

# The Influence of Capital City Redeployment's Announcement on Abnormal Return and Trading Volume Activity of the LQ-45 Companies

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## ABSTRACT

This study aims to investigate the difference between abnormal return and trading volume activity before and after the occurrence of the capital city deployment announcement at the listed companies in LQ-45 index stock. This study carried out by using event study analysis method with 11 (eleven) exchange days: 5 (five) days before, 1-day event date, and 5 (five) days after the announcement. The population is companies listed in LQ-45 index stock. The sample was selected with a purposive sampling method consisting of 44 abnormal distributed companies using One-Sample Kolmogorov-Smirnov. The data were analyzed by using Wilcoxon Sing Rank Test. The result showed that: a). there is no significant difference between abnormal return average toward before and after the occurrence., and b). there is a significant difference in trading volume activity before and after the announcement.

**Keywords:** *Abnormal Return, Trading Volume Activity, Capital City Deployment Announcement*

## 1. INTRODUCTION

Country's economic progress can be measured by the existing capital market activities in the country. The capital market cannot be separated from the various effects of events or phenomena occurred, whether the event is an economic or non-economic. Zaqi (2006) stated that economic events as well as non-economic events that occur in the country cause a reaction to a country's capital modal. Government policies and the economic conditions of the country can affect the capital market. Considering that one of the investors' consideration in investing is profit, investors will conduct studies on economic, political, and legal aspects before investing. Countries which have a stable economic, socio-political conditions and government policies will provide a safer climate for investment, and therefore the risk of investing in that country is smaller than those which have unstable economic (Brigham & Houston, 2010, p. 190).

One of the changes in Indonesian's government policies and political events that grab people's attention is the announcement of Capital city relocation from Jakarta to East Kalimantan. The removal of the national capital means the transfer of the center of government. Previously the center of government, business, finance, trade, and services was centered in Jakarta, resulting in inequality. The removal of the central government will have an impact on the global economy, especially on the capital market.

On 29<sup>th</sup> April of 2019, President Joko Widodo held a limited meeting which resulted a conclusion to relocate Capital city out of Java (Ministry of Communication, 7 January 2020). Then in a state speech on 16<sup>th</sup> August of 2019, President Jokowi asked for permission to relocate the Capital city to the island in Kalimantan, but the exact location was not mentioned yet (Kompas, 7 January 2020). Up to August 26<sup>th</sup> of 2019, President Jokowi through the press conference officially announced the transfer of the

national capital to North Penajam Paser Regency and Kutai Kartanegara Regency, East Kalimantan. In the press conference, Bambang Brodjonegoro as Minister of PPN and The Head of BAPPENAS also stated that the process of relocating the national capital is not an easy thing, it takes a long time. He also added, in 2020, the preparation for relocating the national capital is ready, including masterplan, design, building design, the basis of the legislation, especially the bill and the preparation of the land so that infrastructure development can be carried out in 2020 and the process of relocating the national Capital at the latest is 2024 (Republika, January 7, 2020). The relocating of the national Capital has been included in the National Medium Term Development Plan (RPJMN) 2020-2024, revised edition in June 2019. This project is in priority program number 2 of 7 national priorities.

According to Taufiq (2017), the relocation of the national capital has an impact on the potential for economic equality connectivity. The relocation of the national capital has internal and external impacts. Internal impacts allow economic development leading to the development of outer islands apart from Java. External impacts will have

an impact on foreign cooperation. Besides, the new national capital will increase the attractiveness of Indonesia so it will bring foreign exchange value to the country through investment and tourism.

Hoesen as the Chief Executive of Capital Market Supervisor, OJK, said that the relocation of the national capital to Kalimantan will encourage equity of investment. Indonesian Central Securities Depository data per October 23 of 2019, mentioned that the number of investors by region was still controlled by the island of Java with a ratio amount of 72.20%. Then followed by Sumatra amount of 15.01%, Kalimantan amount of 4.90%, and the rest are scattered in eastern Indonesia. It is hoped that the relocation of the capital outside Java can create a new point of economic growth to encourage investment in demand (Business tempo, January 5, 2020).

Information on announcing the relocation of the national capital is considered to have information content for investors. This can be seen from the movement of the JCI which tends to rise after the announcement which can be observed from the following table:

**Table 1.** Indonesia Stock Price Index

Announcement day	IHSG (Rp)
-5	6296,715
-4	6295,738
-3	6252,967
-2	6239,245
-1	6255,597
0	6214,510
1	6278,171
2	6281,647
3	6289,119
4	6328,470
5	6290,546

*\*Source: www.idx.co.id*

From Table 1, it can be seen that before President Jokowi announced the relocation of the national capital in August 26<sup>th</sup> 2019, the composite stock price index (CSPI) moved fluctuative. It can be seen that JCI strengthened one day before the (t-1) announcement of national capital relocation.

