

Analysis of Capital Market Reaction to Government Policy Events in Indonesia 2020-2021

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Abstract

This study aims to determine the reaction of the Indonesia capital market to the announcement of government policies by looking at the average abnormal return and the difference in the average abnormal return before the event and at the time after the event. This study uses companies listed on LQ45 for the 2020-2021. The data were analyzed with a mean adjusted model approach is used to find abnormal returns, subsequent test results of data analysis using one sample t-test and paired sample t-test. The result of the study that were differences in abnormal returns before and after the event and there were abnormal returns around the announcement of government policy events. In the event period, abnormal returns often occur before the event is announced and there is no certain pattern. The researcher argues that this is because investors' reactions to an event can be influenced by the psychology of investors at the time.

Keywords: *market reaction, abnormal return.*

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The capital market as an economic instrument is very sensitive to any movement of news received from an event, especially if the event that occurs has information content for investors in carrying out investment activities. Suryawijaya and Setiawan (1998) say that if the capital market is more sensitive to events happening around it, the capital market will play an increasingly important role in a country. Information is the main requirement and very important in the ongoing investment activities in the capital market. With the information investors can project the profits obtained.

Information is one of the main considerations needed by investors in making investment decisions. There is a variety of acceptable news in the capital market that triggers a reaction from market participants. Information that enters the market is a reflection of various events that occur around it, both from the economic realm and from outside the economic realm. Events that occur in the economic environment can be in the form of information about industry performance, changes in the application of industrial strategies, announcements of financial statements or company dividends, these events usually always get the attention of investors. In addition to events that occurred in the economic realm that received investor responses, there were events that occurred in the non-economic realm that were considered capable of triggering market reactions. Although it is not directly related to the dynamics of the capital market, it does not mean that events that occur in the non-economic environment do not have an impact on the movement of activity in the capital market. These events can be in the form of natural disasters, wars, riots as well as political and legal issues, which are often the main triggers for stock price volatility on stock exchanges around the world. The more role the stock market plays in economic sustainability, the more sensitive the stock market will be to events that occur around it, whether these events have a direct or indirect relationship to economic sustainability (Suryawijaya and Setiawan, 1998).

To assess whether the news received to the market contains information that is able to have an impact on market reactions or not, it can be determined by testing an event study (Suryawijaya and Setiawan 1998). Research with event studies initially focused on events that occurred within the company, such as news that dividends would be distributed, company annual reports, stock splits and other micro-economic events. Along with the development of research science, the focus of event studies has developed not only focusing on corporate events, but has also extended to aspects outside the micro-economics and even socio-political events that are felt to have an impact on market reactions (Arde et al. 2017).

Recent government policy events such as Large-Scale Social Restrictions (PSBB), Omnibuslaw, Vaccine Procurement, and the Tax Relaxation of PPN BM greatly affect the stock price of a company, because

these policies are national-scale policies and were taken with the aim of – special goals and set by the government during the pandemic that has hit Indonesia since 2020. Some of the government's policies in 2020 to 2021 include events that are rare and on a national scale. Government policies are rare events, because these events only occur in certain situations according to the ongoing situation. This event may affect sentiment on the reaction of the Indonesian capital market.

The concept of market efficiency states that if the market is efficient, new information will quickly be reflected in new stock prices (Tandelin 2010). So the purpose of this study is to see the reaction of the capital market to the 2020-2021 government policy event as measured by using returns.

I. Literature Review And Hypotheses Development

Literature Review

Efficient Capital Market

In the stock market there is a hypothesis that is quite well known among economists, namely the efficient market hypothesis. This theory was originally introduced by Fama (1970). The price created in the market is a reflection of the news received from the events that occur in the surrounding environment. In the capital market, an investor who has more information than other investors will be able to better predict the profit and loss in investing. Affandi and Utama (1998) stated that the problem of efficiency in the capital market is part of the problem that is the focus of the financial sector. Similar to (Fama 1970), they state that market securities are categorized as efficient if the prices created in the market fully reflect the overall news available in the market. In an efficient market, prices are able to quickly adjust if there is new news that enters the market, and then due to price adjustments, abnormal returns will not be obtained because security prices already reflect available information (Jogiyanto, 2003).

Hypothesis Development

PSBB Policy Against Capital Market Reaction

The Large-Scale Social Restriction Policy (PSBB) is a policy taken by the government to deal with the pandemic that has hit Indonesia since February 2020. Following up on the Covid-19 case, President Jokowi on March 31, 2020 then issued Government Regulation No. 21 of 2020 which regulates restrictions. to prevent the further spread of this virus outbreak. The regulation contains licensing rules that regulate the movement of people and goods to and from within an area. Restrictive regulations also not only regulate the entry and exit of people and goods but also include restrictions on activities such as school and office holidays, restrictions on worship, and/or activities in public places. Due to the existence of restrictions, it is possible to disrupt economic activities which have an impact on various aspects due to the limited space for movement and individual activities in economic transactions.

