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The Influence of a Political Event on Property Sector Stocks in Indonesia Stock Exchange

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

This study examines the capital market reaction from the declaration of the presidential and vice presidential candidates for the 2018 presidential election, which will be marked by the presence or absence of abnormal returns. The samples used are stocks that are incorporated into the property sector. As a study of events, this research observes the reaction before, during, and after the event within the observation period. The periods of research used were H-3 (before the event), H0 (current events), and H + 3 (after the event). The data are obtained from www.idx.co.id. The data used in this research is secondary data, such as the stock closing price, which has been adjusted (the closing price is adjusted), and the closing price of IDX. The data are in the form of daily stock prices. These data are then analyzed using the analytical method of the paired sample t-test. The results showed that Abnormal Return had no significance. This means that there is no market reaction when there is an excess of actual return compared to a normal return in the stock exchange of the property. The significance level has a negative condition exactly three days before the declaration of presidential and vice-presidential candidates, which is dated August 6th, 2018. However, in the following days, the 7th and 8th of August 2018, it has experienced an insignificant level of positive. This means that the market perceived appropriately before the presidential and

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vice-presidential candidates were set. In addition, the statistics test result of the Average Trading Volume Activity (TVA) proved that there was a significant difference between the period before and after the official registration of the presidential and vice-presidential candidates in the General Election Commission (KPU). The results showed that there were significant differences due to the value of sig. greater than 0.05 or 0.006 ≥ 0.05.

Keywords: Capital market; property index; event study; abnormal return.

1. INTRODUCTION

The relationship between political events and investor behavior in financial markets has attracted a lot of attention in the financial economics literature. Several studies have documented that prices on financial markets fluctuate as a result of the announcement of major political events such as union legalization, national union strikes, annual budgets, national election results, etc. [1]. It is hoped that the manner and degree to which markets react to political events will vary depending on the type of event being investigated as well as on the "political environment" concerned. It is expected that the conclusions reached on the basis of developed country markets will differ significantly from those of developing countries. This idea, however, is inconsistent with the principles of the popular Efficient Market Hypothesis.

The basic principle of the Efficient Market Hypothesis (EMH) of traditional finance as proposed by Fama [2] is thought to be based on the assumption that the capital market is perfect and thus able to effectively construct market information into stock prices. This perfect capital market assumption rests on the belief that investors and other capital market players are rational in the decision-making process. However, the facts emerging from the field of behavioral finance have alluded to the principles or beliefs held by these EMH theorists.

Each event study research that is based on different events will provide various research results and have different levels of information sensitivity for investors. From various events that occurred in Indonesia, one of the political events that became a trending topic in various mass media in 2018 was the event of the declaration of presidential and vice-presidential candidates for the general election in 2019. This political movement is blatantly reflected in the coverage of various media: television, newspapers, magazines, and also other media such as social media [3]. The declaration occurred on Thursday, August 9th, 2018 commenced by the pair of Joko Widodo and KH. Ma'ruf Amin and subsequently, followed by the pair of Prabowo Subianto and Sandiaga Shalahuddin Uno. These declarations performed simultaneously on the same day. On the following day, the two pairs officially register at the KPU office on Friday, August 10th, 2018, which was the final deadline for the presidential and vice-presidential registration for the general election in 2019.

The property and actual estate sectors are one of the most important sectors in most countries, including Indonesia, since this can be a proper indicator to analyze the economic health of a country. The property and actual estate industry is one of the sectors that give the signal of rise or fall of the economy of a country. The growing number of companies engaged in the property and actual estate sectors in Indonesia indicates its developing economy. Investment in property and actual estate is generally long term and will grow in line with economic growth and is believed to be one of the promising investments. The selection of the company's property sector as the research object based on the thought that when the election results are visible, investors will get certainty regarding the economic policy step of the elected government. Typically, after the direction of the government's economic policy is seen, the property industry can move. The certainty that emerges after the elections will also encourage property developers to get back to the project [4].

This study is designed to provide an overview of the relationship between market reactions in the property sector and political events. Therefore, this study is to analyze the extent to which market reactions in the property sector reflect political events according to the efficiency of the semi-strong form which states that stock prices react very quickly to all public information and no investor can get an abnormal return. after the announcement was made. Information is the key to determining stock prices and a major issue of an efficient capital market [5]. An efficient market is one in which the share price quickly and fully reflects all available information about an asset.

