Event Study Analysis of The Lock Down Tourism, Hospitality, Restaurant and Pharmaceutical Sub-Sector in Indonesia

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Abstract

Purpose: This research aims to find out whether there are differences in stock returns and stock trading volume before and after the announcement of the first PSBB in Indonesia on March 31, 2020, in the tourism, hotel and restaurant sub-sector - the pharmaceutical sub-sector listed on the Indonesia Stock Exchange.

Methodology: The population in this study were all companies in the tourism, hospitality and restaurant sub-sector - pharmaceutical sub-sector registered on the IDX in 2020. The samples obtained from predetermined criteria were 14 for the tourism, hotel and restaurant sub-sector and 9 for the pharmaceutical sub-sector. This research took place for 27 weeks (6 months) before and 27 weeks (6 months) after the PSBB announcement. This research is quantitative research using secondary data. The data analysis method used is descriptive analysis, normality test (Kolmogorov Smirnov) and difference test (Wilcoxon Sign Rank Test).

Findings: The results of the weekly difference test of returns and stock trading volume in these two sectors, on average, did not experience significant differences.

**Keyword:** Return, Trading Volume, Stock Exchange

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Introduction

The Covid-19 pandemic is an extraordinary event known as the Black Swan Event, which is an unexpected and unprecedented event that has a major impact on the global stock market (Yarovaya et al., 2022). The Covid-19 pandemic in Indonesia has had an impact on the capital market and changes to trading schedules on the Indonesian Stock Exchange. As a result, there was an increase in the number of investors selling shares which caused a decline in the stock market and increased inefficiency in it (Zuhairoh & Suelsy, 2021).

The capital market is an important financial instrument in a country's economic sector (Yusmaniarti et al., 2022). According to (Kasmir, 2014) The capital market is a place where sellers and buyers meet to carry out transactions to obtain capital. Investment activities are closely related to information, because it is one of the factors investors consider in making decisions. One indicator of market efficiency is how quickly the market obtains the latest information and can influence changes in stock prices. The faster the market reacts to new information, the more efficient the market is (Yohani et al., 2022).

Figure 1. Graph of Indonesian Economic Growth
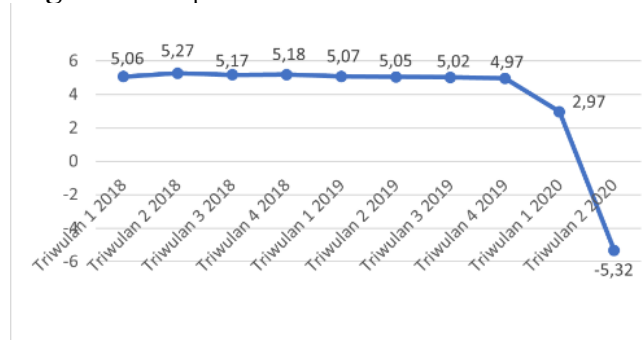
Source: Central Statistics Agency (BPS)

Retaduari (2022) Covid-19 first affected Indonesian citizens on March 2, 2020. Covid-19 caused an economic downturn (Pratiwi, 2022). In the first quarter of 2020, where the first case of Covid-19 exposed Indonesian citizens, Indonesia's economic growth decreased almost twice from before, reaching only 2.97%.

The Indonesian Government's initial step in dealing with the Covid-19 Virus case was the implementation of Large-Scale Social Restrictions (PSBB). The implementation of the PSBB is strictly regulated through Government Regulation Number 21 of 2020 which was stipulated by President Jokowi (Nurhanisah, 2021). This regulation was signed by President Jokowi and came into force in Indonesia on March 31 2020. The reaction to the PSBB announcement will be measured using stock returns and stock trading volume. Stock returns are the results or profits obtained from stock investments (Nurmasari, 2020). while the stock trading volume is the total transactions that occur in a certain time period (Mengga & Batara, 2021).

BPS (2021) Industries that experienced quite a large impact were tourism and health. In 2020, the number of foreign tourist arrivals to Indonesia was 4.02 million visits, where this number decreased by 75.03% when compared to 2019 which reached 16.11 million visits. In fact, the tourism industry plays an important role in economic development and is an industry that can encourage the development of other industries such as trade, transportation, accommodation and food and beverage.

