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Covid-19 Outbreak and New Normal Policy to The Reaction of The Indonesian Capital Market: An Event Study Analysis

Milhah Alfionita[1] ✉, **Dwi Cahyaningdyah**[2]

[1,2]Department of Management, Faculty of Economics, Universitas Negeri Semarang, Indonesia

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Abstract

This study aims to determine whether there is a difference in the average abnormal return on shares of the tourism, hotel, restaurant, transportation, and pharmaceutical sub-sectors before and after the outbreak of the Covid-19 pandemic and the implementation of the new normal policies in Indonesia. This research is quantitative research with an event study approach using a purposive sampling method to determine the number of samples. The study period was limited to 5 days before the event (t-5) and 5 days after the event (t+5). The test tool used in this research is the Wilcoxon signed rank test. The results of this study showed that during the announcement of the and no significant difference in the average trading volume activity in the shares of tourism, hotel, restaurant, and the pharmaceutical sub-sector. In addition, there was no significant difference in the average abnormal return and average trading volume activity in the transportation sub-sector shares. Meanwhile, the announcement of the new normal policies showed that there was no significant difference between the average abnormal return and average trading volume activity in the shares of tourism, hotel, restaurant sub-sector, and transportation sub-sector. Moreover, there was a significant difference between the average abnormal return and average trading volume activity in shares of the pharmaceutical sub-sector.

INTRODUCTION

In December 2019, a new case of the disease was reported that is difficult to treat and highly transmissible between people. The disease originated in the city of Wuhan, China. According to WHO (World Health Organization) identified that the disease is Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) or better known as Coronavirus Disease 2019 (Covid-19). Covid19 has shaken the global economy caused by its aggressive spread. The pandemic initially had an epicenter in the Chinese city of Wuhan. And now it has developed into a global pandemic.

On January 30, 2020, WHO declared the Covid-19 pandemic a global emergency, with a very high level of risk. More than 200 countries are suffering from the Covid-19 pandemic which has an impact on the health sector and the economy which will affect the world economy (Machmuddah et al., 2020). The research (Yousfi et al., 2021) explains that the continued increase in positive cases of Covid-19 and deaths can affect the uncertainty of the US stock market and global economic conditions.

In Indonesia, the first case of a positive Covid-19 patient was an Indonesian citizen aged 31 years and 64 years. Then president Joko Widodo declared on Monday, March 2, 2020. Since then, the spread of the Covid-19 virus in Indonesia has been very fast and increasing. With this data, it proves that Indonesia is the country with the highest number of deaths due to the Covid-19 virus in Southeast Asia. Then, the government made several policies to stop the spread of

✉ Correspondence Address:
Gedung L2 Lantai 1 FE Unnes
Kampus Sekaran, Gunungpati, Semarang, 50229
E-mail: milhahalfionita@gmail.com

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the Covid-19 virus, namely the implementation of lockdowns and the implementation of Large-Scale Social Restrictions (PSBB) in a number of major cities and implementing new habits or commonly referred to as new normal.

The condition of the Covid-19 pandemic has greatly affected the paralysis of the economic sector in Indonesia. The Central Statistics Agency (BPS) said that Indonesia's economic condition experienced a drastic decline in the second quarter of 2020. The capital market is one of the most important economic driving instruments in Indonesia (Hutami & Ardiyanto, 2015). The capital market is a means for companies to increase their long-term funding needs. The existence of the capital market, investors can invest in the hope of obtaining a certain level of profit (return), while issuers can use the funds for investment purposes (Satryo & Wijayanto, 2019). The capital market is also heavily influenced by an economic and non-economic event. The event will affect the reaction of market participants in making investment decisions (Kayyisu & Cahyaningdyah, 2020).

In determining investment decisions, investors look at changes in stock prices that will occur due to market reactions to information or events that occur. According to (Hartono, 2010) when information is published and received by market participants, market participants analyze the content of the information as a badnews or goodnews signal. The positive or negative reaction from investors will be greater or lesser depending on market conditions at the time (Rahayu, 2017).

