

**REACTION OF THE TOP 10 CAPITALIZATION SHARES IN THE  
2020 PILPRES EVENT**

**Rahma Nur Praptiwi, Tri Widjatmaka**

Politeknik Negeri Jakarta

E-mail: rahma.nurpraptiwi@mp.pnj.ac.id, tri.wijatmaka@mesin.pnj.ac.id

Received: **April**

**10th, 2021**

Revised: **April**

**19th, 2021**

Approved: **April**

**17th, 2021**

**Abstract**

*This research is a study that aims to see whether there is empirical evidence of the reaction of the Indonesian capital market to international political events, namely the 2020 US Presidential Election using abnormal return indicators and trading volume activity. The research methodology used is event research. This study uses primary data taken from the first party and researchers get data directly from a questionnaire given to all employees of IT companies in the Special Region of Yogyakarta. The population in this study are stocks that are included in the top 10 capitalization companies in Indonesia. The sampling technique in this study used convenience sampling. The data collection technique in this study used a questionnaire equipped with an answer level as the choice of respondents to answer questions. The data analysis technique used multiple linear regression and the application used SPSS version 22. The results of the paired sample t-test statistical calculation both abnormal return and trading volume activity showed that there was no difference in the average abnormal return and trading volume activity before and after the event.*

**Keywords:** Capital Market, Event Study, Abnormal Return, Trading Volume Activities



**This work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International**

**INTRODUCTION**

One of the most attractive investments for investors is stocks. Because stocks have a high-profit opportunity, but they also have a high potential risk. Stocks allow investors to get multiple benefits, namely in the form of capital gains (the difference between the selling price and the buying price) and dividends. However, shares of going public issuers which are capital goods are very sensitive to changes, both at home and abroad.

In an economic and non-economic environment, there are various events on the stock exchange in which information and data are contained, so that information and data cannot be separated from the stock exchange. According to Suryawijaya and Setiawan as referred to in (Wardhani, 2012), the increasingly important role of the stock market in economic activity, makes the stock market more sensitive to events in its surroundings, whether related or not directly related to economic events.

The capacity of the company or company, changes to company plans, publication of financial reports or dividends are influenced by economic conditions, and always get a response from market players in the capital market. Moreover, various government regulations and economic deregulation also affect changes in price and transaction volume on the stock exchange (Gunanta, 2012). The impact of non-economic conditions, although not directly related to changes in the stock market, cannot be free from stock trading activities (Diniar & Kiryanto, 2016). Non-economic conditions, for example,

## **Rahma Nur Praptiwi, Tri Widjatmaka**

various problems related to ecological issues, human rights, and political conditions, are often the main factors that trigger changes in stock prices on global stock exchanges.

Political issues are part of non-economic conditions and will affect the state of the capital market. Because changes in the political situation will have an improved or even worsening impact on economic stability in which investors want to trade in the stock market. Political stability and stable economic conditions will create a sense of security for investors to invest their funds in the stock market. In this way, investors usually have high expectations of political events, and high expectations will be reflected in changes in stock prices or movements in stock exchange volume in stock trading.

The United States is a superpower that is the mecca of many countries. The election of the President of the United States (Pilpres) of the United States of America in 2020 determines the climate around the world. The US Presidential Election which was held on November 3, 2020, was the 59th US Presidential Election. The presidential candidates for the Presidential Election are Joe Biden-Kamala Harris and Donald Trump-Mike Pence.

This study has the objective of whether there is a significant difference before and after the US presidential election on abnormal returns and whether the trading volume activity between before and after the US presidential election is significantly different.

According to (Sudarsono, 2014) return is the result of the acquisition of investment activities. There are two differences in returns, namely the return that is realized and the return that is expected or expected (investors want this return). Stock return refers to the value of profits that investors feel when investing. According to (Hermuningsih, 2018) return is the result of investing in shares, profits or losses can also be negative or positive. If it is positive, it means that you can gain capital or get realized results, while negative means that you have suffered a loss or capital loss.