According to Fox and Opong [6], an efficient market is a market where prices fully reflect the information available. Therefore the only way to outperform the market that no abnormal returns can be made from this information because adjustments have been made to share prices. The market has adjusted. Therefore, the only way to outperform the market in this regard is to use inside information. Therefore, in this research, it begins to determine the extent to which political information reacts to the property sector market.

Research that refers to the event (event study) was first conducted by Fama, et al. [2] in financial economics. Several previous studies that have conducted event study research are Ramesh, S [7] conducted a study examines market efficiency and market reaction to political events in Colombo Stock Exchange (CSE) using a sample of 40 major political events of the emerging market of CSE which represent different industry sectors from 2008 to 2012. This result shows that political events indicate significant negative information to the CSE. On average, market reacts negatively to market related informational events. Imelda, et al. [8] conducted a study to examine differences in average abnormal return and trading volume activity on sectoral stock indices before and after the 2004, 2009 and 2014 presidential elections. The results show that there is evidence of strong differences in the average normal sectoral stock index before and after the election. president especially in the mining sector. Sirait et al. [9], the event raised was the replacement of Sri Mulyani as finance minister in 2010 with the results of her research stating that in the banking sector there were differences in Average Abnormal return (AAR) before, during and after the announcement of the change of finance minister.

As a result of these developments, more recent research has turned to examining other factors that could potentially influence stock price movements which were omitted from previous studies. Some of these recent studies, such as Osuala & Agbeze [1] and Khan, et al. [10] turned on the search light in the political arena for "missing variation", claiming that there is a high degree of correlation between political events and economic events. Among the various political events deemed to have significant implications for the variation in share prices are the results of the presidential election.

This research is in the form of an event study which aim to examine the information content as measured by abnormal returns around the date of the 2019 presidential election. Abnormal returns are measured from the difference between actual returns and expected returns. Testing of the information content is carried out with the aim of knowing whether there is a market reaction or not by testing whether the 2014 presidential election gave a significant abnormal return on stocks on the days of the event. Forsythe et al. [11] and Huber [12] conducted research and found that there was a significant market reaction to the presidential election. Trisnawati [13] found that there was no significant difference in abnormal returns before and after the 2004 elections, but there were significant differences in abnormal returns in the 2009 election.

Based on the background mentioned, the researcher set the following problem formulation: (1) Is there a significant capital market reaction to the event of the declaration of presidential and vice-presidential candidates in Indonesia in 2018? (2) What are the significant differences between the Average Abnormal Return (AAR) shares of the property before and after the event of the declaration of presidential and vice-presidential candidates in Indonesia in 2018? (3) Is there a significant difference to the Average Trading Volume Activity (ATVA) of the shares of the property before and after the event of the declaration of presidential and vice-presidential candidates in Indonesia in 2018?

Based on the issue above, this research has the following objectives: (1) explaining the capital market reaction of the declaration of presidential and vice-presidential candidates in Indonesia in 2018. (2) Explaining the difference to the Average abnormal Return (AAR) Shares of the property before and after the event of the declaration of presidential and vice-presidential candidates in Indonesia in 2018. (3) Explaining the differences to the Average Trading Volume Activity (ATVA) shares the property before and after the event of the declaration of presidential and vice-presidential candidates in Indonesia in 2018.

2. STUDY OF LITERATURE

2.1 Capital Market Theory

Classically, the definition of the capital market is a trading business of securities such as stocks, bonds and securities, as one of the economic actors, the advantage of obtaining an optimal profit is the goal that is to make the capital market as an institution of buying and selling effects [14]. As described briefly in the introduction, the capital market runs two main functions, namely economic function and financial function. The capital market in carrying out its economic functions provides facilities to transfer funds from parties who have excess funds (lenders) to the parties who need funds (borrower). The second capital market function is to carry out financial function where the capital market provides the funds required by the borrower and lenders provide funds without having to be directly involved in the ownership of the actual assets required for the investment [15]. The capital market activity in Indonesia was officially started in 1977. Its development is not detached from volatile economic and monetary conditions. In the efficient capital market conditions, a positive relationship between the risk and the projected profit is expected (expected return) [15].