An event is described by Grar (2010) as public information in the market that affects the value of one or more companies at the same time. The announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia with its information content can affect stock returns, this has caused a market reaction. Covid-19 information had a direct impact on the capital market as seen from the decline in stock prices at the time the event was published. Meanwhile, the new normal policy information has a positive impact, as can be seen from the stock price trend slowly improving from the previous condition.

Based on the efficient market theory introduced by (Fama, 1970) explained that the capital market conditions that are said to be efficient, namely the price conditions of the securities traded reflect an existing and relevant information (fully reflect). An efficient market as a market in which the price created reflects the availability of full information. Based on the efficient market theory introduced by (Fama, 1970) explained that the capital market conditions that are said to be efficient, namely the price conditions of the securities traded reflect an existing and relevant information (fully reflect). An efficient market as a market in which the price created reflects the availability of full information. Information is an important element for investors and business people in making investment decisions (Hendrawaty & Huzaimah, 2019). Where the information available in the capital market is one of the factors that can affect the capital market and will cause market reactions.

The event study approach is a research model that tests the information contained in the event to market reactions. The theoretical foundation used is the market theory of efficiency and more precisely the market efficiency of the half-strong form. The market is declared efficient half-strong form, informationally involving the speed of market reaction to absorb the announced information (Soejono, 2017).

This market reaction can be viewed from abnormal returns and trading volume activity. Abnormal returns occur when investors can get above-normal returns because they respond to information quickly and are able to manage the information to make investment decisions. In addition, market reaction can also be measured from changes in stock trading volumes, this can be seen from the information that arises from an event received by investors and will be used in the management of investors' portfolios to determine the right strategy, in making transactions, where fluctuations in the number of stock transactions will have an impact on the liquidity of a stock. Stock liquidity is how often stocks are traded. Stock liquidity can be seen from the trading volume activity of a stock (Purwaningsih & Khoiruddin, 2016).

Investors obtaining information will then provide market reaction. The reactions that arise can be in the form of information that is positive or information that is negative. When events are published, there is an overreaction and cannot be expected that can affect the stock price. therefore, the stock price is the price made from the interaction of market participants (Tastaftiani & Khoiruddin, 2015).

The economic sectors that have been most affected by the Covid-19 pandemic include the tourism, hotel, and restaurant, transportation, and pharmaceutical sub-sectors. In the transportation and tourism sub-sector, hotels, and restaurants, it can be seen from the government's recommendation to implement social distancing, and

restrictions on carrying out all activities causing the company's performance in the transportation and tourism sub-sector, hotels, and restaurants to decrease. Meanwhile, in the pharmaceutical sub-sector, it can be seen that people's habits are purchasing vitamins and medicines that can prevent the symptoms of Covid-19 and increase the body's immunity. This, of course, has an impact on the increasing demand for health products. This is a challenge for companies in facing the COVID-19 virus outbreak. In addition, companies must also look at the positive and negative sides caused by the Covid-19 pandemic to be able to maintain the company's performance (Wolor et al., 2020).

Based on the background above, the purpose of this study is to determine the market reaction to the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia in the tourism, hotel, and restaurant sub-sectors, transportation, and pharmaceuticals. This study was conducted in the sectors most affected by the Covid-19 pandemic, and combined the market reaction to the negatively affected sectors shown by the tourism, hotel, and restaurant sub-sectors as well as the transportation sub-sector. Then, looking at the sector that due to the Covid-19 pandemic event shows a positive impact for its company which is shown by the pharmaceutical sub-sector. With the use of abnormal return variables to measure market reactions, an endurance test or Robustness test is then carried out which aims to test the robustness of the model using the variable trading volume activity.

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Based on the background above, the purpose of this study is to determine the market reaction to the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia in the tourism, hotel, and restaurant sub-sectors, transportation, and pharmaceuticals. With the use of abnormal return variables to measure market reactions, an endurance test or Robustness test is then carried out which aims to test the robustness of the model using the variable trading volume activity.

