

### The Indonesian Capital Market's Reaction to the Decision Regarding the Announcement of the Large-Scale Social Restrictions

Nida Fitria<sup>1\*</sup>, Cacik Rut Damayanti<sup>2</sup>  
Fakultas Ilmu Administrasi Universitas Brawijaya<sup>1,2</sup>  
nidafitria06@student.ub.ac.id<sup>1</sup>, cacik@ub.ac.id<sup>2</sup>

#### ABSTRACT

*The announcement of the first PSBB decision is a non-economic event that can affect stock price movements. Signaling theory is the basis of this research. The latest information signals that the regional quarantine announcement can affect the stock price index movement in the capital market. Abnormal returns and trading volume activity are indicators that measure the reaction rate of a stock in the capital market. This study aims to determine whether there is an average abnormal return and trading volume activity before and after the announcement of the PSBB decision. This research is an event study that studies the market reaction with a quantitative approach. The population and sample in this study are company stocks listed on the LQ45 index for February - July 2020 using the Purposive Sampling technique. The research period is five days before and after the event (a total of ten days). The hypothesis test used is the Wilcoxon Signed Rank Test. The result was differences in abnormal returns before and after the event. The Wilcoxon signed rank test results on the trading volume activity variable did not find any significant difference in trading volume before and after the announcement regarding the initial PSBB decision.*

**Keywords:** *PSBB; Event Study; Abnormal Return; Trading Volume Activity*

#### ABSTRAK

Pengumuman keputusan pertama PSBB merupakan peristiwa non-ekonomi yang dapat memengaruhi pergerakan harga saham. Signalling theory menjadi dasar penelitian ini karena sinyal yang timbul dari informasi terbaru ialah peristiwa pengumuman karantina wilayah dapat memengaruhi pergerakan indeks harga saham di pasar modal. Abnormal return dan trading volume activity merupakan indikator pengukur tingkat reaksi suatu saham di pasar modal. Penelitian ini bertujuan untuk mengetahui apakah terdapat rata-rata abnormal return dan trading volume activity sebelum dan sesudah peristiwa pengumuman mengenai keputusan awal PSBB. Penelitian ini bersifat event study, yaitu mempelajari tentang reaksi pasar terhadap suatu peristiwa dengan pendekatan kuantitatif. Populasi dan sampel dalam penelitian ini adalah saham perusahaan yang terdaftar dalam indeks LQ45 periode Februari – Juli 2020 dengan menggunakan teknik penarikan sampel Purposive Sampling. Periode penelitian selama 10 hari bursa (5 hari sebelum dan 5 hari sesudah peristiwa). Uji hipotesis yang digunakan adalah uji Wilcoxon Signed Rank Test. Berdasarkan hasil uji yang dilakukan, ditemukan adanya perbedaan abnormal return pada periode sebelum dan sesudah peristiwa. Hasil uji wilcoxon signed rank test pada variabel trading volume activity tidak menemukan adanya perbedaan signifikan volume perdagangan sebelum dan sesudah peristiwa pengumuman mengenai keputusan awal PSBB.

**Kata Kunci:** *PSBB; Event Study; Abnormal Return; Trading Volume Activity*

\* *Corresponding author : E-mail : nidafitria06@student.ub.ac.id*

## 1. INTRODUCTION

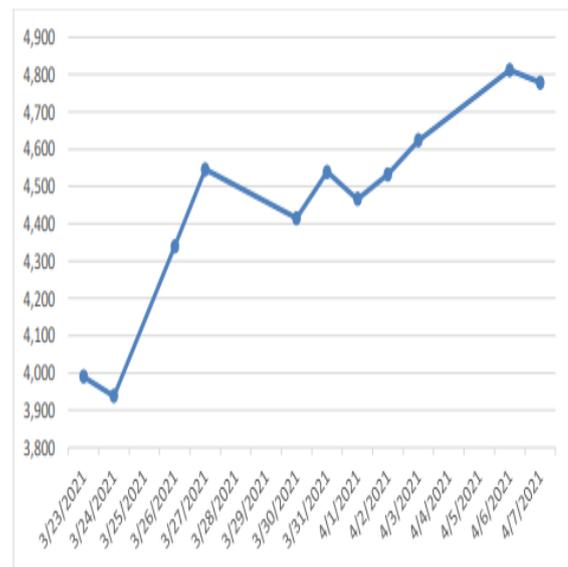
Investment is a commitment to a set of funds or other resources currently being used to reap some benefits in the future (Tandelilin, 2010). Direct and indirect investment are the two types of investment. The capital market serves as a link between investors and issuers during the investment process. The capital market provides investment objects such as debt securities, equities or shares, mutual funds, derivative instruments, and other instruments. The capital market serves as a source of funding for the business world and a means of investment for the community.