According to Jogiyanto (2009) referred to in (Hutami, 2015) abnormal return is the difference between the actual return and the return expected by investors. The difference in return will be positive if the return obtained is greater than the expected return or the return that is calculated.

According to Jogiyanto (2009) in (FIrga, 2012), there are three estimation models of expected return, namely:

a. Mean-adjusted model.

The model assumes that the expected return is constant, with the model the average return realized before the estimated period (estimation period). Using the average through adjustment model, the expected return computes it by dividing the firm's actual realized return over the estimated period by the duration rather than the estimated period. Where the estimated period is the period the event or event occurred (event period) or the event window (event window).

b. Market model.

The market treatment model takes two stages, namely: (1) an expectation model that is formed by using the realization during the estimation period (2) the use of the expectation model to estimate the expected return in the event window. The expectation model calculates the amount of the expected return that is not affected by market shifts, market index gains, and expected returns that are not affected by market shifts. How to calculate the expected return using the market model is calculated using the beta. Beta on the IDX (Indonesia Stock Exchange). It has been proven to be biased due to thin trading because the IDX is a market where trading transactions rarely occur.

c. Market adjusted model.

The market-adjusted model assumes that the best predictor for estimating the

return of a security is the current market index return. By using this method, there is no need for an estimation period to form an estimation model. Thus, the expected return is the market

## **Rahma Nur Praptiwi, Tri Widjatmaka**

index return in a particular event period, and the expected return for all securities in that particular event period is the same.

To get a return or rate of return, investors must pay attention to the potential risks that will be faced if they want to get a certain return. Risk is the difference that may occur between the expected return and the actual return received. The more likely the difference, the greater the investment risk. Risk consists of various reasons, including interest rate risk, market risk, inflation risk, liquidity risk, business risk, and exchange rate risk, financial risk. Types of risk are divided into two categories, namely general risks (risks related to market changes as a whole) and specific risks experienced by companies, namely risks not related to market changes (Nurhaeni, 2009).

Tandelilin (2001) in (Desiyanti, 2011) defines abnormal return as an increase in the rate of return or rate of return from investors' acceptance in one trading session, generally, in stock trading, the return on profits occurs only once, due to achieving the highest profit value. only get once to then decrease slowly and then stabilize again.

This research is relevant to research conducted by (Praptiwi, 2017) entitled Reactions of the Top 10 Capitalization Shares Against the 2014 Ri Presidential Election. This research is an event study that aims to determine whether there is empirical evidence of the reaction of the Indonesian capital market to one of the events. politics in the country, namely the 2014 Presidential Election, using indicators of abnormal return and trading volume.

The difference with previous studies only lies in the variables that affect it, namely this study uses the issue of the 2020 US Presidential Election, which is a more global scale. This research is important to do so that investors and other interested parties know the effect of the 2020 US Presidential Election on the reaction of the capital market in Indonesia.

### **RESEARCH METHOD**

The research methodology applied is event research. According to (Suganda, 2020), the capital market event study is an empirical study used to analyze the effects of stock exchange events in countries. Another meaning, the study is applied to determine the response of the capital market to various events. In capital market research, particularly for market efficiency testing, event study is a semi-strong form of market efficiency test methodology.

This study uses primary data taken from the first party and the researchers get the data directly from the questionnaire given to all employees of IT companies in the Special Region of Yogyakarta. The object of this research is organizational culture and procedural justice for organizational citizenship behavior (OCB). The independent variable is organizational culture (X1) and procedural justice (X2). While the dependent / dependent variable in this study was organizational citizenship behavior (Y). The population in this study were all employees of IT companies in the Special Region of Yogyakarta. The sample selection is by using the purposive sampling method, which means that those who fit the criteria as desired will be used as research samples.

The sampling technique in this study used convenience sampling. The data collection technique in this study used a questionnaire that was equipped with an answer level as the choice of respondents to answer questions. The data analysis technique used multiple linear regression and SPSS version 22 as the application used.