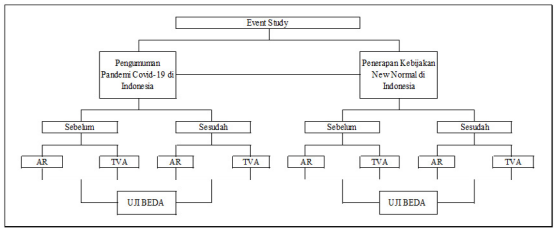

Figure 1. Research Model

METHOD

In this study, it uses a quantitative type of research with an event study approach. According to (Hartono, 2016) explaining the study of events, namely studying the information contained from an event (event) to market reactions. The event study tests how much influence the information contained by an event has on the activity in the capital market by looking at the comparison before and after the event occurred. If an announcement contains information, then when the market is efficient it will show a reaction to changes in stock prices (Junizar & Septiani, 2016). An event study is a study that studies the market's reaction to a particular event that the information is published as an announcement and aims to measure the relationship between the event and the rate of return of securities (Ardiansari & Saputra, 2015).

The population and samples used as the object of research are companies incorporated in the tourism, hotel, and restaurant sub-sectors, transportation, and pharmaceuticals listed on the Indonesia Stock Exchange. The sampling technique applied to this study is the purposive sampling method. The selection of samples in this study is based on several criteria that meet the requirements desired by the researcher, namely: (1) Companies listed in the tourism, hotel, and restaurant, transportation, and pharmaceutical

sub-sectors on the Indonesia Stock Exchange during the observation period, (2) Companies that are actively traded during the research period, (3) Stock data required in the study are available and complete during the research period, and (4) Companies in the tourism, hotel, and restaurant, transportation, and pharmaceutical sub-sectors that are not in the suspended period during the research period.

Abnormal return is the excess of the actual return (actual return) occurs against the normal return. Normal returns are the returns expected by investors. While the actual return is a return that occurs at the time of t which is calculated from the difference in price relative to the previous price (Hartono, 2010). Thus, abnormal return can be interpreted as the difference between the real return and the expected return (Expected return). The calculation of expected returns uses a market adjusted model (Khoiruddin & Faizati, 2014). Where in this model assumes that the best estimator is to estimate the return of a security is the return of the market index at that time.

Calculating market returns can be formulated as follows:

$$R_{(i,t)} = (P_{(i,t)} - P_{(i,t-1)}) / P_{(i,t-1)}$$
$$Rmt = (IHSG\ t - IHSG\ t-1) / (IHSG\ t-1)$$

Description:
Ri,t = Actual return on stock i at time t
Pi,t = Share price i at time t
Pi,t-1 = Share price i at time t-1 (previous day)
Rmt = Market Return at time t
ICIt = ICI at t time
ICI t-1 = ICI at t-1 time

Looking for expected returns can be formulated as follows:

$$E(R_{it}) = R_{mt}$$

Description:
E(Rit) = Expected return i on the t-day
Rmt = Market Return on t-day

Thus to calculate the abnormal return can be formulated as follows:

$$[AR]_{(i,t)} = R_{(it)} - R_{mt}$$

Description:
ARit = Abnormal return i on the t-day
Ri,t = Actual return saham i on the t-day
Rmt = Market Returns on time to -t

Meanwhile, to determine the average abnormal return on the t-day, it can be formulated as follows:

$$[AAR]_t = (\sum_{(i=1)}^{k} (AR)_{(i,t)}) / k$$

Description:
AARt = Average abnormal return on the t-day
ARit = Abnormal return i on the t-day
k = the number of securities affected by the event announcement

Trading volume activity can be interpreted as a means of measuring and responding the market to information. Trading volume activity (TVA) can be interpreted as the amount of stock trading activity that reflects the activeness of stocks in trading in the capital market. In calculating the trading volume activity, you can find a comparison between the number of shares of the issuer traded and all the number of shares outstanding during the research period. Changes in stock trading volumes follow changes in investor expectations. Therefore, trading volume activity can reflect changes in stock trading in the capital market and reflect investors' investment decisions (Cahyo & Ardiansari, 2021).