Every investment process involves risk because investors must forecast how much cash flow they will receive when investing. Return and risk have a positive relationship; the greater the risk, the greater the return (Plastun et al., 2021). As an economic instrument, the capital market cannot be separated from various risks and environmental influences, namely the economic and non-economic environment. Economic influences include announcements of dividends, profits, mergers, and acquisitions by internal and external companies (Chen et al., 2022). Non-economic influences include political, legal, social, natural disasters, and other events.

Economic and non-economic events significantly impact the capital market and the country's economic conditions. Natural and artificial disasters can both have an impact on the capital market. Disease outbreaks that spread globally and worried several countries were among the non-natural disaster events that occurred at the end of 2019. The threat of an outbreak of a new disease known as the Corona Virus emerged in early 2020 from Hubei Province, Wuhan City, China, in December 2019. This virus spreads rapidly between humans. On March 2, 2020, President Joko Widodo announced that two Indonesian citizens had contracted the coronavirus. Following this incident, the number of Indonesians infected with the coronavirus increased. The Indonesian government has implemented Large-Scale Social Restrictions (PSBB) to reduce the spread of the virus. This activity is accomplished by restricting activities such as closing schools and workplaces, restricting religious activities, and restricting activities in public places.

The PSBB caused economic turmoil in the community, such as a decrease in market

demand, which resulted in economic pressure. Additionally, many employees were laid off due to a lack of cash flow to pay employees. The IDX Composite's movement slowed until President Joko Widodo decided to launch the PSBB. The IDX Composite fell 1.61% or 72.89 points the next day, closing at 4,466.04. The following graphic image depicts the movement of the IDX Composite during the event period in greater detail:



**Figure 1. IDX Composite (IHSG)**

Source: IDX, 2022

Figure 1 shows that prior to the announcement of the start of the PSBB, which is March 31, 2020, the IDX Composite fluctuated; it appeared to experience a sharp decline 5 days before the announcement of the start of the PSBB, then closed higher on the day of President Joko Widodo's announcement of the start of the PSBB. However, the IDX Composite was observed to weaken at the end of the trading session one day after the announcement regarding the start of the PSBB, dropping 72.89 points from 4,538.93 to 4,466.04 at the end of the trading session on Wednesday (April 01, 2020), then two days after the announcement regarding the PSBB. The IDX Composite was observed to have increased at the start of the PSBB (April 02, 2020). The increase continued 5 days after the announcement to the highest point, 4,811.83, but experienced a slight decline on Tuesday, April 07, 2020, at 4,778.64. During the same period, 45 leading stock groups, or the LQ45 index, experienced similar events to the IDX Composite. The closing price movement of

the LQ45 Index during the event period is as follows:



**Figure 1. LQ45 Index**  
Source: IDX, 2022

The condition of the IDX Composite and LQ45 Index decreased quite dramatically before the announcement of the PSBB. However, it also decreased after the announcement of the PSBB, though less dramatically than before the announcement of the PSBB. The economic situation in other countries, such as Vietnam and India, also experienced a decline due to the implementation of the lockdown. Anh and Gan who researched the stock market in Vietnam (Anh & Gan, 2020) and Alam *et al.*, who researched the stock market in India (Alam *et al.*, 2020), found that during the pre-lockdown period, the stock market performance in Vietnam and India showed negative results because stock prices experienced a decline and investors panicked about the lockdown information. However, after the lockdown period, stock market performance in Vietnam and India showed positive results as investors adjusted the lockdown information and revived the stock market.

Seeing the conditions in the capital market reaction, which fluctuated in each country following the implementation of the regional quarantine, piqued the interest of researchers, particularly in Indonesia. The effect of non-natural disaster events on the capital market is studied using an event study approach. This study estimates whether or not the information content of non-natural disaster events is sufficient to affect the capital market by measuring changes in stock prices and stock

trading volume activities on the Indonesia Stock Exchange at the time of the event.