## RESULTS AND DISCUSSION

### A. Results of Linear Regression Testing

Table 2

Summary of Regression Test Results for Companies with Top Capitalization Returns with IHSB Returns

| No  | Company Name | Regression Equation         | R     | Coefficient of Determination |
|-----|--------------|-----------------------------|-------|------------------------------|
| 1.  | BBRI         | $Y=1.619x + \epsilon$       | 0.807 | 0.651249                     |
| 2.  | BMRI         | $Y=0.002+1.580x + \epsilon$ | 0.809 | 0.654481                     |
| 3.  | BBCA         | $Y=0.001+1.172x + \epsilon$ | 0.779 | 0.606841                     |
| 4.  | BBNI         | $Y=0.001+1.613x + \epsilon$ | 0.823 | 0.677329                     |
| 5.  | ASII         | $Y=1.310x + \epsilon$       | 0.665 | 0.442225                     |
| 6.  | BBTN         | $Y=1.792x + \epsilon$       | 0.735 | 0.540225                     |
| 7.  | BNGA         | $Y=0.001+1.476x + \epsilon$ | 0.685 | 0.469225                     |
| 8.  | TLKM         | $Y=0.002+1.402x + \epsilon$ | 0.702 | 0.492804                     |
| 9.  | PNBN         | $Y=1.052x + \epsilon$       | 0.6   | 0.36                         |
| 10. | BDMN         | $Y=0.001+1.443x + \epsilon$ | 0.75  | 0.5625                       |

Based on table 2, of the top 10 capitalized companies, six of them have positive  $\alpha$  values, namely BMRI, BBCA, BBNI, BNGA, TLKM, and BDMN, meaning that if the independent variable (IHSB) is considered constant, the company return value is positive. Four companies, namely BBRI, ASII, BBTN, and PNBN have an  $\alpha$  value of zero, which means or if the independent variable (IHSB) is considered constant, the company return value is zero.

The beta value or beta coefficient is used to estimate the occurrence of systematic risk. According to Scheneller (1975) referred to in (Paramitasari, 2011), systematic risk is a risk that cannot be avoided through diversification or commonly called market risk or (market risk) which is the cause due to factors affecting the entire market or economy. Beta of 1 means that every 1% increase / decrease in profits of the market makes an increase / decrease in stock profits by 1%. Thus, the greater the beta, the more sensitive the security profits are to the turnover of market profits and the more risky the stock is. Based on the regression results, the order of companies with the highest to lowest beta are BBTN (1,792), BBRI (1,619), BBNI (1,613), BMRI (1,580), BNGA (1,476), BDMN (1,443), TLKM (1,402), ASII (1,310), BBCA (1,172), and PNBN (1,052).

According to Gozali (2009) referred to in (Paramitasari & Mulyono, 2016) the coefficient of determination ( $R^2$ ) measures how far the model's ability to explain variations in the dependent variable. The coefficient of determination ranges between zero (0) and one (1). A small  $R^2$  value means that the ability of the independent variable (free) to interpret the variation in the dependent variable is so limited. Value close to one (1) means that the independent variables show almost all the information or data needed to predict the variation in the dependent variable. The coefficient of determination ranges from 0.36 to 0.6773.

Table 3  
Average abnormal return (AAR) and standard deviation

|            | N | Minimum  | Maximum  | Average  | Standard Deviation | Variation |
|------------|---|----------|----------|----------|--------------------|-----------|
| AAR before | 5 | -0.0353  | 0.054214 | 0.015413 | 0.026763           | 0.00      |
| AAR after  | 5 | -0.00703 | 0.017437 | 0.004576 | 0.008911           | 0.00      |

According to table 3, the average abnormal return (AAR) after the event has decreased. Before the event, the average abnormal return was 0.015413, the standard deviation was 0.026, while after the event the standard deviation was 0.004576, which was 0.0089. The standard deviation has decreased quite a lot, which is equal to -0.0178. It can be shown that the abnormal return condition after the event is more homogeneous than before the event.

