460	488	550
6.	KPIG	141	150	128	139	136
7.	PDES	160	254	1.330	1.550	870
8.	PJAA	2.025	2.020	1.320	1.260	985
9.	SHID	545	895	1.550	4.300	3.450
	Average	794,33	1.037,33	1.197,55	568,322	1.144,58
	Growth (%)	-	30,59	15,44	-52,54	101,39

Table 2: Debt-to-Equity Ratio Development in Hotel, Restaurant, and Tourism Industry Sub-Sectors Listed on the Indonesia Stock Exchange

2015-2019 Period (In Times)

| No | Issuer code | Year | | | | | |
		2015	2016	2017	2018	2019	Average
1.	BAYU	0,72	0,75	0,87	0,78	0,86	17,862
2.	FAST	1,07	1,11	1,13	0,94	1,05	40,506
3.	INPP	0,24	0,26	0,57	0,59	0,26	5,57
4.	JSPT	0,49	0,47	479,34	0,55	0,69	110,012
5.	JIHD	0,45	0,38	0,35	0,32	0,37	8,31
6.	KPIG	0,25	0,26	0,24	0,35	0,23	4,98
7.	PDES	1,21	1,27	1,23	1,15	1,28	26,644
8.	PJAA	0,75	1,06	0,88	1,05	0,90	18,836
9.	SHID	0,55	0,53	0,60	0,58	0,57	12,01
	Average	0,63	0,67	53,91	0,70	0,69	27,188
	Growth (%)	-	6,34	7,946,26	-98,70	-0,14	-84,554

Table 3: Earnings Per Share Development of Hotel, Restaurant, and Tourism Industry Sub-
Sectors Listed on the Indonesia Stock Exchange
Period 2015-2019 (in Rupiah)

No	Issuer code	Year					
		2015	**2016**	**2017**	**2018**	**2019**	**Average**
1.	BAYU	79,57	77,18	93,91	112,84	135,15	99,73
2.	FAST	52,64	86,51	83,70	106	121	89,97
3.	INPP	5,36	15,21	9,01	6,82	181,37	43,54
4.	JSPT	76,16	53,72	56,81	129	48	72,73
5.	JIHD	1,32	8,40	5,99	6,35	3,53	5,11
6.	KPIG	33,12	256,97	171,86	17,25	3,46	97,13
7.	PDES	12,73	35,83	41,69	5,00	4,91	23,19
8.	PJAA	181,79	81,77	137,64	140	144	137,04
9.	SHID	0,13	0,55	1,10	1,01	11,63	2,884
	Average	49,202	68,46	563,73	58,25	74,31	9,993
	Growth (%)	-	39,14	723,44	-89,66	27,57	140,098

The three tables 1, 2, and 3 above show the development of stock prices, debt to equity ratio, and earnings per share of the hotel, restaurant, and tourism industry sub-sectors listed on the Indonesia Stock Exchange for the 2015–2019 period, which have fluctuated. The urgency of this study is to find out the development of the hotel, restaurant, and tourism industry sub-sectors listed on the Indonesia Stock Exchange from 2015–2019.

LITERATURE REVIEW

Stock Price

The stock price of a company reflects how the company's performance is. If the performance is good, then the stock price tends to rise. On the other hand, if the company's performance decreases, the stock price tends to fall. The stock price determines a shareholder's wealth. Maximizing shareholder wealth translates into maximizing the company's stock price. The stock price cannot be determined, as the stock price at any given time will depend on the cash flow expected to be received in the future by investors if they decide to buy shares. Simply put, stock prices reflect changes in investor interest in the price of stock. When the demand for a stock is high, the price of the stock tends to increase (Brigham & Houston, 2006).

Debt to Equity Ratio

The debt to equity ratio is used to evaluate debt to equity. To calculate this ratio, all debt, including current debt, is compared to total equity. This ratio is useful in determining the cash

amount provided by the lender (creditor) to the company's owner. In other words, this ratio determines how much of one's own capital is utilized as collateral for debt (Kasmir, 2018).