On the other hand, the Covid-19 pandemic has caused investors to speculate on health companies (Fissholah, Qurrota Aini and Hascaryani, 2022). The volume of purchases of health and beauty products in 2019 when the pandemic had not yet entered Indonesia was only 29.1%, in 2020 it rose to 40.1%. The Covid-19 pandemic has actually made investors interested in investing their capital in the health industry because there has been an increase in health products because public spending on health products has become a basic need in the midst of the pandemic.

Research conducted (Fissholah, Qurrota Aini and Hascaryani, 2022) provides empirical evidence that there are significant differences in stock returns before and during the Covid-19 pandemic. Researchers (Anggraini, 2021) also provided results that there was no significant difference in stock returns before and after the announcement of the enactment of the PSBB policy on April 10 2020 and there was no significant difference in stock returns before and after the announcement of the reopening of transportation modes on May 7, 2020. Diansari et al (2021) also stated that the results showed that there were differences in transaction volume during and before the Covid-19 pandemic in Indonesia. However, research conducted by (Yohani et al., 2022) showed that there was no difference in the volume of stock transactions before and after the PPKM announcement. Due to inconsistencies in the results of previous researchers, it is necessary to retest stock returns and the volume of stock trading transactions.

Literature Review

Efficient Market Hypothesis (EMH)

EMH is when share prices reflect the information provided by the company without being influenced by other factors, and have been adjusted to the company's risks and strategies (Fama, 1970). Efficient Capital Market Theory states that stock values reflect all available information, including fundamental information and also internal information from parties within the company (insider information). (Junaid et al., 2021) . (Nyoman et al., 2017) There are three forms of efficient capital markets:

a. Weak Form Efficiency

Efficient market hypothesis in the weak form implies that a situation in which stock values reflect all the information contained in past price records. In this condition, no investor can achieve profits beyond the normal level (abnormal return). The market to be efficient in the weak form if the security prices formed reflect historical data information in the past, in other words investors are unable to obtain abnormal returns using the available historical information.

b. Semi Strong Form Efficiency

Efficient market hypothesis in the semi-strong form state that prices do not only reflect past data, but also reflect all published information. This indicates that investors cannot achieve profits beyond normal levels (abnormal returns).The market to be efficient in semi-strong form if the security prices formed reflect all historical information in the past and relevant public information. So investors are not able to obtain abnormal returns by using information that is built based on information available to the public.

c. Strong Form Efficiency

Efficient market hypothesis in the strong form state that all relevant information, both published and private, is reflected in share prices. In this situation, no investor can achieve abnormal returns (excess returns) by utilizing any information. Efficient market conditions in strong form are the most ideal market conditions, where investors and all market players will not be able to obtain abnormal returns based on the availability of historical information, public information and private information. It is in this form that Fama describes the EMH concept by saying that the security prices formed reflect all available relevant information (stock prices reflect all available information).

Stock

Kasmir (2014) shares are securities that are ownership in nature. Shares can be interpreted as representing the financial participation of individuals or business entities in a company or limited liability company (Yohani et al., 2022). Shares form a symbiotic mutualism between investors and companies.

Event Study

The event study method is used to observe the market response to an event that has the potential to influence the stock exchange, such as certain regulations (Yusmaniarti et al., 2022). Event study is research that looks at the consequences of information announcements on security values (Talumewo et al., 2021). Event study is a study that examines the market response to an event after the information has been announced publicly (Junaid et al., 2021).

Stock Return

Stock returns are based on the level of profit obtained from share buying and selling transactions (Romadhina, Anggun Putri & Dewi, 2021). The capital market reaction to an event containing information can be measured using returns as the value of price changes. To find stock returns according to (Romadhina, Anggun Putri & Dewi, 2021) it can be calculated using the following formula:

$$R_{i,t} = \frac{P_{i,t} - P_{i(t-1)} \times 100\%}{P_{i(t-1)}}$$

Information:

R i,t   = Profit rate of share i in period t

P i (t)   = Stock price i in period t

P i (t-1) = Share price i in period t-1

Stock Trading Volume

Stock Trading Volume is the total transactions that occur in a certain time period (Mengga & Batara, 2021). Stock trading volume is one of the parameters used to assess the market response to events or information related to a stock (Saat et al., 2023). The high volume of share trading on the stock exchange is an indication of a good market (Siswantoro, 2020).