Jogiyanto (2003) says that event studies try to understand how the market responds to the emergence of an event that is informed as a notification to the public. The test can then be used as a basis for assessing whether the events that occur have information content or not. Not only as a basis for assessing information content, this test can also be used to see how efficient the current capital market is, especially to see the efficiency of the semistrong-form efficiency market. Therefore, the main purpose of conducting an event study is to see how the response that appears in the market due to a notification in the form of news or events. Based on the description above, the hypotheses proposed in this study are:

H1a: There are differences in abnormal returns before and after the establishment of the Large-Scale Social Restriction Policy (PSBB).

H1b: There is an abnormal return every day of the event window period for the determination of the Large-Scale Social Restriction Policy (PSBB).

Omnibus Law Policy on Capital Market

The Omnibus law was officially ratified in the DPR plenary meeting on October 5, 2020. Then it was signed by President Jokowi and officially promulgated under Law number 11 of 2020 on November 2, 2020. Therefore, all regulations contained in the Omnibuslaw came into effect from the date the manuscript was signed by President JokoWidodo.

Omnibus law is a method that is applied in a way that several existing rules will be combined into one regulation under one legal umbrella. This method of combining regulations is intended to simplify the regulations that apply in Indonesia which are considered to have obstacles as well as convoluted and lengthy. There are still many problems that arise in the regulations that have been running, such as too many regulatory obstacles and overlapping, the adoption of the Omnibuslaw concept is expected to be able to handle this problem. This concept is also applied to solve bureaucratic problems in the investment sector which are still lagging behind. In line with this thought, the concept of the Omnibuslaw was prepared relating to business

permits, empowerment of micro, small and medium enterprises and job creation along with a review of investment policies by the Coordinating Ministry for the Economy of the Republic of Indonesia.

The presence of the Omnibus Law with the arrangement of investment regulations that increasingly make it easier for investors to invest their capital will certainly trigger a reaction in the capital market, especially since the stipulation of this Law itself is carried out at a time when industry conditions are currently under pressure from the Covid-19 pandemic which has resulted in various sectors going wrong. The other is on investment because almost all economic sectors in Indonesia cannot run normally as usual so that it will have an impact on company securities.

If the occurrence of the Omnibuslaw policy determination has a meaningful information content in decision making, it is predicted that a market response will appear when this news enters the market. The response that appears can be seen from the volatility of security prices. The reaction measure that can be used is to look at the return as a result of the price volatility that occurs. If the response is very fast between the time of notification of the policy and the impact it has, this shows the strength of the efficiency of the stock exchange. If a market is more efficient, the faster the response will be in responding to events that occur with price changes (Affandi and Utama 1998). Based on the description above, the hypotheses proposed in this study are:

H2a: There is a difference in abnormal returns before and after the event of the establishment of the Omnibus Law policy

H2b: There is an abnormal return every day of the event window period. Determination of the Omnibus Law policy

Corona Virus Vaccine Procurement Policy (Covid -19)

On October 5, 2020, President Jokowi signed Presidential Regulation (Perpres) No. 99 of 2020 concerning the Procurement of Vaccines and the process of Vaccination Implementation in an effort to overcome the Covid-19 Pandemic. This vaccine procurement information will certainly bring positive sentiment for business actors and for investors. The efforts given by the government in presenting the Covid-19 vaccine are expected to be able to suppress the transmission of the epidemic so that it can revive the wheels of the national economy so that the business world can quickly recover and can operate normally as before. which in the operational process prioritizes direct meetings between entrepreneurs and consumers.

It is estimated that if the outbreak of the Covid-19 virus can be contained immediately, the government will naturally relax the social restriction policies that were previously implemented to prevent the transmission of the virus. Therefore, with the easing of the imposed restrictions, it is likely that economic growth will recover. In addition, this can also regenerate the enthusiasm of investors to carry out investment activities because of developments towards better economic growth and the success of the vaccination program will certainly have an impact on the psychology of market participants. If the incident of determining the vaccine procurement policy has a meaningful information content in decision making, it is predicted that a market response will appear when this news enters the market. Based on the description above, the hypotheses proposed in this study are:

H3a: There is a difference in abnormal returns before and after the implementation of the Corona Virus Vaccine Procurement Policy (Covid-19)

H3b: There is an abnormal return every day of the event window period. Implementation of the Corona virus (Covid-19) Vaccine Procurement policy

Policy on Relaxation of PPn BM Tax on Capital Market Reaction

The regulation on the relaxation of the 0 percent PPnBM tax was officially signed by the Minister of Finance, Sri Mulyani on February 25, 2021, which will officially come into force on March 1, 2021. This rule is contained in the Minister of Finance Regulation (PMK) Number 20/PMK.010/2021 concerning Sales Tax on Luxury Goods on Taxable Delivery classified as Luxury Certain Motorized Vehicles borne by the government for the 2021 Fiscal Year.

