CAPITAL MARKET REACTION TO GOVERNMENT POLICY IN ADDRESSING COVID-19 PANDEMIC (INDONESIA CASES)

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Abstract: This study aims to determine the capital market's reaction to the entry of the Covid-19 Virus into Indonesia. Who took research data at the time of the announcement of the entry of the Covid-19 Virus into Indonesia, the enactment of the PSBB policy to tackle the Covid-19 pandemic. The event window used in this study is 5 days, where 1 day before and 1 day after the day after the event announcement and 1 event date on that day. The results of the paired sample t-test in this study are expected to be able to show significant differences in Abnormal Return and Trading Volume Activity before and after the announcement of the first case of Covid-19 in Indonesia, at the time the PSBB policy was implemented.

Keywords: Covid-19, Abnormal Return and Trading Volume Activity

INTRODUCTION

Research Background

Countries in the world are now faced with major challenges in handling the coronavirus outbreak, officially identified by WHO as Corona Virus Disease-19 or abbreviated as Covid-19. This pandemic, which started in Wuhan, China, has caused a global shock because, in the last few decades, we have never experienced a virus outbreak with such a rapid and massive rate and transmission capacity like this coronavirus, unlike the SARS and MERS viruses, and Ebola. Which also had a stir a few years ago but was quickly resolved.

Since its appearance in December 2019, the Covid-19 pandemic has had a severe impact on almost all aspects of human life on earth. Especially in the economic sector, although if viewed objectively, this pandemic has also had a positive impact on improving the earth's ecological conditions—with a scale and area that is not playing games: global, worldwide, all countries in the world feel it. The coronavirus pandemic first surfaced when, on December 31, 2019, WHO received a report from China that there was an outbreak in Wuhan's port city of an unknown virus. This outbreak spread so rapidly to various countries in the next two weeks that it became a global pandemic.

In Indonesia, the total number of positive covid-19 cases was 497,668 people with a total of 15,884 deaths, and 418,188 recoveries (www.covid19.go.id). Data as of November 22, 2020, 6.11 PM, the percentage of deaths that occurred in Indonesia (8.71%) was greater than the percentage of deaths that occurred in the world (5.99%). This high percentage creates a lot of anxiety among the community.
The chart above shows that the addition of cases per day is increasing day by day. This certainly gives a big loss to society and Indonesia. The Covid-19 pandemic has not only affected the health side of world citizens. This epidemic also eroded the global economy and spread to Indonesia. In addition to impacting the exchange rate, Covid-19 also impacted the decline in the Composite Stock Price Index (IHSG), which eventually fell free.

Everything is beyond predictions and is not an easy thing to control. Before the confirmation of the first COVID-19 in Indonesia, the JCI was at the level of 6,244 (January 24), weakened to 5,942 (February 20), and corrected again to the level of 5,361 (March 2). On March 12, when the WHO declared a pandemic, the JCI fell 4.2 percent to 4,937 when Thursday's session opened, a level that had not occurred in nearly four years. On March 13, stock trading was halted for the first time since 2008 due to the Covid-19 pandemic. As of April 16, 2020, the JCI had corrected by 28.27% since the beginning of 2020. Based on data from the Indonesia Stock Exchange (IDX) quoted by Bisnis.com, Monday (11/5/2020), JCI touched the level of 4,597.43 with a weakening of 2.52% at the close of trading Friday (8/5/2020) from the story of the previous week's closing trade.
The Covid19 pandemic has devastated Indonesia’s economy. President Jokowi announced the first case on March 2, 2020. President Jokowi announced that two people were positive for Covid-19. On March 2, 2020, the exchange rate of 1 USD against the rupiah was Rp. 14,265.00. Today, April 9, 2020, the exchange rate of 1 USD to Rupiah is Rp. 15,880,004. So the rupiah weakened by 1,615 points or cut by 11.32% in 39 days. The worst weakening of the rupiah until April 10, 2020, occurred on March 23, 2020, with an exchange rate of 1 USD against the rupiah of Rp. 16,575.00 or weakened by 16.19%.