Figure 2. Framework of Thinking
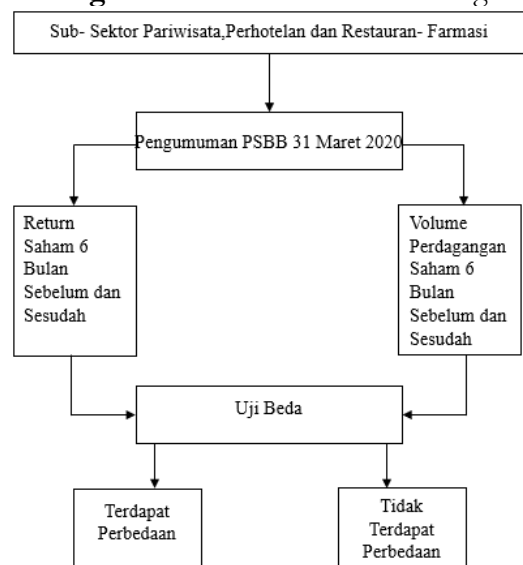
Research Methods

This type of research is descriptive research that uses a quantitative approach, with secondary data research. This research was conducted in the Consumer Goods Industry Sector, Pharmaceutical Sub-Sector and Trade, Services and Investment Sector, Tourism, Hospitality and Restaurant Sub-sector which are listed on the Indonesia Stock Exchange. The data used in the research was obtained from the Yahoo Finance and BEI websites. The population is all the subjects that will be researched (Sugiyono, 2020). The population in this study is the tourism, hotel and restaurant sub-sector companies with a total of 41 companies and the pharmaceutical sub-sector with a total of 11 companies that have been listed on the Indonesia Stock Exchange in 2020. The sample in this study uses a purposive sampling technique with pre-made criteria. which aims to obtain a representative sample. The following are the criteria for purposive sampling:

1. All companies in the health sub-sector and tourism, hotel and restaurant sub-sectors are listed on the Indonesian Stock Exchange.Informasi harga saham dan volume perdagangan saham tersedia lengkap dan dapat di unduh di website www.idx.co / yahoo finance
2. Companies that are actively traded during the event window (first PSBB announcement in Indonesia 31 March 2020). Based on the criteria above, the following company samples were obtained:

Table 1. Sample List of Tourism, Hospitality and Restaurant sub-sector
Companies Registered on the IDX in 2020

No	Company name	Stock code
1	Bukit Uluwatu Villa Tbk	BUVA
2	Jaya Bersama Indo Tbk	DUCK
3	Eastparc Hotel Tbk	EAST
4	Fast Food Indonesia Tbk	FAST
5	Hotel Fitra Internasional Tbk	FITT
6	Island Concepts Indoensia Tbk	ICON
7	Intikramik Alamsari Indoensia Tbk	IKAI
8	MNC Land Tbk	KPIG
9	Mas Murni Tbk	MAMI
10	MAP Boga Adiperkasa Tbk	MAPB
11	Surya Permata Andalan Tbk	NATO
12	Panorama Sentrawisata Tbk	PANR
13	Pembangunan Jaya Ancol Tbk	PJAA
14	Sarimelati Kencana Tbk	PZZA

Table 2. Table of sample list of pharmaceutical sub-sector companies
registered on the IDX in 2020

No	Company Name	Stock Code
1	Darya Varia Laboratoria Tbk	DVLA
2	Indofarma Tbk	INAF
3	Kimia Farma Tbk	KAEF
4	Kalbe Farma Tbk	KLBF
5	Merck Tbk	MERK
6	Phapros Tbk	PEHA
7	Industri Jamu dan Farmasi Sido Muncul	SIDO
8	Tempo Scan Pasific Tbk	TSPC
9	Pyridam Farma	PYFA

Data Analysis Techniques
a. Descriptive Statistical Analysis

Sugiyono (2020) these descriptive statistics describe data into information that is clearer and easier to understand. In this research, descriptive statistical analysis provides an overview of data seen from the average (mean), standard deviation, maximum and minimum values.