The automotive sector contributes significantly to national economic growth. The recovery in the production and sales of this industry will have a broad impact on other sectors, so the stipulation of this policy will encourage recovery in various sectors. The determination of this policy is possible to cause turmoil in the capital market as a result of the reaction of investors in responding to the policy. If the incident of the determination of the PPn BM relaxation policy has a meaningful information content in making decisions, it is predicted that a market response will appear when this news enters the market. Based on the description above, the hypotheses proposed in this study are:

H4a: There is a difference in abnormal returns before and after the Event of Application of the VAT BM . Tax Relaxation Policy

H4b: There is an abnormal return every day of the event window period Implementation of the BM VAT Tax Relaxation Policy

II. Research Methods

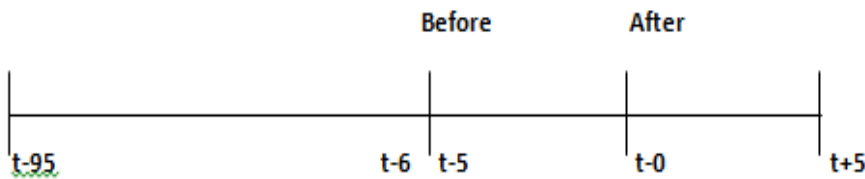
Population and Sample

This research uses data from companies listed on the Indonesia Stock Exchange. In addition, the population for testing in the research is LQ45, where the companies are consistently listed during the period to be observed, namely 2020-2021. The election for 2020 - 2021 is carried out with the hope that the selection of the latest financial year report will be able to better represent the current state of the company and considering that in that year Indonesia was experiencing a great pandemic, namely COVID-19 which had an impact on many aspects of the economy including the capital market. From the population that has been determined by the researcher, then a sample is taken using purposive sampling technique or data collection with certain criteria. The determination of the criteria in this research is intended so that the research carried out is able to capture the effects that arise due to government policy events.

Observation Period

Each observation period is further divided into two observation periods, namely: the estimation period and the event window. The estimation period is used to calculate the actual stock from the sample under normal conditions, which means that there is no certain event that affects the stock sample in the estimation period. The period of events in this study is shown in Figure 1.

Figure 1
Estimated Period and Research Event Window on Government Policy Announcement Events



The date on which a policy is first reported and determined as a policy by the government is designated as event day (t_0). If the policy setting date coincides with a trading holiday, the date closest to the policy assignment will be selected. Each of the observation periods is divided into two periods, namely; estimation period and event period. The estimation period is used to estimate the return. While the event period is the period of time in which the events that occur are used to calculate abnormal returns. The selection of the time period used in this research is 11 days if it is written in the form of numbers it becomes -5, -4, -3, -2, -1, 0, +1, +2, +3, +4, + 5. Meanwhile, this time period means that the test is carried out 5 days before the policy determination date ($t-5$), 1 day after the policy determination (event date, $t=0$) and 5 days after the policy determination date ($t+5$). While the estimation period used is 90 days. The selection of observation dates that the researchers used in this research refers to previous research (Sanjiwani and Jati 2017), which in the research said that the response that emerged in the market to signals in the form of news entering the market was very fast and in order to avoid the influence of other events. thus causing the mixing of information from several events into one. The following table presents the event period for each government policy event.

Table 1 Event Period of PSBB events

No	Event	t-5	t_0	t+5
1	PSBB policy by the president	23/03/2020	31/03/2020	07/04/2020
2	The implementation of PSBB by the Governor of DKI Jakarta for the first time	31/03/2020	07/04/2020	15/04/2020

Table 2 Event Period of Omnibuslaw events

No	Event	t-5	t_0	t+5
1	The implementation of the Omnibuslaw policy for the first time	21/10/2020	02/11/2020	9/11/2020
2	The Omnibuslaw policy is ratified in the plenary session of the DPR	28/09/2020	05/10/ 2020	12/10/2020

Table 3 Event Period of Vaccine Development events

No	Event	t-5	t_0	t+5
1	Implementing vaccine policy for the first time	06/01/2021	13/01/2021	20/01/2021
2	Announcement of the first vaccine development	14/07/2020	21/07/2020	28/07/2020

Tabel 4 Event Period peristiwa kebijakan Relaksasi pajak PPn BM

No	Event	t-5	t ₀	t+5
1	Implementation of the BM VAT Relaxation Tax Policy	18/02/2021	25/02/2021	04/03/2021

III. Research Methods

This study uses an event study and calculates returns for testing the overall hypothesis. Hypothesis 1a, Hypothesis 2a, Hypothesis 3a, Hypothesis 4a, is intended to test whether there are differences in abnormal returns around each event with a paired sample t-test (Paired Sample T-test). While Hypothesis 1b, Hypothesis 2b, Hypothesis 3b, Hypothesis 4b, Hypothesis tests whether there is an abnormal return during the observation period with the One Sample T-test.