The calculation of the trading volume activity can be formulated as follows:

TVAi,t= (Number of shares of company i traded at time t)/(Number of shares of company i outstanding at time t)

Description:
TVAi,t: trading volume activity i on the t-day

Meanwhile, in calculating the average trading volume activity, it can be formulated as follows:

$$ATVA_{(i,t)} = (\sum_{(i=t)}^{n} TVA_{(i,t)}) / n$$

Description:
ATVAi,t: average trading volume activity
$\sum_{(i=t)}^{n} TVA_{(i,t)}$: number of stock trading volumes I at t time
N: number of companies

RESULT AND DISCUSSION

In this study, the market reaction was revealed by comparing the average abnormal returns at the time before and after the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia. Then, this study also tested robustness (robustness test)

by using the variable trading volume activity as a model to measure market reaction at the time of the event. Where this endurance test aims to test the validity of the research results. The research period is carried out for 10 active days of the exchange. With a division 5 days before the event (t-5) and 5 days after the event (t+5). The research period at the announcement of the Covid-19 pandemic in Indonesia was February 24, 2020 – March 9, 2020 with the event date on March 02, 2020. Meanwhile, the research period at the announcement of the implementation of the new normal policy was July 13, 2020 – July 25, 2020 with an event date on July 20, 2020.

The previous data have been collected and then processed and analyzed in stages by conducting statistical tests and normality tests using kolmogorov- smirnov. Furthermore, hypothesis testing is carried out using the paired sample T-Test analysis test if the data is distributed normally. If the data is not normally distributed, the hypothesis test is carried out using a non-parametic statistical test, namely the wilcoxon signed rank test.

The results of a descriptive statistical test on the data of the covid-19 pandemic announcement event in Indonesia showed that the tourism, hotel, and restaurant sub-sectors on the variables of average abnormal return and average trading volume activity before and after the announcement of the Covid-19 pandemic in Indonesia the mean value decreased, this shows that in general the shareholders of the tourism, hotel, and restaurant sub-sector companies have suffered losses because they have not been able to produce abnormal returns that optimal and its trading volume decreases from before the event to after the event.

In the transportation sub-sector, the average abnormal return variable before and after the mean value event has decreased, meaning that in general, shareholders of tourism, hotel, and restaurant sub-sector companies have suffered losses because they have not been able to produce optimal abnormal returns. While the ATVA variable has increased, this indicates that there was an increase in the stock trading volume from before the event to after the event.

In the pharmaceutical sub-sector, in the variables of average abnormal return and average trading volume activity before and after the event the mean value has increased. This shows that in general, shareholders in the pharmaceutical subsector have gained due to abnormal returns after the event and experienced an increase in the trading volume of their shares.

In the tourism, hotel, and restaurant subsectors, in the variables of average abnormal return and average trading volume activity before and after the announcement of the implementation of the new normal policy, the mean value increased. This shows that in general, shareholders in the tourism, hotel, and restaurant sub-sectors have benefited due to abnormal returns after the event and experienced an increase in the trading volume of their shares.

In the transportation sub-sector, in the variable average abnormal return before and after the announcement of the implementation of the new normal policy, the mean value has increased This shows that in general shareholders in the tourism, hotel, and restaurant sub-sectors have gained due to abnormal returns after the event. While in the average trading volume activity the mean value has decreased, this shows that the trading volume decreased from before the event to after the event.

In the pharmaceutical sub-sector, in the variables of average abnormal return and average trading volume activity before and after the announcement of the implementation of the new normal policy, the mean value has increased. This shows that in general, shareholders in the pharmaceutical sub-sector have gained due to abnormal returns after the event and experienced an increase in the trading volume of their shares.