b. Normality test

Hidayat (2013) stated that the normality test is used to check whether a data sample comes from a normal distribution. In this study, the normality test used the Kolmogorov-Smirnov test by looking at the significance value of stock returns and stock trading volume. The level of significance used is 5%. The basis for decision making to determine data normality is as follows:

1. If the probability (Asymp.Sig) < 0.05 then the data is not normally distributed.
2. If the probability (Asymp.Sig) > 0.05 then the data is normally distributed.

c. Hypothesis

The hypothesis test used is the difference test. The difference test is determined by the normality test, where if the data is normally distributed, then the difference test carried out is by using the parametric statistical difference test paired sample t-test, whereas if the data is not normally distributed then the difference test used is the Wilcoxon Sign Rank Test (Esti & Irul,

2017). The basis for making a decision to accept or reject Ho in the paired sample t – test and Wilcoxon Sign Rank Test is as follows:

1. If the probability (Asymp.Sig) < 0.05 then Ho is rejected, meaning there is a difference.
2. If the probability (Asymp.Sig) > 0.05 then Ho is accepted, meaning there is no difference.

Results and Discussion

The object of this research is the tourism, hotel and restaurant sub-sector companies and the health sub-sector listed on the IDX in 2020. In this study there were 41 and 11 companies, however after purposive sampling was carried out, a sample of 14 companies was obtained that met the criteria in this research. tourism sub-sector and 9 pharmaceutical sub-sector companies.

Descriptive Statistical Test

Table 3. Descriptive Test Results (Tourism sub-Sector)

		Stock Returns Before PSBB Announcement	Stock Returns After PSBB Announcement	Stock Trading Volume Before PSBB Announcement	Stock Trading Volume After PSBB Announcement
N	Valid	378	378	378	378
	Missing	0	0	0	0
Mean		-1,62	-2,75	68.154.387,30	15.507.542,86
Std. Deviation		9,483	17,308	267.726.331,101	53.545.541,173
Minimum		-79	-100	100	100
Maximum		35	78	2.324.960.100	610.399.300

From the table above, the average stock return and stock trading volume after the announcement decreased to -2.75 and 15,507,542.86 shares. This shows a decrease in the average return and stock trading volume after the announcement of the PSBB, which was possibly caused by market reactions which interpreted the PSBB as a bad or potentially detrimental signal, especially for the tourism, hotel and restaurant sub-sectors.

Apart from that, the standard deviation of stock returns and stock trading volume after the PSBB announcement also showed quite large variations, with values of 17.308 and 53,545,541.173. This indicates high variability and fluctuation in stock trading volume during the study period.

The maximum stock return after the PSBB announcement rose to 78%. However, there was a drastic decline in share trading volume, to 610,399,300 after the announcement. The lowest stock return also decreased to -100, while the stock trading volume did not change at 100 shares.

Table 4. Descriptive Test Results (Pharmaceutical sub-sector)

		Stock Returns Before PSBB Announcement	Stock Returns After PSBB Announcement	Stock Trading Volume Before PSBB Announcement	Stock Trading Volume After PSBB Announcement
N	Valid	243	243	243	243
	Missing	0	0	0	0
Mean		-0,12	2,93	29.478.106,2922	51.551.862,3416
Std. Deviation		15,002	15,118	58.009.387,43554	119.695.725,59461
Minimum		-41	-25	1.100	10.100
Maximum		113	133	399.942.900	1.394.498.800

From the table above the average (mean) stock return and stock trading volume increased after the announcement to 2.93 and 51,551,862.30 shares. It can be concluded that the market reaction means that the PSBB announcement is a good signal or has the potential to benefit investors.

The standard deviation of stock returns and trading volume after the PSBB announcement

was 15,118 and 119,695,725.60 which were greater than the average value, this shows that variability and fluctuation were high in the research period.