Table 4  
Average abnormal return before and after the event

| t  | Average abnormal return |
|----|-------------------------|
| 5  | 0.001184                |
| 4  | 0.006186                |
| 3  | 0.007475                |
| 2  | 0.006329                |
| 1  | 0.001944                |
| -1 | 0.009857                |
| -2 | -0.00642                |
| -3 | 0.000875                |
| -4 | -0.00212                |
| -5 | 0.00305                 |

During the event period, the average abnormal return based on the calculation results (five days after and five days before the event) shows that most of them are positive for the average abnormal return. The highest average abnormal return value occurs on the first day before the incident, which is 0.001944, while the lowest average abnormal return value on the second day after the event is -0.006425. There is a difference in the average abnormal return (AAR) value in the observation period before and after the incident, indicating that market players responded to the events of the US Presidential Election.

Trading volume activity (TVA) is a tool used to show the response of the stock market to information or data by measuring the mobility parameters of the movement of buying and selling shares in the market. The calculated TVA describes the ratio between the total shares traded and the total shares running during a certain period of time.

Table 5  
Average trading volume activity

|          | N | Minimum  | Maximum  | Mean     | Std. Deviation |
|----------|---|----------|----------|----------|----------------|
| TVA_SBLM | 5 | 0.253132 | 0.276543 | 0.265667 | 0.011113       |
| TVA_STLH | 5 | 0.177196 | 0.438251 | 0.28511  | 0.10787        |

According to table 5, the average TVA after the incident has increased. The

average TVA before the event was 0.265667, which is a standard deviation of 0.011113, while the average TVA after the event was 0.28511 with a standard deviation of 0.10787. The standard deviation has increased quite a lot, which is equal to 0.0967. This shows that the condition after the event was more varied than before the event, namely the stock sale.

Table 6  
Average trading volume activity during the observation period

| <b>T</b> | <b>Rata-rata <i>Trading Volume Activity</i></b> |
|----------|---|
| 5        | 0.177196  |
| 4        | 0.252966  |
| 3        | 0.35043   |
| 2        | 0.438251  |
| 1        | 0.206709  |
| -1       | 0.276543  |
| -2       | 0.254706  |
| -3       | 0.253132  |
| -4       | 0.275045  |
| -5       | 0.268911  |

The difference in the average TVA value at the time observed before and after the event shows that the situation and conditions before and after the event have enough information to smooth market response. (Mahaputra & Purbawangsa, 2015) in their research said that an event or a condition that is created can be said to be information if it is able to change or be taken into consideration by market players.

## B. Hypothesis Testing

### 1. Hypothesis Testing I

The first hypothesis in this study is that there is an influence between 10 stocks with top capitalization and the Composite Stock Price Index (IHSG) during the US Presidential Election.

### 2. Hypothesis Testing II

The second hypothesis in this study is that there is a difference in the average abnormal return obtained by investors before and after the US Presidential Election.

### 3. Hypothesis Testing III

The third hypothesis in this study is that there is a difference in the average trading volume obtained by investors before and after the US Presidential Election.

## Hypothesis Testing I

The first hypothesis is that there is a difference in the average abnormal return obtained by investors before and after the US Presidential Election. According to (Hidayat, 2019), abnormal returns occur due to certain events, for example national holidays, the beginning of the month, an uncertain political atmosphere, extraordinary events, stock splits, initial public offerings, and others.

Hypothesis testing will be carried out, so before that it must be known in advance the data from the variables, namely the abnormal return before and after the event is normally distributed or not. This normality test will use the Z-test formula from Kolmogorov Smirnov, with the following rules:

1. If  $\text{sig} \leq 0.05$ , then the data are not normally distributed
2. If  $\text{sig} > 0.05$ , then the data is normally distributed.

