The Difference in Abnormal Return and Trading Volume Activity Analysis During and After Presidential Election on 17 April 2019 In Transport, Infrastructure And Utility Company Listed In Indonesia Stock Exchange in 2019

Febrina Nafasati Prihantini¹, Dian Indudewi², Abu Mansur³
¹, ², ³ Universitas Semarang

ABSTRACT
This study is an event study that aims to analyze whether or not there are any differences in Abnormal Returns Stock and Trading Volume Activity before and after the Presidential Elections on April 17, 2019 in the Indonesian Stock Exchange (IDX). 45 companies were observed for five-day before and after five days the event become samples of this study. In this study the independent variable is the election of the President and Vice President, while the dependent variable is Abnormal Return Stock and Trading Volume Activity. This study uses an event study, where observations are made on the average abnormal return of stocks and trading volume activity for five days before and after the event. The test equipment in this study used the Wilcoxon Sign Rank Test. The results of this study indicate that there are significant differences in abnormal returns stock and trading volume activity before and after the election of the President and Vice President on April 17, 2019.

Keywords: event study, abnormal returns stock, and trading volume activity.

INTRODUCTION
Economic growth has enabled companies to fulfill their funding needs through raising public funds in the capital market. The activity of raising public funds in the capital market is carried out either through the issuance of bonds or shares (Riantani and Yuliani, 2014). Stocks are most attractive capital market products for investors since they are able to provide attractive benefits such as dividends and capital gains. Some Information can affect stock prices. The information can be in the form of market conditions, political news, national economic policies, and capital market policies (Sihotang & Mekel, 2015).

In general, the information which is needed by investors can come from internal or external conditions of the company (issuer). In an efficient capital market, the market will react quickly to all relevant information. This is indicated by the changes of stock prices above normal conditions, causing abnormal returns (Zaqi, 2006). In addition to using abnormal returns, the capital market's reaction to an information can also be seen...
through trading movement activity in the market called as Trading Volume Activity, where if investors assess an event as it contains information, the event will result in trading decisions above normal trading decisions (Hutami, 2015).

Abnormal returns and Trading Volume Activity occur because they are triggered by certain events or commonly called event studies. For example, national holidays, political atmosphere, extraordinary events, stock splits, initial offerings, suspensions and others (Nurhaeni, 2009). According to Jogiyanto (2008) in Hutami (2015) event study is how to measure the effect of a particular event on a firm’s value. The utility of an event study is to provide rationality in the market and show that the effect of an event will be quickly reflected in the price of a security in the capital market.

The example of event study is the existence of political events. Political events are closely related to economic stability in a country. In Indonesia political events no longer can be separated from reactions that occur in the capital market, events such as the presidential election, Legislative elections, riots, wars and other events are greatly affect the stability of stock prices and trading volume in the capital market. It explains that these things can get various views from investors to invest in the country (Sihotang & Mekel, 2015).

The presidential election in Indonesia is a political event that will affect the economical aspect either directly or indirectly. The presidential election can provide a positive sentiment on the market. Market participants have certain hopes and optimism for a good and safe presidential election in Indonesia, thus it is estimated that this presidential election event will affect the market so that the market will respond to this event as information for making investment decisions (Trisnawati, 2011).

Infrastructure sector was chosen as the object of the study due to the re-election of Jokowi as President will increase returns stock in infrastructure companies, thereby attracting investors to buy shares in infrastructure companies such as in 2014 to 2018.

From several presidential election events in 2012 to 2013, the stock price index in the infrastructure sector is less attractive to investors. This is because in the previous government era, it was not so aggressive in carrying out the development in
infrastructure sector. These following are returns stock price in 2012 to 2018 before and after Jokowi become a president:

*Table 1. Stock Price Returns in Infrastructure Companies*

<table>
<thead>
<tr>
<th>Year Before Jokowi was Elected as President</th>
<th>After Jokowi Served as President</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>2013</td>
</tr>
<tr>
<td>907,524</td>
<td>930,399</td>
</tr>
<tr>
<td>2014</td>
<td>2015</td>
</tr>
<tr>
<td>1,160,284</td>
<td>981,333</td>
</tr>
<tr>
<td>2016</td>
<td>2017</td>
</tr>
<tr>
<td>1,055,587</td>
<td>1,183,708</td>
</tr>
<tr>
<td>2018</td>
<td></td>
</tr>
<tr>
<td>1,064,290</td>
<td></td>
</tr>
</tbody>
</table>


Based on table 1.1, it can be seen that in 2012 and 2013 in the period before Jokowi become a President, there was no significant change of share price in infrastructure companies. In 2014 to 2018 where Jokowi become a president, the share price of infrastructure companies experienced was increased significantly. The market also responded to this by increasing trading volume activity on the Indonesian stock exchange. This can be seen in graph 1.1 below:

*Figure 1. Trading Volume Activity in Infrastructure Companies*

Source: statistical report of annual stock price index on the Indonesia Stock Exchange Semarang.