Stock returns and maximum stock trading volume after the announcement rose to 133% and 1,394,498,800. The minimum stock return value after the PSBB announcement was -25, the stock trading volume after the announcement rose to 10,100 shares

Normalitas Test

Table 5. Normality Test Results (Tourism sub-Sector)

		One-Sampel Kolmogorov-Smirnov Test			
		Stock Returns Before PSBB Announcement	Stock Returns After PSBB Announcement	Stock Trading Volume Before PSBB Announcement	Stock Trading Volume After PSBB Announcement
N		243	243	243	243
Normal Parameters[a,b]	Mean	-.1235	29478106.2922	51551862.3416	51551862.3416
	Std. Deviation	15.00197	58009387.43554	119695725.59461	119695725.59461
Most Extreme Differences	Absolute	.269	.306	.333	.333
	Positive	.269	.270	.248	.248
	Negative	-.163	-.306	-.333	-.333
Test Statistic		.269	.274	.306	.333
Asymp. Sig. (2-tailed)		.000[c]	.000[c]	.000[c]	.000[c]

Based on the results of normality test processing on stock returns and stock trading volume before and after the announcement of the PSBB in Indonesia on March 31 2020, Asymp results were obtained. Sig (2-tailed) is 0.000 < 0.05. These results explain that the sample data before and after the pandemic were not normally distributed, so the difference test used a non-parametric method in the form of the Wilcoxon Signed Rank Test.

Differential Test of Stock Returns in the Tourism, Hospitality and Restaurant sub-sectors (Wilcoxon Sign Rank Test)

Table 6. Results of Different Stock Return Tests in the Tourism, Hospitality and Restaurant sub-sectors

No	Time	Z	Asymp. Sig. (2-tailed)	Information
1.	Week-1	-.980b	.327	Rejected
2.	Week-2	-2.230b	.026	Accepted
3.	Week-3	-.910b	.363	Rejected
4.	Week-4	-1.853b	.064	Rejected
5.	Week-5	-.560b	.575	Rejected
6.	Week-6	-.346b	.729	Rejected
7.	Week-7	-2.423b	.015	Accepted
8.	Week-8	-.849b	.396	Rejected
9.	Week-9	-.863b	.388	Rejected
10.	Week-10	-.314b	.754	Rejected
11.	Week-11	-2.624b	.009	Accepted
12.	Week-12	-.377b	.706	Rejected
13.	Week-13	-.307b	.759	Rejected
14.	Week-14	-.760b	.447	Rejected
15.	Week-15	-.714b	.475	Rejected
16.	Week-16	-.818b	.413	Rejected
17.	Week-17	-.268b	.789	Rejected
18	Week-18	-.490b	.624	Rejected
19.	Week-19	-.875b	.381	Rejected
20	Week-20	-1.423b	.155	Rejected

No	Time	Z	Asymp. Sig. (2-tailed)	Information
21.	Week-21	-.079b	.937	Rejected
22.	Week-22	-1.693b	.090	Rejected
23.	Week-23	-.314b	.753	Rejected
24.	Week-24	-2.908b	.004	Accepted
25.	Week-25	-2.095b	.036	Accepted
26.	Week-26	-1.379b	.168	Rejected
27.	Week-27	-.825b	.409	Rejected

In the table, of the 27 weeks of observation, only 5 weeks had a significance value of <0.05, namely weeks 2, 7, 11, 24, and 25. A total of 22 other weeks had a significance value > 0.05. Because the average weekly difference test results have a value of > 0.05, it can be concluded that H1 is rejected. The results of this test prove that the stock return value did not experience significant differences in the tourism, hotel and restaurant sub-sectors before and after the announcement of the first PSBB in Indonesia.

Stock return itself means the level of profit obtained from share buying and selling transactions (Romadhina, Anggun Putri & Dewi, 2021). Meanwhile, the Efficient Capital Market Theory by Fama (1970) is not proven in this research, especially the semi-strong efficient form with published information is PSBB 31 March 2020. This research was only carried out for 27 weeks where to test the efficient capital market requires a period of time. which is old. This finding is in accordance with Fama's opinion that testing efficient capital markets should be carried out over a long period of time, it is not possible if the proof of this theory is carried out using a short data period (Mesran, 2021). Researchers (Alajbeg et al., 2012) also argue that there needs to be a combination of other theories to complete the efficient capital market theory. (Sharma & Kumar, 2020) found that behavioral finance theory could be an alternative choice to efficient capital market theory because it is considered more effective in explaining extreme market fluctuations, and is also able to explain investor behavior which is not always rational in making investment decisions. . The results of this research are in line with research (Darmayanti et al., 2021) that there was no difference in stock returns before and after the announcement of the first case of Covid-19 in Indonesia.

