The Impact Of Covid-19 On Stock Price And Stock Trade Volume (Case Study of Food and Beverages Companies Listed on the Indonesia Stock Exchange)

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ABSTRACT

The first Covid-19 case in Indonesia was announced on March 2 2020. This study aims to find out whether there is a significant difference in stock prices and stock trading before and after Covid-19 entered Indonesia (Case Study of Registered Food and Beverages Companies on the Indonesian Stock Exchange). The data for this study were taken 9 months before and 9 months after Covid-19 in Indonesia. Data were processed by paired sample t-test, using SPSS. From the results of the data processing, it shows that there was a significant difference in stock prices before and after the announcement of the first case of Covid-19 in Indonesia. This is indicated by a significance value of 0.011 <0.05. Where stock prices have decreased compared to before the Covid-19 case. Meanwhile, stock trading volume also shows a significant difference. Where the significance value is 0.003 <0.05. The stock trading volume after the announcement showed an increasing value.

Keywords: Covid-19, Stock Price, Stock Trade Volume

Introduction

Corona virus is one a group of viruses that can cause disease in animals as well as humans. Several types of corona viruses are known to cause respiratory infections in humans ranging from cold coughs to more serious ones such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS). Covid-19 is an infectious disease caused by a newly discovered coronavirus. This is a new virus and disease that was previously unknown before the outbreak occurred in Wuhan, China, in December 2019. (Andreinna et al., 2020). WHO (World Health Organization) has declared Covid-19 a global health emergency, the world economy has been drastically affected. Sales decreased, consumers changed their behavior, production reduced, the companies are under a heavy financial burden serious, and the unemployment rate is increasing worldwide (Darmayanti et al., 2020).

The Covid-19 case first entered Indonesia on March 2 2020. Since then, various efforts have been made by the government to reduce the impact of the Covid-19 pandemic in various sectors. One of them is to keep the distance between people who are around. In this case, it also has an impact on the food and sub-sector companies beverages because food and beverages are basic needs that humans need to survive, the shares of this sub-sector will more or less have an impact as well. With Covid-19, economic conditions have also worsened. For this reason, it can be seen whether the food and
beverages sub-sector is able to survive in an unstable state due to the Covid-19 event (Sambuari et al., 2020).

**Literature Review**

**Signaling Theory**

Signaling theory is a theory that explains the signals conveyed by the signaler or signaler to the receiver or receiver of the signal. In theory, it explains that management will try to provide useful information for investors. Providing a signal or signal from management to investors will assist investors in making policies. (Triono et al., 2021). According to Hanafi (2019: 63) the capital market is a financial market where long-term financial instruments are traded. The capital market is said to be long-term financial because it has a maturity of more than one year. The capital market is an activity concerned with public offerings and securities trading, public companies related to the securities they issue, as well as institutions and professions related to securities. Investment has an important role in economic development for developed and developing countries. If from year to year investment activity continues to decline, this will have an impact on economic growth because capital market activity is an indicator to measure the development of a country.

**Stock Price**

The share price is defined as the price in the real market, and is the easiest price to determine because it is the price of a stock in an ongoing market or when the market is closed. In addition, the stock price is also defined as the price that occurs on the stock market at a certain time and the price of the share is determined by market participants, the high and low price of this share is determined by the demand for and supply of these shares in the capital market (Husain, 2021).

**Stock Trading Volume**

Stock trading volume is the number of shares traded in a certain period. The volume of this stock transaction shows how much investors are interested in making transactions, either buying or selling shares of a company. A high transaction volume value does not necessarily indicate a high stock price. The value of this transaction volume can change due to events that occur both within itself and other events that occur outside the company (Nurmasari, 2020).

**Covid-19**

Covid-19 stands for Corona (CO), Virus (VI) Disease (D) and 2019 (19), which the Covid-19 corona virus first appeared in 2019. The World Health Organization (WHO) finally determined Covid-19 to mention the corona virus that is endemic throughout the world. This new type of corona virus appeared in Wuhan, China. This virus is then transmitted between humans through droplets of bodily fluids on the hands or solid surfaces. Then, healthy people whose hands are contaminated can become infected if they touch their mouth, nose or eyes. Until finally, this new type of corona virus was called Covid-19 (Onyele & Nwadike, 2020).

