Analysis Of Return On Assets And Dividend Payout Ratio On Stock Performance
Case Study of Pharmaceutical Companies Listed on the Indonesian Stock Exchange for the 2017-2022 Period

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ABSTRACT
This study aims to determine the Analysis of Return on Assets and Dividend Payout Ratio on Stock Performance (Case Study of Pharmaceutical Companies Registered on the Indonesia Stock Exchange for the 2017-2022 period). The population in this study were 12 pharmaceutical companies listed on the IDX and 6 samples. Companies with 6 years of data. The sampling method used is the non-random sampling method. The data analysis method used is multiple linear regression analysis to determine the effect of profitability, market ratios and interest rates on stock prices. Testing data was carried out using IBM SPSS Statistics 25 Software. From the results of the regression analysis test, it is obtained that the t value is -2.049 with a significance level of 0.048 (0.048 <0.05) so that the variable Return on Assets (X1) has a significant effect on stock prices, which means H1 is accepted. From the results of the regression analysis test, it was obtained that the t value was 1.478 with a significance level of 0.149 (0.149 > 0.05), so the dividend payout ratio (X2) variable did not significantly affect stock prices, which means H2 was rejected. From the results of the regression analysis test, the calculated f value was obtained of 3.631 with a significance level of 0.038 (0.038 <0.05) then the variables Return on Assets and Dividend Payout Ratio have a simultaneous and significant effect on stock prices, which means H3 is accepted.

Keywords: Profitability, Market Ratio, Stock Prices

INTRODUCTION
Share prices are closely related to a share's market price. Demand and supply influence changes in stock prices in the secondary market. If there are more enthusiasts or people who want to buy shares in a company, the higher the share price will be. And conversely, if there are few interested people who want to buy the shares, the value of the share price will also decrease. The share price is the value of a share as seen from the total assets of the company when issuing the shares.

Share value is an appropriate index for company effectiveness, so it is often used. Sometimes it is said to maximize company value or maximize shareholder wealth. Thus, the higher the share price, the higher the company value and vice versa. In other words, the share price is the price per share prevailing in the capital market. The share price is a very important factor and investors must pay attention to it when investing because the share price shows the issuer's performance. Share prices in the capital market consist of three categories, namely the highest price (high price), the lowest price (low price) and closing price (close price). The highest or lowest price is the highest or lowest price that occurs on one trading day. The closing price is the latest price at the end of stock exchange hours (Hermanto 2020).

It can be seen that the share prices of pharmaceutical sub-sector companies have experienced share price fluctuations in the last year period 2017 - 2021. The decline in share prices that occurred in 2019 was due to government policy to reduce prices medicines proposed by members Commission IX DPR RI (dpr.go.id). In 2020 prices...
Stock Performance, ROA and Dividend Payout

share experience increase return even be the highest matter. This triggered the transfer of investors to company pharmacy caused by the pandemic covid-19 where at the moment that company pharmacy become most important sector in sustain condition pandemic especially in Indonesia. Average Return on the assets (ROA) of the 6 companies studied fluctuate every year. From the existing graph it can be seen that in 2018 the average ROA experienced a significant decline. Average DPR where each company different in matter share dividend, dividend highest shared company was in 2019, and followed with 2020, p This compare backwards with average prices company stock pharmaceuticals are in decline, where though happen decline company still share dividends, and p This supported with profitability participating companies increase.

Previous research indicates that there is a research gap for each variable. In Mochamad Aldy Prayoga's (2022) research, it shows that ROA has a positive effect on share prices and in Purnama Sari's (2023) research the results show that DPR has a significant positive effect on stock prices.

Based background behind research Which explained in on, so writer try formulate problem Which will be discussed in this research are:
1. How does Return on Assets affect Share Performance in pharmaceutical companies listed on the Indonesia Stock Exchange (BEI) for the 2017-2022 period?
2. Dividends affect? Payouts Ratio to Share Performance in pharmaceutical companies listed on the Indonesia Stock Exchange (BEI) for the 2017-2022 period?
3. How does Return affect? on Assets and Dividends Payouts Ratio to Share Performance in pharmaceutical companies listed on the Indonesia Stock Exchange (BEI) for the 2017-2022 period?

The Hypothesis of this study:
H1: ROA influences share prices in pharmaceutical companies.
H2: DPR influences share prices in pharmaceutical companies.
H3: ROA and DPR have a simultaneous effect to share prices in Pharmaceutical Companies.