## 2. LITERATURE REVIEW

Plastun *et al.*, (2021) stated that information-containing events would provide investors with positive or negative signs (signals) in making investment decisions. Market participants will analyse the announced information as a good or bad signal. Market participants will analyse information announced as a good or bad signal. According to (Brigham, E.F and Houston, 2010), Signaling theory is an action taken by the management of a company that gives instructions to investors about how to view the company's prospects. Signalling theory is the basis of this research, where every signal that arises from the latest information, in this case, information on regional quarantine announcement events, can affect the movement of the stock price index in the capital market (Spence, 1978). The concept of regional quarantine used by the Indonesian Government is called Large-Scale Social Restrictions or abbreviated as PSBB. The implementation of the PSBB is helpful in breaking or minimising the chain of transmission of Covid-19 by stopping all economic activity during the time determined by the Government. The cessation of economic activity has a significant impact on the company, which is reflected in changes in stock prices (Ramelli & Wagner, 2020). This condition illustrates the uncertainty and financial instability of the company that will occur so that it can affect returns on the capital market, including on the Indonesia Stock Exchange (IDX). Changes in stock prices can be measured using abnormal returns and Trading Volume Activities (TVA) (Anh & Gan, 2020; Kiryanto *et al.*, 2022; Mujib & Candraningrat, 2021). Abnormal return is the excess of the actual return over the expected return. TVA compares the number of shares traded with those outstanding in a given period (Plastun *et al.*, 2021).

Previous studies have been conducted on the impact of company information or special events that lead to abnormal returns. Anh & Gan (2020) stated that there was a significant negative impact on stock returns in Vietnam prior to the lockdown but a significant positive impact on stock performance in all markets and various business sectors in Vietnam during the lockdown. The panel data regression model with D\_BFLOCK and D\_LOCK was used as the

analytical technique. A different finding has been identified in India, there was no effect during the lockdown period in all markets listed on the Bombay Stock Exchange (BSE), but there was a significant effect in the pre-lockdown period, namely the negative abnormal average because investors panicked due to the lockdown issue (Alam *et al.*, 2020). The sample was 31 companies listed on BSE, with a sample period taken was 35 days (24 February-17 April 2020). An event window of 35 days was taken with 20 days before and 15 days during the event. This study also found a positive abnormal return around the present lockdown period and confirms that the lockdown positively impacted the stock market performance of stocks until the situation improved in the Indian context.

In the Indonesian context, Rori *et al.*, (2021) found no insignificant differences in abnormal TVA and stated that the capital market reacted to the PSBB Announcement due to Covid-19. Meanwhile, Purnayasa & Sisdyani (2021) stated in their research that there was no average trading volume activity before and after the approval of the implementation of the PSBB for the first time in Indonesia. The absence of market reaction is assumed because Indonesia's level of market efficiency is still weak.

The different events that have been identified impacted the stock market's actors. The Indonesian companies reacted positively on the first day after ISO 9001 certificate announcement, which led to average and cumulative abnormal returns (Kiryanto *et al.*, 2022). Using an event study and selecting 13 days (6 days before and after the announcement), and analyzing using a pair t-test sample and one sample t-test, this study found that the investors react positively to the companies who have succeeded in implementing ISO 9001.

Based on the problems, theory and previous studies, the following hypothesis was formed:

H1: There is a significant difference in market reaction as measured by Abnormal Return in the period before and after the decision regarding the start of the PSBB

H2: There is a significant difference in market reaction as measured by Trading Volume Activity in the period before and after the decision regarding the start of the PSBB

### 3. RESEARCH METHOD

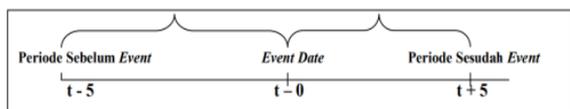
This study is an event study with a quantitative approach by observing non-natural disasters that necessitate a national-scale

regional quarantine or the term, namely PSBB, which occurred on March 31, 2020, in Indonesia. This research aims to determine the initial impact of PSBB on the Indonesian capital market, as determined by the PSBB's presence or absence. Abnormal return is the value of changes in stock prices and trading volume activity, which reflects stock trading activity in the capital market and investor decisions. The Indonesia Stock Exchange (IDX) data source can be accessed directly via the official website, [www.idx.co.id](http://www.idx.co.id). Moreover, the Yahoo Finance website at [www.finance.yahoo.com](http://www.finance.yahoo.com). The sample is members of the LQ45 index from February to July 2020 and does not take corporate actions such as distributing dividends, stock splits, or conducting mergers when events occur. This study's research variables and measurements are abnormal return (AR) and trading volume activity (TVA).