However, during the period of the IHSG event, it was observed as down amount 41.46 points from the level of 6255.597 to 6214.51. Meanwhile, on the day after the event (t + 1) the announcement of national capital relocation was observed as strong (August 27, 2019). JCI on the day after the event (t +

1) was observed as strong amount 63,661 points from the level of 6214.51 to 6278.171. JCI movement is inseparable from the movement of bluechip shares. Bluechip shares are 45 stocks that have high liquidity and capability. Based on data from IDX.co.id, the LQ-45 stock index in the period of the event decreased amount 7,365 points from the level of 975,255 to 979,662, while in the post-event period ( $t + 1$ ) the LQ-45 index increased amount 11,772 points from the previous day which was 967.89 to 979,662.

Thomas Lembong as the Head of the Investment Coordinating Board (BKPM) mentioned that the announcement of national capital relocation becomes a positive sentiment for investors. This is because the estimated budget for moving the national capital out of Java is around IDR 466 Trillion or USD 33 Billion (detikfinance, 30 April 2020). The funding needs can be fulfilled with various financing schemes, which amounted to 19.2% or IDR 89.472 Trillion came from APBN funds, 54.6% or IDR 254.436 Trillion came from Government Business Entity Cooperation (KPBUE), and 26.2% or IDR 122,092 Trillion comes from the private sector (CNBC Indonesia, 30 April 2020).

From the financing scheme created by the government, the number of funds coming from the APBN will be kept as low as possible so that it does not interfere with the country's needs which are highly prioritized. The biggest funding scheme comes from the PPP because this government wants to involve a greater private role. So that the development of basic and important infrastructure can combine cooperation between the private sector and the government, while the rest comes from private (Coverage 6, 30 April 2020). The financing scheme for the relocation of the national capital, mostly from the private sector, has resulted Indonesia becomes one of the destination countries to invest (Bisnis.com, 30 April 2020). The relocation of the national capital help to stimulate the investment in Indonesia, which was previously sluggish.

The increase in demand for several securities stocks. The increase in demand led to an

increase in sell prices one day after the event, including PP Properti Tbk (PPRO) by 17.65%, PT Agung Podomoro Land Tbk (APLN) by 7.73%, PT Sitara Propertindo Tbk (TARA) by 4.25 %, PT Bumi Serpong Damai Tbk (BSDE) by 3.64%, PT Capri Nusa Property Tbk (CPRI) by 1.75%, and several other issuers (idx.co.id, January 8, 2020). The most significant increase occurred in the shares of the company PP. Properti Tbk (PPRO), which led the top gainers on the IDX. The increase in property issuer's shares is due to the issuer already owning land or projects in Kalimantan (CNN, 8 January 2020). As happened to PT Agung Podomoro Land Tbk (APLN) which has a Borneo Bay City development project located not far from Kutai Kartanegara Regency and North Penajam Paser Regency. Whereas the issuers of PP Properti Tbk (PPRO) experienced a flood of calls for cooperation from some landowners to develop projects around the location of the new capital. Also, the issuer PP Properti Tbk (PPRO) has a hotel and shopping center in East Kalimantan. The high demand for shares from a number of these issuers has caused the price of the shares to increase. The announcement of national capital relocation also has an impact in the form of an increase in stock trading volume. Stocks experienced an increase during the event period includes PT Ciputra Development Tbk, which increase amount of 559.54% from 13,641,100 to 89,968,700, Capri Nusa Satu Properti Tbk. (CPRI) increase amount of 351.03% from 4,086,000 to 16,958,300 and Sitara Propertindo Tbk. (TARA) which increase amount of 132.2% from 27,037,200 to 62,801,400 (idx.co.id, 8 January 2020).

To test the information content of announcement, an event study approach is use. The use of the event study approach is intended to see the reaction of an announcement which is not directly related to an economic event, relocating of national capital. Market reaction is indicated by changes in prices of the relevant securities that can be measured by abnormal return (AR) and changes in stock trading activity measured by trading volume activity (TVA) (Islami, 2012).

## 2. LITERATURE REVIEW

### 2.1 Signaling Theory

According to Spence (1973), signaling theory involves two parties, namely the party within the company, for example, management who acts as the party giving the signal, and an external party such as the investor who acts as the recipient of the signal. Company managers have more information about the company's prospects than investors. For this reason, management attempts to reduce information assessment by giving signals to outsiders in the form of financial information in order to reduce uncertainty about the prospects of the company (Morris, 1987). Spence stated that by giving a signal or signal, the management tried to provide released information. Then the investor will adjust the decision according to the investor's understanding of the signal given.