Table 7  
Normality Test of Variable Data Abnormal return

|         | AR Before | AR After |
|---------|-----------|----------|
| Score Z | 0.495     | 0.670    |
| Sig     | 0.967     | 0.761    |

Source: processed data (2021)

Table 7 shows the Z value or Z-value of each abnormal return. Based on table 7, it can be concluded:

1. The Z value for the abnormal return variable before the event is 0.495 with a significance of 0.967. The sig value  $> 0.05$ , then the conclusion is that the abnormal return data before the event is normally distributed
2. The Z value for the abnormal return variable after the event is 0.670 with a significance of 0.761. because the sig value  $> 0.05$ , the conclusion is that the abnormal return data after the event is normally distributed.

Based on the Z-test with Kolmogorov Smirnov, it is concluded that the two variables have a normal data distribution, so that the analysis can continue into a parametric statistical analysis.

Tabel 8  
*Paired sample t-test Variabel Abnormal return*

| Mean     | St. Deviation | t     | df | Sig.(2-tailed) |
|----------|---------------|-------|----|----------------|
| 0.009985 | 0.02          | 1.639 | 9  | 0.136          |

Source: processed data (2021)

Based on table 8, the Paired sample t-test shows a t value of 1.639 with a significance of 0.136. Because sig  $> 0.05$ , it can be concluded that there is no difference in the average abnormal return obtained by investors between before and after the US Presidential Election at the 95% confidence level. The rules that apply in the paired sample t-test are:

1. If the t value  $> t$  table, then  $H_0$  is rejected or is in the area of acceptance for  $H_1$  (there is a significant difference in the average abnormal return between before and after the US Presidential Election.)
2. If the t value  $< t$  table, then  $H_0$  is accepted or is in the  $H_1$  rejection area (there is no significant difference in the average abnormal return between before and after the US Presidential Election)

The findings of this study are in accordance with the research (Hidayat, 2019) namely that there is no difference in the average abnormal return before and after the event. Market response related to general election events in terms of stock abnormal returns tends to be momentary and not prolonged.

### Hypothesis Testing II

The second hypothesis is that there is a difference in the average TVA or trading volume obtained by investors before and after the US Presidential Election. Hypothesis testing will be carried out, so before that, the data from the trading volume activity variables before and after the event must be normally distributed or not. This normality test will use the Z-test formula from Kolmogorov Smirnov, with the following rules:

1. If sig  $\leq 0.05$ , then the data are not normally distributed
2. If sig  $> 0.05$ , then the data is normally distributed.



Table 9  
Normality Test of Stock Trading Volume Variable Data

|         | TVA Before | TVA After |
|---------|------------|-----------|
| Score Z | 0.486      | 0.532     |
| Sig     | 0.972      | 0.940     |

Source: processed data (2021)

Table 9 above shows the Z value of each share trading volume, namely:

1. The Z value for the variable stock trading volume before the US Presidential Election is 0.486 with a significance of 0.972. The value of sig > 0.05, then the conclusion is that the stock trading volume data before the event is normally distributed.
2. The Z value for the variable stock trading volume after the US Presidential Election is 0.532 with a significance of 0.940. The value of sig > 0.05, then the conclusion is the stock trading volume data after the event is normally distributed.

Table 10  
Paired Sample t Test Variable Stock Trading Volume

| Mean     | St. Deviasi | t      | df | Sig.(2-tailed) |
|----------|-------------|--------|----|----------------|
| -0.01944 | 0.11393     | -0.540 | 9  | 0.603          |

Source: processed data (2021)

The paired sample t test above shows the t value of -0.540 with a significance of 0.603. The significance value is 0.603 > 0.05, so the conclusion is that there is no difference in the average stock trading volume activity before and after the US Presidential Election at the 95% confidence level.

**C. Discussion**

Figure 1 presents the fluctuations in the abnormal return that occurred when an event occurred, namely at intervals of five days before and five days after the event. In general, before the event, the average abnormal return increases until the third day and decreases until the first day before, while the average abnormal return after the event generally fluctuates up and down.