2.1.1 Event study

By definition, an event study is a study that analyzes the market reaction to an event, the information of which is published as an announcement. This event study can be used to test the information content of an announcement [16]. Testing the content of information is meant to see the reaction of an announcement or event. If it contains appropriate information, then the market is expected to react. The market reaction is indicated by the change in the price of the securities which are related. This reaction can be measured using an abnormal return [16]. Mackinlay [17] mentioned that there are steps to be considered in conducting an event study, including:

a. Define the event of interest, which is the information available in the market.
b. Build a theory that can give a reason or explain the financial response to the incident.
c. Identify the event dates.
d. Select a matching event window according to the justification of the distance.
e. Adapt the companies that are experiencing the incident.
f. Calculates abnormal returns during the event window and tests its significance level.

2.1.2 Abnormal return

Return is one of the factors that motivates investors to invest and is a reward or result gained on the courage of investors to bear the risk of investing. An abnormal return is an excess of a actual return compared to the normal expected return. Return is an income that has been received by the investor, while the expected return is the desired income that is potentially received by the investor at a later time. Abnormal return can occur as a result of certain events, such as national holidays, early months, erratic political atmosphere, extraordinary incidents, stock split, initial offers of stocks, and many more [16]. The abnormal return will result in a positive value when the actualized return is more significant than the expected return, and investors will benefit above normal. Conversely, if the return has a negative value, the investors will benefit below normal. Abnormal return is used to measure the market reaction of the information content of an announcement. If an announcement generates an abnormal return for the investor, it means the announcement has information, and the reverse announcement that does not result in abnormal return means the announcement has no information content [18].

2.1.3 Trading volume activity

Trading Volume Activity (TVA) is an instrument that can be used to view the reaction of the capital market to the information through the stock trading volume parameter [19]. The development of stock trading volumes reflects the strength between supply and demand, which is a reflection of investor behavior [20]. The rising volume of trading is a hike in the buying and selling activities of investors on the stock exchanges. The higher the bidding and demand of stock, the greater the impact on the fluctuations in stock prices on the exchanges. The increasing volume of stock trading shows increasing demand for such stocks by the public; therefore, it will bring influence on rising prices or return shares. Trading Volume Activity is a ratio between the number of shares traded at a given time to the number of shares circulating at a given time. The number of shares issued is the number of shares when the company is conducting stock emissions.

2.2 Emprical Review

There are a number of research done on non-economic events, especially those relating to political events against abnormal returns. Research conducted by Sukmaningrum, Madyan, and Hendratmi [21] concluded that there is no difference in the Average Abnormal Return (AAR) between before and after the announcement of the establishment of the governor of DKI Jakarta, the province where the capital city of Indonesia lies, in 2017. Rofiki, Topowijono, and Nurlaily [22] said the results of one sample t-test showed that there was a negative Average Abnormal Return (AAR) in the vicinity of the period of events which was only temporary. Subsequently, a significant abnormal return became positive. Wilcoxon signed-rank test indicated that there was a significant abnormal return difference between before and after the event. Wilcoxon signed-rank test on the trading variable volume activity did not find any significant differences in trading volumes before and after the election event of the governor of DKI Jakarta. Katti Siti Wardhani [23], concluded that the Indonesian capital market (in this case, the Indonesia Stock Exchange) reacts to national political events that occur. This is evidenced by the abnormal return, which is significant around the period of events.

The results of the study of Dewi, Wahyuni, and Dianita [24] concluded that based on the statistical test of the average abnormal return during the period of the event, there was a significant difference in average abnormal return before and after the event of the governor election of DKI Jakarta in 2017. Based on statistical tests on the average trading activity volume during the period of events, there was no significant difference in the average trading activity volume between before and after the election event of the governor of DKI Jakarta in 2017. The results of the research of Alrhafynza and Siswanto [25] suggested that the trial decision of the case of religious blasphemy by the governor of DKI Jakarta, Basuki Tjahaja Purnama in 2017 has no significant effect on abnormal return and Trading Volume Activity (TVA). The findings of Rahmawati and Pandansari [26] concluded that there was no difference between the average abnormal return on the shares of LQ-45.

Ramesh [7] showed empirical results that political events have significant negative influences against abnormal averages. These findings confirmed the hypotheses that political events provide negative information to the Colombo Stock Exchange (CSE) in Sri Lanka. Sudewa and Sari [27] argued that there was no market reaction from the presidential election in 2014. This was demonstrated by the results of statistical testing of the cumulative abnormal return, which indicated the absence of information content that causes the market not to react. There was no significant abnormal return difference between before and after the presidential election in 2014 using seven days span of events. This was argued due to the actions of capital market players who tend to prepare the speculation that is considered profitable for them in the days before and after the presidential election in 2014. Sirait et al. [9] mentioned in his research results that in the banking sector, there is a difference in Average Abnormal Return (AAR) between before, at the time, and after the announcement event of the minister of finance substitution.