Figure 1.3. Effect of the number of Covid-19 cases in Indonesia on the Rupiah Exchange Rate

(Source: Data Processing Results, Sihaloho, 2020)

The results of data processing show a tendency for a positive relationship between the number of Covid-19 cases and the strength of the USD exchange rate against the Rupiah. If the point of Covid 19 continues to increase, it will worsen the Indonesian economy's condition. One of the indicators is the depreciation of the Rupiah against USD and other foreign currencies.

In Indonesia, the industrial sector that has had the most impact on the Covid-19 outbreak is the tourism sector. The tourism sector has been predicted to be the second-largest source of foreign exchange contribution for Indonesia. However, the Covid-19 pandemic changed all that. Since the instructions for maintaining social distancing and echoing activities at home have been issued, the tourism sector has become sluggish. Several stimuli prepared by the government to revive the tourism sector were unable to stem the negative impact of the Covid-19 corona. Many tourist attractions are closed. The occupancy of the majority of hotels has also dropped dramatically, meaning there is no income. Bali is one of the destinations most affected. Foreign tourists are the number one source of income from the Island of the Gods. According to the Bali Immigration Office, in February 2020, as many as 392,824 tourists came to Bali; this figure has decreased by 33% since January due to the coronavirus. The number of hotel occupants in Bali has fallen by 70 percent since the coronavirus spreads, which has impacted the welfare of employees. The impact of the coronavirus on the economy is inevitable. Therefore, some hotel employees in Bali are only paid half the salary. These cuts are necessary to keep the business running but also to maintain the economic needs of employees. Some hotel managers also ask their workers to take time off when they are quiet.

When several industrial sectors began to collapse due to the Covid-19 outbreak, the consumer goods sector became the sector with the least correction. Based on data from the Indonesia Stock Exchange, the consumer sector's performance fell 19.17 percent during the first quarter of 2020. The decline was the thinnest compared to other industries. Consumers goods as predicted, namely the most defensive sector, aka that can withstand recessions and crises but cannot grow as high as the economy is booming. The existence of the corona pandemic and calls for home activities have caused the consumption of public goods to increase, possibly being one of the positive sentiments that support the performance of the consumer sector.

Based on Bloomberg data, shares of PT Siantar Top Tbk. (STTP) is a support for the consumer goods sector with an increase of 44.44 percent throughout Q1 / 2020. Then there are also shares of ITIC (40.38 percent) and INAF
The presence of these two pharmaceutical issuers is considered not surprising because they are indeed producers of health products and medicines and vitamins that are now being sought after by the public. Indofarma is also one of the companies responsible for medical devices for handling Covid-19 in Indonesia, such as importing 100,000 rapid test packages from China and Korea.

The medical device and pharmaceutical industries are sectors that fall into the high-demand category. The government encourages this sector to be able to meet public demand for health products. The need for by-products from these two sectors is currently increasing in line with the handling of the Covid-19 outbreak. This condition needs to be put to fair use to realize Indonesia's independence in the health and pharmaceutical sectors. What can see this high need from the number of medicines and medical devices that have been used to overcome the Covid-19 pandemic. This is a positive achievement that must maintain because the pharmaceutical and medical devices sector is the largest contributor to the Indonesian economy.

The COVID-19 outbreak has had a severe impact on almost all countries in the world, including Indonesia. The effect is not only in one area but in virtually all existing activities. One aspect of concern during the Coronavirus outbreak is an investment. The existence of various restrictions in a country certainly has an impact on economic activity.

The Investment Coordinating Board or BKPM has acknowledged that the Corona or Covid-19 virus is a severe threat that will sooner or later affect the stability of a country, including Indonesia. According to Rizal Calvary Marimba, a member of the Investment Committee for Communication and Information at the BKPM, the decline in investment value will be very noticeable when viewed from the trade relations involving the Covid-19 epicentre countries. The existence of restrictions or lockdowns makes trading activity affected with a significant loss.