Earning Per Share

Earning Per Share adalah besarnya suatu laba bersih yang siap dibagikan kepada semua pemegang saham perusahaan atau jumlah uang yang dihasilkan setiap perlembar saham serta rasio yang menggambarkan kondisi dipasar tentang perolehan keuntungan potensial perusahaan. *Earning Per Share* merupakan bentuk pemberian keuntungan yang diberikan kepada pemegang saham. Besarnya *Earning Per Share* dapat diketahui dari sumber informasi keuangan perusahaan atau langsung dapat dihitung berdasarkan neraca dan laporan keuangan laba rugi perusahaan (Fahmi, 2017).

According to research undertaken by Heny Ratnaningtyas (2021), return on equity, current ratio, and debt to equity ratio have a significant effect on stock prices. A high debt-to-equity ratio suggests that the firm is doing exceptionally well, resulting in increased returns for investors, which in turn increases investor interest in companies with the potential to enhance stock prices. On the other hand, a high current ratio indicates that the company is able to pay off its debts with current assets, reducing the risk of liquidation and the risk of loss to investors. As a result, valuers prefer to invest in companies with strong fundamentals, which affects the increase in stock prices. A low debt-to-equity ratio shows that the company's total liabilities are less than the amount of capital collected from investors. As a result, the company's debt load is extremely low, its profit margin is large, and this will impact the stock market price (Ratnaningtyas, 2021).

Meutia Dewi (2017) determined, based on her study, that the liquidity level of PT Aneka Tambang Tbk, as assessed by the current ratio from 2012 to 2016, on average, was 220.86 percent, suggesting a healthy situation since the ratio is above the industry norm of 200 percent. From 2012 to 2016, the average quick ratio for PT Aneka Tambang Tbk was 170.02 percent, suggesting a healthy situation since the ratio is above the industry benchmark of 150 percent. The average solvency level of PT Aneka Tambang Tbk from 2012 to 2016 as evaluated by the debt to asset ratio was 40.09 percent, indicating a poor state since the ratio exceeds the industry requirement of 35 percent. The average debt-to-equity ratio of PT Aneka Tambang Tbk from 2012 to 2016 was 67.57 percent, indicating a poor financial situation since it exceeded the industry average of 66 percent (Dewi, 2017).

Similarly, according to a study by Arini Dwi Nengtyas, Dwiatmanto, and Zahro Z.A. (2016), the liquidity ratio continues to decrease and remains below industry standards. The

constant growth increases the company's exposure to risk. The total activity ratio would stay below standard owing to the decrease in the sales value and the inefficient use of assets and inventory, the larger the profit achieved. The total profitability ratio continues to be below standard. This demonstrates that the company's sales revenue has not been maximized. It is anticipated that PT Aneka Tambang (Persero) Tbk's management will eventually enhance current assets to pay short-term liabilities. The management's profitability ratio will improve sales levels and streamline company expenses (Nengtyas et al., 2016).

Hypotheses

H1: The debt-to-equity ratio and earnings per share affect hotel, restaurant, and tourismindustry subsector stock prices listed on the Indonesia Stock Exchange.

H2: The debt-to-equity ratio and earnings per share affect the stock prices of hotel, restaurant, and tourism industry subsectors listed on the Indonesia Stock Exchange simultaneously.

RESEARCH METHODS

Research design

The sort of study used by the researcher is data-driven and includes quantitative research, i.e., data measured on a numerical scale.