Based on table 1, it is explained that the results of the data normality test on each variable to the event of the announcement of the Covid-19 pandemic in Indonesia. Where all variables are declared not normally distributed. Except for the variable average abnormal return after in the transportation sub-sector stocks which show normal distribution data. Thus, for the next test, it uses an alternative test tool, namely the wilcoxon signed rank test. Although, there is data on the average abnormal return after the event in the transportation sub-sector that shows normal distribution data, for hypothesis testing, it still uses an alternative test, namely the wilcoxon signed rank test because the data on the average abnormal return before the event in the transportation sub-sector shows abnormal data. Meanwhile, at the announcement of the implementation of the new normal policy in Indonesia. each variable abnormal return and trading volume activity shows data that is not normally distributed.

Table 1. Normality Test Results

Normality Test Results Before and After the Announcement of the Covid-19 Pandemic in Indonesia			
Sub Sektor	**Variabel**	**Nilai Asymp. Sig.**	**Description**
Tourism, Hotels and Restaurants	AAR Before	0.000	Not Normally
	AAR After	0.000	Not Normally
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally
Transportation	AAR Before	0.004	Not Normally
	AAR After	0.200	Normal
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally
Pharmacy	AAR Before	0.003	Not Normally
	AAR After	0.005	Not Normally
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally
Normality Test Results Before and After the Announcement of the Implementation of the New Normal Policy in Indonesia			
Tourism, Hotels and Restaurants	AAR Before	0.000	Not Normally
	AAR After	0.000	Not Normally
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally
Transportation	AAR Before	0.000	Not Normally
	AAR After	0.011	Not Normally
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally
Pharmacy	AAR Before	0.000	Not Normally
	AAR After	0.000	Not Normally
	ATVA Before	0.000	Not Normally
	ATVA After	0.000	Not Normally

According to Jogiyanto (2016) on the theory of efficient markets explains that the market is said to be efficient when every market participant responds to information so that market participants can react appropriately and quickly in the formation of new equilibrium prices. This new price balance reflects the information available in the market. The characteristics of an efficient market are half-strong form, namely: (1) many investors are rational and trying to maximize profits, (2) investors as price takers, (3) investors get information easily and without costs, (4) information from an event is random and unpredictable, and (5) investors react quickly to new information. On the contrary, if the above conditions are not met, it can be said that the market is declared inefficient. The characteristics of the market are inefficient, namely (1) few investors can influence the price of securities, (2) investors get information at high prices and non-uniform information between market participants, (3) published information can be well predicted by investors, and (4) investors as straightforward and unsophisticated individuals.

Based on normality test previously it has been carried out and resulted in that data on average abnormal returns and average trading volume activity before and after the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia show that all data are not distributed normally. Thus, for the next test, it uses an alternative test tool, namely the wilcoxon signed rank test. The wilcoxon signed rank test is a non-parametric test that is carried out as an alternative test if the parametric test is not met or has data that is not normally distributed (Hartono, 2010).

Based on table 2 of the hypothesis test results above, it proves that the hypothesis (Ha1, Ha2, and Ha3) which tests the difference in the average abnormal return before and after the announcement of the Covid-19 pandemic in Indonesia shows that there is a significant difference in market reactions before and after the announcement of the Covid-19 pandemic in Indonesia.

In the tourism, hotel, and restaurant subsectors. This result indicates that the difference in the average abnormal return before and after the announcement of the Covid-19 pandemic in Indonesia indicates that the Indonesian capital market is included in the half-strong efficient market because at the time the event was published market participants reacted quickly. The results of this study support research (Waryati et al., 2021), (Nguyen et al., 2021), (AlAli, 2020) and (Harjoto & Rossi, 2021) which in their research found that there was a significant difference in the average abnormal return before and after the event.

