

The Effect of Return on Asset, Return on Equity, Net Profit Margin, and Debt to Equity Ratio on Dividen in Pharmaceutical Companies in Period 2017 – 2021

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ABSTRACT

Purpose: This research is based on a phenomenon that occurs from the impact of the Covid-19 pandemic which causes an increase in the consumption of medicines in all levels of society due to efforts to increase immunity to prevent corona virus infection and to see the company's ability to predict future opportunities and strategies is the main key in the success of a company. Companies are also required to innovate products, especially during the Covid-19 pandemic and pharmaceutical companies are intensively innovating products because people are aware of the importance of maintaining health. This study aims to determine the effect of Return On Asset, Return On Equity, Net Profit Margin, and Debt To Equity Ratio on Dividend Payout Ratio.

Design/methodology/approach: The independent variables in this study are ROA (X1), ROE (X2), NPM (X3) and DER (X4) and the dependent variable in this study is DPR (Y). The type of research used in this study is a type of quantitative research. This study took all time series data with a period of 5 years 2017 to 2021. The number of research samples with purposive sampling techniques was obtained by as many as 5 companies.

Findings: From the results of this study, it can be concluded that ROA, ROE, NPM, and DER have a significant effect on DPR.

Originality/value: This paper is original

Paper type: Research paper

Keywords: *Debt To Equity Ratio, Dividend, Net Profit Margin, Return On Asset, Return On Equity*

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I. INTRODUCTION

The development of the pharmaceutical industry every year must experience an increase in performance in order to get maximum profit. The purpose of establishing a company is to get the maximum profit and enrich the shareholders or investors through stock returns. Pharmaceutical companies are businesses that are currently developing in Indonesia and can attract investors to invest. In the face of fast-paced competition, it demands the company's tactics in order to survive the competition, while the weak company will experience bankruptcy. The company's ability to predict future opportunities and strategies is the main key in the success of a company. Companies are also required to innovate products, especially during the Covid-19 pandemic and pharmaceutical companies are intensively innovating products because people are aware of the importance of maintaining health. As well as to attract investors to get additional funds in order to survive the competition (Purnomo Putri Maritha & Soekotjo, 2019).

Pharmaceutical companies are suppliers of medicines, the impact of the Covid-19 pandemic has caused an increase in the consumption of medicines at all levels of society due to efforts to increase immunity to prevent corona virus infection, currently the industry records that the uptake of drugs outside of Covid-19 has contracted by up to 11 percent. The pharmaceutical industry is one of the sectors that continues to grow during the pandemic with the growth of the pharmaceutical industry will provide better access to quality pharmaceutical

production for the community. This has an impact on increasing sales of pharmaceutical companies in Indonesia. However, whether this has an impact on the company's financial performance. Because many workers and medical personnel are affected by Covid-19. So it is likely to affect the company's performance.

The capital market is a market of short-term or long-term financial instruments, to be traded both in the form of debt and own capital issued by the government and private companies (Musdalifah et al., 2015). Investors who buy shares of companies, generally aim to receive a profit rate in the form of dividends (Tahu, 2018, p. 34). Dividend is the level of profit obtained by a financier or investor on the investment made. Every short-term or long-term investment has the main goal of obtaining a profit called a return, either directly or indirectly (Umam & Sutanto, 2012). Dividends can be interpreted as a form of distribution of profits made by the company to investors, shareholders. The amount of dividend distributed by the company is determined by the shareholders at the GMS (General Meeting of Shareholders) (Tahu, 2018).