Hartono (2017, p. 614) stated that published information can provide signals used by investors to make investment decisions. When an event or announcement has information content (information content), it will cause a reaction when the information is published. The reaction can be demonstrated by the change in the price of the security in question. The reaction can be measured by an abnormal return (Hartono, 2017, p. 644). When market participants regard the event as good news (good news), the response generated is a positive response producing positive abnormal returns, and vice versa. In addition to abnormal returns, market reactions can be seen from changes in stock trading volume. Changes in the volume of stock trading reflect investment decisions because it shows stock trading activities in the capital market.

### 2.2 Efficient Market Theory

According to Fama (1970), an efficient market occurs if the price of a security "fully reflects" the available information (a security market is efficient if the security prices "fully reflect" the information available). According to Hartono (2017, p. 605), if the market reacts quickly and accurately to reach a new equilibrium price that fully reflects the information available, then this condition is called an efficient market. From the explanation, it can be concluded that the market is efficient when a market can respond

to information so that it reaches a new Equilibrium. Meanwhile, according to Tandililin (2010, p. 219), an efficient market is a market where the prices of all traded securities have reflected all available information.

### 2.3 Differences in Abnormal returns Before and After Announcement of National capital Relocation

According to Fama's efficient market theory (1970), an event containing information will cause the market to react and adjust to the new equilibrium price. The new price adjustment process will cause abnormal returns. If an announcement contains information, it will produce an abnormal return for investors, but when an announcement does not contain information, it does not produce an abnormal return for investors (Sukiro, 2003 in Simanjutak, 2017).

Hartono (2017, p. 614) explained that a piece of information published as an announcement can give a signal to investors. Then the signals will be analyzed and used as a basis for investment decisions. According to Mahmoodzadeh, et. al, (2014) explained that an announcement is a signal used by investors in making investment decisions.

The announcement of national capital relocation contains useful information for investment decision-making process. The event caused a positive signal in the form of an increase in stock demand so sale also has an increase in this condition resulting in the market reacting. Capital market reaction is demonstrated by changes in stock prices. When the stock price increases, the actual return also increases, this condition results in an abnormal return. The results of the study conducted by Rofiuddin (2018) showed that the ratification of the tax amnesty policy contained information so that there was a significant difference between abnormal returns before and after the event.

H1 : There is a significant difference in abnormal return on the LQ-45 Index shares before and after national capital relocation.

## 2.4 Difference in Trading Volume Activity Before and After Announcement of the National Capital Relocation

According to efficient market theory, market participants will respond when there is new information. When information about the relocation of national capital is published, investors who first get information will more quickly determine the investment steps that will be taken. If the investor predicts that there is a profit or loss that can be drawn from this information, there will be a movement in stock trading volume. However, if investors decide to hold back, wait and see, then it will affect the movement of stock trading volume.

Beaver cited by Mayasari (2010) in Widyaningrum (2014) stated that an event containing an information will affect the number of shares traded in line with the signaling theory. When an event is responded to as a good news signal, many investors buy shares. This is because the information is considered to provide benefits. When the purchase of securities has increased the price has increased. For investors who expect capital gains, investors will sell their shares so that the trading volume will increase. However, when an event is responded to as a bad signal (bad news) then the trading volume of shares traded will decrease. Trading volume activity is one of the instruments used as benchmarks to see the market's reaction to an event. High trading volume indicates that the stock is more active. Active stock trading indicates that the stock is liquid and attractive to investors.

H2: There is a significant difference in trading volume activity on LQ-45 Index shares before and after the transfer of the capital city.

## 3. RESEARCH METHOD

### 3.1 Population and Samples

The population in this study is all companies in the LQ-45 stock index which is a composite stock index of 45 types of preferred shares. The sampling technique used is Purposive Sampling. The criteria set by the researchers are: Companies used as samples are companies whose shares are included in the LQ-45 Stock Index on the

Indonesia Stock Exchange and companies which become sample are companies that do not take corporate action during the research window period. Based on the criteria set by the researcher, the number of samples used in this study are 44 securities.

### 3.2 Measurement of Variables

In this study, researchers used an observation period (event period) for 11 days namely 5 days before (t-5), 1-day event date (t0), and 5 days after (t + 5) events during the active day of the exchange with the data collection on the Indonesia Stock Exchange (IDX). The announcement of the national capital relocation occurred in August 26<sup>th</sup> of 2019. The independent variable used in this study was the announcement of the national capital relocation.