METHOD
In this research, the type of research carried out is descriptive with a quantitative approach and involves data collection, preparation and data processing which is carried out descriptively and objectively in solving problems in hypothesis testing. The subjects used in this research are pharmaceutical companies listed on the IDX and the data used is from the financial reports of 6 pharmaceutical companies that are listed on the Indonesia Stock Exchange. (BEI) and share price data with closing prices (Closing Price) for a period of 6 years from 2017 - 2022. Based on criteria Which according to this research are as follows following:
2. Company which publishes complete financial reports in accordance with the required data.
3. Data complete information owned by the company during 2017-2022.
4. This research used 6 samples from 12 pharmaceutical companies listed on the IDX.
5. Research data covers 6 years from the 2017-2022 period.

Based on characteristics taking sample the above, then the company will become subject in study This amounting to 6 out of 12 companies pharmaceuticals listed on the Indonesian Stock Exchange period 2017-2022. Following is list of companies the:

<table>
<thead>
<tr>
<th>Company Code</th>
<th>Company name</th>
</tr>
</thead>
<tbody>
<tr>
<td>KAEF</td>
<td>Kimia Farma (Persero) Tbk</td>
</tr>
<tr>
<td>SIDO</td>
<td>Sido Muncul Herbal Medicine and Construction Industry Tbk</td>
</tr>
<tr>
<td>TSPC</td>
<td>Tempo Scam Pacific Tbk</td>
</tr>
<tr>
<td>DVLA</td>
<td>Darya Varia Laboratoria Tbk</td>
</tr>
</tbody>
</table>

Table 1 Research Sample
Company Code | Company name
---|---
PYFA | Pyridam Farma Tbk
KLB E | Kalbe Farma Tbk


The data analysis method is an activity after all the data has been collected. The Multiple Linear Regression Analysis Test has one dependent variable and two or more independent variables (Sugiyono, 2016). The multiple regression equation can be formulated as follows:

$$ Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + e $$

Stock price. According to Darmadi and Fakhruddin (2016) share prices can be understood as the prices that occur on the stock exchange at a certain time. Share prices can change up or down in a relatively quick period of time. It is said like that because it can change in a matter of minutes and can even change in a matter of seconds. This can be caused depending on the demand and supply between share buyers and share sellers.

Return on Assets is a ratio that describes the ability to manage funds invested in overall assets that produce profits. ROA is a picture of productivity in managing funds so as to generate profits. The smaller this ratio, the less good it is, and vice versa, meaning this ratio is used to measure the effectiveness of the company's overall operations (Kasmir, 2016). This ratio can be calculated using the formula:

Dividends Payouts Ratio. The higher the dividend Payouts The ratio will benefit investors, but from the company side it will weaken internal finances because it reduces retained earnings. But otherwise Dividend Payouts The smaller the ratio, the more detrimental it will be to shareholders (investors) but the company's internal finances will be stronger (Indriyo and Basri, 2014). Ratio This can calculated use formula:

### RESULTS AND DISCUSSION

Analysis Results Descriptive Research Data

Statistics descriptive is a method data analysis that can be done describe or in other words describe as well as summarize the data that has been gathered with objective presentation minimum, maximum, average and standard values deviation without interesting conclusion whatever on the results presented. (Walpole, 1995 in journal Febsriyani, et al. 2022).

<table>
<thead>
<tr>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROA</td>
<td>36</td>
<td>-.01</td>
<td>.31</td>
<td>.1019</td>
</tr>
<tr>
<td>DPR</td>
<td>36</td>
<td>-.83</td>
<td>5.24</td>
<td>.5671</td>
</tr>
<tr>
<td>Stock price</td>
<td>36</td>
<td>169.00</td>
<td>4250.00</td>
<td>1431.8611</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>36</td>
<td>169.00</td>
<td>4250.00</td>
<td>1431.8611</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023.

The mean or average is the comparison of the sum of all data values with the amount of data. The mean is the middle value or central tendency. If the distribution of data is symmetrical about the average. Based on table 4.1 in descriptive statistics, the highest mean is in the share price variable of 1431 and the lowest mean is in the ROA variable with a value of 0.1019. The maximum value is the highest value in a group of data based on table 4.1 in descriptive statistics, the maximum is in the ROA variable with a value of 0.31 and the minimum value is -0.01, then the DPR variable has a maximum value of 5.24 and a minimum value of -0.83 and the share price variable with a maximum value of 4250 and a minimum value of 169.

Standard deviation is the average variation of all data towards the mean value. Standard deviation is something that reflects the size of the deviation of data within a group towards the center of the data. Based on table 4.1 in descriptive statistics, the highest standard deviation is in the share price variable with a value of 824 and the lowest value is in the ROA variable with a value of 0.07.
**Results of Data Testing Analysis**

**Normality test**

Testing normality addressed. For test is variable data distribution related. For every variable free certain distribute with normal or No. Basis for taking decision in the normality test Kolmogorov Smirnov is. If mark significance > 0.05 then the research data normally distributed, if mark significance < 0.05 then research data No normally distributed.