The following are the stages in analyzing the data used in this study:

1. Identifying the shape
2. Determining the time span of the event study.
3. Determining the return adjustment method used to calculate abnormal returns.
4. Calculating the actual return or the actual return around the event period.
5. Calculating the expected return or expected return around the event period.
6. Calculating abnormal returns around the event period.
7. Calculating the average abnormal return of each stock in the period before and after the event.
8. Calculating the average abnormal return for all stocks per day in the event period.
9. Calculating the trading volume activity of each stock during the specified research time.
10. Calculating the average trading volume activity before and after the event.
11. Calculating the average trading volume activity of all stocks per day during the study period.

The event period was 11 trading days, 5 days before the PSBB policy announcement on March 31, 2020 (pre-event window), and 5 days after the PSBB policy announcement on March 31, 2020 (post-event window). The research period has also been adjusted to correspond with the stock trading schedule outlined in the 2020 stock exchange calendar.



**Figure 2. Event Period**

After the data had been put in the statistical analysis, the descriptive statistical analysis was performed to determine the minimum, maximum, average level (mean), standard deviation of the average abnormal return, and average trading volume activity. The normality test and the hypothesis test using IBM SPSS have been conducted. The hypothesis test used in this study is a different test of the average abnormal return and a different test of the average trading volume activity.

We measure the investor's reaction to the PSBB announcement, Abnormal Return (AR) and Trading Volume Activity (TVA). AR is the difference between actual and expected returns (Prasad *et al.*, 2021). The realized return, also known as the return, is the difference between the current and previous prices at time  $t$ . At the same time, TVA is an instrument used to assess the capital market's reaction to an event containing news or information by using a benchmark of stock trading volume activity in the capital market (Ülkü & Onishchenko, 2019). The calculation result of trading volume activity (TVA) reflects the comparison of the number of shares traded with the number of shares outstanding in a given period.

## 4. RESULT

### a. Statistical Descriptive Analysis

During the study period, descriptive statistical analysis was performed to determine the minimum, maximum, average level (mean), and standard deviation of AR and TVA variables. Descriptive analysis is performed by calculating the abnormal return value of each company in the sample one by one. Calculating abnormal returns begins with calculating the actual return. After calculating the actual and expected returns, the abnormal return is calculated, which is the difference between the actual and expected returns. The abnormal return calculation is used first to obtain the average abnormal return (AAR) calculation in the form of an event study.

**Table 1**  
**AAR of Each Stock**

No.	Stock code	Average Abnormal Return	
		Before	After
1	ACES	0.0164	-0.0068
2	ADRO	0.0290	0.0178
3	AKRA	0.0237	0.0069
4	ANTM	0.0154	0.0337
5	ASII	-0.0125	-0.0026
6	BBCA	0.0156	-0.0061
7	BBNI	-0.0088	0.0141
8	BBRI	0.0023	-0.0100
9	BMRI	-0.0065	0.0077
10	BRPT	0.0154	0.0553
11	BSDE	-0.0071	0.0414
12	BTPS	-0.0276	0.0532
13	CPIN	0.0038	-0.0132
14	CTRA	-0.0576	0.0580
15	ERAA	-0.0498	0.0458
16	EXCL	0.0128	0.0170
17	GGRM	-0.0070	0.0223
18	HMSP	-0.0093	0.0270
19	ICBP	-0.0002	-0.0139
20	INCO	0.0464	0.0045
21	INDF	0.0084	-0.0049
22	INKP	0.0107	0.0450
23	INTP	0.0097	-0.0116
24	ITMG	0.0006	-0.0069
25	JPFA	0.0098	-0.0044
26	JSMR	-0.0366	0.0385
27	KLBF	-0.0025	-0.0048
28	LPPF	-0.0558	0.0056
29	MNCN	-0.0180	0.0182
30	PGAS	-0.0038	0.0245
31	PTBA	-0.0037	-0.0179
32	PTPP	-0.0180	0.0605
33	PWON	-0.0083	0.0477
34	SCMA	-0.0258	0.0082
35	SMGR	-0.0018	0.0015
36	TBIG	-0.0168	-0.0062
37	TKIM	-0.0304	0.0491
38	TLKM	0.0023	-0.0069
39	TOWR	-0.0140	0.0026
40	UNTR	-0.0216	-0.0026
41	UNVR	-0.0070	-0.0102
42	WIKA	-0.0166	0.0710
43	WSKT	-0.0026	0.0581
<b>Average before and after</b>		-0.0058	0.0164