The first dependent variable in this study is that abnormal return which is the difference from the actual return to the expected return by the investor. The following are the steps that must be done to calculate abnormal returns:

a). The realization of return is a return that occurs at the t-time which is the difference in the current price relative to the previous price. With the following formulation:

$$R_{i,t} = \frac{P_{i,t} - P_{i,t-1}}{P_{i,t-1}}$$

Explanation:

$R_{i,t}$  = actual Return

$P_{i,t}$  = The closing price of the stock I at time t

$P_{i,t-1}$  = The closing price of the previous stock

b). The expected return is the return expected by investors in the future. the expected return is a return that must be estimated. In this study, researchers used a market-adjusted model to calculate expected returns. Hartono (2017, p. 679), a market-adjusted model (Market-adjusted Model) considered that the best estimation for estimating securities returns is market index returns at that time. Besides, this model does not need to use an estimation period so that it is more focused on the event period. This is because the

estimated security return is the same as the stock index return. Return expectations can be denoted as follows:

$$E(R_{i,t}) = R_{Mt}$$

Explanation:

$E(R_{i,t})$  = Return of the realization of securities I in the period of events t-t

$R_{i,t}$  = Return of i-securities in the t-event period

$R_{Mt}$  = Market index returns in the j-estimated period can be calculated by the formula

$R_{Mj} = (IHSg_t - IHSg_{t-1}) / IHSg_{t-1}$ , IHSg is the composite stock price index

c). Calculation of abnormal return with the following formulation:

$$RTN_{i,t} = R_{i,t} - E(R_{i,t})$$

Explanation:

$RTN_{i,t}$  = Abnormal return of securities i in the period of events t-t

$R_{i,t}$  = Realized return that occurs for the i-securities in the t-event period

$E(R_{i,t})$  = Return of the i-th securities for the t-event period

d). Then, calculating the Average Abnormal Return (AAR) of various securities in the period before and after the event. The calculation for looking for an Average Abnormal return can be denoted as follows:

$$AAR_{sebelum} = \frac{\sum_{t-5}^{t-1} AR_{before}}{t} \quad AAR_{saat} = \frac{\sum_{t_0}^{t_0} AR_{event}}{t}$$

$$AAR_{sesudah} = \frac{\sum_{t+5}^{t+1} AR_{after}}{t}$$

Explanation:

$AAR_t$  = Average abnormal return on stock I on the t-day

$AR_{it}$  = Abnormal return of securities i on day t

t = Long period

e). Calculating the Abnormal Return (AR) for all shares per day during the event period,

which can be calculated with the notation as follows:

$$AAR_{sebelum} = \frac{\sum_{i=-1}^n AR_{before}}{n} \quad AAR_{saat} = \frac{\sum_{i=0}^n AR_{event}}{n}$$

$$AAR_{sesudah} = \frac{\sum_{i=+1}^n AR_{after}}{n}$$

Explanation:

$AAR_t$  =Average Abnormal Return in period t

$AR_{it}$  = Average abnormal return of securities i in period t

n =Number of securities

While the second dependent variable in this research is Trading Volume Activity which is a measure reflecting stock trading activities (Wulan, et. al, 2018). In addition, Trading Volume Activity reflects how active and liquid a stock is. The following are the steps taken to calculate Trading Volume Activity (Forster, 1986 in Muzad, 2017):

a). Calculating the TVA of each company during the observation period:

$$TVA = \frac{\sum \text{the company's stock j traded at time t}}{\sum \text{the company's stock j outstanding at time t}}$$

b). Then calculating the Average Trading Volume Activity, the sum of the trading volume of each transaction that occurs in a stock exchange at a certain time and stock. Calculating the Average Trading Volume Activity (ATVA) of each sample company in the period before and after the event can be denoted as follows

$$ATVA_{before} = \frac{\sum_{-5}^{-1} TVA_{it} \text{ before}}{t \text{ before}} \quad ATVA_{event} = \frac{\sum_0^0 TVA_{it} \text{ event}}{t \text{ event}}$$

$$ATVA_{after} = \frac{\sum_{+5}^{+1} TVA_{it} \text{ after}}{t \text{ after}}$$

Explanation:

ATVA = Average Trading Volume Activity

$TVA_{i,t}$  =Trading volume of i-securities activity in t-period

t = Period length (5 days before, 1 day at the time, and 5 days after the event)

c). Next, calculating the Average Trading Volume Activity of all shares per day during the event period

$$ATVA_{t_{before}} = \frac{\sum_{i=-1}^n TVA_{it} \text{ before}}{n}$$

$$ATVA_{t_{event}} = \frac{\sum_{i=0}^n TVA_{it} \text{ event}}{n}$$

$$ATVA_{t_{after}} = \frac{\sum_{i=+1}^n TVA_{it} \text{ after}}{n}$$

Explanation:

$ATVA_t$  = Average trading volume activity of all shares per day

$TVA_{it}$  = Trading volume of securities activity i in period t

n = Number of securities

This research uses a quantitative approach. The data is processed with the help of the SPSS 25 program. Tests carried out in research, including research instrument tests, descriptive statistical tests, data normality tests and hypothesis testing.