The steps taken in data analysis are as follows:

1. Determine the expected return by using an estimation model for each security. For this reason, the estimation model that will be used in this study is the mean adjusted model. This model sums the actual return of each stock during the estimation period. The result of the sum of the actual returns is divided by the number of periods in the estimation period. Actual return is obtained by finding the difference between the daily closing stock price minus the previous day's stock price then divided by the previous day's stock price.

$$R_{it} = \frac{P_{it} - P_{it-1}}{P_{it-1}}$$

Where:

Dimana:

- R_{it} = actual return
- P_{it} = stock price at t
- P_{it-1} = stock price at t-1

2. Calculating the expected return based on the average return during the estimation period with the mean adjusted model.

$$ER_{it} = \frac{\sum_{j=t-1}^{t-2} R_{ij}}{T}$$

Where:

- ER_{it} = the -I security's expected return for the -t event period
- R_{ij} = realized return of the -1 security in the -j estimation period
- T = the length of the estimation period, which is from t1 to t2

3. After the previous steps, the next step is to calculate the abnormal return of each sample

$$AR_{it} = R_{it} - ER_{it}$$

Where:

- AR_{it} = abnormal return of stock i on day t
- R_{it} = actual return for stock i on day t
- ER_{it} = expected return of the -I security for the t event period

4. The last step is to calculate the Average Abnormal Return (AAR) with the formula:

$$AAR_t = \frac{\sum_i^k AR_{it}}{k}$$

Where:

- AAR_t = Average abnormal return K – security for day t in the event period
- AR_{it} = abnormal return of stock i on day t
- K = number of securities

5. Determine whether the average abnormal return (AAR) in each event period under study is significant or different from zero by using the Paired Sample T - test.

If the average abnormal return (AAR) is different from zero, this indicates that the capital market in Indonesia is an efficient market as indicated by the reaction to every event in the determination of government policies which is reflected by the abnormal return around the event. On the other hand, if there is no AR around the occurrence of government policy-setting events, then this indicates that information leaks occurred before the incident occurred.

IV. Research Results And Discussion

Data analysis

Data analysis in this study will be carried out separately for each government policy event so that the results can be known in detail to then draw general conclusions. Prior to further testing, a normality test will be carried out first so as not to violate the basic assumptions of the statistical tools used. The following are the results of normality testing using Kolmogrov Smirnov.

Table 5 Normality of Data

NO	DATA	PSBB P1	PSBB P2	OMNIBUS LAW P1	OMNIBUS LAW P2	VAKSIN P1	VAKSIN P2	RELAKSASI PPN BM
		Sig	Sig	Sig	Sig	Sig	Sig	Sig
1	t-5	0,000	0,052*	0,015	0,200*	0,200*	0,000	0,036
2	t-4	0,000	0,200*	0,114*	0,200*	0,000	0,000	0,200*
3	t-3	0,051*	0,200*	0,000	0,200*	0,007	0,000	0,050*
4	t-2	0,200*	0,067*	0,089*	0,190*	0,008	0,000	0,032
5	t-1	0,000	0,042	0,160*	0,131*	0,000	0,000	0,200*
6	t0	0,097*	0,002	0,200*	0,002	0,006	0,000	0,200*
7	t+1	0,200*	0,000	0,001	0,000	0,003	0,000	0,200*
8	t+2	0,200*	0,194*	0,200*	0,200*	0,019	0,000	0,174*
9	t+3	0,079*	0,200*	0,069*	0,018	0,200*	0,000	0,021
10	t+4	0,039	0,105*	0,131*	0,035	0,200*	0,000	0,193*
11	t+5	0,001	0,098*	0,180*	0,083*	0,000	0,000	0,099*

Keterangan: Signifikan pada level *adalah 5%

Source: processed data, 2021

Normality test is required as a prerequisite before performing the paired sample t-test. If the model in a study has data that is normally distributed, the test will be carried out using a parametric test. Paired Sample t-test or paired sample t-test is a form of parametric test used to test the hypothesis that the same or not different (H0) of two variables. The data comes from two measurements or two different observation periods that have been taken from paired subjects, this also applies to the one sample t-test. It can be seen from table 6 that there are data that are not normally distributed, data that are not normally distributed will be followed up using the Wilcoxon Signed Rank Test.

PSBB Policy Determination Event

Table 6 Paired Sample T –Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-3,539	0,01*
df	35	
Std.deviation	0,0392	
Remarks: Significant at *5% level		

Source: processed data, 2021

The test results in table 6 show the significance of abnormal returns before and after the announcement of the implementation of the first Large-Scale Social Restrictions (PSBB) policy by President Jokowi using the paired sample t-test, the result of which is 0.001. If the significance value obtained is less than 0.05, then hypothesis 1 is accepted. In Table 6 it can be seen that based on the test results obtained the value of sig < 0.05 (0.001 < 0.05). This illustrates that hypothesis 1a is accepted, that is, there is a difference in the average abnormal return before and after the announcement of the first PSBB policy by President Jokowi.