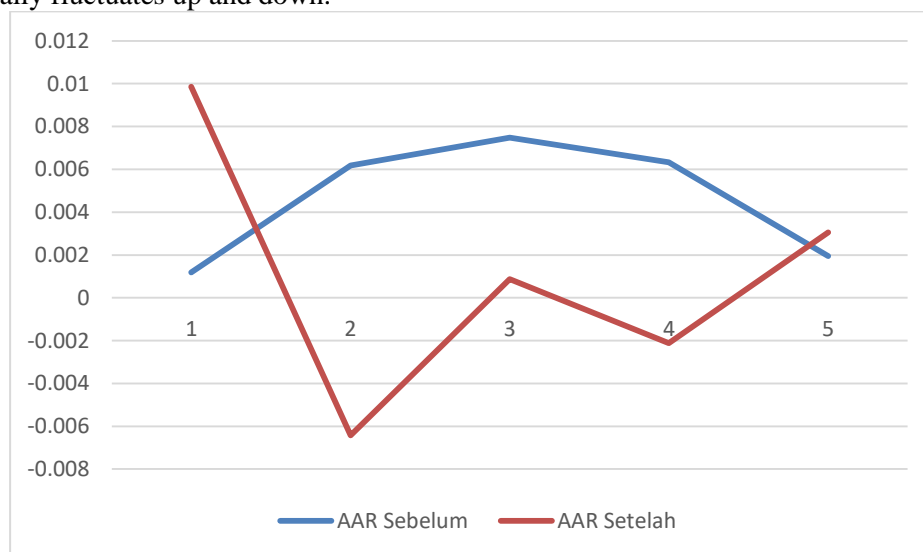


Figure 1 Average Abnormal return Around the US Presidential Election

## Rahma Nur Praptiwi, Tri Widjatmaka

Investing funds in the capital market carries a risk that is closely related to stock price fluctuations, and price fluctuations are influenced by various information or data. Information with good news means the stock price will go up, and information with bad news will decrease the stock price (Nurhaeni, 2009).

According to the paired sample t-test, it shows the t value of 1.639 with a significance of 0.136. Because  $\text{sig} > 0.05$ , it can be concluded that there is no difference in the average abnormal return obtained by investors between before and after the US Presidential Election at the 95% confidence level. This is due to the actions of players on the stock exchanges who tend to prepare speculations that are considered favorable for them on the days around the events. Not showing the relevant difference between the average abnormal returns before and after the US presidential election proves that although the events contain information, investors' reactions did not cause turmoil for the capital market.

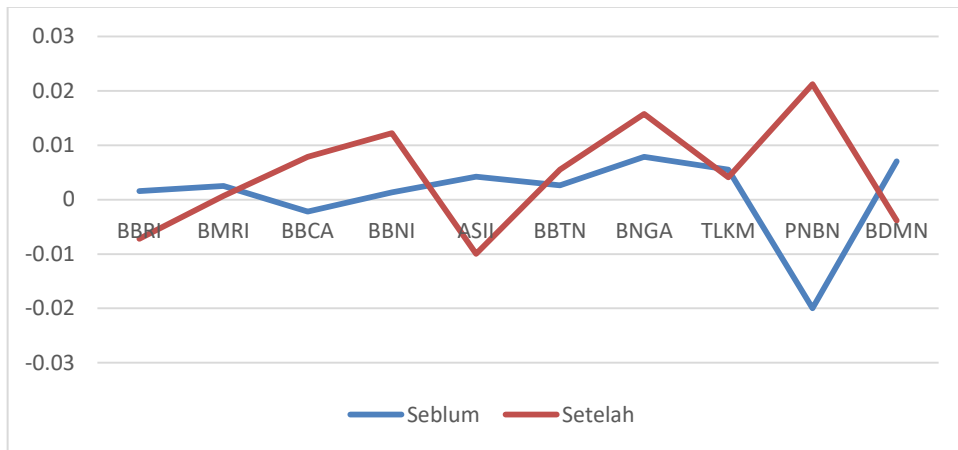


Figure 2 Average Abnormal Return by Company

Based on Figure 2, the general conclusion is before the event and, the company gets a positive abnormal return, and after that, the abnormal event is negative. Before the incident, PNBK had a negative tendency, while after the ASII incident it tended to be negative.