Population and sample

In this research, the population consisted of 35 hotel, restaurant, and tourism subsector companies listed on the Indonesia Stock Exchange between 2015 and 2019. On the basis of purposive sampling, the research samples consist of nine companies that provide complete financial statement data for each year: PT Bayu Buana Tbk (BAYU), PT Fast Food Indonesia Tbk (FAST) , PT Indonesia Paradise Property Tbk (INPP), PT Jakarta Setia Budi Internasional Tbk (JSPT), PT Jakarta International Hotels & Development Tbk (JIHD), PT MNC Land Tbk (KPIG), PT Destinasi Tirta Nusantara Tbk (PDES), PT Pembangunan Jaya Ancol Tbk (PJAA), dan PT Hotel Sahid Jaya International Tbk (SHID).

Sources of data and data types

The data used in this study is a type of secondary data, and the data collected is in the form of financial reports and a summary of company performance in the hotel, restaurant, and tourism sub-sector industries that have been published on the Indonesian stock exchange during the 2015–2019 period. The data came from financial reports and a summary of the company's performance, such as debt to equity ratio and earnings per share on stock prices

and financial statements of the Hotel, Restaurant, and Tourism Industry sub-sector companies, which originated from the Indonesia Stock Exchange and were found on the website www.idx.co.id.

RESULTS

To get a general understanding of the value of the debt-to-equity ratio, earnings per share on stock prices in the hotel, restaurant, and tourism industry sub-sectors listed on the Indonesian stock exchange were examined. In this instance, we will thus report the outcomes of the computations for each of the variables that have been investigated. This study employs the variables debt-to-equity ratio (X1), earnings per share (X2), and stock price (Y).

The classic assumption test

Normality test

The normality test was performed to assess whether or not the given data had a normal distribution. The P-P Plot Test was used to examine the normality of the data. Normality testing may be determined by examining the data spread (points on the diagonal axis of the normal distribution graph), and the results are shown in Figure 1.

Normal P-P Plot of Regression Standardized Residual

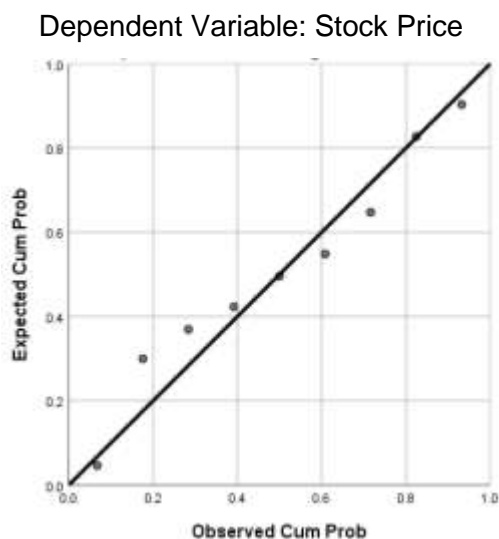Dependent Variable: Stock Price

Figure 1: Normality Probability Plot

Figure 1 shows the results of the normality test (Normal P-Plot Of Regression Standardized Residual). It can be shown that the points are distributed about the diagonal line and that the distribution follows the diagonal. These results demonstrate that the regression

model is usable since it satisfies the assumption of normality that the data is normally distributed, as evidenced by the fact that the points in the figure are scattered along and around the diagonal line.

Test of Multicollinearity

Multicollinearity refers to the occurrence of perfect correlation between two independent variables in a model of multiple linear regression. This evaluation is conducted using VIF with criteria. If the VIF of an independent variable is more than 10 or the tolerance is less than 0.10, it may be inferred that the variable is multicollinear. According to the findings of multiple linear regression analysis, the VIF of each independent variable may be calculated as follows:

Table 1: Multicollinearity Test

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	592.781	167.324		3.543	.012		
Debt to Equity Ratio	-.002	.003	-.224	-.789	.460	.997	1.003
Earning Per Share	-.050	.021	-.671	-2.362	.056	.997	1.003

a. Dependent Variable: Stock price

If there is multicollinearity in a regression model, the value of VIF may be used to determine this. If the tolerance value is less than 0.1 and VIF is more than 10, multicollinearity is present. Table 1 of the study findings reveals that the debt-to-equity ratio's tolerance value is 0.997, with a VIF value of 1,003. The earnings per share tolerance value is 0.997 and the VIF value is 1,003. Therefore, it may be argued that among the variables in the regression model does not include multicollinearity.