The capital market is still depressed amidst Indonesia's struggle against the coronavirus pandemic (Covid-19). The composite stock price index, the primary reference index on the Indonesia Stock Exchange, was under pressure, as was mutual funds' performance. Referring to IDX data, up to April 8, 2020, the JCI has dropped 26.44% with a record of net foreign sales of IDR 15.01 trillion on the stock market, while on the non-regular Market (cash and negotiations), there has been a net buy. foreign Rp 2.94 trillion.

To detect a reaction in the capital market, it is necessary to measure the response during the event period. In an event, who can measure it by using Return as the value of price changes? Abnormal Return (AR) is an indicator that can use to count the number of stock reactions. Abnormal Return is the excess of shares received by investors from the expected Return. Jogiyanto (2014: 609) states that an abnormal return or excess Return is an excess of the Return that occurs against expected returns.

In addition to abnormal returns, to determine the capital market's reaction more thoroughly, it is also necessary to measure the activity of stock trading in the capital market; a calculation commonly used is Trading Volume Activity (TVA). Trading Volume Activity is a tool used to see how the market reacts to information in the capital market by looking at Trading Volume Activity's movement (Fama in Febriyanti and Rahyuda, 2016). Trading Volume Activity compares the number of shares traded at a particular time and the number of shares of the company that is outstanding in a certain period. It can be done by comparing the number of shares traded in a certain period with the total number of shares outstanding during the same period to calculate trading volume activity.

Until now, stock prices on the stock market will still be overshadowed by the increasingly alarming development of the spread of Covid-19 from within the country. There are differences in the impact of the Covid-19 pandemic on various economic sectors in Indonesia, making researchers interested in examining this more deeply. This research will look at the effects of the Covid-19 pandemic on stock prices in several industrial sectors listed on the Indonesia Stock Exchange, using the event studies method. Event studies are studies that look at the impact of information announcements on the price of securities. Event studies are generally related to how quickly they can reflect the Market's stock price information (Tandelilin, 2015). The event studies method used in this research is to determine the capital market's reaction to the announcement of the entry of the Covid-19 Virus into Indonesia, the enactment of the PSBB policy to tackle the Covid-19 pandemic. This study's event window is 11 days, five days before and five days after the day after the event announcement and one event date. The shorter research period is due to reducing other influences outside the event date.
Formulation of the problem

1. Is there a significant difference in abnormal returns before and after the announcement of the entry of the Covid-19 Virus in Indonesia?
2. Is there a significant difference in Trading Volume Activity before and after the announcement of the entry of the Covid-19 Virus in Indonesia?
3. Are there significant differences in abnormal returns before and after the announcement of the implementation of the PSBB policy?
4. Is there a significant difference in Trading Volume Activity before and after the announcement of the implementation of the PSBB policy?

LITERATURE REVIEW

1. Signaling Theory

Signal theory underlies this research; signaling Theory originated from George Akerlof's writings in his 1970 work "The Market for Lemons," which introduced asymmetric information (information asymmetry). Akerlof (1970) studied the phenomenon of imbalance of information regarding product quality between buyers and sellers by testing the used car market. Signal theory is used to explain that financial reports are used to provide positive signals (good news) and negative signals (bad news) to the wearer. According to Brigham and Housten (2011), cues or signals are actions taken by company management that form instructions for investors about how the government views its prospects.

2. Efficient Market Hypothesis (EMH)

The capital market is said to be efficient, one of which is if the stock price reflects all the market information. General information must be available to investors to know everything about the company and company shares. The concept of Efficient Market Hypothesis (EMH) was first put forward by Fama (1970) in Rahman and Ervina (2017), which states that in an efficient market, securities in the form of convertible bonds will always be traded at a fair value so that no one is also able to obtain abnormal returns, after adjusting for risk, by using existing trading strategies. In other words, the price formed in the Market is a reflection of all available information.

3. Event Study Theory

Robert G. Bowman, in his article entitled Understanding And Conduction Even Study (1983), Robert G. Bowman defines an event study as something that examines the behavior of securities prices in a market reaction to announcements or events. The event or report contains information that can affect the company's value and its impact on all companies in the capital market, both systemically and non-systematically. Such events or announcements, such as dividend announcements, presidential elections, convertible bond issuance, the Bali bombing event, merger announcements, acquisition announcements, stock split announcements, earnings announcements, new product announcements, and so on, are quoted from (Hartono: 2010).