Testing on the second hypothesis is to see the market reaction around the announcement of the PSBB policy that occurred on March 31, 2020. To see whether or not there are abnormal stock returns before and after the announcement of the policy, it will be sought by conducting a one sample t-test. In principle, this test is to compare the average stock abnormal return with a stock return of 0 (no abnormal stock return).

Table 7 One Sample T-test

DATA	SIG.	CONCLUSION
t-5	0,000	Significant
t-4	0,120	insignificant
t-3	0,000	Significant
t-2	0,000	Significant
t-1	0,000	Significant
t0	0,000	Significant
t+1	0,000	Significant
t+2	0,000	Significant
t+3	0,000	Significant
t+4	0,000	significant
t+5	0,087	insignificant

Source: processed data, 2021

Table 7 shows that most of the abnormal returns are significant in the period t-4 to t +4. In significant periods after the announcement of the PSBB policy, it shows that the market reacts quickly and fully reflects on information. Therefore, it can be concluded that the announcement of the PSBB policy by President Jokowi contains information content. Based on the results of the study, it can be seen that a significant abnormal return only occurs four days after the announcement of the event, then on the fifth day the abnormal return is not significant again, this indicates that the market then quickly returns to its new equilibrium. Although there is an insignificant abnormal return on the fifth day, but overall the event period, most of the periods show a significant value, especially in the period after the event. Based on these results, it can be proven that hypothesis 1b is accepted, namely There is an abnormal return every day of the event window period for the determination of the Large-Scale Social Restriction Policy (PSBB).

The sensitivity test is then used as an additional test of the differences in the events being tested. The test carried out is to compare the events of March 31, 2020 when the announcement of the PSBB policy was first delivered by President Jokowi with the events of April 7, 2020, when the announcement of the implementation of the PSBB policy was first made by the Governor of DKI Anies. This sensitivity test was conducted as part of the event study method. This test is carried out to gain confidence from the results of hypothesis testing.

Table 8 Paired Sample T-Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	12,322	0,000*
df	35	
Std.deviation	0,0219	
Remarks: Significant at *5% level		

Source: processed data, 2021

In table 8 the results of the paired sample t-test show the sig value. of $0.000 < 0.05$, which means that there is a difference in market reaction between before and after the announcement of the implementation of the PSBB policy by the Governor of DKI Anies for the first time.

Table 9 One Sample T-test

DATA	SIG.	CONCLUSION
t-5	0,000	Significant
t-4	0,000	Significant
t-3	0,000	Significant
t-2	0,000	Significant
t-1	0,000	Significant
t0	0,109	insignificant
t+1	0,000	Significant
t+2	0,046	Significant
t+3	0,701	insignificant
t+4	0,000	significant
t+5	0,000	Significant

Source: processed data, 2021

Based on the one sample t-test test in table 9, it was found that the abnormal returns were mostly significant around the announcement of the implementation of the PSBB policy by the Governor of DKI Anies on April 7, 2020. In the t+1 period, it showed that the market reacted quickly to the announcement of the implementation of the PSBB Policy. by the Governor of DKI which continued in the t +2 period, but after the t +2 period the abnormal return generated was not significant but in the following period, namely t+4 and t +5 the abnormal return was significant. This shows that the market reacts quickly and fully reflects market conditions on the information received. The results show that there is a market response to the announcement of the PSBB policy by the governor of DKI on 7 April 2020, as well as the t period of 31 March 2020 providing significant test results.

Omnibuslaw Policy Setting Event

Table 10 Paired Sample T-test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-4,586	0,000*
df	34	
Remarks: Significant at *5% level		

Source: processed data, 2021

The test results in table 10 show the significance of abnormal returns before and after the announcement of the implementation of the Omnibuslaw policy, which was first signed by President Jokowi on November 2, 2020, using the paired sample t-test, the result of which was 0.000. In Table 10 it can be seen that based on the test results obtained the value of $\text{sig} < 0.05$ ($0.000 < 0.05$). This illustrates that hypothesis 2a is accepted, namely that there is a difference in the average abnormal return before and after the announcement of the first signing of the Omnibuslaw policy by President Jokowi. This means that there is a market reaction

around the event, the market reacts shown by investors who are sensitive in absorbing and responding to information from these events. Therefore it can be said that the market is in the form of semi-strong information.

Table 11 One Sample T –Test

DATA	SIG.	CONCLUSION
t-5	0,718	insignificant
t-4	0,304	insignificant
t-3	0,354	insignificant
t-2	0,618	insignificant
t-1	0,010	Significant
t0	0,037	Significant
t+1	0,003	Significant
t+2	0,000	Significant
t+3	0,000	Significant
t+4	0,000	Significant
t+5	0,027	Significant

Source: processed data, 2021

Based on the one sample t-test in table 11, it was found that the abnormal return results were mostly significant around the announcement of the signing of the Omnibuslaw policy by President Jokowi on November 2, 2020. From the test results, it can be seen that 5 five days before the announcement date there was no significant abnormal return, Significant abnormal returns occur starting in the t-1 period, which is one day before the announcement date, continuing up to five days after the announcement date. In the t+1 period, it shows that the market reacted quickly to the announcement of the signing of the Omnibuslaw Policy by President Jokowi which continued until period t+5. Therefore, hypothesis 2b is accepted that there is an abnormal return every day of the event window period for the determination of the Omnibuslaw Policy.