Autocorrelation Test

The autocorrelation test determines whether or not there is a correlation between periods t and t-1. The Durbin-Watson test is used to determine the existence or absence of autocorrelation (DW-test). If the DW number is below -2, it indicates that there is a negative autocorrelation; if it is between -2 and 2, it indicates that there is no autocorrelation; and if it is above +2, it indicates that the autocorrelation is positive. Based on the outcomes of the SPSS version 26 data analysis computation, table 2 shows the outcomes of the autocorrelation test.

Table 2: Durbin-Watson Autocorrelation Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.720[a]	.518	.357	264.04247	1.622

a. Predictors: (Constant), Earning Per Share, Debt to Equity Ratio
b. Dependent Variable: Stock Price

Table 2 above shows that if DW lies between -2 and +2, then the Durbin–Watson test = 1.622 and if -2 < DW > +2, then there is no autocorrelation either positive or negative.

Heteroscedasticity Test

The objective of the heteroscedasticity test is to determine if the regression model demonstrates inequality between the residuals of one observation and another. Using the scatter plot approach, heteroscedasticity may be determined by graphing the ZPRED value with SRESID. A good model is achieved if there is no discernible pattern on the graph, such as a concentration in the centre, a narrowing followed by a broadening, or the opposite. Figure 2 depicts the heteroscedasticity test in this research based on the findings of data processing.

Scatterplot
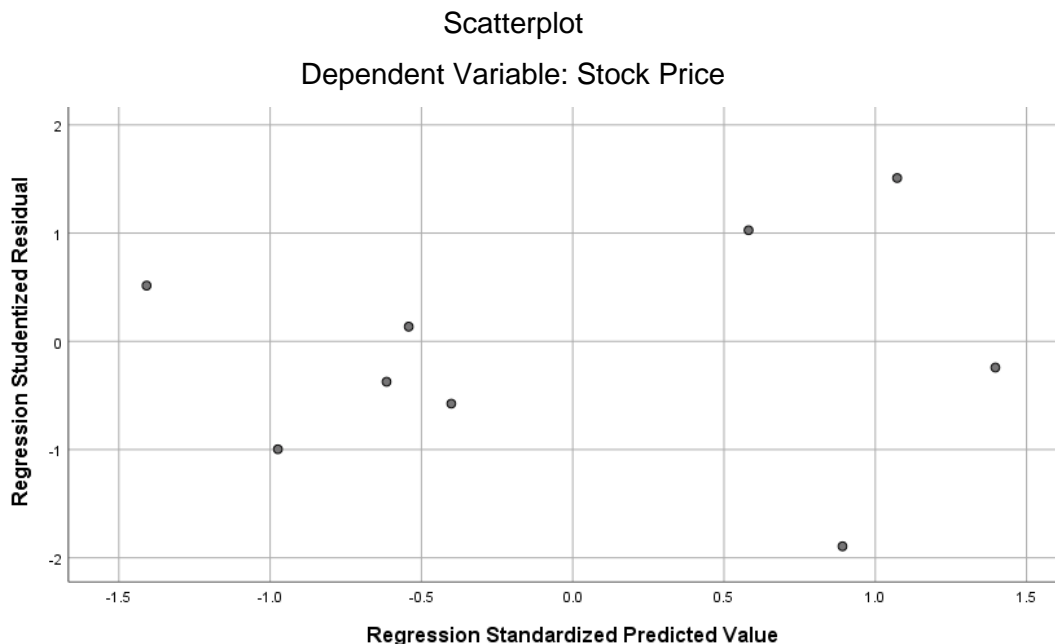
Dependent Variable: Stock Price

Figure 2: Heteroscedasticity Graph

Figure 2 shows that the points are spread randomly, not in a regular pattern, and are spread both above and below the numbers 0 and Y. Moreover, in this study's regression model,

the points do not accumulate in a single location. Therefore, the debt-to-equity ratio and earnings per share variables on stock prices are suitable for the regression model.

