Stock Performance Analysis of PT. Kalbe Farma TBK (KLBF) in 2016-2020

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KEYWORDS
COVID-19; pandemic; stocks

ABSTRACT
When the World Health Organization (WHO) announced that COVID-19 was upgraded to pandemic status, investors began to reconsider their portfolio structure from risky assets such as stocks to gold. This study aims to determine the stock performance of PT. Kalbe Farma Tbk during the COVID-19 pandemic. A quantitative descriptive approach by linking company financial statement data with the phenomenon of the COVID-19 pandemic is the method used in this study. Based on the results of the research that has been done, it can be concluded that the performance of PT. Kalbe Farma Tbk before and during the COVID-19 pandemic on the dependent variable (stock return), namely the Current ratio, had a significant effect on Stock Return. However, based on the results of hypothesis testing regarding the effect of Earnings Per Share and Net profit margin on Stock Return partially, it can be concluded that these variables do not have a significant effect on Stock Return. Based on the conclusions above, the researcher recommends that the first company is expected to make the value of CR better in order to attract investors in investing their funds. Because if the company has a high CR value then the company can be said to have no constraints to pay their debts, thus many investors will be interested in investing in pharmaceutical sector companies and that can be very profitable for the company.

1. Introduction
The end of 2019 and the beginning of 2020 were tough years for the rest of the world. The whole world was shocked by the arrival of CoronaVirus Disease 2019 (COVID-19). In Indonesia, the first case of COVID-19 was announced on March 2, 2020 by President Joko Widodo. COVID-19 triggered a sharp downturn in the world economy and pressure on economic activity in various sectors. The Jakarta Composite Index (JCI) also said it fell 151.54 points or fell 2.94 percent to 5,002.55 at the close of trading session I on the Indonesia Stock Exchange (IDX). In the first trading session, JCI had touched the lowest point at 4,929.56 (Ramli, 2020). This is due to health protocol policies such as large-scale social restrictions which give birth to work-from-home procedures and have an impact on reducing public mobility, including goods and services.
In general, the Indonesian economy contracted in the second quarter of 2020 (Rahma, 2023), the pharmaceutical industry became one of the positive growth. This can be seen in the first semester of 2020 the performance of several pharmaceutical companies was able to record an increase in profits. On an annual basis or year on year (yoy) in the first quarter of 2020, economic growth in Indonesia grew negatively by 1.29 percent. Likewise, it contracted quarter-to-quarter (q to q) which was previously 2.97 percent (first quarter of 2020) and in the second quarter minus 4.19 percent.

The capital market is one of the means to make investments, which allows investors to make investments to form a portfolio according to the risks they are willing to bear and the level of profit they expect. The expectation of investors for their investment is to get the maximum return (rate of return). To find out the extent of investment that investors will make in a company is able to provide returns by the required level, investors can see the profitability of their company. The higher the value of the company, the investor demand for the shares of the company concerned increases, thus increasing the stock price which can then increase stock returns (Hidayat et al., 2016).

Based on the results of (Prasetya, 2021), it shows an increase and decrease in the financial performance of each company that is sampled on the variables tested during the COVID-19 pandemic. In addition, the pandemic in 2020 also affected Kalbe Farma’s cash flow, but the influence provided was positive. This positive influence was caused by the increasing demand for medicines, multivitamins, and supplements so that sales rose rapidly in the first quarter of 2020 (Ardiansyah & Sarwoko, 2020).

From the explanation above, it raises research questions such as; Is there an effect of the current ratio on stock returns? Is there any effect of earnings per share on stock returns? Is there any effect of net profit margin on stock returns? Is there any effect of current ratio, earnings per share, and net profit margin on stock returns simultaneously? And which independent variable influences the most?

Based on the research questions above, the author is interested in knowing how PT. Kalbe Farma Tbk before and during the COVID-19 pandemic by knowing the influence of independent variables (current ratio, earnings per share, and net profit margin) on dependent variables (stock return).

2. Materials and Methods

The method in this study uses quantitative descriptive methods. The type of data used is secondary data obtained from the official website of PT. Kalbe Farma Tbk. https://www.kalbe.co.id/id/investor in the form of the company's 2016 financial statements as an indication of conditions before the COVID-19 pandemic and 2020 financial statements as an indication of conditions during the COVID-19 pandemic.

Based on research by (Hidayat, Juwenah, & Astuti, 2016) to determine the stock performance of a company, the variables that can be used are as follows:

1. Current Ratio, according to (Kasmir, 2014) the current ratio or current ratio is a ratio to measure the company's ability to pay short-term obligations or debts that are immediately due when collected as a whole. While (Hanafi, Santi, & Muazaroh, 2013) said the current ratio measures the company’s ability to meet its short-term debt using its current assets (assets that will turn into cash within one year or one business cycle).