II. LITERATUR REVIEW AND HYPOTHESIS DEVELOPMENT

Return On Asset is an important indicator in assessing the company's future prospects the higher the company's condition. Meanwhile, according to (Becker et al., 2015) Return On Assets is used to see the ability of an entity to generate profits from each asset owned. Asset return rewards also indicate the efficiency of utilizing the entity's assets in producing the main purpose for which the entity stands Return On Asset (ROA) Reflects how much return is generated on each rupiah of money invested in the form of assets (Murhadi, 2015). According to (Suad, 2019) ROA can show how much net profit can be obtained from all the wealth that a company has, thus the return on assets has a significant effect on dividends. This theory is supported by research by Agustini & Fuadati (2017), (Susellawati et al., 2020), (Hazen, 2019), (Sari Novita & Sudjarni, 2015), (Wijayanto & Putri, 2018). (Parera, 2016) The ROA variable has no significant effect on dividend payouts. This is what underlies the basis for the development of hypotheses proposed in research, namely:

H1 : Return On Assets partially has an insignificant effect on Dividends

Return On Equity is a measure of a company's ability to make an after-tax profit using its own capital. ROE is a measurement of the income available to company owners for the capital they invest (Syamsuddin, 2016). According to (Murhadi, 2015) ROE reflects how much return is generated for shareholders on every rupiah of money invested. Meanwhile, according to (Suad, 2019) The ratio used to measure how much profit is the owner of his own capital is entitled to. thus the return on equity has significant effect on dividends, this theory is supported by research by Parera, 2016, (Sriyono & Abdi, 2017), (Lestari Firda et al., 2016) Return On Equity (ROE) has a significant effect on dividend policy. This is what underlies the basis for the development of hypotheses proposed in research, namely:

H2 : Return On Equity partially has a significant effect on Dividends

Net Profit Margin is a ratio to measure net profit from sales by dividing profit before tax and income. NPM is the ratio between net profit, namely sales after deducting all expenses including taxes compared to sales (Syamsuddin, 2016). This ratio reflects the company's ability to generate a net profit from each of its sales (Murhadi, 2015), thus the net profit margin has significant effect on dividends, this theory is supported by research by (Nurhayati, 2013), (Parera, 2016), (Yasa Mahendra & Wirawati Putu, 2016) Net Profit Margin has a positive and significant effect on Dividend Payout. This is what underlies the basis for the development of hypotheses proposed in research, namely:

H3 : Net Profit Margin partially has a significant effect on Dividends

Debt To Equity Ratio is a ratio that compares the amount of debt owned with capital, the lower this ratio, the better it will be for the condition of the company. This ratio shows the ratio between debt and own capital (Suad, 2019). According to (Kamaludin & Indriani, 2012) Calculating the comparison between long-term debt and own capital. Meanwhile, according to (Tahu, 2018) Debt to equity ratio reflects the company's ability to manage the portion of debt with the capital owned by the company, the greater this ratio reflects the company's higher financial risks, because the capital owned is not able to cover the company's debts. Thus the debt to equity ratio has a significant effect on dividends, this theory is supported by research by (Agustini & Fuadati, 2017), (Sari Novita & Sudjarni, 2015), (Sriyono & Abadi, 2017), (Parera, 2016) Debt To Equity Ratio (DER) which has a significant effect on dividend payout. This is what underlies the basis for the development of hypotheses proposed in research, namely:

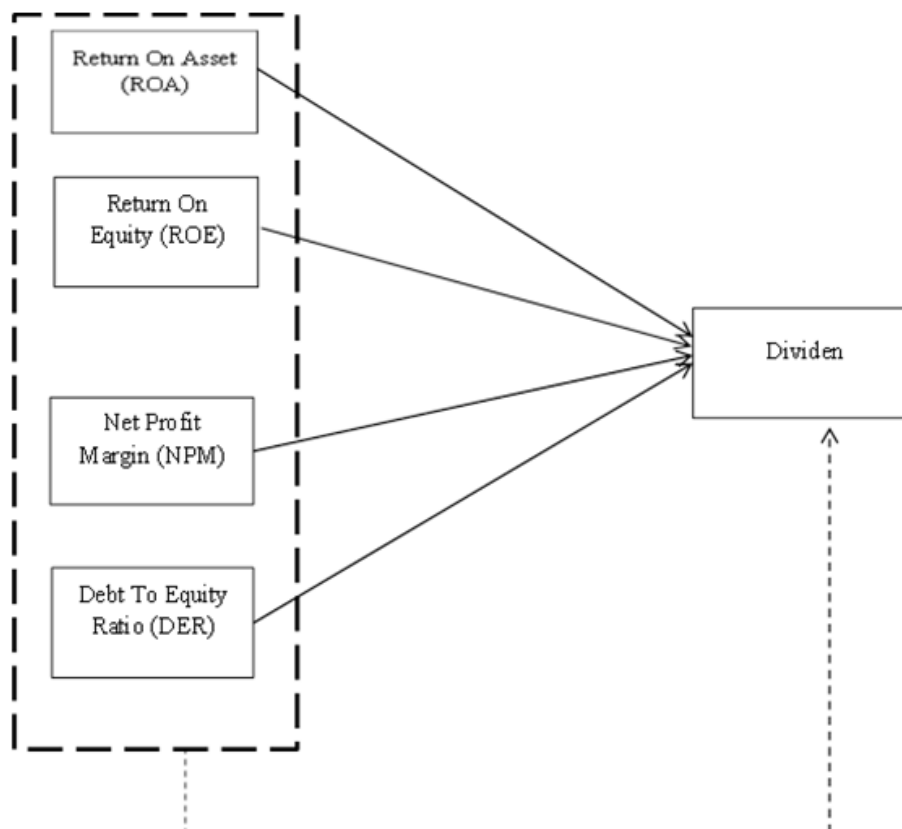
H4 : Debt To Equity Ratio has a significant effect on Dividends

Based on research conducted by (Parera, 2016), the results of simultaneous test research show that Net Profit Margin (NPM), Return On Asset (ROA), Debt To Equity Ratio (DER) affect Dividend Payout (Parera, 2016). Research conducted (Sriyono & Abadi, 2017) shows that the variables SKM, ROE, Exchange Rate, and DER simultaneously have a significant positive effect on dividends (Sriyono & Abadi, 2017). This is what underlies the basis for the development of hypotheses proposed in research, namely:

H5 : ROA, ROE, NPM, and DER simultaneously effect on Dividends

B. Conceptual framework and hypothesis building

Based on the introduce above, the research framework is described as follows:



III. METHODS

This research was conducted on pharmaceutical companies on the Indonesia Stock Exchange for the period 2017 – 2021 which can be accessed at www.idx.co.id. The object of this study is a pharmaceutical company on the Indonesia Stock Exchange for the period 2017 – 2021. The population in this study was 11 companies listed on the Indonesia Stock Exchange. This research sample was selected using a purposive sampling technique with the following criteria: a) pharmaceutical companies that occur on the Indonesia Stock Exchange, b) companies that have issued financial statements for the period 2017 – 2021, c) companies that have distributed dividend for 5 years. The population sampled in this study in this study there are 5 pharmaceutical companies on the Indonesia Stock Exchange for the period 2017 – 2021. The data collection method used in this study was non – participant observation. This study observes data that has been published on the official website of the Indonesia Stock Exchange (www.idx.co.id). Testing the hypothesis of this study using multiple linear regression analysis. Multiple linear regression equation can be formulated as follow:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 e \dots \dots \dots$$

Description :

Y = Dividen

X1 = Return on Assets (ROA)

X2 = Return On Equity (ROE)

X3 = Net Profit Margin (NPM)

X4 = Debt To Equity Ratio (DER)

IV. RESULT AND DISCUSSION

A. Research Descriptive Statistic

Table 1. Descriptive Statistical Test Result

| Descriptive Statistics | | | | | |
|------------------------|----|---------|---------|---------|----------------|
| | N | Minimum | Maximum | Mean | Std. Deviation |
| ROA _ X1 | 25 | .002 | .310 | .10986 | .077537 |
| ROE _ X2 | 25 | .012 | .363 | .14578 | .079671 |
| NPM _ X3 | 25 | .003 | .401 | .14493 | .114552 |
| DER_ X4 | 25 | .091 | 4.228 | 1.04871 | 1.512483 |
| Valid N (listwise) | 25 | | | | |