Multiple Linear Regression Model

Using a multiple linear regression equation model, the relationship between a dependent variable and many more variables is analyzed. In this study, the multiple linear regression equation model was constructed to estimate the simultaneous effect of the debt-to-equity ratio and earnings per share (as independent variables) on stock prices (as dependent variables). The program SPSS V. 26 was used to test the data, and the processing of the data yielded the following calculation results:

Table 3: Multiple Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	592.781	167.324		3.543	.012		
Debt to Equity Ratio	-.002	.003	-.224	-.789	.460	.997	1.003
Earning Per Share	-.050	.021	-.671	-2.362	.056	.997	1.003

a. Dependent Variable: Stock Price

Equation: Y = 592,781 + 0,002 X1 + 0,050X2 + e

According to this model, the constant value is 592.781, which means that if the variable debt-to-equity ratio (X1) and earnings per share (X2) are considered to be 0, then the stock price (Y) is valued at 592.781. The coefficient of debt to equity ratio (X1) with a value of 0.002 has a positive affect on stock prices, indicating that if X1 rises by one unit, Y will increase by 0.002. The earnings per share (X2) coefficient has a value of 0.050, which indicates that if the earnings per share (X2) increases by one unit and all other factors remain constant, the stock price will decrease by 0.050.

Hypotheses Test
Partial Test

This test was performed to assess the significance of each independent variable's effect on the dependent variable by comparing their coefficients. The results of this study's t-test are shown in table 4.

Table 4: Results of Partial Test Hypothesis Testing

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	592.781	167.324		3.543	.012
Debt To Equity Ratio	-.002	.003	-.224	-.789	.460
Earning Per Share	-.050	.021	-.671	-2.362	.056

a. Dependent Variable: Stock Price

The partial test results may be described as follows, based on table 4:

Hypothesis testing for the debt-to-equity ratio (X1): the significance of the debt-to-equity ratio is 0.460, which is larger than 0.05 with a 5% percent error rate and a 95 % confidence level. The T-count value of 0.789 will be compared against the T-table value of 2.44691. Therefore, T-count lower than T-table indicates that the debt-to-equity ratio has an insignificant effect on stock prices.

Hypothesis test for earnings per share (X2); the significant value of earnings per share is 0.056, which is greater than 0.05 with a 5% margin of error and a 95% confidence level. The T-count value of 2.362 is compared to the T-table value of 2.44691. Therefore, since T-count is lower than T-table, it can be claimed that earnings per share have an insignificant impact on stock prices.

Simultaneous Test

This test was performed to examine if the independent variables affect the dependent variable simultaneously. The study's F-test findings are shown in the table below.

Table 5: Simultaneous Test

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	449056.672	2	224528.336	3.221	.112[b]
Residual	418310.569	6	69718.428		
Total	867367.241	8			

a. Dependent Variable: Stock Price
b. Predictors: (Constant), Earning Per Share, Debt to Equity Ratio

Based on table 5, we achieved a significant value of 0.112 or greater than the relevant significant profitability criterion, 0.05, with a 5% error rate and a 95% degree of confidence. The F-count value is 3.221, which will be tested against the F-table value of 5.14. Due to the fact

that F-count 3.221 is lower than F-table 5.14 with a significant 0.112 > 0.05, it can be concluded that the debt-to-equity ratio and earnings per share have no influence on stock prices.