The formula for calculating the current ratio expressed by (Fahmi, 2014) is as follows:

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]

2. Earning Per Share (EPS), according to (Kasmir, 2014) defines as follows: "Earning Per Share is a ratio to measure the success of management in achieving profits for shareholders". According to
(Fahmi, 2014) "Earning Per Share (EPS) or income per share is a form of providing benefits given to shareholders from each share owned."

The formula or how to calculate Earnings Per Share (EPS) is as follows:

\[
EPS = \frac{EAT}{Js} 
\]

Information:
EPS = Earning Per Share
EAT = Earning After Tax
Js = Number of shares in circulation

3. Net Profit Margin (NPM), according to Mahmud M. Hanafi in the book Financial Management Edition 1 (2013: 42) states Net Profit Margin or Profit margin as follows: "Profit margin calculates the extent to which the company’s ability to generate net profit at a certain level of sales". Meanwhile, according to (Fahmi, 2012) Net Profit Margin (NPM), is a ratio used to measure the margin of return on sales, this ratio will describe the company's net income based on total sales.

The formula for calculating Net Profit Margin is as follows:

\[
NPM = \frac{Net Profit After Tax}{Net Sales} 
\]

Sumber : (Hanafi et al., 2013)

4. Stock Return, according to (Fahmi, 2012) defines return as follows: "Return is the profit obtained by companies, individuals and institutions from the results of investment policies they do". According to (Hartono, 2022), return is the result obtained from investment. Stock returns can be calculated using the following formula:

\[
Return \ Saham = \frac{Pt-Pt-1+Dt}{Pt-1} 
\]

Source : (Hartono, 2022)

Where:
Rt = Return Saham
Pt = Share price in period t
Pt-1 = Share price in the previous year
Dt = Dividends received in period t
3. Result and Discussion

Table 1 - Descriptive Statistics Table

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>5</td>
<td>411.60</td>
<td>465.77</td>
<td>442.9340</td>
<td>20.53295</td>
<td>421.602</td>
</tr>
<tr>
<td>X2</td>
<td>5</td>
<td>49.06</td>
<td>58.31</td>
<td>52.9100</td>
<td>3.43527</td>
<td>11.801</td>
</tr>
<tr>
<td>X3</td>
<td>5</td>
<td>11.08</td>
<td>11.91</td>
<td>11.6780</td>
<td>0.34953</td>
<td>0.122</td>
</tr>
</tbody>
</table>

Valid N (listwise) 5

Source: Results Output SPSS 26

Descriptive statistics are used to provide an overview or descriptive of a research data can be seen from the minimum, maximum, average, and standard deviation values of each variable studied, both dependent variables (Stock Return) and independent variables (Current Ratio, Earnings Per Share, and Net Profit Margin). Based on the calculations in the table from the number of 1 company, namely Kalbe Farma as a sample using the Purposive Sampling method where Kalbe Farma multiplied by the period of observation years 2016 to 2020 (5 years), so that the amount of data from each of these studies amounts to 5.

The Current Ratio (CR) variable, namely X1 has a minimum value of 411.60 and a maximum value of 465.77, an average value (mean) of 442.9340, with a standard deviation (SD) of 20.53295 and Based on calculations in the table Variable Earnings Per Share (EPS) or X2 has a minimum value of 49.06 and a maximum value of 58.31, the average value (mean) is 52.9100 with a standard deviation (SD) of 3.43527 and a variance of 11.801.

Variable X3 is Net Profit Margin (NPM) based on the calculation in table 1 The variable has a minimum value of 11.08 and a maximum value of 11.91, an average value (mean) of 11.6780, with a standard deviation (SD) of 0.34953 and a variance of 0.122. Then the last variable Y, namely Stock Return, based on the calculation in table 1 The variable has a minimum value of 15.17 and a maximum value of 19.19, an average value (mean) of 16.8620, with a standard deviation (SD) of 1.73271 and a variance of 3.002.

Classical Assumption Test

Normality Test

Test Normality data to find out whether the distribution of data used is normal or abnormal. Data normality testing using Kolmogorov-Smirnov statistical test. The test results can be seen as follows:

Table 2 - Kolmogorov Smirno normality test results

<table>
<thead>
<tr>
<th>Normal Parameters ab</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>.0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>0.3467761</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td>Positive</td>
<td>.163</td>
</tr>
<tr>
<td>Negative</td>
<td>-.224</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.224</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.200c,d</td>
</tr>
</tbody>
</table>

a. test distribution is normal
b. calculated from data
c. liliefors significance correction
d. this is a lower bound of the true significance

Source: Results Output SPSS 26
From the results of the K-S Value study in table 2 that the residual of the regression has a significant probability value of 0.200 > 0.05, this means that the regression residual is normally distributed. In addition to using the Kolmogorov-Smirnov test, normal distribution testing can also be done by looking at the graph of normal probability plots (normal P-P Plots), if the data is normally distributed then the points will spread around the diagonal line.