4. Capital Market

A capital market is a meeting place between sellers and buyers with a risk of profit and loss and a means for companies to increase long-term funding needs by selling stocks or issuing bonds (Jogiyanto, 2010: 29). Meanwhile, according to Hunan (2001: 3), formally, the capital market can be defined as a market for various long-term financial instruments that are commonly traded in the form of debt and equity issued by the Government and companies.

5. Abnormal Return

Abnormal Return is the Return that investors get that is not by expectations. Abnormal Return is the difference between the expected Return and the Return obtained. The Return difference will be positive if the Return accepted is greater than the predicted Return or the calculated return. Meanwhile, the Return will be harmful if the Return obtained is smaller than the expected Return or the calculated Return. Abnormal returns can occur due to
specific events, for example, national holidays, the beginning of the month, the beginning of the year, political uncertainties, extraordinary events, stock splits, initial public offering, and so on. The event study analyzes the abnormal returns (abnormal returns) of securities that may occur around the event's announcement. Abnormal Return or excess Return is the excess of Return that occurs against standard Return. Abnormal Return is the difference between the actual Return that arises with the expected Return (Jogiyanto, 2000).

6. Shares Trading Volume

Trading Volume Activity (TVA) can be used as an indicator to see investors' reactions to stock trading volume. What can use it to see whether ISRA announcements are positive or negative signals to make everyday decisions. Trading Volume Activity compares the number of shares traded and the number of shares outstanding in a certain period.

Past Research

Haryanto (2020). The research title is the Impact of Covid-19 on the Rupiah Exchange Rate Movement and the Composite Stock Price Index (IHSG). Examining the impact of Covid-19 on the exchange rate (Indonesian Rupiah against US Dollar) and the Composite Stock Price Index (IHSG) in Indonesia. This study uses daily data on the Covid-19 case, the exchange rate, and the CSPI period from March 2 to April 30, 2020. The results of the analysis show:

- A 1% increase in the Covid-19 case led to a depreciation of the Rupiah against the US Dollar by 0.02%.
- A 1% increase in the Covid-19 case, causing a correction to CSPI of 0.03%.
- A 1% increase of CSPI leading to an appreciation of the Rupiah against the US Dollar by 0.311%.

Thus, Covid19 has an impact on the depreciation of the Rupiah against the US Dollar and has a low impact on CSPI, so policy intervention is needed to control the spread of the Covid-19 outbreak, control panic so as not to affect the Rupiah and the stock market through various stimulus policies.

Nurmasari, Ifa. 2020. The Impact of Covid-19 on Changes in Stock Prices and Transaction Volume (Case Study at PT. Ramayana Lestari Sentosa, Tbk.) what took this study's data 31 days before 31 days after the announcement of the first case of Covid-19 in Indonesia. The data were processed using paired sample t-test, using SPSS version 20. The results of data processing showed significant differences in stock prices before and after the announcement of the first Covid-19 case in Indonesia. This is indicated by a significance value of 0.00 <0.05. Where the stock price has decreased compared to before the Covid-19 case. Meanwhile, the volume of stock transactions also shows a significant difference. Where the significance value is 0.01 <0.05. The work of stock transactions after the announcement offers an increasing value

Khoiriah; Moh. Amen; Arista (2020). The Influence Before and During the Covid-19 Pandemic on LQ-45 Shares on the Indonesia Stock Exchange in 2020 who conducted this research to determine the effect of the Covid-19 Pandemic on the top 45 stocks (LQ-45) listed on the IDX. The research method that researchers used was the Paired Samples T-Test and the Wilcoxon Signed Ranks Test. Based on the results of the tests that have been carried out, it can be concluded that before and after the Covid-19 Pandemic had a significant effect on LQ-45 shares listed on the Indonesia Stock Exchange in 2020. The test results using the Paired Samples T-Test showed that the average variable, The abnormal Return (AAR) between before and during the Covid-19 pandemic, had a significant effect. The moderate trading volume activity (ATVA) variable shows a significant positive impact between before and during the Covid-19 pandemic.