DISCUSSION

The simultaneous effect of debt to equity ratio, earnings per share on stock prices

On the basis of the results of the simultaneous test (F-test), it can be found that the F-count value is less than the F-table, with a significance level of 0.112, which is higher than 0.05. This demonstrates that the debt-to-equity ratio (X1) and earnings per share (X2) influence the stock price simultaneously (Y). The stock price variable is explained by 20.7 percent of the debt-to-equity ratio (X1) and earnings per share (X2), with the remaining 79.3 percent accounted for by unspecified variables. Based on a prior study by Gede Priana Dwipratama, simultaneously, PBV, DER, EPS, DPR, and ROA have an effect on stock prices. There is also a similar research finding by Silaholo with the results of EPS and PBV that has a significant effect on stock prices.

The partial effect of debt-to-equity ratio, earnings per share on stock prices

According to the findings of the partial test (t-test), the debt-to-equity ratio has a partial effect on the stock price. The stock price will increase by 0.287 units if the debt-to-equity ratio increases by one unit. Thus, to calculate the stock price, the debt-to-equity ratio must be increased. T-count, having a value of 0.789, is less than T-table, which has a value of 2.44691. It is relatively different from the previous study by Gede Priana Dwipratama, with the results not having a partial effect on the variables of PBV, DER, DPR, and ROA.

According to the findings of the partial test (t test), earnings per share had no influence on stock prices in part. The regression coefficient for the variable earnings per share is 0.056, which indicates that if the variable earnings per share increases by one unit, the stock price will increase by 0.056 units. Gede's prior study revealed that EPS had a significant impact on stock prices. With a 5% margin of error and a 95% confidence level, the significant value of earnings per share is 0.056, which is greater than 0.05. The T-count value of 2.362 is compared to the T-table value of 2.44691. Consequently, the T-count is less than the T-table. It might be stated that earnings per share partly do not have a significant effect on stock prices.

CONCLUSION

The results of research and discussion that have been put forward by the authors as the conclusions of this study are:

Upon simultaneous testing (F-test), it can be seen that the variables debt to equity ratio (X1) and earnings per share (X2) where the F-count value is lower than the F-table (3.221 is

lower than 5.14) with a significant 0.112 > 0, 05. It can be stated that the turnover of debt to equity ratio (X1) and earnings per share (X2) simultaneously has an effect on stock prices. Changes in debt to equity ratio (X1) and earnings per share (X2) can explain changes in variables to stock prices of 20.7%.

Upon scanning the partial test results (t-test), it can be seen that the debt to equity ratio (X1) has a significant effect on stock prices (Y) where the debt to equity ratio (X1) of T-count is lower than the T-table or 0.789 > 2.44691. Earnings per share (X2) have no significant effect on stock prices (Y) where earnings per share of T-count is lower than T-table or 2.362 lower than 2.44691, which means it has no significant effect on stock prices (Y).

LIMITATIONS AND SUGGESTIONS

This study has some limitations that make it difficult to get better results. The first limitation of this study is that the data was only utilized for five years (2015–2019), with no extra data, such as quarterly data, that would have created a more detailed discussion. To acquire better results while testing the hypothesis, the amount of time period on research must be increased. This study did not take a sample from each sector, hence it does not include all Indonesian public companies.

As indicated in the study limitations, there are some recommendations for further research if the same theme of research is undertaken. For instance, it extends the time frame for doing research. It will have improved the outcome and had a significant influence. It is suggested to include another independent variable that could affect the stock price, such as a cash flow statement, another ratio, or an information segment. The increased independent variable intends to increase variation in the study.

For the company to pay more attention to earnings per share and the debt-to-equity ratio, since neither factor has a big effect on stock prices on its own. The authors suggest that further research replace or add variables such as leverage ratios that affect the debt to equity ratio, market ratios that affect earnings per share, and price book value to develop the hypothesis. Thus, companies pay attention to leverage ratios and market ratios, and the value of the company will increase in the eyes of investors. For investors and potential investors who will choose to invest, they should first consider the debt-to-equity ratio and earnings per share, both simultaneously and partially, and pay attention to the linkages and other factors such as financial ratios before investing.

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