Table 2. Wilcoxon Signed Rank Test Results on Average Abnormal Return Before and After the Announcement of the Covid-19 Pandemic and the Implementation of new normal policies in Indonesia

Hypothesis	Asymp. Sig. 2 tailed	Description	Result
Ha1	0.041	<0.05	There are differences
Ha2	0.179	>0.05	No difference
Ha3	0.024	<0.05	There are differences
Ha4	0.170	>0.05	No difference
Ha5	0.101	>0.05	No difference
Ha6	0.019	<0.05	There are differences

The transportation sub-sector stocks showed that the average abnormal return did not have a significant difference before and after the announcement of the Covid-19 pandemic in

Indonesia. The findings illustrate that the Indonesian capital market is not included in the half-strong form efficiency market because at the time of the Covid-19 pandemic, market participants did not respond quickly. This means that market players have given a negative response to the Covid-9 pandemic event in the transportation sub-sector issuers. The results of this research are in line with research (Irmayani, 2021), (Sambuari et al., 2020), and (Alam et al., 2020) which stated that there was no significant difference in the average abnormal return before and after the event.

The pharmaceutical sub-sector stocks showed that there was a market reaction indicated by the significant difference in the abnormal average return before and after the announcement of the Covid-19 pandemic, describing that the Indonesian capital market is a half-strong form efficiency market, because during the Covid-19 pandemic the market responded faster. This indicates that the announcement of the Covid-19 pandemic contains information that has an impact on the level of profit obtained during the research period, so that it can affect investors' investment decisions which will have an impact on abnormal returns.

When viewed from the role of the management of each company in facing market reactions before and after the Covid-19 pandemic in Indonesia. the company was rocked by the problem of difficult distribution of sales due to limited access in and out. Companies are required to think hard about formulating the right strategy to maintain sales stability. To achieve sales stability in the midst of a pandemic. Companies must make alternatives by changing the use value of products into something needed during a pandemic and also making it easier to distribute so that they reach consumers. The innovation strategy will help companies in Indonesia survive in the midst of a pandemic, or at least until the situation returns to normal. If sales are unstable, it will have an impact on poor financial performance. That can signal to investors that the company is not doing well. If the company's performance is stable in the midst of a pandemic, it will be able to make investors continue to invest because it is considered that the company has good profitability and company value.

Meanwhile, the hypothesis that tests the average abnormal return before and after the announcement of the implementation of the new normal policy in Indonesia is the hypothesis (Ha4, Ha5, and Ha6). In stocks in the tourism, hotel, and restaurant sub-sectors, the test results showed that there was no difference in market reactions on the average abnormal return before and after the announcement of the implementation of the new normal policy in Indonesia. These results indicate that the Indonesian capital market is not included in the half-strong form efficiency market because at the time of the implementation of the new normal policy, market participants did not respond quickly. This means that market players give a negative response to the event of implementing the new normal policy on issuers of the tourism, hotel and restaurant sub-sectors as well as the transportation sub-sector.

The transportation sub-sector stocks showed that there was no difference in market reaction before and after the implementation of the new normal policy. It can be seen from the fact that there is no significant difference in the average abnormal return before and after the announcement of the implementation of the new normal policy in Indonesia in the transportation sub-sector. This result illustrates that the Indonesian capital market is not included in the half-strong form efficiency market because at the time of the implementation of the new normal policy, market participants did not respond quickly. This means that market participants give a negative response. This indicates that during the research period there was no difference in the amount of return on profits for investors. This result is also driven by one of the factors, namely the operational activities of the transportation sub-sector companies have returned to operation and are able to adjust to the implementation of the new normal policy. The results of this study are in line with research (Irmayani, 2021), (Sambuari et al., 2020), and (M. N. Alam et al., 2020) which found no difference in the average abnormal return before and after the event.

Meanwhile, in the pharmaceutical sub-sector, there are differences in pasat reactions before and after the implementation of the new normal policy. It can be seen from the difference in the average abnormal return before and after the announcement of the implementation of the new normal policy in Indonesia. This result indicates that the difference in the average abnormal return before and after the announcement of the Covid-19 pandemic in Indonesia indicates that the Indonesian capital market is included in the half-strong efficient market because at the time the event was published market participants reacted quickly. This also indicates that the event of the announcement of the implementation of the new normal policy contains information that has an impact on the level of profit obtained during the research period. The results of this study are in

line with research studies (Waryati et al., 2021), (Nguyen et al., 2021), (AlAli, 2020) and (Harjoto & Rossi, 2021) which state that there are differences in average abnormal returns before and after events.