Kusnandar, D., &Bintari, V. (2020). Comparison of Abnormal Stock Returns Before and After Changes in Trading Time During the Covid-19 Pandemic. The paired sample t-test shows a statistically significant difference in abnormal returns before and after the announcement of changes in trading time on stock exchange transactions. This means that the information of trading time changes on stock exchange transactions carried out by the Indonesia Stock Exchange is a negative signal that can be wrong news announcements. Investors are more interested in selling their share ownership rather than increasing their share ownership.
Lestari, Made Irma (2020). Significance of the Effect of Sentiment on PSBB Implementation on Economic Aspects: The Effect on the Rupiah Exchange Rate and Stock Return (Case Study of the Covid-19 Pandemic. The rupiah exchange rate was significantly affected by the implementation of PSBB during the Covid-19 pandemic. Simultaneously, the test results on stock returns stated that it was not a significant effect of the performance of PSBB on the stock returns of companies listed on the stock exchange. The negative sentiment from the polemic of PSBB enforcement only affects the rupiah exchange rate but does not significantly affect stock returns—April to June 4, 2020. The significance of the implementation of the PSBB also needs to consider other factors from the economic, social, and political sides. Several controversial incidents that occurred during the performance of the PSBB influenced fluctuations in community sentiment, namely to government policies that seem indecisive.


Kartikaningsih, Dewi. 2020. The Effect of Exchange Rates on Stock Prices in the Food and Beverage Sector Companies during the Covid-19 Pandemic. The results show that the exchange rate affects companies’ stock price engaged in the food and beverage sector, which are listed on the Indonesia Stock Exchange.

Framework

Based on the periodization chosen in this study and on the previous description, this study’s theoretical framework is described as follows:

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Figure 4. Framework

Research Hypothesis.

H1 : There is a significant difference in abnormal returns before and after the announcement of the entry of the Covid-19 Virus in Indonesia
H2 : There is a significant difference in Trading Volume Activity before and after the announcement of the entry of the Covid-19 Virus in Indonesia
H3 : There is a significant difference in abnormal returns before and after the announcement of the implementation of the PSBB policy
H4 : There is a significant difference in Trading Volume Activity before and after the announcement of the implementation of the PSBB policy

RESEARCH METHODS

Research Variables and their Operations

1. Abnormal Return

The measurement of abnormal Return in this research uses market-adjusted models, which assumes that the best height is the market index return (Pincus, 1993 in Widiastuti, 2004), so there is no need to use the estimation period to form an estimation model because the estimated security return is the same as the return index. The Market in the same period. In this case, the market return index uses the Return from the composite stock price
index (IHSG). Here is the formula for calculating the abnormal Return:

$$ CAR = \sum AR_t $$

$AR_t = R_t - R_{mt}$

$$ R_t = \frac{P_t - P_{t-1}}{P_{t-1}} $$

$$ R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}} $$

Information:

$AR_t$ = Abnormal Return for company i on day t

$R_t$ = daily company return on day t

$R_{mt}$ = Return of market index on day t

$P_t$ = share price of company i at time t

$P_{t-1}$ = share price of company i at time t-1

$IHSG_t$ = composite stock price index at time t

$IHSG_{t-1}$ = composite stock price index at time t-1

2. Stock Trading Volume

Trading Volume Activity is a comparison between the number of shares traded and the number of shares outstanding in a certain period of time. Trading Volume Activity can be formulated as follows:

$$ TVA = \frac{\sum \text{Company i shares that are traded at time } t}{\sum \text{Company i shares that were outstanding at time } t} $$

After the TVA of each stock is known then the average TVA is calculated during the observation period with the formula:

$$ XTVAt = \frac{\sum XTVAi}{n} $$

Information:

$XTVA_t$ = Average TVA at time t

$\Sigma XTVAi$ = Amount of TVA at time t

n = Number of samples

Population and Research Sample

This study's populations are companies listed on the Indonesia Stock Exchange in the consumer goods industry, medical equipment industry, and pharmaceuticals and tourism. Sampling was done by purposive sampling. This technique selects specific target groups to obtain information. Samples are assigned to specific groups that can provide the required information because they are the only party with information or conform to the researcher's criteria.