Table 3 Normality Test

<table>
<thead>
<tr>
<th>N</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal Parameters a, b</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Statistical Tests</td>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

Test result normality with non-parametric statistical tests Kolmogorov-Smirnov show that big mark Kolmogorov-Smirnov is 0.127 and no significant at 0.151 (because p = 0.151 > 0.050) which means that the residuals are distributed normally.

**Test Multicollinearity**

Table 4 Multicollinearity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1694.478</td>
<td>241.025</td>
<td>7,030</td>
<td>.000</td>
</tr>
<tr>
<td>1 ROA</td>
<td>-3646.560</td>
<td>1779.821</td>
<td>-.326</td>
<td>-2,049</td>
</tr>
<tr>
<td>DPR</td>
<td>191,855</td>
<td>129,833</td>
<td>.236</td>
<td>1,478</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

Notice results calculation in table on looks that tolerance value of every independent variable above 0.1. This matter show No There is variable independent who owns mark tolerance not enough of 0.1 and value variance inflation factor (VIF) of every variable independent under 10. This is show that No There is variable independent who owns more VIF value of 10, with thereby can concluded that No There is multicollinearity between variable independent in the regression model.

**Test Heteroscedasticity**

Table 5 Heteroscedasticity Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Q</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>704,738</td>
<td>190,316</td>
<td>3,703</td>
<td>.001</td>
</tr>
<tr>
<td>1 ROA</td>
<td>-2650.410</td>
<td>1405.365</td>
<td>-.314</td>
<td>-1,886</td>
</tr>
<tr>
<td>DPR</td>
<td>-46,150</td>
<td>102,517</td>
<td>-.075</td>
<td>-.450</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

From the results on can is known that regression model free from problem Heteroscedasticity. This matter seen from mark significance variable independent more big from level significance of 0.05.

**Linear Multiple Regression Analysis Result**

Based on Table 6, The constant value of 1694 indicates the constant of the Share Price (Y) assuming the Return variable on Assets (X1), and Dividends Payouts Ratio (X2) is equal to zero or constant, so the Share Price (Y) value experiences an upward trend of
Return regression coefficient on Assets (X1) of -3646.56 indicates that for every increase in Return on Assets is 1%, then share prices will tend to fall by 1% assuming that there are other variables, namely dividends Payouts Ratio (X2) is considered constant. The existence of this negative relationship means that between Return on Assets with Stock Prices show the opposite relationship.

Dividend regression coefficient Payouts The ratio (X2) of 191.855 states that for every increase in dividends Payouts A ratio of 1% means share prices will tend to increase by 1% assuming that there are other variables, namely return on Assets (X1) are considered constant. The existence of this positive relationship means that between Dividends Payouts Ratio with stock prices shows a unidirectional relationship.

Table 6 Multiple Linear Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Q</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1694.478</td>
<td>241,025</td>
<td>7.030</td>
</tr>
<tr>
<td>ROA</td>
<td>-3646.560</td>
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<tr>
<td>DPR</td>
<td>191.855</td>
<td>129,833</td>
<td>.235</td>
<td>1.478</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

From table on so made equality regression as following:

\[ Y = 1694 - 3646.560X1 + 191.855X2 + e \]

Table 7 Coefficient Test Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.425 a</td>
<td>.180</td>
<td>.131</td>
<td>769.14333</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

R Square (R²) is 0.18. This matter means that 18% of the share price variable (discretionary accruals) can explained by variables independent Return on Assets (X1), and Dividend Payout Ratio (X2), Meanwhile the rest 82% is explained by other factors outside the analyzed model.

Table 8 F Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>4296650.025</td>
<td>2</td>
<td>2148325.012</td>
<td>3,631</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>19522188.281</td>
<td>33</td>
<td>591581.463</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23818838.306</td>
<td>35</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

Is known that f count of 3.631 and F Table for the total of 36 data obtained is 2.87, so can compared to that calculated F value more big than ft abel (3,631 > 2.87) and also level significance i.e. 0.00 more small compared to level The significance is α (0.05). So you can concluded that variable independent in study This the result influential to Share Prices as variable the dependent.

Table 9 T Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Q</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
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<tr>
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<td>129,833</td>
<td>.235</td>
<td>1.478</td>
</tr>
</tbody>
</table>

Source: Data processed with SPSS version 25, 2023

Based on the results of the t test, the influence of the independent variable partially on the dependent is:

1. Return on Assets (ROA)
Return on Assets have a calculated t value of -2.049, so it is greater than the t table (t table for sample 36 is -1.692) and the significance value for the Return variable on Assets are 0.048, so it is greater than 0.05 (0.048 < 0.05), it is concluded that Return on Assets have a negative correlation and influence stock prices, so H1 is accepted.