Lamasigi and Treisye [28] concluded the results of his research that the change of the president of Indonesia on July 23rd, 2001, has a positive abnormal return between before and after the event to the LQ-45 shares. The result of the same research conducted by Nurhaeni [29] mentioned that there was a distinction between the AAR before and after the legislative election event in 2009. While the results of her research on the event study: the announcement of the quick count of the legislative election in 2014 showed there was a significant difference between the abnormal return of shares before and after the announcement of the results. This indicated that the market reacts to the quick count announcement information [30]. However, the research results were done by Pratama et al, [31] demonstrated that there is no significant reaction to the event of the appointment of Joko Widodo as the president of Indonesia, meaning that the information is not sensitive to investors.

Bechtel and Fuss [32] analyzed the influence of political factors, in particular, the German parliamentary elections on stock performance in four economic sectors between 1991 and 2005, and concluded that there was a higher average return and volatility in the defense and pharmaceutical sectors. A higher trend towards a more conservative government while there is a higher average return and higher volatility in the alternative energy and consumer sectors respectively, with a higher probability of a leftist government.

Pantzalis, Stangeland, and Turtle [33] also found that there was a positive stock market reaction in the two-week pre-election period among the 33 countries investigated. Positive abnormal returns have a positive relationship with the uncertainty of election results. Hsu and Yu [34] examined the stock market results of nine elections between 1992 and 2004 in Taiwan. Their results show that political elections create short-term positive abnormal returns before the election, which suggests that elections did take place in Taiwan's elections. Other than that, they also found that abnormal returns are even higher when the incumbent government loses. This finding is in line with Pantzalis et al. [33] who found a strong positive abnormal return that caused the general election to be defeated by the incumbent government.

Yi-Hsien, Mei-Yu, and Che-Yang [35] analyzed the US Presidential election and concluded that the effect of the presidential election on the stock market depends on each president himself, the general policies of the winning party, and the nature of the market.

Onder and Mugan [36] studied the effect of political events from 1995 to 1997 on the volatility of stock returns for two emerging markets, Turkey and Argentina. They concluded that even though political events have an impact on the stock market, these impacts are not significant. Chen, Bin, and Chen [37] investigated the impact of nine (9) political events that took place from 1996 to 2002 on the Taiwan stock market. They concluded that political events had a significant impact on share prices; and insist that good news causes positive abnormal returns whereas negative news causes negative abnormal returns.

In short, it can be argued that the existing literature on the impact of political events on stock returns has mixed conclusions, which therefore requires a further search or further investigation into the impact of the outcome of the presidential election on emerging stock markets.

3. METHODOLOGY

3.1 Hypothesis Development

The capital market in carrying out its economic functions provides facilities to transfer funds from parties who have excess funds (lenders) to the parties who need funds (borrower). The second capital market function is to carry out financial function where the capital market provides the funds required by the borrower and lenders provide funds without having to be directly involved in the ownership of the actual assets required for the investment [15]. The capital market activity in Indonesia was officially started in 1977. In its development, it is not detached from the volatile economic and monetary conditions at the time. In the efficient capital market conditions, it is expected that there is a positive relationship between the risk and the expected profit [15]. Lamasigi and Treisye [28] concluded the results of his research that the change of the president of Indonesia on July 23rd, 2001, has a positive abnormal return between before and after the event to the LQ-45 shares.

H1: There is a significant capital market reaction to the declaration of the presidential and vice-presidential candidates in Indonesia in 2018.

An abnormal return is an excess of a actual return compared to the normal expected return. This abnormal return is calculated with the difference between actual return and expected return, where the actual return is a comparison of the stock price of the day with the previous share price relative. In comparison, the expected return is calculated with the market return obtained from the difference of IDX Composite at a certain time with the previous IDX Composite. If an abnormal return stock, which is obtained after the breakdown of stocks declines, the abnormal return earned negative value as the actual return obtained is lower than the expected return. Sirait et al. [9] mentioned in his research results that in the banking sector, there was a difference in Average Abnormal Return (AAR) before, at the time, and after the announcement of the minister of finance substitution. Based on the explanation above, a hypothesis can be proposed:

H2: There is a difference of Abnormal Average Return (AAR) stocks LQ-45 before and after the event of the declaration of the presidential and vice-presidential candidates in Indonesia in 2018.