---

1*Correspondence Author, Email: febrina@usm.ac.id
2 Email: dianindudewi@usm.ac.id
3 Email: mansurams18@gmail.com
P-ISSN: 2580-6084, E-ISSN: 2580-8079
Based on graph 1.1, it can be seen that the market response tends to fluctuate in the era where Jokowi become a president. It was proven in 2012 and 2013 before Jokowi become President, the market response to the changes in stock prices was quite enthusiastic even though the changes were not significant, in 2014 after the election of Jokowi as President the market response was quite large although in 2015 and 2016 there was a decline but in 2017 and 2018 the market response experienced a very drastic increase compared to previous years. This could happen because the Indonesian stock market players really appreciated the election of Jokowi. At that time, Jokowi promised a breakthrough with a giant budget to build infrastructure (cnbc Indonesia, 2019).

In addition, according to the Chief of the Committee for the Acceleration of Priority Infrastructure Development, Rainier Harriyanto said that the acceleration of infrastructure development was also driven by the existence of the Law on Land Procurement for Public Interest Development. The existence of the law since 2015 has made land acquisition more certain. The acceleration also occurred due to the good investment predicate given by several of international rating agencies to Indonesia. In a survey conducted by the Indonesian Institute of Sciences (LIPI) in 11 provinces, LIPI Expert Survey Coordinator, Esty Ekawati, argued that most experts stated that there was satisfaction in the bridges and roads development. For telecommunications networks, 62.1 percent of experts said it was actually good, 62.1 percent of health infrastructure, 64.8 percent of education infrastructure, 58.6 percent of fuel, 76.6 percent for airports and ports, 60.7 percent for bridges and roads. This status increases investor confidence to invest in infrastructure development (cnnindonesia.com, 2018).

From the description above, it raises questions for stockholders whether Jokowi's re-election as President in the 2019 will apply the old policies or will change the existing policies with new policies. Will the new policy result in much larger return for investors in infrastructure companies or will they lose? And whether the enthusiasm of market participants will increase more than the previous year or it decrease like the previous year.
THEORETICAL BACKGROUND

The Relationship between the Presidential Election on April 17, 2019 and Abnormal Returns Stock

Abnormal return is the gap between the expected return and the obtained return. The return gap will be positive if the obtained return is greater than the expected return or calculated return. Meanwhile, the return will be negative if the obtained return is smaller than the expected return or the calculated return (Nurhaeni, 2009). Abnormal returns can occur due to certain events, for example the election of president and vice president. Where the policies that will be taken by the new president will affect the economic conditions in a country, if the policies taken by the new president can benefit investors in the future, investors will get positive abnormal return (up). On the other hand, if the policies taken by the new president can be detrimental to investors, investors will get negative abnormal return (down). In this case, the election of the president and vice president will greatly influence investors in making decisions to buy or sell shares on the stock exchange, even though the company's performance is good if the political and security situation is not comfortable for investors, they will not invest, even avoid it. There are differences in abnormal returns stock before and after the presidential elections on April 17, 2019.

The results of studies conducted by Diniar & Kiryanto (2015) and (Pamungkas, 2015) found that there is a significant difference in abnormal returns before and after the presidential elections in April 17, 2019.

H1: There are differences in abnormal returns stock before and after the presidential elections on April 17, 2019.

The Relationship between the Presidential Election on April 17, 2019 and Trading Volume Activity

Trading Volume Activity (TVA) is an instrument that can be used to see the reaction of the capital market to information through the changes in stock trading volume in the market as a parameter (Diniar & Kiryanto, 2015). Trading Volume Activity can occur due to certain events, for example the presidential election. Where
the policies that will be taken by the new President will affect the economic conditions in a country, if the policies taken by the new President can benefit investors in the future, investors will respond positively by increasing the trading volume. On the other hand, if the policies taken by the new President can be detrimental to investors, investors will respond negatively by showing a declining trading volume. In this case, the election of the president and vice president will greatly affect investors' interest in making decisions to buy or sell shares on the stock exchange, even though the company's performance is good if the political and security situation is not comfortable for investors, they will not invest, and even avoid it. There will be differences in trading volume activity before and after the presidential elections on April 17, 2019.