The following are the results of testing data normality when viewed from the histogram graph and normal probability plots (normal P-P Plots) below:

![Normal P-P Plot of Regression Standardized Residual](source)

**Figure 1 – Normal Results Probability Plot**

Source: Results Output SPSS 26

Based on Figure 1 explains that the data of this study are normally distributed. It is proven that the normal Probability Plot of points is close together or does not spread far from the diagonal line, then the residual value is normal.

**Heteroscedasticity Test**

The heteroscedasticity test is used to determine the presence or absence of deviations from the classical assumption of heteroscedasticity, namely the presence of variance inequality from residuals for all observations in the regression model. A prerequisite that must be met in the regression model is the absence of symptoms of heteroscedasticity. In this study the Heteroscedasticity Test used was the Scatterplot Test, and the Glejser Test.

Scatterplot Test, This method is by looking at the scatterplot graph between standardized predicted value (ZPRED) and studentized residual (SRESID). There is no certain pattern on the scatterplot chart between SRESID and ZPRED where the Y axis is the predicted Y and the X axis is residual (Y prediction - Y is true). The basis of decision making is: If there is a certain pattern, such as the existing dots form a certain regular pattern (wavy, widened then narrowed), then heteroscedasticity occurs. If there is no clear pattern, such as dots spreading out above and below the number 0 on the Y-axis, heteroscedasticity does not occur.
Based on figure 3 can be seen the spreading dots. The data points spread above and below the number 0 and the spread of these data points is not patterned, this shows that the data of this study does not occur heteroscedasticity.

**Multicollinearity Test**

Multicollinearity is carried out with the aim of testing whether the regression model found a correlation between independent or $X$ (independent) variables. To detect whether the regression model experiences multicollinearity can be examined using Variance Inflation Factor (VIF) and Tolerance for each independent variable, that is, if an independent variable has a VIF value of $< 10$ and a Tolerance value of not less than 0.10 means that multicollinearity does not occur. The results of the multicollinearity test are as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>Correlations</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>Std. error</td>
<td>$t$</td>
<td>$Sig.$</td>
</tr>
<tr>
<td></td>
<td>24.510</td>
<td>2.486</td>
<td>9.858</td>
<td>.06</td>
</tr>
<tr>
<td>X1</td>
<td>-.020</td>
<td>.003</td>
<td>-6.866</td>
<td>.09</td>
</tr>
<tr>
<td>X2</td>
<td>-.496</td>
<td>.17</td>
<td>-28.56</td>
<td>.02</td>
</tr>
<tr>
<td>X3</td>
<td>2.342</td>
<td>.101</td>
<td>23.26</td>
<td>.02</td>
</tr>
</tbody>
</table>

a. dependent variable $y$

Source: Results Output SPSS 26
Based on Table 3 above, it can be seen that the variables $X_1$ (Current Ratio / CR), $X_2$ (Earnings Per Share / EPS) and $X_3$ (Net Profit Margin / NPM) have a VIF value of less than 10. This shows that there is no multicollinearity between independent variables in this study.

**Regression Analysis**

The analysis methods used in this study are multiple linear regression analysis methods and simple linear regression analysis methods. This analysis model is used to determine whether the independent variables Current Ratio ($X_1$), Earnings Per Share ($X_2$), and Net Profit Margin ($X_3$) affect the dependent variable Stock Return ($Y$) both simultaneously and partially.

This multiple linear regression analysis is used to analyze the strength of the influence of the independent variable or $X$ (Current Ratio, Earnings Per Share, Net Profit Margin) on the dependent variable or $Y$ (Stock Return) simultaneously. Based on Table 4, it can be seen the influence of the variables Current Ratio, Earning Per Share, and Net Profit Margin shown in the R Square value of 1,000 or 100%.

**Table 4 - Multiple Regression Test Results**

<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>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.000$^a$</td>
<td>1.000</td>
<td>.998</td>
<td>.06936</td>
<td>3.053</td>
</tr>
</tbody>
</table>

$a$. dependent variable $Y$

Source: Results Output SPSS 26

**Research Hypothesis Testing**

**Test $t$ (Partial)**

The $t$ test is used to determine whether or not the independent variables have a real effect on the dependent variable. With a significant value used is 0.05. If the significant value is less than 0.05 then we accept an alternative hypothesis, which states that an independent variable partially affects the dependent variable.