2. Dividends Payouts Ratio (DPR)
Dividends Payouts The ratio has a calculated t value of 1.478, so it is smaller than the t table (the t table for sample 36 is 1.692) and the significance value for the Dividend variable Payouts The ratio is 0.149, so it is greater than 0.05 (0.149 > 0.05). This means that the dividend payouts The ratio has no effect on stock prices, so H2 is rejected.

Discussion

Influence Return On Assets To Price Share. From the results testing analysis regression obtained calculated t value as big as -2.049, so it is greater than the t table (t table for sample 36 is -1.692) with level significance of 0.048 (0.048 < 0.05) then variable Return on Assets (X1) has an effect to meaningful share prices H1 is accepted. Return on Asset (ROA) is a ratio that describes the ability of the assets owned by a company to generate profits. Return on Assets (ROA) measure how much profit a company obtains using all the assets it owns. The higher the ROA value means the higher the profits obtained. In other words, the higher the ROA value means the higher the asset productivity company in making a profit. The high ROA value will attract interest and increase investors' confidence in investing in the company. Increasing the attractiveness of a company makes the company more attractive to investors, because the rate of return will be greater.

Influence Dividends Payouts Ratio To Price Share. From the results of the regression analysis test, the calculated t value was 1.478 then it is smaller than the t table (t table for sample 36 is 1.692) with a significance level of 0.149 (0.149 > 0.05) then variable 1 Dividend Payout Ratio (X 2 ) No has an influence on share prices, which means H2 rejected. Dividend policy can be used as a reference for investors in assessing company performance, often this dividend policy can influence the share price of a company because dividends Payouts A high ratio can provide information to investors that the company has sufficient funds to pay dividends on its shares. Through dividends payouts ratio, it can be seen how much the company shares its net profits in the form of dividends so that dividends payouts The ratio is able to clearly explain the form of the company's dividend policy.

Influence Return on Assets And Dividends Payouts Ratio To Price Share. From the results of the regression analysis test, the calculated f value was 3,631 and the significant value was 0.038. These results are in accordance with the results of the comparison of calculated f and table f. It is known that the calculated f is 3.631 and the f table is 2.87 so that the calculated f value is greater than the f table (3.631 > 2.87), so it can be concluded that the independent variable (Return on Assets and Dividends Payouts Ratio) in this research model simultaneously influences the dependent variable (Share Price). These results support the accepted hypothesis H3. Based on the research results, it is clear that there is a significant influence between Return on Assets and Dividends Payouts Ratio to Share Price. Return Value on High assets will indicate that the company is able to generate relatively high profits. Investors will like companies with return values on high assets, because the company is able to generate a greater level of profit than companies with returns on Low assets. Therefore, companies that are able to generate high ROA will pay high dividends as well.

CONCLUSION

This researcher aims to prove empirically about Influence Return on Assets, Dividend Payout Ratio on Stock Performance Case Study of Pharmaceutical Sub-Sector Companies for the 2017-2022 period. Based on the results of the analysis, this research concludes that:
1. From the results of the regression analysis test, it was obtained that the calculated t value was -2.049 with a significance level of 0.048 (0.048 < 0.05), so the Return variable on Assets (X1) influence share prices, which means H1 is accepted.

2. From the results of the regression analysis test, it was obtained that the calculated t value was 1.478 with a significance level of 0.149 (0.149 > 0.05), so the Dividend variable Payouts Ratio (X2) has no effect on share prices, which means H2 is rejected.

3. From the results of the regression analysis test, it was obtained that the calculated f value was 3.631 with a significance level of 0.038 (0.038 < 0.05), so the variable Return on Assets and Dividends Payouts The ratio has a simultaneous effect on share prices, which means H3 is accepted.

REFERENCES
[18] Faulia Anggeraini (2023). The Effect of Dividend Policy on Share Prices in Food and Beverage Companies Listed on the Indonesia Stock Exchange (Study on Food and Beverage Companies Listed on the IDX). Journal on Education Volume 05, No. 02, January-February 2023, pp. 5063-5076 E-ISSN: 2654-5497, P-ISSN: 2655-
1365.


[23] https://www.idx.co.id/id/usaha-ter-recorded/report-keuangan-dan-tahunan


[65] Sri Devi Andriani (2023). The Influence of Return On Equity (ROE), Earning Per Share (EPS) and Debt To Equity Ratio (DER) on Share Prices (Empirical Study of