The sensitivity test is then used as an additional test of the differences in the events being tested. The test carried out is to compare the events of November 2, 2020 at the time of the announcement of the signing of the Omnibuslaw policy by President Jokowi with the events of October 5, 2020 at the time of the announcement of the ratification of the Omnibuslaw policy for the first time in the plenary session of the DPR.

Table 12 Paired Sample T-Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-5,179	0,000*
df	34	
Std.deviation	0,01086	
Remarks: Significant at *5% level		

Source: processed data, 2021

In table 12 the results of the paired sample t-test show the sig value. of $0.000 < 0.05$, which means that there is a difference in market reaction between before and after the announcement of the ratification of the Omnibuslaw policy in the plenary session of the DPR.

Table 13 One Sample T-Test

DATA	SIG.	CONCLUSION
t-5	0,162	insignificant
t-4	0,000	Significant
t-3	0,299	insignificant
t-2	0,000	Significant
t-1	0,000	Significant
t0	0,128	insignificant
t+1	0,000	Significant
t+2	0,001	significant
t+3	0,084	insignificant
t+4	0,300	insignificant
t+5	0,001	Significant

Source: processed data, 2021

Based on the one sample t-test in table 13, it shows that the abnormal return is significant at t-4, t-2, t-1, t+1, t+2 and t+5. Significant abnormal returns occurred successively after the announcement day, this indicates that the market reacted to the ratification of the Omnibuslaw policy at the plenary session of the DPR as seen in the significance of the t+1 and t+2 periods. After that, the abnormal return was not significant in periods t+3 and t+4. This indicates that the market reacts quickly and fully reflects the information, because the market quickly and then quickly returns to a new equilibrium with no abnormal returns.

The results show that there is a market response to the announcement of the signing of the Omnibuslaw policy by President Jokowi on November 2, 2020 as well as the announcement of the ratification of the Omnibuslaw policy by the DPR on October 5, 2020, which gave significant test results.

The Event of Establishing Vaccine Procurement Policy

Table 14 Paired Sample T-Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-2,606	0,009*
df	30	
Remarks: Significant at *5% level		

Source: processed data, 2021

The test results in table 14 show the significance of abnormal returns before and after the announcement of the implementation of the first Vaccine policy by President Jokowi on January 13, 2021, using the paired sample t-test, the result of which is 0.009. In Table 14 it can be seen that based on the test results obtained the value of sig < 0.05 (0.009 < 0.05). This illustrates that hypothesis 3a is accepted, namely that there is a difference in the average abnormal return before and after the announcement of the implementation of the first vaccine policy by President Jokowi.

Table 15 One Sample T-test

DATA	SIG.	CONCLUSION
t-5	0,000	Significant
t-4	0,001	Significant
t-3	0,001	Significant
t-2	0,769	insignificant
t-1	0,281	insignificant
t0	0,468	insignificant
t+1	0,004	Significant
t+2	0,084	insignificant
t+3	0,093	insignificant
t+4	0,004	Significant
t+5	0,006	Significant

Source: processed data, 2021

Based on the one sample t-test in table 15, it shows that the abnormal return is significant on the day before the event, namely t-5, t-4, t-3, while on the days after the event, the abnormal return is significant only at t+1, t+4 and t+5. This is possible considering that the signs or signals from the government regarding the implementation of vaccines by President Jokowi have appeared a few days and are predicted to be carried out on January 13, 2021. However, this event still raises the market reaction seen in the t+1 period which shows that the market is react quickly to vaccine implementation events. With a significant abnormal return that occurred in the 11-day period of observation, it can be said that the vaccine implementation event contains relevant information content in the morning of stock market movements, therefore Hypothesis 3b is accepted that there is an abnormal return every day of the vaccine procurement event window period.

The sensitivity test is then used as an additional test of the differences in the events being tested. The test carried out is to compare the t event of January 13, 2021 when the vaccine was first implemented with the t event of July 21, 2020 when the first announcement of vaccine procurement in Indonesia by President Jokowi on July 21, 2020.

Table 16 Paired Sample T-Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-0,392	0,695
df	30	
Remarks: Significant at *5% level		

Source: processed data, 2021

In table 16 the results of the paired sample t-test show the sig value. of $0.695 > 0.05$, which means that there is no difference in market reaction between before and after the announcement of the first vaccine procurement in Indonesia.