The trading volume is one indicator that is employed to analyze the market reaction to the event or information relating to stock. Changes in trading volumes are measured by the activity of stock trading volumes measured by Trading Volume Activity (TVA). TVA is a comparison between the number of shares traded at a certain time with the number of shares of the company circulating at a certain period. The intensity of the average change in TVA between before and after the breakdown of stocks is an indicator of the effect resulted by the breakdown of stock to the stock trading volumes.

H3: There is a difference in the Average Trading Volume Activity (ATVA) stocks LQ-45 before and after the event of the declaration of the presidential and vice-presidential candidates in Indonesia in 2018.

3.2 Research Design

This research is an event study that uses a quantitative approach and is a comparative study. Companies on the property sector index are the locations where this study was conducted. The object examined in this study is an abnormal return. This research was conducted on the IDX through its official website (www.idx.co.id). The observation period in this study was for 6 trading days, namely t-3 (3 days before) and t + 3 (3 days after) of the declaration of the presidential and vice-presidential candidates to be precise, namely on August 6 - 8 and 10, 13 and August 14, 2018. The basis for taking the period is according to Kothari and Warner [38], on this case, according to calendar time and clustered date. This concept of time is very important because it will determine the "time window" for analysis. Besides, the time dimension in the event study will indicate whether the event study is short term (short term) or long term (long term).

3.3 Population and Samples

The population in this study were all companies listed in property stocks until the study period, namely August 2018. While the samples are part of the number and characteristics owned by the population [39]. The sampling techniques in this study are purposive sampling, i.e., deriving samples from a population based on certain criteria [16]. The criteria used are:

a. Companies registered in the property stocks in the period of August 6th to August 8th and August 10th, August 13th and August 14th in 2018. (The underlying reason for the selection of property stocks is because the companies are relatively reactive to the political activity in the country as it relates to policy changes and the development of infrastructure projects).
b. Presenting complete data related to the variables used in the study (the daily closing stock price, the daily stock volume of stocks, the stocks included in the daily property sector, and the number of outstanding shares).
c. Do not conduct corporate actions during the research period, such as announcements and dividend distribution, merger, split stock, and other activities.

3.4 Data Collection Techniques

The type of data used in this study is quantitative data. The data source used in this study is a secondary data source, which is a historical data of all the companies listed in the LQ-45 index during event day and post event day. Data obtained from the official website of IDX (www.idx.co.id).

3.5 Variable Measurements

3.5.1 Trading volume activity

The Trading Volume Activity (TVA) shows the activity of trading and reflects how active and liquid a stock is traded. The calculation of TVA is done by comparing the number of shares of companies traded with the overall number of outstanding shares of the company during the research period [40]. The steps in calculating the TVA are presented as follows:

1. Calculating each company's TVA during the research period with the following formula:

$$\text{TVA}_{\text{It}} \frac{\sum stock-i\ transacted\ at\ period-t}{\sum stock-i\ are\ outstanding\ at\ period-t}$$

2. Calculating the average TVA of each company's samples in the period before and after events with the following formula:

Before:

$$\frac{\sum_{-7}^{-1} \text{TVA it before}}{T \text{ before}}$$

After:

$$\frac{\sum_{-7}^{+1} \text{TVA it after}}{T \text{ after}}$$

3. Calculating the average company's TVA samples per day during the research period [41] with the following formula:

$$\text{ATVAAt} \frac{\sum_{i=1}^{n} \text{TVA it}}{n}$$

3.5.2 Abnormal return

An abnormal return is an excess of a actual return compared to the normal expected return.