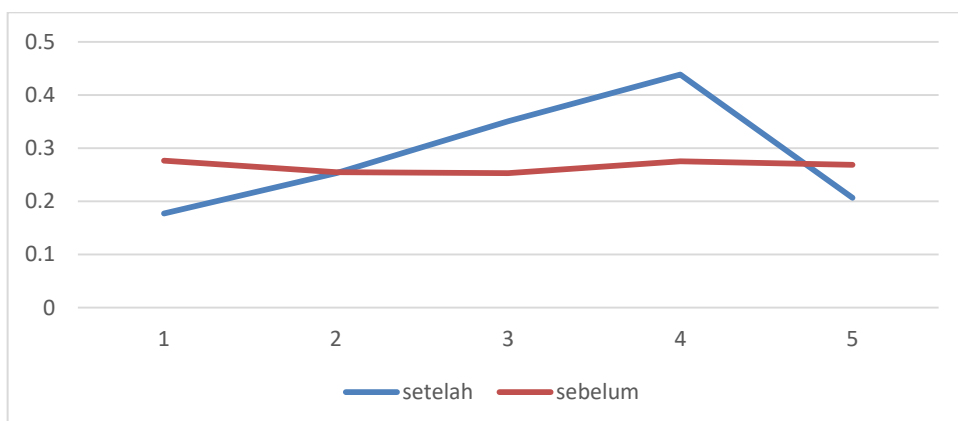


Figure 3 Average Trading volume activity (TVA) Around the US Presidential Election

Figure 3 illustrates the fluctuations in TVA that occurred during the event period,

namely the five days before and five days after the event. There was a fairly stable condition in the days before the event, and there was a downtrend after the fourth day before the event. Selling action tends to color trading activities as a strategy for market players to secure their portfolios. From the paired sample t test, the t test above shows the t value of -0.540 with a significance of 0.603. The significance value is  $0.603 > 0.05$ , so the conclusion is that there is no difference in the average stock trading volume before and after the US Presidential Election at the 95% confidence level.

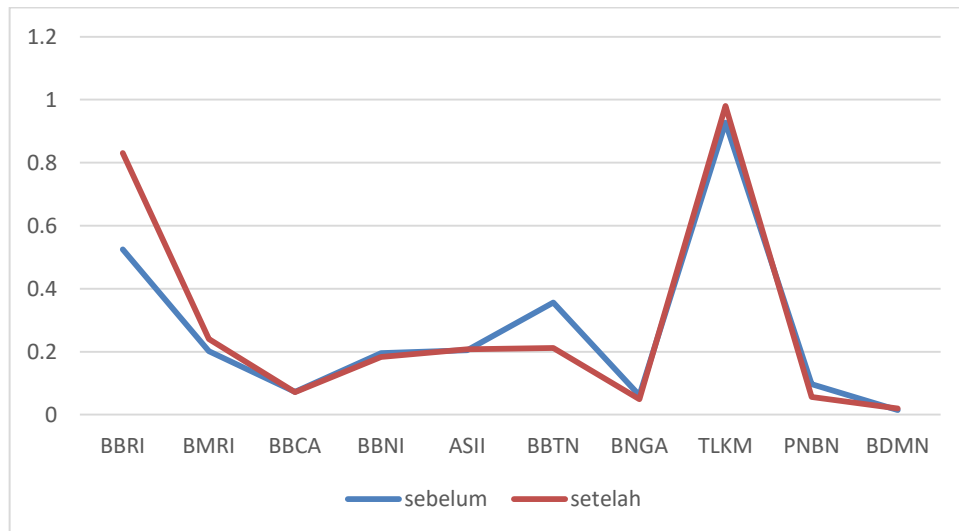


Figure 4 Average Trading Volume Activity by Company

Based on the picture above, the conclusion is that before or after the event there is no change in average trading volume activity. Telkom has the highest average trading volume activity. Figure 4 shows that there is no change in average trading volume activity on a large scale.