The calculation results, as shown in Table 1, show the number of positive AAR obtained by the company in the period following the event, compared to the period before the announcement of the start of the PSBB policy. In the period preceding the event, only 16 companies received

an average positive AR, while 27 received an average negative AR.

The AAR following the event demonstrates that the results are inversely proportional to the period preceding the event. The number of positive AAR following the event indicates the average. It was discovered that 27 companies obtained an average positive abnormal return following the event, while 16 companies obtained a negative abnormal return. The table below shows the results of the descriptive analysis for the AR variable:

**Table 2**  
**Descriptive Statistical Analysis Results**

Period	AAR Before	AAR After
<b>N</b>	43	43
<b>Minimum</b>	-0.0576	-0.0179
<b>Maximum</b>	0.0464	0.0710
<b>Mean</b>	-0.005753	-0.016423
<b>Std. Deviation</b>	0.0211448	0.0255382

Furthermore, TVA compares the number of shares traded and those outstanding in a given period. To begin a descriptive analysis, first compute TVA during the event period. After calculating TVA, the average TVA of all sample company shares during the research period, before and after the announcement of PSBB policy, can be calculated.

**Table 3**  
**Average TVA**

No.	Stock code	Average Abnormal Return	
		Before	After
1	ACES	0.0014	0.5007
2	ADRO	0.0026	1.0013
3	AKRA	0.0129	1.5065
4	ANTM	0.0073	2.0037
5	ASII	0.0025	2.5012
6	BBCA	0.0101	3.0051
7	BBNI	0.0058	3.5029
8	BBRI	0.0033	4.0016
9	BMRI	0.0024	4.5012
10	BRPT	0.0010	5.0005
11	BSDE	0.0017	5.5008
12	BTPS	0.0026	6.0013
13	CPIN	0.0007	6.5003
14	CTRA	0.0059	7.0030
15	ERAA	0.0506	7.5253
16	EXCL	0.0030	8.0015
17	GGRM	0.0009	8.5004
18	HMSB	0.0005	9.0003
19	ICBP	0.0007	9.5004
20	INCO	0.0014	10.0007

No.	Stock code	Average Abnormal Return	
		Before	After
21	INDF	0.0019	10.5010
22	INKP	0.0014	11.0007
23	INTP	0.0012	11.5006
24	ITMG	0.0029	12.0014
25	JPFA	0.0015	12.5008
26	JSMR	0.0017	13.0009
27	KLBF	0.0020	13.5010
28	LPPF	0.0055	14.0028
29	MNCN	0.0030	14.5015
30	PGAS	0.0074	15.0037
31	PTBA	0.0044	15.5022
32	PTPP	0.0119	16.0060
33	PWON	0.0009	16.5004
34	SCMA	0.0068	17.0034
35	SMGR	0.0016	17.5008
36	TBIG	0.0045	18.0022
37	TKIM	0.0015	18.5008
38	TLKM	0.0019	19.0009
39	TOWR	0.0022	19.5011
40	UNTR	0.0017	20.0009
41	UNVR	0.0006	20.5003
42	WIKA	0.0085	21.0042
43	WSKT	0.0056	21.5028
<b>Average before and after</b>		0.0046	0.0052

Based on the calculations in Table 3, the movement of the average value of TVA for all companies is positive both before and after the announcement. However, when comparing the average TVA before and after the event, the average TVA increased from 0.0046 before to 0.0052 after the event. The descriptive analysis for the TVA is illustrated below.