Return is an income that has been received by the investor, while the expected return is the desired income that is potentially received by the investor at a later time. Abnormal return can occur as a result of certain events, such as national holidays, early months, erratic political atmosphere, extraordinary incidents, stock split, initial offers of stocks, and many more [16]. These are steps in calculating the shares abnormal return:

1. Calculating the actual return by using the formula as follows:

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

2. Calculating the daily expected return of the stock, using the market adjusted model where the expected return is estimated to be equal to the market index. This calculation uses the following formula:

$$E[Rit] = \frac{ILQ45_{it} - ILQ45_{it-1}}{ILQ45_{it-1}}$$

3. Calculating the abnormal return, which is the difference between the actual return and the expected return using the following formula:

$$ARit = R_{it} - E(Rit)$$

4. Calculating the average abnormal return of each share in the period before and after the occurrence using the formula as follows:

$$Before = \frac{\sum_{-1}^{-7} - AR_{it}\,Before}{T\,Before}$$

$$After = \frac{\sum_{+1}^{+7} - AR_{it}\,After}{T\,After}$$

5. Calculating the Average Abnormal Return (AAR) for the entire stock per day during the event period using the formula as follows:

$$AAR_t = \frac{\sum_{t=1}^{n} - AR_{it}}{n}$$

3.6 Data Analysis Techniques

The analysis was conducted using the event study analysis techniques to process and discuss the data obtained. The methodology for event study generally follows the following procedure [41]:

a. Collecting samples of companies that have an event to be researched.
b. Determine the exact day or date of the event.
c. Define the research period or event window.

3.7 Data Analysis Methods

One sample t-test analysis is used to test the first hypothesis in this study, while for the second and third hypotheses if the data is normally distributed, the analysis technique used is the paired sample t-test and if the data is not normally distributed, the analysis technique used is the Wilcoxon test.

The first stage of testing is to calculate the actual return, expected return, calculate daily stock returns, then regress daily stock returns, and daily market returns to get alpha and beta. The next step is to calculate the abnormal return for each listed share before and after the declaration of the 2019 presidential and vice-presidential candidates. After the abnormal return is known, the cumulative abnormal return and the average abnormal return must be calculated.

The standard error of estimation needs to be known (Standard Error of Estimate) for the abnormal return. The t-test statistical test is necessary to determine the significance of the abnormal return. The next step is to test the hypothesis for the research variables using the paired sample t-test analysis test. A Paired sample t-test analysis test is often used to test the before-after data analysis model. Different tests are carried out to assess the certain treatment of the same sample but in non-concurrent periods. The observations referred to in this study are the events of the 2018 Declaration of Presidential Candidates and Candidates for Vice President in Indonesia.

Hypothesis testing is carried out using two different tests related to averages, namely the paired sample-test with SPSS version 24 software, namely by comparing the average trading volume and the average abnormal return before and after the declaration of the presidential and vice-presidential candidates in Indonesia. The t-test for two related samples is to test the paired mean difference between two samples and for parametric testing [16].

The test technique is carried out using paired sample t-test because the data is likely to be normally distributed, with the formula:

$$t = \frac{X_i - X_2}{\frac{Sd}{\sqrt{n}}}$$

Paired sample t-test, the variables are compared between before and after the declaration of presidential and vice-presidential candidates in Indonesia using a confidence level of 95% or α = 5%, with the following conditions [41]:

a. If the value is Asymp.Sig. (2-tailed) less than 0,05 or 5% means that the data in the study have a significant difference.
b. If the value is Asymp.Sig. (2-tailed) more than 0,05 or 5% means that the data in the study do not have a significant difference.

An alternative if the data is not normally distributed, the Wilcoxon Signed Rank Test Average difference test will be carried out with the SPSS applications program version 24. The basis for drawing concluding is that if the p-value of the Wilcoxon test statistics is <0,05 then the null hypothesis (H0) is rejected and Ha received.

4. RESULTS AND DISCUSSION

From the Table 1, it can be seen that on the 6 trading days at the event period there was no significant abnormal return. The significance of the average abnormal return before and after the event shows that there is no good reaction from investors (capital market players) regarding the declaration of the presidential and vice-presidential candidates in 2018. The emergence of negative abnormal returns in periods t-3, t-2 it might be because the candidate pairs chosen in the declaration did not match investors' expectations, so the market responded negatively.

The results of this test are the same as the results of research conducted by Sudewa and Sari [27], there is no market reaction in the 2014 presidential election, this is indicated by the results of statistical tests on cumulative abnormal returns which show the absence of information content, causing the market to not react. Other than that, Anggraini's research [42] found that there was a significant abnormal return in the 1999, 2001, 2004 elections but not significant in 2009, so that the condition of the Indonesian capital market is classified as semi strong (semi strong form).