Table 17 One Sample T-Test

DATA	SIG.	CONCLUSION
t-5	0,347	Insignificant
t-4	0,922	Insignificant
t-3	0,857	Insignificant
t-2	0,136	Insignificant
t-1	0,000	Significant
t0	0,007	Significant
t+1	0,003	Significant
t+2	0,078	Insignificant
t+3	0,000	Significant
t+4	0,100	Insignificant
t+5	0,015	Significant

Source: processed data, 2021

Based on the one sample t-test in table 17, it shows that before the announcement occurred, significant abnormal returns were only in period t-1, while in the period after the event, significant abnormal returns were found in periods t+1, t+3 and periods t+5, while the rest did not find a significant abnormal return. With a significant abnormal return, say that the announcement of the vaccine procurement event has relevant information content for investors.

The results show that there is a market response to the event of the signing of the vaccine by President Jokowi on January 13, 2021, as well as the announcement of the procurement of the first SMS vaccine on July 21, 2020, which gave significant test results.

Event of Determination of BM VAT Relaxation Tax Policy

Table 18 Paired Sample T-Test

Information	t-stat.	Sig. (2-tailed)
Average abnormal return before the event – Average abnormal return after the event	-0,485	0,631
df	33	
Std.deviation	0,01265	
Remarks: Significant at *5% level		

Source: processed data, 2021

The test results in table 19 show the significance of abnormal returns before and after the announcement of the PPn BM tax relaxation announcement on February 25, 2021 by using the paired sample t-test, the result of which is 0.631. If the significance value obtained is less than 0.05, then hypothesis 4a is accepted. In Table 19 it can be seen that based on the test results, the sig value > 0.05 ($0.631 > 0.05$). This illustrates that hypothesis 4a is rejected, ie there is no difference in the average abnormal return before and after the announcement of the relaxation of the PPn BM tax. This shows that the event of relaxation of the PPn BM tax does not contain information content so that it is not responded to by investors.

Table 2 One Sample T-Test

DATA	SIG.	CONCLUSION
t-5	0,053	Insignificant
t-4	0,968	Insignificant
t-3	0,100	Insignificant
t-2	0,731	Insignificant
t-1	0,006	Significant
t0	0,004	Significant
t+1	0,343	Insignificant
t+2	0,085	Insignificant
t+3	0,793	Insignificant
t+4	0,076	Insignificant
t+5	0,000	Significant

Source: processed data, 2021

The results from table 20 show the abnormal return values before and after the announcement of the PPn BM tax relaxation announcement. Significant results were found in periods t-1, t0, t+5 while in other periods were not significant. These insignificant results reflected the absence of reactions that appeared before the event occurred except one day before the event which then continued on the date of the policy announcement event, This indicates that they have reacted to the announcement of the PPn BM tax relaxation first, which then quickly returned to insignificant markets, this is possible because the notification of the PPnBM tax relaxation policy was already known by market participants. However, after t+1 the abnormal return is significant again at t+5. Overall, the observation period found several periods around the announcement date of events that caused significant abnormal returns. This indicates that hypothesis 4b is rejected, i.e. There is an abnormal return every day during the announcement window period for the VAT relaxation of BM tax.

V. Discussion

Research using an event study approach on these four events of government policy announcements shows that these events have information content, which causes the Indonesian capital market to react to events that have a national scale. Market reactions appear before the government policy event is announced nationally to the public, and in some cases the market reaction lasts several days until after the event. this could be because there have been signs and signals received by the public from the government related to government policies that will be implemented in Indonesia in the previous few days.

Based on the results of the analysis in the previous chapter, the semi-strong efficient market theory says that incoming information can affect investor psychology according to the information received. Therefore this can create a reaction to an event that occurs.

Several events that occurred behind the announcement of government policies, such as changes in rules in social activities, restrictions on people's daily activities, new rules in the world of work, etc., caused differences in the decisions of investors from one day to another. . investors act according to their surrounding circumstances and analytical abilities, because not all investors can think and act rationally. Therefore, the observation period in the research used cannot be entirely significant or vice versa. There are times when the situation is considered as an opportunity to enter the market or switch (exchange) from one stock to another.

Significant or insignificant test results are results that we cannot fully predict from investor movements. Because there are several factors that can cause this (why). 1. There is a delay in information received and known by investors so that investors miss the moment and are too late to react (sell/buy) to a new event. For example, today the investor is busy and only finds out the information the next day. 2. The strategy used by each investor is different. The analytical ability of one investor is different from another, so that every decision and consideration taken in dealing with an event may also differ depending on the ability of the investor concerned. One strategy that can be exemplified is wait and see, in this strategy investors choose to wait and see when is the right moment to enter or exit the market. For example, when almost all market participants decide to buy, some other investors act to sell or even do not act, so the movements that occur look so small and even insignificant. Vice versa.

Based on the data recapitulation of the abnormal return analysis using paired sample –t –test analysis on the SPSS 22 program, the results showed significant differences in the three events of government policy announcements, namely the events of PSBB policy announcements, Omnibuslaw and Vaccine procurement. Based on these results, the researcher concludes that investors react to the events of national-scale government policy announcements. This indicates that market participants earn more than the actual return, which means that if there is an abnormal return, it indicates that the information content around the events that occur gives a positive value.