When viewed from the role of the management of each company in facing market reactions before and after the implementation of the new normal policy, it can be seen that the tourism, hotel, and restaurant sub-sector companies as well as the transportation sub-sector began to squirm again when the government began to relax Large-Scale Social Restrictions (PSBB) with the implementation of the new normal policy while still paying attention to health protocols. For managerial companies in the tourism, hotel, and restaurant sub-sectors as well as the transportation sub-sector to be able to build and improve the company's balanced and sustainable operational activities by considering changing trends. The corporate strategy of the tourism, hotel, and restaurant sub-sectors as well as the transportation sub-sector can remain productive and safe from the Covid-19 pandemic. This strategy is expected to be able to restore investor confidence to continue investing because tourism, hotel, and restaurant sub-sector companies are able to maintain the company's profitability while still complying with regulations set by the government.

Pharmaceutical sub-sector companies whose business activities continue to increase during the Covid-19 pandemic until the implementation of the new normal policy. The managerial role of this pharmaceutical sub-sector company must be able to maintain the company's performance. It can be seen from the sales of medical devices such as masks, handsanitizers, vitamins, and other health products that have increased during the Covid-19 pandemic and are sustainable until the new normal policy period.

The Robustness test aims to see the consistency or sturdiness and strength of the research results. In this study, the Robustness test was carried out by replacing the proxy of abnormal variable returns with trading volume activity to measure market reactions at the time of the event. Trading volume activity (TVA) was chosen as the variable used in this robustness test because changes in trading volume have a positive relationship and affect each other's impact of an event so that it can help in seeing and analyzing capital market reactions by showing changes in stock prices for certain events.

Based on the results in table 3 which states that the hypothesis models of Ha2, Ha4, Ha5, and Ha6 in this study are consistent or robust. This means that with market reaction testers with different proxies showing the same results, it can be said that this research model has passed that can result in variations in errors. And these results can prove that the variable average trading volume activity is able to corroborate the results of the market's reaction to the event.

The variable average trading volume activity in the transportation sub-sector was able to strengthen the results of market reactions before and after the announcement of the Covid-19 pandemic in Indonesia. Meanwhile, the variable average trading volume activity in the tourism, hotel, and restaurant sub-sectors, the transportation sub-sector, and the pharmaceutical sub-sector were able to strengthen the results of the market reaction to the announcement of the implementation of the new normal policy in Indonesia. Meanwhile, the results of the robustness test test that proves that the research model is inconsistent or not robust, namely during the Covid-19 pandemic event, namely in the Ha1 and Ha3 hypothesis models which state that in the tourism, hotel, and restaurant sub-sectors (Ha1) and in the pharmaceutical sub-sector (Ha3) there is no difference in the average trading volume activity before and after the announcement of the Covid-19 pandemic in Indonesia. This means that the variable average trading volume activity in stocks of the tourism, hotel, and restaurant sub-sectors as well as the pharmaceutical sub-sector before and after the covid-19 pandemic announcement event was not able to strengthen the results of the market reaction to the event. Testing with inconsistent or robust results occurred because there was a variance inequality of high errors in the data during the observation period. These results illustrate that during the research period there was no information content that influenced investors' decisions in stock transactions. This result is also in line with the research conducted (Mardhiah & Yunita, 2021), (Dewi & Masithoh, 2020), (Chandra & Suardana, 2021) and (Ismanto, 2020) which in her research found no difference in trading volume activity before and after the event.