**Table 4**  
**Descriptive Statistical Analysis Results**

Period	AAR Before	AAR After
<b>N</b>	43	43
<b>Minimum</b>	0.0005	0.0003
<b>Maximum</b>	0.0506	0.0558
<b>Mean</b>	0.004602	0.005149
<b>Std. Deviation</b>	0.0078102	0.0096138

The AAR and average trading volume activity (ATVA) were tested before and after the announcement of the start of the PSBB policy. The table below shows the results of testing the normality of AAR and ATVA data before and after the announcement of the PSBB policy:

**Table 5**  
*Normality Test Results AAR and TVA*

Variable	Period	N	Asymptotic Sig.	Notes
Abnormal Return	Before	43	0.200	Normal
	After	43	0.007	Abnormal
Trading Volume Activity	Before	43	0.000	Abnormal
	After	43	0.000	Abnormal

**b. Hypothesis testing Result**

The AAR difference test is used to test the H1 hypothesis, specifically whether there is a significant difference in the AAR of the stock before and after the announcement of the initial decision on the PSBB policy. The non-parametric Wilcoxon Signed Rank Test with a significance level of 5% was used to test the average abnormal return test (0.05). The following are the results of the various tests of the average abnormal return using the Wilcoxon Signed Rank Test at a significance level of 5% (0.05):

**Table 6**  
*Wilcoxon Signed Rank Test Results AAR Before and After Events*

Hypothesis	Period	Ztest	Asymptotic Sig.	Notes
H1	ARR Before-After	-3.079	0.002	There is a Significant Difference

Based on the Wilcoxon Signed Rank Test results from the average abnormal return data in Table 6, it is known that for the period before and after the announcement of the PSBB policy, the Asymptotic sig value is 0.002, indicating that the significance value is less than the significance level has been set at 5% or higher (0.05).

The ATVA difference test was used to test the H2 hypothesis, specifically whether there was a significant difference in stocks' average trading volume activity before and after the announcement of the initial decision on the PSBB policy. The non-parametric Wilcoxon Signed Rank Test with a significance level of 5% was used to test the average trading volume activity test (0.05). The following are the results of the various tests of the average abnormal return using the Wilcoxon Signed Rank Test at a significance level of 5% (0.05):

**Table 7**  
*Wilcoxon Signed Rank Test Results ATVA Before and After the Event*

Hypothesis	Period	Ztest	Asymptotic Sig.	Notes
H2	Average Trading Volume Before-After	-0.570	0.568	There is no significant difference

According to Table 5, the Wilcoxon Signed Rank Test results from ATVA data, the Asymptotic sig value shows a value of 0.568 for the period before and after the announcement event regarding the beginning of the PSBB policy, indicating that the significance value is greater than the significance level, which has been set at 5% or 0.05.

**c. Discussion of Research Results**

The results of testing the H1 hypothesis for the difference in the AAR before and after the announcement event regarding the start of the PSBB policy show a significant difference in the average abnormal return before and after the event. The average negative AR that occurred before the event (t3, t-4, and t-5) and the D day of the announcement of the start of the PSBB policy indicated that the information received by investors was terrible news. The AAR is positive up to period t+5, although it was negative after period t+1 in period t+2, this does not cause the AAR to decrease in the following period. The period t+3 to t+5 is again positive, indicating that stock prices on the stock exchange floor have increased and market participants have felt favourable due to the regional quarantine. The mean value of the AAR prior to the announcement of the start of the PSBB policy is lower than the mean value of the AAR after the announcement of the PSBB policy.

The results of hypothesis testing H2, the different tests of ATVA before and after the announcement event regarding the start of the PSBB policy, show no difference in ATVA before and after the announcement event regarding the start of the PSBB policy. The Asymptotic Sig value of 0.568 > 0.05 or (5%), more remarkable than the specified significance value, indicates a significant difference between the period before and after the event. The announcement of the start of the PSBB policy did not affect stock trading activities. Even

though the numbers fluctuated quite a bit, the movement of trading volume activity before and after the announcement of the start of the PSBB policy remained relatively stable or positive.