**Indonesia stock exchange**

The Indonesia Stock Exchange (IDX) is a Self Regulatory Organization (SRO) that provides infrastructure to support the implementation of orderly, fair and efficient securities trading and is easily accessible to all stakeholders. The Indonesia Stock Exchange on its official website provides stock, bond and derivative trading data, market reference services, financial reports of registered companies, and other information related to securities presented in real time, delayed and end of day as well as publications. This is to make it easier for stakeholders to get accurate information and support the implementation of securities trading. (Fatimala, 2020).
Figure 1. Conceptual Framework

H1: It is suspected that there is a significant difference in the stock prices of food and beverages companies listed on the Indonesia Stock Exchange before and after the national announcement of the first case of Covid-19 in Indonesia.

H2: It is suspected that there is a significant difference in the trading volume of shares of food and beverage companies listed on the Indonesian Stock Exchange before and after the national announcement of the first case of Covid-19 in Indonesia.

Research Methods

Research approach

The type of research used is comparative research, which is comparative research. In this study what is meant is by comparing stock prices and stock trading volume before and after the announcement of the entry of the Covid-19 virus in Indonesia. Food and beverage companies listed on the Indonesia Stock Exchange consist of 8 companies. (Bakhtiar et al., 2020).

Research variable

According to Sugiyono (2019: 67) Research variables are anything in any form that is determined by researchers to be studied so that information about this is obtained, then conclusions are drawn.

a. Data before the national announcement of the Covid-19 case in Indonesia for the first time (X1). Data prior to the national announcement of the Covid-19 case in Indonesia for the first time included price data and trading volume of shares of food and beverage companies listed on the IDX. In this study, the data taken before the first case of Covid-19 was 72.

b. Data after the national announcement of the Covid-19 case in Indonesia for the first time (X2). Data following the national announcement of the Covid-19 case in Indonesia for the first time includes price data and trading volume of shares of food and beverage companies listed on the IDX. In this study, the data taken after the first case of Covid-19 was 72.
Table 1. Operational Definition

<table>
<thead>
<tr>
<th>No</th>
<th>Type</th>
<th>Definition</th>
<th>Scale</th>
<th>Indicator</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stock price (X1)</td>
<td>The share price is the price that occurs on the stock market at a certain time and the share price is determined by market participants</td>
<td>Nominal</td>
<td>The share price used is the closing price</td>
<td>(Hamidah &amp; Um-diana, 2017)</td>
</tr>
<tr>
<td>2</td>
<td>Stock Trading Volume (X2)</td>
<td>Stock trading volume is the number of shares sold</td>
<td>Ratio</td>
<td>TV A = Number of shares traded at time t divided by the number of shares outstanding at time t</td>
<td>(Fatimala, 2020)</td>
</tr>
</tbody>
</table>

Data analysis method

Data analysis is the process of organizing and sorting data into patterns, categories, and basic descriptive units so that themes and places can be found and working hypotheses are formulated as suggested by the data. To analyze the priority on the data normality test, if the data is normally distributed then the test used is the parametric Paired Sample t Test, but if the data is not normally distributed then the test used is the non-parametric Wilcoxon Signed Ranks Test (Ikriyah, 2017). To make it easier to analyze, SPSS (Statistical Package for Social Science) software is used. The test stages carried out are:

Descriptive statistics

Descriptive statistics are statistics that are used to analyze data by describing or describing the data that has been collected as it is without intending to make general conclusions or generalizations (Sugiyono, 2019: 206). Descriptive statistics are used to provide an overview or description of the average value (mean), standard deviation, maximum value, and minimum value for quantitative data while qualitative data uses a frequency distribution (Ikriyah, 2017).

Normality test

The normality test is carried out using the SPSS program statistical tool, namely the Normality Test which aims to test whether in a regression model, the dependent variable, the independent variable, or both have a normal distribution or not. (Ikriyah, 2017) The Normality test to be used is a one-test sample kolmogrove-smirnov Test this is done because the sample data is more than 30.

Paired Sample T Test Different Test

The Paired Sample T Test is used if the data is normally distributed. If it is not normally distributed, then use the Wilcoxon ranks test. Based on a significance level of 0.05 or a 95% confidence level (Novitasari et al., 2020), the basis for decision making is based on the probability value as follows:

a. If tcount > t table then H0 is rejected and vice versa Ha is accepted.
b. If tcount ≤ t table then H0 is accepted and Ha is rejected.
Results And Discussion