## CONCLUSION

Based on the research results, it can be concluded that 1). From the paired sample t test, it can be seen that there is no difference in the average abnormal return obtained by investors between before and after the US Presidential Election at the 95% confidence level. The existence of an abnormal return indicates that the market has not been effective in a semi-strong form if the information that is fully reflected in the price is public information and market information. 2). From the paired sample t test, it can be seen that there is no significant difference in the average trading volume before and after the US Presidential Election. This is due to the actions of stock exchange players who tend to prepare speculations that are considered favorable for them on the days around the events.

## REFERENCES

- Desiyanti, Rika. (2011). The Effect Of Abnormal Return And Capital Gain On The Rate Of Return Of Shares. *Journal Of Accounting And Auditing Studies*.
- Diniar, Ayudia Hanung, & Kiryanto, Kiryanto. (2016). Analysis Of The Impact Of President Jokowi's Election On Stock Returns (Case Study Of Lq-45 Shares In The

## **Rahma Nur Praptiwi, Tri Widjatmaka**

- Indonesia Stock Exchange). *Indonesian Journal Of Accounting*, 4 (2), 97–108.
- Firga, Yanti. (2012). Testing Of Abnormal Stock Returns Before And After The Launch Of The Indonesian Sharia Stock Index (Issi). *Journal Of Management*, 1 (1), 1–17.
- Gunanta, Joshua Get Up. (2012). Impact Of The Loan To Value Restriction Rule On Property Share Prices. *Journal Of Accounting Unesa*. Surabaya.
- Hermuningsih, Sri. (2018). Affecting Factors. (September), 78–89.
- Hidayat, Randy. (2019). Analysis Of Differences In Abnormal Return Before And After Political Events On Lq-45 Company Shares In Bei. *Journal Of Management Science*, 7 (2), 193. <https://doi.org/10.32502/jimn.v7i2.1569>
- Hutami, Rizkia Nur And Moh Didik Ardiyanto. (2015). Abnormal Return And Trading Volume Activity Before And After Presidential Election. *Journal Of Accounting*, 4 (2), 1–10.
- Mahaputra, I., & Purbawangsa, I. (2015). The Influence Of 2014 Legislative Election Events On Abnormal Returns Of Lq 45 Shares On The Indonesia Stock Exchange. *E-Journal Of Management Of Udayana University*, 4 (5), 248013.
- Nurhaeni, Nunung. (2009). The Impact Of The Indonesian Legislative General Election In 2009 On Abnormal Returns And These Activities. *Journal Of Accounting And Auditing*.
- Paramitasari, Ratih. (2011). The Effect Of Systematic Risk And Unsystematic Risk On The Expected Return Of The Stock Portfolio Of Manufacturing Companies Listed On The Indonesia Stock Exchange.
- Paramitasari, Ratih, & Mulyono, Mulyono. (2016). Portfolio Analysis To Determine The Optimal Expected Return And Minimal Risk On Shares Of Telecommunications Companies Listed On The Indonesia Stock Exchange. *Journal Of Management And Organization*, 6 (1), 19. <https://doi.org/10.29244/jmo.v6i1.12181>
- Praptiwi, Rahma Nur. (2017). Reaction Of The Top 10 Capitalization Shares On The Election Of The President Of The Republic Of Indonesia In 2014. *Complexity: Management Scientific Journal, Organization And Business*, 6 (2).
- Sudarsono, Bambang. (2014). Factors Affecting Stock Returns In Property And Real Estate Companies Listed On The Indonesian Stock Exchange. *Business And Economics (Jbe)*, 23 (1), 30–51.
- Suganda, Renald. (2020). Event Study Theory And Discussion Of Indonesian Capital Market Reactions.
- Wardhani, Laksmi Swastika. (2012). The Reaction Of The Indonesian Capital Market To The Second Round Of 2012 Dki Jakarta Governor Election (Event Study On Member Shares Of The Kompas 100 Index). *Feb Student Scientific Journal*, 1 (1), 129–142.