The results of studies conducted by Hutami (2015) and (Sihotang & Mekel, 2015) show that there is a significant difference between trading volume before and after the presidential elections in 17 April 2019.

H$_2$: There is a difference in trading volume activity before and after the presidential elections on 17 April 2019.

**METHOD, DATA AND ANALYSIS**

**Research Variables and Operational Definitions**

The variables in this study consist of dependent and independent variables. The dependent variable in this study is the Even study, which is the Presidential election on April 17, 2019, while, the independent variables in this study are stock abnormal returns and trading volume activity.

These following are the operational definition of each variable in this study:

1. Even Study in this study is the Election of President and Vice President on April 17, 2019 which further mention as presidential election.
2. Abnormal return is the difference between the expected return and the obtained return. Abnormal return is calculated by the following formula:

\[
RTN_{it} = R_{it} - E[R_{it}]
\]

Where:
\[ RTN_{1,t} = \text{Abnormal Return of the 1st security in the t event period} \]
\[ R_{1,t} = \text{Actual return that occurs for the 1st security in the t-event period} \]
\[ E[R_{1,t}] = \text{The expected return of the 1st security for the t-event period} \]

3. Trading Volume Activity is an instrument that can be used to see the reaction of the capital market to information through stock trading volume parameters (Praman and Mawardi, 2012). TVA is measured by the following formulation:

\[ TVA = \frac{\text{The number of traded-share}}{\text{the number of outstanding share}} \]

Population and Sample

The populations in this study were Transportation, Infrastructure and Utilities companies listed on the Indonesia Stock Exchange during the time of observation 10 April 2019 - 24 April 2019. The purposive sampling method were used with these following criteria; (1) Transportation, Infrastructure and Utilities listed on the Indonesia Stock Exchange (IDX) during the study period (April 10, 2019 - April 24, 2019), (2) Active shares listed on the Indonesia Stock Exchange (IDX) that have abnormal return and trading volume activity data during the study period (5 days before and 5 days) after the presidential and vice presidential elections on 17 April 2019.

Analysis Method

Wilcoxon Sign Test is a non-parametric test equipment used to analyze the data from the observations of paired samples. Whether there is a difference or not, between before and after the election of president and vice president on April 17 2019.Wilcoxon Sign Test is used as an alternative to Paired sample T-test when the observed data sample is not normally distributed.

RESULTS

The populations in this study are all companies in the Transportation, Infrastructure and Utilities sector that conduct transactions on the Indonesia Stock Exchange (IDX) during 10 - 24 April 2019. Based on Idx.co.id, There are 75 companies. In accordance with predetermined criteria, there are 30 companies that
cannot be used as samples of this study because they do not meet the predetermined criteria. They do not have abnormal return data and there is no trading volume on the stock exchange. While the companies that can be used as samples are 45 companies.

**Descriptive Statistics**

Descriptive statistics describe a data that is seen from the minimum, maximum, average value (mean), and standard deviation. The statistical results of the description can be seen in the following table:

**Table 2. Descriptive Statistics**

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abnormal Return Seland</td>
<td>225</td>
<td>-1076099445</td>
<td>349552551</td>
<td>.0017338649</td>
<td>.0396874929</td>
</tr>
<tr>
<td>Abnormal Return Sesudah</td>
<td>225</td>
<td>-120500316</td>
<td>267941425</td>
<td>.0058067572</td>
<td>.0356157671</td>
</tr>
<tr>
<td>Trading Volume Activity Seland</td>
<td>225</td>
<td>.000000003</td>
<td>.007282567</td>
<td>.0000791723</td>
<td>.0005483124</td>
</tr>
<tr>
<td>Trading Volume Activity Sesudah</td>
<td>225</td>
<td>.000000006</td>
<td>.003655647</td>
<td>.0000567060</td>
<td>.0003004011</td>
</tr>
</tbody>
</table>

Source: SPSS results, 2019

**Tests Wilcoxon Sign Rank Test**

This following table show the result of Wilcoxon sign rank test:
Based on Table 4.2 it can be seen that the results of Wilcoxon Sign Rank Test on Abnormal Return shows that from 225 companies there are 93 sample companies that have decreased (Negative Ranks) from before the presidential elections to after the presidential elections with an average decrease (Mean Ranks) of 110.84 and the number of negative rankings (Sum of Ranks) of 10308.00. While the sample companies that experienced an increase (Positive Ranks) were 132 sample companies with an average value of increase (Mean Ranks) of 114.52 and the number of positive rankings (Sum of Ranks) was 15117.00 and there was no difference in abnormal returns between before and after the election (Ties = 0).