In this study researchers used the Kolmogorof-Smirnov One-sample statistical test (Widyasari, 2017) to test the normality of the. The reason for choosing Kolmogorof-Smirnov One-sample statistical test is because it is more sensitive to detecting normality of data compared to testing using graphics. If the Asymp value. Sig. (2-tailed) > 0.05, then the data is normally distributed, but if the Asymp value. Sig. (2-tailed) < 0.05, then the data are not normally distributed.

Based on the normality of data distribution, data analysis technique that can be used to test two paired samples in this study is the Wilcoxon Sing Rank Test. This is because the data is distributed abnormally so non-parametric statistical tests are used namely the Wilcoxon Sing Rank Test to test hypotheses. When the sig. (2-tailed) ≤ significance level (α = 5%), or Z count > Z table or Z count < -Z table then H0 is rejected and Ha is accepted. Whereas when the value of sig. (2-tailed) > significance level (α = 5%), or Z count ≤ Z table or -Z count ≥ -Z table then H0 is accepted and Ha is rejected.

## 4. RESULTS AND DISCUSSION

### 4.1 Descriptive Statistics

#### 4.1.1 Average Abnormal Return of the Company on the LQ-45 Stock Index Before and After the Announcement of the Transfer of the National Capital

The results of data processing for descriptive statistics in this study can be seen in the following table 1:

**Table 1.** Descriptive Statistics of Average Abnormal Returns of All Companies LQ-45 Stock Index Before and After Announcement of Capital Transfers

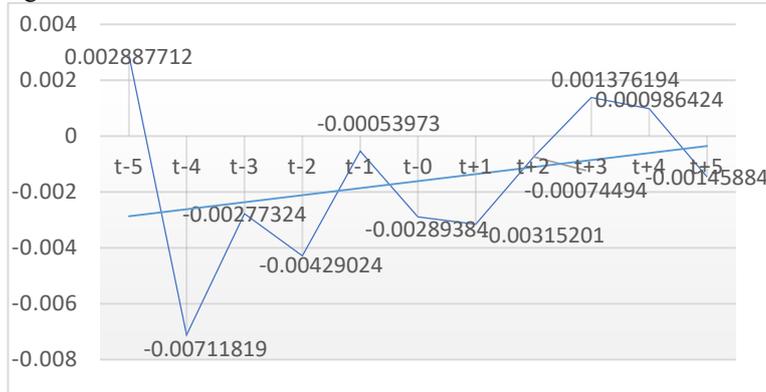
	Minim um	Maxim um	Mean
<b>AR Before</b>	- 0,1083 6101	0,0611 0466	- 0,0023667 371
<b>AR After</b>	- 0,0890 3002	0,1306 3849	- 0,0005986 334

\*Source: Processed by researchers

Based on table 1, it can be seen that the average (mean) abnormal return of the company included in the LQ-45 Stock Index after the event shows a figure that is higher than the average before the event, this can be interpreted that the market reacts to the announcement of national capital relocation. This result also shows that the announcement of the national capital relocation gave an increase in abnormal return which indicated that the event was considered good news and the market responded positively. The minimum abnormal return value before the event amount of -0.10836101, which is owned by Erajaya Swasembada Tbk., while the minimum value after the event amount of -0.08903002, which is owned by Wijaya Karya (Persero) Tbk. The maximum abnormal return value before the event is 0.06110466 owned by Adaro Energy Tbk., while the maximum abnormal return value after the event is 0.13063849 owned by Vale Indonesia Tbk.

Based on the average daily abnormal return value of all sample companies in the LQ-45 Stock Index in the period before and after the announcement of the transfer of the national

capital, to find out the movement of daily abnormal returns can be described in line figure 1 as follows:



\*Source: Processed by researchers

**Figure 1.** Daily Average Abnormal Returns of All Sample Companies Before and After Announcement of the Transfer of National Capital

From Figure 1, it can be seen that before the announcement of the national capital relocation, the average daily abnormal return of the company tends to fluctuate and shows a negative number, which means that the return is smaller than the expected return. However, the average abnormal return indicates an increase one day after the announcement of the national capital relocation although it still points to a negative number. Then, on the third and fourth day after the announcement of the national capital relocation, abnormal return refers to a positive number which means that the return is greater than the expected return. Abnormal return has a significant increase trend during the observation periode.