Data analysis method

This research data analysis method using the event study technique. Jogiyanto (2013) states that event studies can test the information content of an announcement and can also be used to test the efficiency of a semi-strong market. If the statement contains information (information content), it is expected that the market will react when the Market receives the announcement. Market reaction is indicated by a change in the price of the security in question. The method for event study generally follows the following procedure by Elton and Gruber in Munawarah (2009):

1. Collect a sample of companies that have an event that you want to research.
2. Determine the exact day or date of the announcement and define it as day 0.
3. Determine the research period or event window, five days after and before the announcement date,
4. For each sample of companies, we can see the Return and trading volume activity in each unit period (days).
5. Calculating the abnormal Return from the returns that have been obtained for each company.

Data analysis techniques used the IBM Statistic SPSS version 26.0 program. The data normality test used the One-Sample Kolmogorov-Smirnov Test and Shapiro-Wilk. While the event study is tested differently with the One-Sample Test for a different test for each t event period, for testing before and after the event is tested with the Paired Samples Test if the data is normally distributed, but if the information is not normally distributed, a different test is done using the Wilcoxon Test.

RESULTS AND DISCUSSION

1. Event Study 1

Effects of Abnormal Return and Trading Volume Activity before and after the announcement of the first Covid-19 case in Indonesia

The first confirmed Covid-19 case in Indonesia was announced directly by President Joko Widodo at the Presidential Palace, Jakarta, Monday, March 02, 2020. The first case that occurred in Indonesia was against two residents of Depok, West Java. Therefore, in this event study research, the event period occurred for 11 trading days which occurred 5 days before and 5 days after the announcement of the First Covid-19 case in Indonesia on March 2, 2020.

Average Abnormal Stock Returns and Trading Volume Activity During the Event Period

<table>
<thead>
<tr>
<th>Period t</th>
<th>Date</th>
<th>Average of Abnormal Return</th>
<th>Average of Trading Volume Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-5</td>
<td>24-Feb-20</td>
<td>0.00742</td>
<td>0.00040</td>
</tr>
<tr>
<td>t-4</td>
<td>25-Feb-20</td>
<td>0.0002</td>
<td>0.00044</td>
</tr>
<tr>
<td>t-3</td>
<td>26-Feb-20</td>
<td>0.00967</td>
<td>0.00044</td>
</tr>
<tr>
<td>t-2</td>
<td>27-Feb-20</td>
<td>0.00754</td>
<td>0.00047</td>
</tr>
<tr>
<td>t-1</td>
<td>28-Feb-20</td>
<td>(0.00385)</td>
<td>0.00042</td>
</tr>
<tr>
<td>t0</td>
<td>02-Mar-20</td>
<td>0.00965</td>
<td>0.00062</td>
</tr>
<tr>
<td>t+1</td>
<td>03-Mar-20</td>
<td>(0.00344)</td>
<td>0.00049</td>
</tr>
<tr>
<td>t+2</td>
<td>04-Mar-20</td>
<td>(0.01879)</td>
<td>0.00061</td>
</tr>
<tr>
<td>t+3</td>
<td>05-Mar-20</td>
<td>0.01156</td>
<td>0.00069</td>
</tr>
<tr>
<td>t+4</td>
<td>06-Mar-20</td>
<td>0.01201</td>
<td>0.00063</td>
</tr>
<tr>
<td>t+5</td>
<td>09-Mar-20</td>
<td>0.02721</td>
<td>0.00064</td>
</tr>
</tbody>
</table>

Data Normality Testing From the tables and graphs above, it can be seen that there has been a decrease in abnormal returns after the first announcement of the Covid-19 case in Indonesia. The abnormal return on the day of the announcement was 0.00965, then it fell to minus 0.00344 at t + 1, and minus 0.01879 at t + 2.
Test of Normality