4.1 Discussion of the t-test Significance of Abnormal Return

The results of the test conducted on the significance of the abnormal return of shares during the study period showed that the abnormal return has no significance. This means that there is no market reaction when there is an excess of actual return compared to the normal return in the stock exchange of the property. The significance level has a negative value exactly three days before the declaration of presidential and vice-presidential candidates, which is dated August 6th, 2018.

However, after that day, the 7th and 8th of August 2018 experienced an insignificant level of positive. This means that the market reaction was positive before the presidential and vice-presidential candidates were officially announced. However, there was a stimulating thing after the official registration of presidential and vice-presidential candidates in KPU that the stock exchange is assessed negatively even though this value is not significant. The circumstance is very likely to happen when the presidential and vice-presidential candidates are not desired by most investors. The next interesting finding is that precisely on the two

Table 1. The One-sample t-test results against the abnormal return during the research period

Period	AAR	T Count	Sig.	Description
$T\text{-}_3$	-0,0111844	-1,838	0,073	Not significant
$T\text{-}_2$	0,00130854	0,211	0,834	Not significant
T-1	0,00500787	0,613	0,543	Not significant
$T +_1$	-0,0033649	-1,096	0,279	Not significant
T + 2	0,00498979	1,187	0,242	Not significant
T + 3	0,00272049	0,745	0,460	Not significant
* t_{table} (0,025; 44)	2.01537			

Source: Processed secondary data (2019) periods, i.e., t+2 and t+3 (August 13th to August 14th, 2018), the response of the market to the expected return was more considerable compared to the actual return; therefore there was non-significant positive trend in the IDX. This means the stock market is experiencing a positive level of return.

This opinion supports the results of the research [27] which suggested that there was no market reaction in the presidential election in 2014. This is demonstrated by the results of the statistical testing of the cumulative abnormal return that shows the absence of information content, causing the market not to react. There was no significant abnormal return difference between before and after the presidential election in 2014 using seven days span of events. This was argued due to the actions of capital market players who tend to prepare the speculation that is considered profitable for them in the days before and after the presidential election in 2014.

4.2 Discussion of the Difference Test of Average Abnormal Return Results

The results of the Average Abnormal Return (AAR) statistics test between before and after the declaration of the candidate for the president and the vice-president in 2018 did not indicate a significant difference. The reaction can be seen in the table above, which indicates that there is no significant difference between Average Abnormal Return (AAR) between before and after the official registration event of the presidential and vice-presidential candidates.

It supports the research conducted by Pamungkas [43], Mari'a [44] and Syaputra [45] who also found no significant difference between the before and after events. In contrast, the researches conducted by Fanni [46] and Aini [47] found empirical evidence that there was a significant difference in Average Abnormal Return (AAR) between before and after the event.

The absence of significant differences between the period before and after the declaration event discussed above indicates that the information of the event is unable to leverage the stock trading to be above the normal. The absence of significant market reactions reflects that market players were more vigilant and calculated long-term possibilities, so they were not in a hurry to buy and sell stocks. Although researchers found no significant differences between Average Abnormal Return (AAR) of the shares before and after the official registration of presidential and vice-presidential candidates in the KPU, they have a significant impact on the overall price of the company's share during the research period.

4.3 The Result of Difference Test of Average Trading Volume Activity (ATVA)

The test of the Average Trading Volume Activity (ATVA) aims to determine if there is a significant difference between the Average Trading Volume Activity (ATVA) before and after the event of the declaration and the official registration of the presidential and vice-presidential candidates in the KPU. The test was conducted using the Wilcoxon Signed Rank Test due to data on the Average Trading Volume Activity (ATVA).

The results of the Average Trading Volume Activity (TVA) statistic test proved that there was a significant difference between the period before and after the official registration of presidential and vice-presidential candidates in the KPU. The reaction is shown in the table above, which indicates that there is a significant difference due to the value of sig. is higher than 0,05 or 0,006 ≥ 0,05.

These results supported the research conducted by Pamungkas [43], Aini [47], and Effendi [48], who found empirical evidence that there was a difference between the Average Trading Volume Activity (ATVA) between before and after the event. However, this study differed from Fanni [46], Maria [49] and Syaputra [45] who did not find any significant differences before or after the event.