The factor that causes this difference is that officially, the spread of the corona virus is considered to have started on December 31 2019 (BBC, 2020). If the PSBB is announced some time later, most of its effects may have been anticipated by the market. The second factor is that before the PSBB was implemented on March 31 2020 in Indonesia, the market had already reflected the potential negative impact on the tourism sector. For example, the share price of the company Evidence Uluwatu Vila (BUVA), the share price as of 30 December 2019 was 77, but the share price as of 13 April 2020 was 60, this proves that before and after the announcement of the PSBB there was not such a big difference. Meanwhile, if we look at the financial report, BUVA's business profit and loss in 2019 experienced a loss of -45.4, and in 2020 it was -1,067.50, it can be concluded that in 2019 the BUVA company experienced a loss. Meanwhile, companies in the restaurant sector, one of which is Cipta Selera Murni, in the Profit and Loss report on the net profit side in 2019, experienced a loss of -11,410,702,020 and in 2020 it was -37,622,229,900.

Test of Differences in Stock Trading Volume in the Tourism, Hospitality and Restaurant sub-sectors (Wilcoxon Sign Rank Test)

Table 7. Test Results for Different Stock Trading Volumes in the Tourism, Hospitality and Restaurant sub-sectors

No	Time	Z	Asymp. Sig. (2-tailed)	Keterangan
1.	Week 1	-1.726b	.084	Rejected
2.	Week 2	-1.036b	.300	Rejected
3.	Week 3	-1.350b	.177	Rejected

No	Time	Z	Asymp. Sig. (2-tailed)	Keterangan
4.	Week 4	-1.977b	.048	Accepted
5.	Week 5	-2.291b	.022	Accepted
6.	Week 6	-2.040b	.041	Accepted
7.	Week 7	-2.103b	.035	Accepted
8.	Week 8	-2.229b	.026	Accepted
9.	Week 9	-1.412b	.158	Rejected
10.	Week 10	-.345b	.730	Rejected
11.	Week 11	-.282b	.778	Rejected
12.	Week 12	-1.224b	.221	Rejected
13.	Week 13	-.596b	.551	Rejected
14.	Week 14	-.785b	.433	Rejected
15.	Week 15	-.785b	.433	Rejected
16.	Week 16	-1.412b	.158	Rejected
17.	Week 17	-1.224b	.221	Rejected
18	Week 18	-.973b	.331	Rejected
19.	Week 19	-.534b	.594	Rejected
20	Week 20	-1.475b	.140	Rejected
21.	Week 21	-1.852b	.064	Rejected
22.	Week 22	-.345b	.730	Rejected
23.	Week 23	-.659b	.510	Rejected
24.	Week 24	-.534b	.594	Rejected
25.	Week 25	-.408b	.683	Rejected
26.	Week 26	-.220b	.826	Rejected
27.	Week 27	-.973b	.331	Rejected

In the table of weekly difference test results above from 27 weeks of research, only 5 weeks had a significance value < 0.05, namely weeks 4, 5, 6, 7 and 8. The other 22 weeks had a significance value > 0 .05. So, the conclusion that can be drawn is that H2 is rejected. The results of this test show that there is no significant difference in stock trading volume before and after the announcement of the first PSBB in Indonesia in the tourism, hotel and restaurant sub-sectors. The results of this research support research (Yohani et al., 2022) that there is no difference in the volume of stock transactions before and after the PPKM announcement.

The factor that causes there to be no significant differences is government policy. Government policy which came into effect on March 10, 2020, includes a trading halt, where stock market activities are suspended if the Composite Stock Price Index (IHSG) falls by 5 to 10 percent. Apart from that, if the JCI continues to decline by more than 15 percent, the trading suspend policy will be implemented until the end of the trading session (Nugraha, 2023). During trading suspend investors can evaluate the latest information, news or announcements that may affect stock prices. This kind of policy can reduce the possibility of a decline in market performance, one of which is preventing panic selling. The impact of this policy can be seen in stock trading volume, where statistically, the average value does not show a significant difference.