Table 3. Robustness Test Results

Hypothesis	Asymp. Sig. 2 tailed	Description	Result
Ha1	0.841	>0.05	Not Sturdy / not robust
Ha2	0.600	>0.05	Robust
Ha3	0.144	>0.05	Not Sturdy / not robust
Ha4	0.281	>0.05	Robust
Ha5	0.101	>0.05	Robust
Ha6	0.001	<0.05	Robust

When viewed from per sub-sector, it states that in the tourism, hotel, and restaurant sub-sector companies in the event of the announcement of the Covid-19 pandemic in Indonesia proves that the results of research in the tourism, hotel, and restaurant sub-sectors are not robust or not sturdy. His findings stated that there was a difference in the average abnormal return and there was no difference in the average trading volume activity before and after the announcement of the Covid-19 pandemic in Indonesia. This means that the variable average trading volume activity in stocks of the tourism, hotel, and restaurant sub-sectors before and after the Covid-19 pandemic announcement event is not able to strengthen the results of the market reaction to the Covid-19 pandemic announcement event in Indonesia. Meanwhile, at the event of implementing the new normal policy, it proves that the results of research in the tourism, hotel, and restaurant sub-sectors are robust. His findings stated that there was no difference in the average abnormal return and average trading volume activity before and after the implementation of the new normal policy in Indonesia. This result can be concluded that this research model is able to strengthen the results of the market reaction to the announcement of the implementation of the new normal policy in Indonesia.

In the transportation sub-sector companies, during the announcement of the Covid-19 pandemic and the implementation of the new normal policy in Indonesia, it proves that the results of this study are declared robust. His findings reported that there was no difference in the average abnormal return and average trading volume activity before and after the announcement of the Covid-19 pandemic and the implementation of the new normal policy in Indonesia. This result can be concluded that this research model is able to strengthen the results of the market reaction to the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia.

In the pharmaceutical sub-sector companies at the announcement of the Covid-19 pandemic in Indonesia, it proves that the results of research in the pharmaceutical sub-sector are not robust or not sturdy. His findings stated that there was a difference in the average abnormal return and there was no difference in the average trading volume activity before and after the announcement of the Covid-19 pandemic in Indonesia. This means that the variable average trading volume activity in pharmaceutical sub-sector stocks before and after the Covid-19 pandemic announcement event is less able to strengthen the results of the market reaction to the Covid-19 pandemic announcement event in Indonesia. Meanwhile, in the event of implementing the new normal policy, it proves that the research results in the pharmaceutical sub-sector are sturdy or robust. His findings found that there were differences in market reactions before and after the announcement of the implementation of the new normal policy in Indonesia. This result can be concluded that this research model using the variable average trading volume activity is able to strengthen the results of the market reaction to the announcement of the implementation of the new normal policy in Indonesia.

CONCLUSSION AND RECOMENDATION

This study discusses the market reaction to the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia in the tourism, hotel, and restaurant, transportation, and pharmaceutical sub-sectors. This study was conducted to determine whether there was a difference in the average abnormal return on stocks of the tourism, hotel, and restaurant subsectors, transportation, and pharmaceuticals before and after the announcement of the Covid-19 pandemic and the implementation of new normal policies in Indonesia. From the results of the research and discussion above, it can be concluded as a whole that in each event the announcement of the Covid-19 pandemic and the new normal policy in Indonesia, it produces a different market reaction in each sub-sector. Thus, not all Covid-19 pandemic events and events of implementing new normal policies can affect market reactions in each of its sub-sectors, and the Covid-19 pandemic event also does not always produce abnormal returns in each subsector for market players.

For further research, it is recommended that in measuring market reactions, it can be added with other variables such as security return variability, market capitalization, or others. Then, it can add government policies in reducing the impact of the Covid-19 pandemic in Indonesia which are being discussed, such as the launching of the Covid-19 virus vaccine in Indonesia, the Implementation of Community Activity Restrictions (PPKM), or other policies.

For investors, the results of this research can be used as reference material by investors to make investment decisions. Where the events of the announcement of the Covid-19 pandemic and the implementation of new normal policies

in Indonesia do not all carry positive or negative information. In this case, sufficient knowledge is necessary to minimize investment risks. Investors are also required to focus more on the fundamental aspects of the company to see the company's financial performance and prospects in the future.

For the company, the results of this study further improve the company's performance and value during the Covid-19 pandemic and this new normal policy because it has a very impact where the company that is considered to be able to survive is a company that is highly viewed by investors. Improved performance will increase the value of the company as investors see as investors always consider all information in their investment decisions.

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