The researcher also conducted a sensitivity test or robustness test to confirm the consistency of the results of the hypothesis test on the average abnormal return with an 11 Hri event window period. From the test results, it is concluded that robust research results are that there are significant differences between before and after the announcement of government policies.

Based on the results of the paired sample t -test for the fourth event, namely the Relaxation of Sales Tax on Sales Tax, there was no significant difference between the events before the event and after the policy announcement event. So the researcher concludes that investors do not react to the announcement of the PPn BM Tax Relaxation announcement which is seen in the insignificant abnormal return. This also indicates that market participants do not benefit other than the actual return. In other words, the announcement of the PPn BM Relaxation policy is considered to have no meaningful information content for investors so that it does not cause a reaction in the capital market. Another possible reason for investors not responding to the announcement of the PPn BM Tax Relaxation policy announcement is that although this policy applies nationally, it only specifically leads to the automotive sector so that, if this incident triggers a market reaction, the most likely the most influential are stocks in the automotive sector. automotive, so that when viewed as a whole the reaction or response that appears can be very small or even insignificant.

The researcher concludes that the results of this study are in line with the theory of market efficiency which states that market securities are categorized as efficient if the prices created in the market fully reflect the overall news available in the market. In an efficient market, prices are able to quickly adjust when new news enters the market. This can be seen from the results of the one sample t -test which proves that there are abnormal returns around the 11-day period of observing events. Significant abnormal returns around the event window illustrate that the market reacts to government policy announcement events. Jogiyanto (2003) states that if the announcement of an event contains information, it can trigger abnormal returns and vice versa. This abnormal return can be obtained by investors around the announcement of government policies. Overall, the significance of abnormal returns appeared before the announcement of the event, this indicates that there has been information leakage from the announcement of the policy. while the significance that occurs from period t_0 onwards illustrates the effect of government policy announcements. In some significant events that occur only last approximately until $t+3$, while the next period is not significant again. This means that the market as a whole has absorbed the information from the announcement so that there will be no more abnormal returns. However, in several significant abnormal return policy events, it was found that it lasted long enough to $t+5$. From the results of research on government policy announcements, it can be seen that the market reacts, but according to information, the market is inefficient in a semi-strong form. Jogiyanto (2003) said that the market is categorized as a semi-strong efficient informationally if investors react quickly to absorb abnormal returns to get to a new balance.

Overall, based on the results obtained from the four government policy events taken from 2020 to 2021, it can be concluded that non-economic or political events are capable of triggering market reactions. The results of this study are in line with Dewi, Wirama, and Sari (2018), Kurniawati and Fauziati (2014) and Zaqi (2006). In addition, the results of this sensitivity test support previous research by Gunarsih and Hartadi (2003), Kurniawati and Lestari (2011) and Dewi (2018) researching the market reaction by calculating return expectations using the mean adjusted model and market adjusted model, resulting in both models of calculating return expectations. show the same results, which are equally significant.

VI. Conclusion

This study aims to analyze and test and collect empirical evidence whether events involving political events in the form of national-scale government policies in Indonesia have information content or not so that they are reacted by investors. Based on the tests that have been carried out by researchers on investors' reactions to the announcement of the government's policy by using abnormal return measurements obtained using the mean-adjusted model, this research can draw conclusions as follows:

1. From the results of the paired sample t -test, there is evidence that there is a difference in the average abnormal return before and after the announcement of the government policy, which was found in the announcement of the PSBB, Omnibuslaw, and vaccine procurement policies. Meanwhile, in the fourth event, namely the Relaxation of the Bm VAT Tax, there was no significant difference.
2. The Indonesian capital market reacts to government policy events that occur in the country. This is evidenced by a significant abnormal return around the period of the event being tested, this indicates that the events that occur have information content that is quite meaningful for the market. This is indicated by the consistent sensitivity test results. So it can be said that the results of this study are quite robust.

VII. Limitations And Suggestions

In conducting this research, of course, the researcher cannot be separated from limitations. The first limitation is the relatively short observation period of 10 days (5 days before and 5 days after the policy announcement event). In future research, it is hoped that researchers can use a longer observation period so that they can capture possibilities that are not described in this study. The second limitation, the sample used is relatively small, namely stocks listed in LQ45, further research can use a larger sample such as KOMPAS 100, to avoid too few samples used because of corporate events that may occur during the observation period. The third limitation, the third limitation, namely the ratio used as the basis for predicting market reactions to government policy events is only limited to abnormal returns. In future research, it is hoped that more ratios can be added as a basis for measurement, for example total trading volume, etc. In addition, further researchers can also use two methods of calculating abnormal returns at the same time to ensure the results obtained, for example CAPM, market model, and market adjusted model as a comparison material. The fourth limitation, this research uses daily data. Further researchers can conduct research using intraday data so that later they can more clearly observe market reactions.

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