4.1.2 The Average Trading Volume Activity of the Company on the LQ-45 Stock Index Before and After the Announcement of the National Capital Relocation

The results of data processing for descriptive statistics in this study can be seen in the following table 2:

**Table 2.** Descriptive Average Trading Volume Activity of All Companies LQ-45 Stock Index Before and After Announcement of Capital Transfers

	Minim um	Maxim um	Mean
<b>TVA Before</b>	0,00017380	0,03056834	0,0016903
<b>TVA After</b>	0,00014683	0,0395	0,0018856

\*Source: Processed by researchers

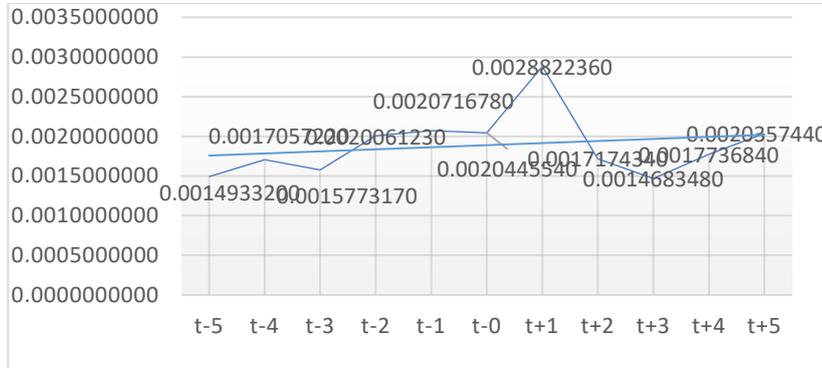
Based on table 2, it can be seen that the average value (mean) of the company's trading activity volume included in the LQ-45 Stock Index after the event shows a higher number than the average before the event, this can be interpreted that the market reacts to the event announcement of the national capital relocation. This result also shows that the announcement of the national capital relocation considered good news so that it has a positive effect on investor reaction because the average value of trading volume activity has increased. The minimum value of trading volume activity before the event amount of 0,00017380, owned by Unilever Indonesia Tbk., while the minimum value after the event amount of 0,00014683, owned by Tjiwi Kimia Tbk Paper Factory.

The maximum value of trading volume activity before the event is 0.03056834, owned by Erajaya Swasembada Tbk, while the maximum value of trading volume

activity after events is 0.03953796, owned by Erajaya Swasembada Tbk.

Based on the average daily trading volume activity value of all sample companies in the

LQ-45 Stock Index before and after the announcement of national capital relocation, the movement of the average daily trading volume activity can be described in line figure 2 as follows:



**Figure 2.** Daily Average Trading Volume Activity Charts of All Sample Companies During the Period Before and After the Announcement of national capital relocation

From Figure 2 it can be seen that before the announcement of national capital relocation, graph tends to fluctuate. The average daily trading activity volume of the company experienced a rapid increase. When the announcement of national capital announced, the decline occurred on first day and continued until the second day, but experienced an upward trend on third day. Then the increase continues fourth day. Daily trading volume activity during the

observation period experienced an increasing trend.

**Normality test**

A normality test used to determine whether the data in the period before and after the announcement of national capital relocation is normal or not. The following is a table of the Kolmogorov-Smirnov One Sample test results.

**Table 3.** Normality Test Results For Each Variable

Variable	Period	Asymp. Sig. (2-tailed)	Normal Distribution
AR	Before	0,000	Not Normal
	After	0,000	Not Normal
TVA	Before	0,000	Not Normal
	After	0,000	Not Normal

\*Source: Processed by researchers

Based on the results of the normality test using the Kolmogorov-Smirov One Sample test above, it shows that the average abnormal return test and trading volume of the company's stock activities including the LQ-45 Stock Index point to the Asymp value.

Sig. (2-tailed) 0,000 or <0.05. It can be interpreted that the data are not normally distributed. Thus, non-parametric statistical test, the Wilcoxon Singed Rank Test is used to test the hypothesis.

Hypothesis test

*A. The difference in Abnormal Return of Company LQ-45 Shares Before and After the Announcement of National Capital Relocation.*

This test aims to determine whether there is a significant difference between the average

abnormal return before and after the announcement of national capital relocation. The results of the different tests of the average abnormal return before and after the announcement of national capital relocation can be seen in table 4.

**Table 4.** Test Statistics

	AR_after- AR_before
Z	-,101 <sup>b</sup>
Asymp. Sig. (2-tailed)	,920

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

Based on Table 4. it is known that Asymp.Sig. (2-tailed) is 0,920 and z count is -0,101. Due to the value  $0.920 > 0.05$ , and the value of  $-Z$  count  $\geq -Z$  table is  $-0.101 \geq -1.960$ , it can be concluded that  $H_0$  is accepted and  $H_a$  is rejected, or there is no significant difference between the average abnormal return of companies included in the Index LQ-45 shares before and after the political event announcing the relocation of the national capital in August 26th, 2019.

*B. The difference in Trading Volume Activity of LQ-45 Company Stocks Before and After*

*Announcement of Displacement of Capital Cities*

This study aims to determine whether there is a significant difference between the average trading volume activity before and after the relocation of national capital on companies which are included in the LQ-45 stock index on the Indonesia Stock Exchange. The results shows the different test of average trading volume activity before and after the announcement of national capital relocation. It can be seen in table 5.