Table 2. Statistical Test of Stock Prices

<table>
<thead>
<tr>
<th>Decrptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHMSBLM</td>
<td>72</td>
<td>246.00</td>
<td>20175.00</td>
<td>6471.0556</td>
<td>5217.34606</td>
</tr>
<tr>
<td>SHMSSDH</td>
<td>72</td>
<td>216.00</td>
<td>12215.00</td>
<td>5412.6667</td>
<td>3536.91234</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on table 2, it is known that N is the number of samples used as many as 72. The data above is data on stock prices for food and beverages companies listed on the IDX monthly closing prices (Monthly closing prices) from June 2019 to December 2020 obtained from the Indonesia Stock Exchange. The results of the descriptive test processed by the researchers showed that the average (mean) stock price before the announcement of the Covid-19 case in Indonesia for the first time was 6471.0556 with a standard deviation of 5217.34606. Then the minimum value is 246.00 and the maximum share price is 20175.00 during the 9 months of capital market work prior to the announcement. Meanwhile, the descriptive test processed by the researchers showed that the average (mean) stock price after the announcement of the Covid-19 case in Indonesia for the first time was 5412.6667 with a standard deviation of 3536.91234. Then the minimum value is 216 and the maximum share price is 12215.00 for 9 months of capital market work after the announcement. The data in table 4.3 shows that there was a significant change in the average share price before the announcement of the Covid-19 case for the first time in Indonesia of 6471.0556 and after only 5412.6667. This can happen because the value of shares has also decreased after the announcement of the Covid-19 case for the first time in Indonesia.

Table 3. Statistical Test Of Stock Trading Volume

<table>
<thead>
<tr>
<th>Descriptive Statistics</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOLSBLM</td>
<td>72</td>
<td>0.00037</td>
<td>0.43931</td>
<td>0.0984017</td>
<td>0.10356618</td>
</tr>
<tr>
<td>VOLSSDH</td>
<td>72</td>
<td>0.00146</td>
<td>1.29479</td>
<td>0.1813974</td>
<td>0.24744518</td>
</tr>
<tr>
<td>Valid N (list-wise)</td>
<td>72</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results of the descriptive test processed by the researchers showed that the average value (mean) of stock trading volume before the announcement of the Covid-19 case in Indonesia for the first time was 0.0984017 with a standard deviation of 0.10356618. Then the minimum value is 0.00037 and the maximum share price is 0.43931 during the 9 months of capital market work prior to the announcement. Meanwhile, the descriptive test processed by the researchers showed that the average value (mean) of stock trading volume after the announcement of the Covid-19 case in Indonesia for the first time was 0.1813974 with a standard deviation of 0.24744518. Then the minimum value is 0.00146 and the maximum value of stock trading volume is 1.29479 during
the 9 months of capital market work after the announcement.

**Stock Price Normality Test**

Analytical distribution of data can use Kolmogrov Smirnov or Shapiro-Wilk. The Kolmogrov-Smirnov test is used for large sample studies. Meanwhile, Shapiro-Wilk is for small sample data. The data in the table above shows that N = 72, meaning that decisions are taken by looking at the Kolmogrov-Smirnov data. The data is said to be normal (symmetrical) in the Asymp test. Sig. (2-tailed) if the Sig. Greater than 0.05. Table 4.5 shows that Sig. The stock price before the announcement of the Covid-19 case for the first time in Indonesia was 0.151 while Sig. The share price after the announcement of the Covid-19 case for the first time in Indonesia was 0.064. Because the value of sig. Greater than 0.05, it can be said that stock price data is normally distributed.

**Stock trading volume normality test**

The data in the table above shows that N = 72, meaning that decisions are taken by looking at the Kolmogrov-Smirnov data. The data is said to be normal (symmetrical) in the Asymp test. Sig. (2-tailed) if the Sig. Greater than 0.05. Table 4.6 shows that Sig. The volume of stock trading before the announcement of the Covid-19 case for the first time in Indonesia was 0.234 while Sig. The trading volume of shares after the announcement of the Covid-19 case for the first time in Indonesia was 0.203. Because the value of sig. Greater than 0.05, it can be said that stock price data is normally distributed.

**Sample test paired t-Test Stock prices**

Based on the results of data processing, it is known that the value of Sig. (2-tailed) is 0.011. The Mean Paired Differences is 5.77478. This value shows the difference between the average stock price before and after the announcement of the first Covid-19 in Indonesia on March 2 2020 of 5.77478 and the difference between the 1.39005 to 10.15951 (95% Confidence Interval of the Difference Lower) and Upper. The result of t count is 2.626 and the value of df (degree of freedom) is 71 and the value of 0.05/2 is equal to 0.025, this value will be a reference in finding the ttable value in the distribution of ttable values so that a t-table value of 1.994 is found.

**Discussion**

**Differences in Share Prices of food and beverage companies listed on the Indonesia Stock Exchange Before and After the Announcement of the First Case of Covid-19 in Indonesia**

The results of the Paired t-Test that was carried out on stock prices of food and beverage companies listed on the Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia using SPSS obtained a sig value. 0.011 and t-count 2.626. Where is the sig. 0.011 <0.05 and also the t-count value of 2,626 > ttable 1,994 obtained from the t-table distribution (appendix 6). Thus H0 is rejected and Ha is accepted, which means that there is a significant difference between the share prices of food and beverage companies listed on the Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia.