<table>
<thead>
<tr>
<th>Sektor</th>
<th>Kolmogorov-Smirnov</th>
<th>Shapiro-Wilk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>df</td>
</tr>
<tr>
<td>AR_Sebelum</td>
<td>Industri</td>
<td>.191</td>
</tr>
<tr>
<td></td>
<td>Panwissa</td>
<td>.296</td>
</tr>
<tr>
<td></td>
<td>Telekomu</td>
<td>.253</td>
</tr>
<tr>
<td>AR_Sesudah</td>
<td>Industri</td>
<td>.274</td>
</tr>
<tr>
<td></td>
<td>Panwissa</td>
<td>.224</td>
</tr>
<tr>
<td></td>
<td>Telekomu</td>
<td>.252</td>
</tr>
<tr>
<td>TVA_Sebelum</td>
<td>Industri</td>
<td>.331</td>
</tr>
<tr>
<td></td>
<td>Panwissa</td>
<td>.428</td>
</tr>
<tr>
<td></td>
<td>Telekomu</td>
<td>.357</td>
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<tr>
<td>TVA_Sesudah</td>
<td>Industri</td>
<td>.337</td>
</tr>
<tr>
<td></td>
<td>Panwissa</td>
<td>.366</td>
</tr>
<tr>
<td></td>
<td>Telekomu</td>
<td>.387</td>
</tr>
</tbody>
</table>

* This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Based on the table above, it can be seen that data that is normally distributed are only abnormal returns before and after in the telecommunications sector with a sig > 0.05.

Different Test of Average Abnormal Return and Trading Volume Activity (Wilcoxon Signed Rank Test)

<table>
<thead>
<tr>
<th>Test Statistics a</th>
</tr>
</thead>
<tbody>
<tr>
<td>AR_Sesudah - AR_Sebelum</td>
</tr>
<tr>
<td>Z</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
</tr>
</tbody>
</table>

a. Wilcoxon Signed Ranks Test  
b. Based on positive ranks.

Because who normally distributed not all of the data tested, the different test used was the Wilcoxon Signed Rank Test. From the Wilcoxon test results, it was found that there was no significant effect between before and after the first announcement of the Covid-19 case in Indonesia on Abnormal Return and Trading volume activity. The results of this study are in line with Lestari’s research (2020). There is no difference in abnormal returns before and after the announcement of the first case of Corona Virus (COVID-19) in Indonesia; what can see that this event does not contain information so that there is no reaction and does not have a significant impact on market activities in the capital market. This happened because the President of Indonesia’s announcement on March 2, 2020, was neutral, in which other countries in Southeast Asia had announced the first cases of the Corona Virus before this event occurred in Indonesia. This means that the information obtained by investors tends to be the same so that investors cannot run to secure their investment by investing in other countries that have been affected by the Corona Virus outbreak. For this reason, stock exchange activities tend to be characterized by wait and see action after the announcement. Investors do not want to rush in decision-making so that this event does not affect abnormal returns for investors.

2. Event Study 2

The Effect of Abnormal Return and Trading Volume Activity Before and After Large-Scale Social Restrictions (PSBB) are implemented

As the government’s step in dealing with the spread of the Covid-19 virus, the Governor of DKI Jakarta Anies Baswedan officially announced the application of DKI Jakarta’s status with the status of Large-Scale Social Barriers (PSBB), which was effective starting on Friday, April 10, 2020. So, the event period used in this study is 5 days before and after April 10, 2020. Researchers want to know the impact of the PSBB implementation in DKI Jakarta on the Stock Market value in Indonesia.
Average Abnormal Stock Returns and Trading Volume Activity During the Event Period