**Table 5.** Wilcoxon Singed Rank Test Results Trading Volume Activity of the companies included in LQ-45 Stock Index before and after the announcement of National Capital Relocation.

Test Statistics<sup>a</sup>

	TVA_after - TVA_before
Z	-4,002 <sup>b</sup>
Asymp. Sig. (2-tailed)	,000

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

*Sumber: Output SPSS 25*

Based on the table 5, it is known that Asymp.Sig. (2-tailed) is worth 0,000 and the Z count is -4,002. Due to the value amount of  $0.000 \leq 0.05$ , and the calculated Z value  $< Z \text{ table is } -4.002 < -1.960$ , it can be concluded that  $H_0$  is rejected and  $H_a$  is accepted, or there is a significant difference between the average trading volume of the companies activity which are included in LQ stock index before and after the announcement of national capital relocation in August 26<sup>th</sup> 2019.

## 5. DISCUSSION

### 5.1 The Effect of Announcement of National Capital Relocation on Abnormal Return

The results of the analysis show that the announcement of national capital relocation does not have a significant difference, before and after the event of abnormal returns on companies shares which are included in the LQ-45 stock index on the Indonesia Stock Exchange. This indicates that the information content of the announcement of national capital relocation is weak or even does not have significant influence on market reaction. The results of this study are in line with studies conducted by Sihotang & Mekel (2015), Pratama et. al (2015), Rahmawati & Achadiyah (2015), Hall & Kenjegaliev (2017), and Maharani & Yunita (2018).

The results of this study do not support the effectiveness of Signaling theory which states that when information is published as an announcement will give a signal to investors used in the investment decision-making process (Sugeng, 2017, p. 317). If the announcement contains a positive value, then the market will react when the announcement is received by the market (Hartono, 2018, p. 56). The relocation event of the national capital is one of the non-economic events that is officially published so that investors are aware of this information. However, investors consider that the information of the relocation of national capital is not enough to influence investors' decisions in investing. This is indicated by the absence of significant differences in influence on abnormal returns before and after the announcement of national capital relocation. When an event does not give a different effect on abnormal returns before and after an event, then it shows that

markets have no reaction to these events (Hartono, 2018, p. 10).

In addition, the results of this study are not following the market efficiency theory. Market efficiency theory is how quickly the market absorbs information so that information is reflected in changes in the price of securities (Fama, 1970). The results of this study indicate that there is no abnormal difference before and after the announcement of national capital relocation. This shows that the market cannot absorb the information of national capital relocation and the price of the security does not reflect existing information.

Based on the results of descriptive analysis of chapter IV, the minimum value of abnormal return before the event is -0.10836101 which is owned by Erajaya Swasembada Tbk., whereas the maximum value is 0.06110466 which is owned by Adaro Energy Tbk. Meanwhile, the minimum value after the event is 0.08903002, owned by Wijaya Karya (Persero) Tbk., whereas the maximum value is 0.13063849, owned by Vale Indonesia Tbk. The average abnormal return value of the LQ-45 Stock Index after the announcement of the relocation of the national capital is -0.0005986334 greater than the average before the event which is -0.0023667371. This can be interpreted that the capital market reacts to the announcement of national capital relocation. The results also showed that the announcement of national capital relocation shows an increasing trend than before the event. The increase in abnormal returns indicates that the event is considered good news and the market responds positively. The positive market response is caused by investors hoping that information can provide benefits in the future.

There is no significant difference between abnormal returns before and after the announcement of national capital relocation because investors tend to take a moment and see an action in the sense that investors wait and observe whether the announcement of national capital relocation influences the economy and the Indonesian capital market. Investors do not want to take risks by making a quick decisions from external information and non-economic information. This investor caution is what causes the market not to react significantly because investors do not want to get a loss from the decisions taken.

The inability of national capital relocation to the LQ-45 Index caused by investors who consider that the relocation of national capital has less relevant information to be considered in investment process. In the investment decision-making process, investors not only make judgments based on happening event events, but also doing a fundamental analysis and technical analysis. Fundamental analysis focuses on events that directly or indirectly affect companies' performance. Investors tend to analyze the companies' performance risk. When the companies' performance is good, investors will get a capital gain, besides, the company can provide large dividends to investors, the level of corporate income is reflected in the Earning Per Share (EPS) and economic conditions. In addition, investors analyze the stock price movements occurred in the market so in non-economic events in the form of moving the capital city of the country does not affect the decisions of investors in investing, but investors consider the companies' performance as a reference in investing.