## 5. DISCUSSION

The difference in the AAR that occurred prior to and following the announcement of the start of the PSBB policy demonstrates that the information content of the announcement about the start of the PSBB policy is a market reaction that is useful for investors in making investment decisions and can influence market participants in making decisions. Transactions reflected in stock price changes may result in AR changes. The findings of this study support the Signalling theory, which describes that information provided by companies determines the decision-making by the investors (Spence, 1978). In this case, information on regional quarantine announcement events can affect the stock price index movement in the capital market. This study is also consistent with the findings of Febriyanti (2020) who found significant differences in AR related to the impact of the COVID-19 pandemic on stock prices. This research is also in line with the previous studies from Ahn *et al.*, (2020) Kiryanto *et al.* (2022), Alam *et al.*, (2020). However, it is inversely proportional to the research of Hadiprajitno & Hersugondo (2021), Purnayasa & Sisdyani (2021), and Rori *et al.*, (2021) who conducted research on the reaction of the Indonesian capital market to the announcement of the DKI Jakarta PSBB and found that there was no average abnormal return before and after the announcement of the DKI Jakarta PSBB.

The announcement regarding the start of the PSBB policy did not increase stock trading volume activity. This result means that the announcement regarding the start of the PSBB policy needs to contain sufficiently influential information. The absence of a significant difference in ATVA before and after the event indicates that trading activity on the trading floor does not increase or decrease. This study is also consistent with the findings of Purnayasa & Sisdyani, (2021) and Rori *et al.*, (2021) who conducted research on the reaction of the Indonesian capital market to the DKI Jakarta PSBB announcement and found that there was no average trading volume activity before and after the DKI Jakarta PSBB announcement. They assume that no market

reaction is assumed because Indonesia's level of market efficiency is still weak.

Investors interpret this condition as an uncertainty that encourages a cautious approach to their investment due to the uncertainty of a market condition. The announcement of the PSBB policy can be interpreted as bad news for the market. Information about capital market conditions is something that capital market participants (investors) are constantly looking for in order to make later investment decisions. Indonesia's capital market investors are more cautious and critical when dealing with non-economic events such as the regional quarantine. Empirical evidence from research findings, supported by previous research findings, indicates that regional quarantine events can have information content for capital market participants. With this research, market participants can pay more attention to these events and be more cautious when making decisions to transact in the capital market.

## 6. CONCLUSION AND RECOMMENDATION

### Conclusions

The Wilcoxon Signed Rank Test found a significant difference in the average abnormal return of stocks before and after the announcement of the start of the PSBB policy when testing the H1 hypothesis. The AAR before the event was negative, whereas the AAR after the event was positive, indicating a difference in the AAR before and after the announcement of the start of the PSBB policy. The Wilcoxon Signed Rank Test revealed no significant difference in ATVA before and after the event when testing the H2 hypothesis. The ATVA obtained before and after the event shows a relatively small difference; the ATVA after the event has increased, but only by 6 points from the period before and is very positive, indicating that the test results show no difference.

### Recommendations

1. In estimating stock prices and making investment decisions, capital market participants (investors) should pay attention to external situations, such as events that occur in the non-economic environment, in addition to using investment analysis models based on scientific theories such as technical and fundamental analysis, so that any

- information obtained can be used in considering the actions to be taken later.
2. Future research is expected to be able to use other calculation methods, such as the Mean Adjusted Model and Market Model, or to use all three models simultaneously and then compare the results of the calculations of the three models to determine the impact on the research results. Further research could be conducted using other index stocks or sector stocks.
  3. Furthermore, the length of the research period must be considered, and it is necessary first to determine whether any other events could have affected market conditions during that period. If this is the case, the day of the event should be excluded from the study.