Based on the statistical descriptive table above , it show that the data used in this study amounted to 25 or 5 pharmaceutical companies registered with BEI for 5 years from 2017 – 2021. From the data above it show that the ROA variable has a minimum value of 0,002 and a maximum value of 0,310, and has average value of 0,109866 with a standard deviation of 0,77537. For ROE having a minimum value of 0,012 and a maximum value of 0,363, and has average value of 0,14578 with a standard deviation of 0,079671. NPM variable has a minimum value of 0,003 and a maximum value of 0,401 , and has and has average value of 0,14493 with a standard deviation of 0,114552. While the DER variable has a minimum value of 0,091 and a maximum value of 4,228 , and has average value of 1,04871 with a standard deviation of 1,512483.

B. Result of Multiple Linear Regression Analysis

Tabel 2. Multiple Linear Regression Analysis

| Unstandardized Coefficients | | | |
|-----------------------------|--------|------------|--|
| Model | B | Std. Error | |
| 1 (Constant) | -.489 | .117 | |
| ROA _ X1 | 2.385 | 3.648 | |
| ROE _ X2 | 3.047 | 2.484 | |
| NPM _ X3 | -5.067 | 1.456 | |
| DER_ X4 | .025 | .030 | |

The multiple linear regression analysis model used is as follows:

$$Y = -489 + 2,385X1 + 3,047X2 + (- 5,067X3) + 0,025X4$$

Based on the multiple linear regression equation above , it can be explained as follow:

B1 = 2,385 , which means that if the return on asset (X1) increases by 1%, dividends will increase by 2,385 percent if the other independent variables are constant.

B2 = 3,047 , which means that if the return on equity (X2) increases by 1%, dividends will increase by 3,047 percent if the other independent variables are constant.

B3 = - 5,067 , which means that if the net profit margin (X3) decrease by 1%, dividends will by decrease - 5,067 percent if the other independent variables are constant.

B4 = 0,025 which means that if the debt to equity ratio (X4) increases by 1%, dividends will increase by 0,025 percent if the other independent variables are constant.

C. Result of the model feasibility test (F – test)

This test is conducted to determine the level of significance simultaneously or simultaneously all independent variabel on the dependent variable on the dependent variable. If \leq or significance $F \geq \alpha$ (0,05), then H0 is accepted otherwise if $>$ or significance $F < \alpha$ (0,05), the H0 is rejected. The result of the simultaneous significance test of this study can be seen in table 3.

Table 3.

| Model | | F | Sig |
|-------|------------------------------|--------|-------|
| 1 | Regression Residual Total | 11.801 | .000b |

Based on the result of the simultaneous significance test in Table 3 , the significance value 0,00 is less that 0,05 (0,00 < 0,05) and 11,801 is greater than 2, 84 (11,801 > 2,84) , then H0 is rejected and H1 is accepted. This shows that the variable return on asset , return on equity , net profit margin , and debt to equity ratio simultaneously affect dividends and the regression model is feasible to use in this study.

D. Coefficient of Determination

Tabel 4. The coefficient determination R2

| Model | R | R. Square | Adjusted R Square | Std Error of the Estimate |
|-------|-------|-----------|-------------------|---------------------------|
| 1 | .838a | .702 | .643 | .148229 |

Table 4 above , seen through the adjusted R2 value , which is equal to 0,702 which means that 70,2% of the variation in dividends can be explained by the variables ROA , ROE , NPM and DER, while the remaining 29,8% is influenced by other variables outside the research model.