### 5.2 The Effect of Announcement of National Capital Relocation on Trading Volume Activity

The analysis shows that the relocation of national capital has a significant difference between before and after the event on trading volume of the companies' stock activity which included in the LQ-45 stock index on the Indonesia Stock Exchange. This indicates that the announcement of national capital relocation affects investors' decisions in investing, which means the market responds to the event. The results of this study are in line with research conducted by Islami & Sarwoko (2012), Sihotang & Mekel (2015), Pamungkas et. al (2015), and Liogu & Saerang (2015).

The results of this study are consistent with signaling theory which states that outsiders or the market will respond to any information coming from management or the mass media as a signal to certain events that can affect the value of a company (Supragita, 2011). When the event contains a good information, it will cause a positive response by the market, causing a positive abnormal return. However, when the event contains a bad information, it will cause a negative response

and cause a negative abnormal return (Hartono, 2018, p. 10). The information on the announcement of national capital relocation is a signal for investors, this signal will cause a market reaction, which is marked by an increase in trading volume activity during the observation period. Based on the results of the study show that the average value of trading volume activity during the observation period shows positive results. It indicates that the announcement of national capital relocation is a good news for the investors.

The results of this study show market efficiency theory. An efficient market theory is how quickly the market can absorb an information, then the information will be reflected in price changes (Fama, 1970). When the relocation of national capital is announced, the market absorb the information and have a respond on it. It can be seen from the increase in trading volume activity after higher events higher before the announcement of national capital relocation.

Based on the results of the descriptive analysis on chapter IV, the minimum value of trading volume activity before the event is 0,00017380, owned by Unilever Indonesia Tbk., and the maximum value is 0.03056834, owned by Erajaya Swasembada Tbk. The minimum value after the event is 0.00014683, owned by Tjiwi Kimia Paper Factory, and the maximum value is 0.03953796, owned by Erajaya Swasembada Tbk. The average value of the trading volume of the companies' activity Index LQ-45 Stock after the announcement of national capital relocation amount of 0.0018856945, it is greater than the average before the event which is 0.0016903347. This can be interpreted that the capital market reacts to the announcement of national capital relocation. The results also show that the announcement of national capital relocation gave an increase in trading volume activity, indicating that the event was considered as a good news and the market gave positive responses.

Trading volume activity is one of the parameters used to see capital market reactions to information through the parameters of the stock trading volume. The development of stock trading volumes reflects the strength between demand and supply of shares which is a reflection of investor behavior. When the volume of

demand and supply increases, it will affect fluctuations in stock prices on the exchange. The increasing volume of stock trading shows that these shares are in demand (Liogu, 2015).

The results of this study indicate that the average trading volume of activity after the announcement of national capital relocation shows an increasing trend than before the event. Investors who have a speculation tend to take an advantage from the announcement of national capital relocation to buy securities shares, due to the fact that they consider the information can provide benefits in the future, resulting a fluctuations in stock demand and supply which is reflected in changes on trading volume activity which is significantly positive on company stock indexes LQ-45 shares before and after the announcement of the national capital relocation. This shows that the announcement of national capital relocation gave a positive signal (good news) for investors, so many investors are looking for companies' shares.

## 6. CONCLUSIONS

The results of this study show that there is no significant difference between abnormal stock returns before and after the announcement of national capital on companies that include in the LQ-45 Stock Index. This means that the announcement of the transfer of the national capital does not have enough information content to influence the market. The absence of differences in abnormal returns before and after events may be caused by investors who have assumption that the information about the relocation of national capital has a less relevant as a consideration in investment decision making. The internal factors of the company and the macroeconomy may be more influential for investors in the investment decision-making process.

Meanwhile, there is a significant difference between the trading volume of stock activity before and after the announcement of national capital relocation on companies that includes in LQ-45 Stock Index. This means that significantly, the announcement of national capital relocation has an information which a sufficiency influenced on the activity of trading volume stock.

There is no significant difference between abnormal returns before and after an event, however, there is a significant difference between trading volume activity before and after an event. This indicates that the event has the information content causing a market reaction which is indicated by the presence of a significant difference in trading volume activity so that investors are tend to buy and sell in accordance with the desired price and amount, but the information is not authentic enough to make investors get abnormal returns.

The limitation of this study are the absence of definite concepts regarding the determination of the length of the observation period in the event study research, making this study have limitations in determining the observation period. The observation period in this study based on previous researches which have a similar topic, namely for 11 days of observation, 5 days before the event 1 day during the event, and 5 days at the time of the event, in addition, this study used the LQ-45 Stock Index, where the shares included in LQ-45 index is a stock that has high liquidity. Thus, the results of this study could be different when using other techniques.

To get more accurate results, the next research is expected to be able to add the indicators of market reaction measurements besides abnormal return and trading volume activity, such as trading frequency and the number of requests and offers (bid/offer). In addition, further research is expected to expand the research sample both by the quantity and existing sectors to illustrate the actual market situation resulting from the relocation of the national capital.

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