Furthermore, the Trading Volume Activity shows that from 225 sample companies, there are 94 sample companies that have decreased (Negative Ranks) from period before to after presidential elections with an average decrease (Mean Ranks) of 112.99 and the number of negative rankings (Sum of Ranks) of 10621.00. While the sample companies that experienced an increase (Positive Ranks) were 130 sample companies with an average value of increase (Mean Ranks) of 112.15 and the number of positive rankings (Sum of Ranks) was 14579.00 and there were differences in trading volume activity between before and after election (Ties = 1).
Table 4. Hypothesis Testing with Wilcoxon Sign Rank Test

<table>
<thead>
<tr>
<th>Test Statistics&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Abnormal Return Sesudah - Abnormal Return Sebelum</th>
<th>Trading Volume Activity Sesudah - Trading Volume Activity Sebelum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-2.460&lt;sup&gt;b&lt;/sup&gt;</td>
<td>-2.038&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.014</td>
<td>.042</td>
</tr>
</tbody>
</table>

<sup>a</sup> Wilcoxon Signed Ranks Test  
<sup>b</sup> Based on negative ranks.

Based on table 4.3 results explain these following results:

1. The results of the first hypothesis test ($H_1$): there is a difference in Abnormal Return between before and after the presidential elections on April 17, 2019. The Abnormal Return variable shows the significance value or Asymp. Sig. (2-tailed) 0.014 < from the 0.05 level of significance. It means that it can be concluded that $H_1$ is accepted.

2. The results of the second hypothesis test ($H_2$): there is a difference in Trading Volume Activity between before and after the presidential elections on April 17, 2019. The Trading Volume Activity variable shows a significance value or Asymp. Sig. (2-tailed) 0.042 < from the 0.05 level of significance. It means that it can be concluded that $H_2$ is accepted.

DISCUSSION

The Differences in Abnormal Returns Stock Before and after the Presidential Election on April 17, 2019

On the results hypothesis testing ($H_1$) which stated that there was a difference in abnormal returns stock between before and after the presidential and vice presidential elections on April 17, 2019 was accepted. A significant difference indicates that the market provides feedback fast on the information it receives. Market players can conclude that if the previous government returns to lead this country, the direction of future economic policy will be predictable. That the re-election of Jokowi as president
will be able to increase huge profits for Transportation, Infrastructure and Utilities companies listed on the Indonesia Stock Exchange (IDX) (Nurhaeni, 2009).

The results of this study are supported by studies which is conducted by Diniar & Kiryanto (2015) and Pamungkas (2015) which state that there are significant differences in abnormal returns before and after the presidential and vice presidential elections.

**The Differences in Trading Volume Activity before and After the Presidential Elections on April 17, 2019**

On the results of testing the second hypothesis (H₂) which stated that there was a difference in trading volume activity before and after the presidential and vice presidential elections on 17 April 2019 was accepted, but the difference in average trading volume activity after the elections on 17 April 2019 did not increase and even decreased compared to before the presidential and vice presidential elections on 17 April 2019.

The decline in trading volume activity after the elections indicates that investors are responding to the information received more cautiously. Investors tend to make profit tackling and some investors reason to avoid uncertain situations during the election. This result shows that the occurrence of presidential elections on 17 April 2019 gives a signal about bad news on stock exchange activities or declining stock price movements, which will pose risks for investors and for their investments (Nurhaeni, 2009).

The results of this study are supported by studies conducted by Hutami (2015) and Sihotang & Mekel (2015) which state that there are significant differences in trading volume activity before and after the presidential elections.

**CONCLUSIONS**

Based on the results of the analysis that has been carried out using Wilcoxon Sign Rank Test model for 45 companies for 5 days before after the presidential elections on the Indonesia Stock Exchange (IDX), it is concluded that there is a significant difference in the average abnormal returns and trading volume activity.
Suggestions that can be given by researchers based on this study, that investors can pay attention to information on abnormal returns and trading volume activity before invest in a company, especially if there are important events that can have an effect on investing.

Of course, this research cannot be separated from many limitations. The Limitations in this study include the calculation of abnormal returns in this study using the market adjusted model, where in finding the expected return in the observation period is the same as the market return (JCI) during the observation period, so the ability to detect abnormal returns is getting weaker. In addition to the observation period in this study is relatively small, which is 5 days before and after election of president and vice president on April 17, 2019.

The subsequent research agenda that can be used as a reference for researchers in the future is: In calculating abnormal returns are expected in future research should use the mean adjusted model or market model, so the consistency of the results of the study can be observed. It is necessary to consider add the window period or observation period.

REFERENCES