Table 2. The results of the paired sample t-test of Average Abnormal Return (AAR) before and after the event

		Mean	N	Std. deviation	Std. error mean
Pair	AAR_Before	-0,000004019	45	0,0218149401	0,0032519793
1	AAR_After	0,001448445	45	0,0136367791	0,0020328510

Table 3. Paired samples test

		Paired differences					t	Df	Sig. (2-tailed)
		Mean	Std. deviation	Std. error mean	95% Confidence interval of the difference				
					Lower	Upper			
Pair 1	AAR_ before-AAR_ after	-0,001452	0,025957	0,003869	-0,009251	0,006346	-0,375	44	0,709

t_{table} = 2.01537

Source: Processed secondary data (2019)

Table 4. The Results of Wilcoxon Signed Rank Test and Average Trading Volume Activity (ATVA)

		N	Mean rank	Sum of ranks
ATVA _AFTER ATVA _BEFORE	Negative Ranks	31[a]	23,61	732,00
	Positive Ranks	13[b]	19,85	258,00
	Ties	10[c]		
	Total	54		

a. ATVA_AFTER < ATVA_BEFORE
b. ATVA_AFTER > ATVA_BEFORE
c. ATVA_AFTER = ATVA_BEFORE

Period	Ztest	Asimptotic Sig.	Desc.
ATVA before-ATVA after	-2,767[b]	0,006	Significant

Source: Processed secondary data (2019)

It implies that the capital market reaction to a particular event of political events is reviewed from the Average Trading Volume Activity (ATVA) of the stock, tends to vary depending on the type of event, the type of shares studied, as well as the characteristics of each investor.In addition, the negative rank is greater than the positive rank, which means there was a considerable decline after the registration event of presidential and vice-presidential candidates.

5. CONCLUSIONS

Based on the analysis from the hypothesis test above, the researcher summarizes some conclusions as follow:

a. Within the six operating days of IDX on the event period, there was no significant abnormal return. The average significance of the abnormal return before and after the event indicated the absence of a positive reaction from the investors (capital market players) on the event of the declaration of presidential and vice-presidential candidates in 2018.
b. The results of the test conducted on the significance of the abnormal return of shares during the study period showed that the abnormal return has no significance. This means that there is no market reaction when there is an excess of the actual return compared to the normal return of property stocks in the stock exchange. The significance level has an adverse condition precisely three days before the declaration of presidential and vice-presidential candidates, which is dated August 6th, 2018. But in the following days, on August 7th and August 8th 2018, it experienced insignificantly positive levels. This means that the market reaction was positive before the presidential and vice-presidential candidates were set. However, there was a stimulating thing after the official registration of presidential and vice-presidential candidates in KPU that the stock exchange is assessed negatively even though this value is not significant. The circumstance is very likely to happen when the presidential and vice-presidential candidates are not desired by most investors. The next interesting finding is that precisely on the two periods, i.e., t+2

and t+3 (August 13th to August 14th, 2018), the response of the market to the expected return was more considerable compared to the actual return; therefore there was a non-significant positive trend in the IDX. This means the stock market is experiencing a positive level of return.

c. The results of the Average Trading Volume Activity (TVA) statistic test proved that there was a significant difference between the period before and after the official registration of presidential and vice-presidential candidates in the KPU. The reaction is shown in the table above, which indicates that there is a significant difference due to the value of sig. is higher than 0,05 or 0,006 ≥ 0,05.

   There are a number is limitation is Although Reality There Is A Bit Of Panic Caused By Confusing Information Before The Declaration Of The 2018 Presidential And Vice Presidential Candidates, Investors Or Market Players Are Mature In Responding And Making Investment Decisions. Investors Or Market Players In Estimating Stock Prices And Making Investment Decisions Should Still Use An Investment Analysis Model Based On Scientific Theories Such As Fundamental Analysis And Technical Analysis, And Always Observe External Situations More Wisely.
d. The Government Is Expected To Create A Conducive Investment Climate And Formulate Policies And Regulations That Support The Indonesian Capital Market To Attract Investors To Invest In The Capital Market.
e. The Calculation Of Abnormal Returns In This Study Is To Use A Market Adjusted Model, So It Does Not Use The Estimation Period, But Only The Event Period Or Window Period. Therefore, For Further Research It Is Recommended To Try To Use Other Models Such As The Mean-Adjusted Model And The Market Model Or By Comparing Several Models To See The Results And The Differences. The Sample Used Can Also Be Expanded By Using Other Index Stocks, Or Using Stocks From Other Sectors.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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