**Table 5 - Test Results $t$ (Partial)**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. error</td>
</tr>
<tr>
<td>Constant</td>
<td>24.510</td>
<td>2.486</td>
</tr>
<tr>
<td></td>
<td>-.020</td>
<td>.003</td>
</tr>
<tr>
<td></td>
<td>-.496</td>
<td>.017</td>
</tr>
<tr>
<td></td>
<td>2.342</td>
<td>.101</td>
</tr>
</tbody>
</table>

Source: Results Output SPSS 26

**The Effect of Current Ratio on Stock Return**

The criterion in testing this variable is $H_0$ accepted = If $t$ calculate $< t$ table, then partially the effect is not significant Current Ratio on Stock Return. $H_a$ received = If $t$ calculate $> t$ table, then partially the effect of significant Current Ratio on Stock Return.

Based on Table 5, it can be seen that the significant value of the Current Ratio (CR) variable is 0.092. The significant value is greater than the value of 0.05 or 0.092 $> 0.05$. Then $H_0$ is rejected and $H_a$ is accepted, so that partially the Current Ratio has a significant effect on stock returns. Thus, the results of this study are in line with the research of (Christian, Saerang, & Tulung, 2021) which has similar results, from the results of the study it can be seen that the research hypothesis stating "Allegedly Current Ratio has a significant influence on Stock Return" is accepted. So it can be concluded that the Current Ratio has a significant effect on Stock Return.
The Effect of Earnings Per Share on Stock Return

The criteria in this test are $H_0$ accepted = If $t$ calculate $< t$ table, then partially the effect of Earnings Per Share on Stock Return is not significant. $H_a$ received = If $t$ calculate $> t$ table, then partially the effect of Earnings Per Share is significant on Stock Return.

Based on table 5, we can see a significant value of 0.022. The significant value is less than the value of 0.05 or 0.02 < 0.05. Then $H_0$ is accepted and $H_a$ is rejected, so that Earnings Per Share does not have a significant effect on Stock Return. This result is not in line with research conducted by (Almira & Wiagustini, 2020) which states that Earnings per share (EPS) has a positive effect on stock returns.

The Effect of Net Profit Margin on Stock Return

The criteria in this test are $H_0$ = If $t$ calculate $< t$ table, then partially the effect of Net Profit Margin on Stock Return is not significant. $H_a$ = If $t$ calculate $> t$ table, then partially the effect of Net Profit Margin on Stock Return is significant.

Based on table 5, we can see a significant value of 0.027. The significant value is less than the value of 0.05 or 0.027 < 0.05. Then $H_0$ is accepted and $H_a$ is rejected, so that partially Net Profit Margin does not significantly affect Stock Return. This is in line with research by (Hasanudin & Awaloedin, 2020), which has similar results, namely the significance level of < 0.05 which means that NPM has a negative effect on stock returns.

F Test (Simultaneous)

<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>Regression</td>
<td>12.004</td>
<td>3</td>
<td>4.001</td>
<td>831.872</td>
<td>.025b</td>
</tr>
<tr>
<td>Residual</td>
<td>.005</td>
<td>1</td>
<td>.005</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12.009</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Results Output SPSS 26

The F test is used to determine whether the independent variables ($X$) simultaneously have a significant effect on the dependent variable. With the value of the degree of confidence used is 0.05. If the calculated F value results in a calculation greater than the table F value ($H_1$ accepted = $F$ Count $> F$ Table), then an alternative hypothesis is accepted which states that all independent variables simultaneously have a significant effect on the dependent variable ($Y$).

Based on table 5 above, it can be seen that the calculated F value is 831,872 or 831,872 > 0.05 with a significant value of 0.025. Then $H_0$ is rejected and $H_1$ is accepted so that the Current Ratio, Earnings Per Share, and Net Profit Margin have a significant effect on Stock Return together (simultaneously).

4. Conclusion

Based on the results of the research that has been done, it can be concluded that the performance of PT. Kalbe Farma Tbk before and during the COVID-19 pandemic on the dependent variable (stock return), namely the Current ratio, had a significant effect on Stock Return. However, based on the results of hypothesis testing regarding the effect of Earnings Per Share and Net profit margin on Stock Return partially, it can be concluded that these variables do not have a significant effect on Stock Return.

Based on the conclusions above, the researcher recommends that the first company is expected to make the value of CR better in order to attract investors in investing their funds. Because if the company has a high CR value then the company can be said to have no constraints to pay its debts, thus many investors will be interested in investing in pharmaceutical sector companies and that can be very profitable for the company. Next is advice for those who want to invest in pharmaceutical companies, it is recommended to look at the CR owned by the company if investors want to make long-term investments.
5. References