E. Partial Test Result (t- test)

Tabel 5. Partial Test Result (t-test)

| Model | t | Sig. |
|--------------|--------|------|
| 1 (Constant) | -4.165 | .000 |
| ROA_X1 | .654 | .521 |
| ROE_X2 | 1.227 | .234 |
| NPM_X3 | -3.481 | .002 |
| DER_X4 | .838 | .412 |

Partial test result (t-test) partial significance test or t – test is a test used to test the significance of the regression coefficient partially or to test the effect of independent variables on the dependent variable. If $t - \text{value} \leq t \text{ table}$ or significance $t \geq \alpha$ (0,05) then H_0 is accepted and H_1 is rejected , on the contrary , if $t \text{ value} > t \text{ table}$ or significance $t < \alpha(0,05)$, the H_0 is rejected and H_1 is accepted. The result of the partial significance test of this study can be seen in table 5.

- a. The variable return on assets (ROA) has a significance value of 0,521 which is greater than the real level $\alpha = 0,05$ (0,521 > 0,05) and the t value of 0,654 is less than t table 2,085 (0,654 < 2,085) so H_0 is accepted and H_1 is rejected. This shows that return on asset partially has a insignificant effect on dividends in Pharmaceutical companies on the Indonesia Stock Exchange for the 2017 – 2021 period. If the ROA value increases , it will be followed by an increase in dividends , conversely if the ROA value decreases , the dividends will decreases.
- b. The variable return on equity (ROE) has a significance value of 0,234 which is greater than the real level $\alpha = 0,05$ (0,234 > 0,05) and the t value of 1,227 is less than t table 2,085 (1,227 < 2,085) so H_0 is accepted and H_1 is rejected. This shows that return on equity partially has a insignificant effect on dividends in Pharmaceutical companies on the Indonesia Stock Exchange for the 2017 – 2021 period. The result of the research show the ROE value does not have significant effect on dividends , meaning that the level of ROE does not affect dividend distribution.
- c. The variable net profit margin (NPM) has a significance value of 0,002 which is less than the real level $\alpha = 0,05$ (0,002 < 0,05) and the t value of -3,481 is less than t table 2,085 (-3,481 < 2,085) so H_0 is rejected and H_1 is accepted. This shows that net profit margin partially has a significant effect on dividen in pharmaceutical companies on Indonesia Stock Exchange for the 2017 – 2021 period.the net profit margin variable has a significant effect on dividen , which means that the higher the NPM value the higher the dividen obtained by investors.
- d. The variable debt to equity ratio (DER) has a significance value of 0,412 which is greater than the real level $\alpha = 0,05$ (0,412 > 0,05) and the t value of 0,838 is less than t table 2,085 (0,838 < 2,085) so H_0 is accepted and H_1 is rejected. This shows that debt to equity ratio partially has a insignificant effect on dividen in pharmaceutical companies on Indonesia Stock Exchange for the 2017 – 2021 period.the debt to equity ratio variable has a insignificant effect on dividen , which means that the higher the DER value the higher the dividen obtained by investors.

The independent variable which has the most dominant influence on the dependent variable can be seen throught the standardized coefficient beta. The dominant influence of the independent variable on the dependent variable was seen using the highest beta standardized coefficients. In this study , the standardized coefficients beta is the ROA variable of 2,385 , ROE was 3,047 ,NPM -5,067 and DER 0,025. Of the four independent variables , the highest value of standardized coefficients beta is the ROE , so the independent variable is the most dominant in the dependent variable , namely the ROE variable.

V.CONCLUSION

Based on this research , it is know that theoretically , the return on equity , net profit margin , and debt to equity ratio variables get result in accordance with the pervious theory , namely return on equity , net profit margin , and debt to equity ratio have a significant effect on dividends of pharmaceutical companies. This shows that the level of return on equity , net profit margin , and debt to equity ratio affect investor interest in making investment decision. The result of this study also provide empirical evidence that return on asset has no effect on dividen of pharmaceutical companies. This research is expected to be able to provide an empirical contribution to the effect of return on asset , return on equity , net profit margin , and debt to equity ratio on dividend on the Indonesia Stock Exchange for the development of financial management science. The result of this study are expected to be taken into account by investors making investment decision.

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