Differential Stock Return Test in the Pharmaceutical sub-sector (Wilcoxon Sign Rank Test)

Table 8. Results of different stock return tests in the Pharmaceutical sub-sector

No	Time	Z	Asymp. Sig. (2-tailed)	Information
1.	Week 1	-1.479b	.139	Rejected
2.	Week 2	-.356b	.722	Rejected
3.	Week 3	-.634b	.526	Rejected
4.	Week 4	-1.785b	.074	Rejected
5.	Week 5	-.771b	.441	Rejected
6.	Week 6	-.339b	.735	Rejected
7.	Week 7	-.356b	.722	Rejected
8.	Week 8	-2.136b	.033	Accepted
9.	Week 9	-2.117b	.034	Accepted
10.	Week 10	-.535b	.592	Rejected
11.	Week 11	-2.252b	.024	Accepted
12.	Week 12	-1.266b	.205	Rejected
13.	Week 13	-.847b	.397	Rejected
14.	Week 14	-.507b	.612	Rejected
15.	Week 15	-1.844b	.065	Rejected
16.	Week 16	-2.100b	.036	
17.	Week 17	-1.122b	.262	Rejected
18	Week 18	-2.549b	.011	Accepted
19.	Week 19	-.421b	.674	Rejected
20	Week 20	-2.032b	.042	Accepted
21.	Week 21	-1.249b	.212	Rejected
22.	Week 22	-1.779b	.075	Rejected
23.	Week 23	-2.134b	.033	Accepted
24.	Week 24	-2.666b	008	Accepted
25.	Week 25	-2.677b	.007	Accepted
26.	Week 26	-2.310b	.021	Accepted
27.	Week 27	-1.541b	.123	Rejected

In the table above, which has a significance value <0.05 only amounted to 10 weeks from a total of 27 weeks, on the 8.11, 16, 18, 20, 23, 24, 25, and 26 weeks. Signification> 0.05. Because the average test results of the weekly difference have a value of> 0.05, it can be concluded that H3 is rejected. The test results prove that the value of stock returns did not experience significant differences in the pharmaceutical sub-sector before and after the PSBB announcement was first in Indonesia. The results of the research are in line with research (Darmayanti et al., 2021) that there is no difference in stock returns before and after the announcement of the first Covid-19 case in Indonesia.

Factors that make no difference, because pharmaceutical companies only need a few aspects, including vitamins, masks and Personal Protective Equipment (PPE). There were no pharmaceutical companies listed on the Indonesian Stock Exchange that had vaccine products for Covid-19 when this research was carried out. Increased sales of vitamins, medicines and health equipment will affect the cash component due to sales. However, on the other hand, the pharmaceutical sector also experienced a decline in sales of non-Covid-19 drugs (Azizah & Rusdianto, 2023). Apart from that, patients with degenerative or other diseases who are undergoing outpatient treatment are also limited in getting treatment or control, so that demand for other types of medicine has decreased (Susesti & Wahyuningtyas, 2021).

State-owned pharmaceutical holding PT Bio Farma (Persero) Honesti denies that the pharmaceutical industry during the Covid-19 pandemic could grow positively, because the pharmaceutical industry had to bear the burden of purchasing raw materials whose prices increased

3-5 times (Fitra, 2020). Apart from that, the share of liabilities also increased during the Covid-19 pandemic, for example on December 31 2020, SIDO's total liabilities jumped to IDR 627.78 billion from the amount on December 31 2019 which was IDR 464.85 billion. This 35 percent increase in liabilities was caused by growth in business debts of 39 percent (year-on-year) to IDR 203.69 billion (ipotnews, 2021). KLBF's total liabilities or debt increased by 20.5% year-on-year to IDR 4.29 trillion in 2020, compared to the previous year's amount of IDR 3.56 trillion (Ihsan, 2021).