The results of this study are in line with research conducted by Nurmasari, (2020).
showing that by using a paired sample t-test, the stock price of PT. Ramayana Lestari Sentosa, Tbk. Before and after the announcement of the first case of Covid-19 in Indonesia for the first time showed a significant difference. Then the results of this study are also in line with research conducted by Darmayanti et al., (2020) showing that by means of a paired sample t-test, the stock price of PT. Indosat Tbk. Before and after the announcement of the first case of Covid-19 in Indonesia for the first time showed a significant difference. The results of this study are also in line with research (Bakhtiar et al., 2020) showing that by means of a paired sample t-test there is a significant difference between stock prices before and after the presence of Covid-19 in Indonesia at communication companies listed on the Indonesia Stock Exchange.

Food and beverage companies listed on the Indonesian stock exchange experienced a significant decline in share prices due to the Covid-19 case that occurred in Indonesia. Of course this causes people to reduce purchases of goods at companies and causes a decrease in turnover at food and beverage companies listed on the Indonesian stock exchange. This decrease in income will also make stock prices decrease. For investors, of course this is a detrimental thing, because investors have a great chance of not getting dividends and can experience capital losses.

Differences in Stock Trading Volume of food and beverage companies listed on the Indonesia Stock Exchange Before and After the Announcement of the First Case of Covid-19 in Indonesia

The results of the Paired t-Test that was carried out on stock prices of food and beverage companies listed on the Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia using SPSS obtained a sig value 0.003 and t-count 3.102. Where is the sig. 0.003 <0.05 and also the t-count value 3.102 > t-table 1.994 obtained from the t-table distribution (appendix 6). Thus H0 is rejected and Ha is accepted, which means that there is a significant difference between the trading volume of shares of food and beverage companies listed on the Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia.

The results of this study are also in line with research conducted by Darmayanti et al., (2020) which showed that using a paired sample t-test, the stock price of PT. Indosat Tbk. Before and after the announcement of the first case of Covid-19 in Indonesia for the first time showed a significant difference. The results of this study are also in line with research (Fadillah et al., 2020) showing that by means of a paired sample t-test there is a significant difference between Abnormal Return before and after the Covid-19 event in Indonesia. However, this study is not in line with research (Bakhtiar et al., 2020) entitled "The Impact of Covid-19 on Comparison of Share Prices and Transaction Volume of Share Sales of Telecommunication Companies Listed on the IDX." The results of this study showed that using a paired sample t-test did not there is a significant difference between the sales volume of shares before and after Covid-19 in communication companies listed on the Indonesia Stock Exchange. The food and beverage company listed on the Indonesian stock exchange experienced a significant increase in stock transaction volume due to cases caused by Covid-19. The increase in stock transaction volume occurred due to increased stock trading activity in food and beverage companies listed on the Indonesian Stock Exchange. This increase in stock transaction volume was not followed by an increase in share prices. This event showed that many investors were selling their shares, due to fears that investors would suffer losses as a result of the impact of the COVID-19 pandemic.

Conclusion and Suggestions

There are differences in the share prices of food and beverage companies listed on the
Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia. Food and beverage companies listed on the Indonesian stock exchange experienced a significant decline in share prices due to the Covid-19 case that occurred in Indonesia. There is a difference in the trading volume of shares of food and beverage companies listed on the Indonesia Stock Exchange before and after the announcement of the first case of Covid-19 in Indonesia, so in this case there has been a significant increase in the volume of stock transactions due to cases caused by Covid-19. The increase in share transaction volume was due to increased share buying and selling activity on the Indonesia Stock Exchange.

Based on the limitations that have been carried out, several suggestions are proposed that can provide positive benefits, including for food and beverage companies listed on the Indonesia Stock Exchange, it is hoped that they will strive to maintain the stability of rising stock prices in order to maintain investor confidence and interest due to stable stock price values, or continue to increase can increase the Stock Trading Volume. The stock market is one part of the macroeconomy because of its large scope. From the stock market Investors can assess the company's prospects so as to determine investor interest in investing in the company's shares. This can be used as one of the company's strategies in carrying out business competition in order to obtain the capital needed so that it can help improve company performance where in the event of a pandemic a lot of capital is needed but investors are very careful in unexpected times like this. For further research, it is hoped that it will be able to add new variables such as stock returns and abnormal returns and increase the number of companies studied so that research will increase because this research only uses food and beverage companies.

References


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