## REFERENCES

- Agus, I. W. (2021). Reaksi Pasar terhadap Penerapan Pembatasan Sosial Berskala Besar pada Masa Pandemi Covid-19. *Jurnal Akuntansi Universitas Udayana, Vol.31 No.* <https://doi.org/10.24843/EJA.2021.v31.i12.p08>
- Ahn, J. S., Assaf, A. G., Josiassen, A., Baker, M. A., Lee, S., Kock, F., & Tsionas, M. G. (2020). Narcissistic CEOs and corporate social responsibility: Does the role of an outside board of directors matter? *International Journal of Hospitality Management, 85*. <https://doi.org/10.1016/J.IJHM.2019.102350>
- Alam, M. N., Alam, M. S., & Chavali, K. (2020). Stock market response during COVID-19 lockdown period in India: An event study. *Journal of Asian Finance, Economics and Business, 7(7), 131–137*. <https://doi.org/10.13106/jafeb.2020.vol7.no7.131>
- Anh, D. L. T., & Gan, C. (2020). The impact of the COVID-19 lockdown on stock market performance: evidence from Vietnam. *Journal of Economic Studies, 48(4), 836–851*. <https://doi.org/10.1108/JES-06-2020-0312>
- Brigham, E.F and Houston, J. (2010). *Essentials of Financial Management* (Second Edi). Cengage Learning Asia Pte Ltd.
- Chen, L., Huang, J., Hu, D., & Chen, X. (2022). Dividend regulation and cost stickiness: evidence from a quasi-natural experiment. *China Accounting and Finance Review, 24(4)*. <https://doi.org/10.1108/CAFR-08-2022-0092>
- Febriyanti, G. A. (2020). Dampak pandemi Covid-19 terhadap harga saham dan aktivitas volume perdagangan (Studi kasus saham LQ-45 di Bursa Efek Indonesia). *Indonesia Accounting Journal, 2(2), 204*. <https://doi.org/10.32400/iaj.30579>
- Hadiprajitno, J. A., & Hersugondo, H. (2021). Reaksi Pasar Modal Indonesia Terhadap Peristiwa Pengumuman PSBB DKI Jakarta. *E-Bisnis: Jurnal Ilmiah Ekonomi Dan Bisnis, 14(2), 145–153*.
- Irawan, W., James Andrew Hadiprajitno, & H Hersugondo. (2021). Reaksi Pasar Modal Indonesia Terhadap Peristiwa Pengumuman PSBB DKI Jakarta. *E-Bisnis: Jurnal Ilmiah Ekonomi Dan Bisnis, 14(2), 145–153*. <https://doi.org/10.51903/e-bisnis.v14i2.399>
- Kiryanto, K., Kartika, I., & Zaenudin, Z. (2022). Stock price reaction on ISO 9001 certification announcement: evidence from Indonesia. *International Journal of Quality and Reliability Management, 39(2), 612–629*. <https://doi.org/10.1108/IJQRM-04-2020-0127/FULL/XML>
- Mujib, B., & Candraningrat, I. R. (2021). Capital market reaction to Covid-19 pandemic on LQ45 shares at Indonesia stock exchange (IDX). *American Journal of Humanities and Social Sciences Research, 5(3), 74–80*.
- Plastun, A., Sibande, X., Gupta, R., & Wohar, M. E. (2021). Evolution of price effects after one-day abnormal returns in the US stock market. *The North American Journal of Economics and Finance, 57, 101405*. <https://doi.org/10.1016/J.NAJEF.2021.101405>
- Prasad, M., Bakry, W., & Varua, M. E. (2021). Abnormal volatility in seasoned equity offerings during economic disruptions. *Journal of Behavioral and Experimental Finance, 30, 100509*.
- Purnayasa, I. W. A., & Sisdyani, E. A. (2021). Reaksi Pasar terhadap Penerapan Pembatasan Sosial Berskala Besar pada Masa Pandemi Covid-19. *E-Jurnal Akuntansi, 31(12), 3133–3147*.
- Ramelli, S., & Wagner, A. F. (2020). Feverish Stock Price Reactions to the Novel Coronavirus. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.3550274>

- Rori, A, Mangantar, M., & Maramis, J. B. (2021). Reaksi Pasar Modal Terhadap Pengumuman Pembatasan Sosial Berskala Besar (Psb) Akibat Covid-19 Pada Industri Telekomunikasi Di Bei. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(1), 851–858. <https://doi.org/10.35794/emba.v9i1.32620>
- Rori, Alriani, Mangantar, M., & Maramis, J. B. (2021). Reaksi Pasar Modal terhadap Pengumuman Pembatasan Sosial Berskala Besar (PSBB) Akibat Covid-19 pada Industri Telekomunikasi di BEI. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 9(1).
- Spence, M. (1978). Job market signaling. In *Uncertainty in economics* (pp. 281–306). Elsevier.
- Tandelilin, E. (2010). *Portofolio dan Investasi*. Bandung: Alfabeta.
- Ülkü, N., & Onishchenko, O. (2019). Trading volume and prediction of stock return reversals: Conditioning on investor types' trading. *Journal of Forecasting*, 38(6), 582–599.