<table>
<thead>
<tr>
<th>Period</th>
<th>Date</th>
<th>Average of Abnormal Return</th>
<th>Average of Trading Volume Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>t-5</td>
<td>03-Apr-20</td>
<td>0.02719</td>
<td>0.00044</td>
</tr>
<tr>
<td>t-4</td>
<td>06-Apr-20</td>
<td>0.02326</td>
<td>0.00051</td>
</tr>
<tr>
<td>t-3</td>
<td>07-Apr-20</td>
<td>0.00675</td>
<td>0.00051</td>
</tr>
<tr>
<td>t-2</td>
<td>08-Apr-20</td>
<td>0.01641</td>
<td>0.00052</td>
</tr>
<tr>
<td>t-1</td>
<td>09-Apr-20</td>
<td>0.01507</td>
<td>0.00053</td>
</tr>
<tr>
<td>t0</td>
<td>10-Apr-20</td>
<td>0.01677</td>
<td>-</td>
</tr>
<tr>
<td>t+1</td>
<td>13-Apr-20</td>
<td>(0.03113)</td>
<td>0.00032</td>
</tr>
<tr>
<td>t+2</td>
<td>14-Apr-20</td>
<td>(0.01311)</td>
<td>0.00035</td>
</tr>
<tr>
<td>t+3</td>
<td>15-Apr-20</td>
<td>0.00056</td>
<td>0.00037</td>
</tr>
<tr>
<td>t+4</td>
<td>16-Apr-20</td>
<td>0.00723</td>
<td>0.00045</td>
</tr>
<tr>
<td>t+5</td>
<td>17-Apr-20</td>
<td>0.07780</td>
<td>0.00055</td>
</tr>
</tbody>
</table>

From the Table and Graph above, it can be seen that there was a decrease in the value of Abnormal Returns a day after the implementation of PSBB, but this did not last long because the Abnormal Return value crept up to 0.07780 at t + 5 after the implementation of PSBB. Trading Volume Activity also shows that there is no significant effect of the implementation of the PSBB in DKI Jakarta.

Test of Normality

Based on the table above, data with normal distribution is only abnormal returns in the telecommunication sector with a sig value > 0.05. The trading volume activity in the telecommunication sector before and after is usually distributed.

Different Test of Average Abnormal Return and Trading Volume Activity (Wilcoxon Signed Rank Test)

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>AR_Sesudah - AR_Sebelum</th>
<th>TVA_Sesudah - TVA_Sebelum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-3.986&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-2.084&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>0.000</td>
<td>0.037</td>
</tr>
</tbody>
</table>

Because what customarily distributed not all of the data tested, the different test used was the Wilcoxon Signed Rank Test. From the Wilcoxon test results, in general, we can see that the abnormal return and trading volume activity show a significant negative value between before and after the implementation of the PSBB. This study's
results are in line with the research of Nurmasari (2020) and Khoiriah, Amin, and Arista (2020). This is indicated by a negative z count value of 3.986 sig 0.000 for Abnormal Return and a negative z count of 2.084 sig 0.037 for trading volume activity; this means that there are differences in reactions arise in terms of the rate of return on investment.

PSBB is one of the government's steps to prevent the spread of the virus, so this PSBB has created positive sentiment among investors. As a result of the improving investor sentiment, it will also impact the stock market. It is associated with the behavior of investors in responding to information that is considered a risk. There are several types of investors in responding to risk, namely conservative, moderate and aggressive styles. Thus it is concluded that investors' decisions depend on the risks they wish to face. Investors are not necessarily avoiding the stocks most affected by COVID-19; on the other hand, those in the safe category are not necessarily in demand.

CONCLUSION

1. Event Study 1: That there is no significant effect on Abnormal Return and Trading volume activity between before and after the announcement of the first Covid-19 case in Indonesia. This is thought to happen because news has circulated in the community that there are already residents infected with Covid-19. It does not have an impact on stock market behavior.

2. Event Study 2: Abnormal Return and Trading volume activity are significantly negatively affected by the imposition of Large-Scale Social Restrictions (PSBB) in DKI Jakarta. The implementation of the PSBB caused all community activities to be limited, thus impacting on limited economic activity as well, this has resulted in the emergence of concerns in the stock market so that transactions have increased. Many sell-offs are carried out despite negative returns.

SUGGESTIONS

For investors, during the Covid-19 pandemic, researchers suggest investing in more conservative products to avoid fluctuations and wait for more conducive market conditions. Investors can choose to invest in money market mutual fund products whose movements are more stable and continue to grow positively during the pandemic. Money market mutual funds can also be used as an alternative to emergency funds.

REFERENCE