Test of Differences in Stock Trading Volume in the Pharmaceutical sub-sector (Wilcoxon Sign Rank Test)

Table 9. Different Tests of Stock Trading Volume in the Pharmaceutical sub-sector

No	Time	Z	Asymp. Sig. (2-tailed)	Information
1.	Week 1	-2.192[b]	.028	Accepted
2.	Week 2	-2.666[c]	.008	Accepted
3.	Week 3	-1.718[b]	.086	Rejected
4.	Week 4	-1.007[b]	.314	Rejected
5.	Week 5	-.296[b]	.767	Rejected
6.	Week 6	-.652[b]	.515	Rejected
7.	Week 7	-.296[b]	.767	Rejected
8.	Week 8	-1.362[b]	.173	Rejected
9.	Week 9	-1.836[b]	.066	Rejected
10.	Week 10	-2.666[b]	.008	Accepted
11.	Week 11	-1.362[b]	.173	Rejected
12.	Week 12	-.533[b]	.594	Rejected
13.	Week 13	-1.125[b]	.260	Rejected
14.	Week 14	-1.836[c]	.066	Rejected
15.	Week 15	-1.836[c]	.051	Rejected
16.	Week 16	-2.666[b]	.008	Accepted
17.	Week 17	-1.362[c]	.173	Rejected
18	Week 18	-2.666[b]	.008	Accepted
19.	Week 19	-2.666[b]	.008	Accepted
20	Week 20	-.178[c]	.859	Rejected
21.	Week 21	-2.666[c]	.008	Accepted
22.	Week 22	-1.718[b]	.086	Rejected
23.	Week 23	-.770[c]	.441	Rejected
24.	Week 24	-.296[c]	.767	Rejected
25.	Week 25	-.178[b]	.859	Rejected
26.	Week 26	-1.481[b]	.139	Rejected
27.	Week 27	-2.073[b]	.038	Accepted

From the table above, only 8 weeks out of a total of 27 weeks have a significance value of <0.05, namely weeks 1, 2, 10, 16, 18, 19, 21, and 27. The other 21 weeks have a significance value greater than 0.05, then it can be concluded that H4 is rejected. From the results of this test, it means that there is no significant difference in stock trading volume in the pharmaceutical sub-sector before and after the first PSBB announcement in Indonesia. The results of this research are in line with research conducted (Yohani et al., 2022) that there is no difference in the volume of stock transactions before and after the PPKM announcement.

The factor that makes there no significant difference in the trading volume of shares in the pharmaceutical sub-sector is because the availability of active pharmaceutical raw materials is scarce because the largest producers of pharmaceutical raw materials come from China and India. With the outbreak originating from China, China became the first country to implement a lockdown so that other countries that cooperated in importing experienced a decrease in production due to a shortage of raw materials (Strong et al., 2020). The second factor is the waiting time for product

delivery (distribution). The second factor is because investors are monitoring this situation wisely so that when the PSBB is announced investors are not in a rush to make buying or selling decisions. Apart from that, an investor who uses the "wait and see" strategy excessively will tend to only pay attention and analyze stock price movements without carrying out buying or selling transactions. They wait for the right moment to sell their shares again after finding the appropriate momentum (Respati & Fitanto, 2022).

Conclusion

Based on the results of research on event study analysis of PSBB announcements in Indonesia on stock returns and stock trading volume in companies in the tourism, hotel and restaurant sub-sector - pharmaceutical sub-sector listed on the IDX, for 6 months after and after PSBB as follows:

1. There is no significant difference in stock returns before and after the announcement of the PSBB in Indonesia 31 March 2020 in tourism, hotel and restaurant companies listed on the Indonesia Stock Exchange.
2. There is no significant difference in share trading volume before and after the announcement of the PSBB in Indonesia 31 March 2020 in tourism, hotel and restaurant companies listed on the Indonesia Stock Exchange.
3. There is no significant difference in stock returns before and after the PSBB announcement in Indonesia 31 March 2020 for pharmaceutical companies listed on the Indonesian Stock Exchange.
4. There is no significant difference in share trading volume before and after the announcement of the PSBB in Indonesia on March 31 2020 for pharmaceutical companies listed on the Indonesian Stock Exchange.

Suggestion

The future researchers will be able to add other variables related to shares. Increase the number of research periods by conducting research on various other company sectors so you can analyze more deeply. For information users, the results of different tests, the results of the analysis in this research, can be used as a point of view when investing capital in a company when an event occurs. Based on the results of this research, it can also be used as additional literature and as reference material for further research.

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