

Impact of Quick Count Result of President Election on Stock Prices and Trade Activities in the Indonesian Capital Market

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| Received: 05.06.2019 | Accepted: 15.06.2019 | Published: 30.06.2019

DOI:10.21276/sjbms.2019.4.6.2

Abstract

This research is an event study that aims to find empirical evidence of the impact of the quick count of the results of the presidential election on the Indonesian capital market. The population of this study are stocks that are consistently listed on the Indonesia Stock Exchange during the study period. The data used is secondary data in the form of a daily sectoral index two days before and two days after the event. Paired Samples t-test is used to test the hypotheses. The results of the Paired Samples t-test show that there are no significant abnormal returns in the period around the date of the event, and in the period between before and after the quick count event the results of the presidential election. The results of the study also prove that there is no abnormal trading frequency in the period around the date of the event, and in the period between before and after the quick count event the results of the presidential election. In general, it can be concluded that there is no impact from the quick count of the results of the presidential election on the Indonesian capital market.

Keywords: Abnormal Return, Abnormal Frequency Trading, Event Study, Quick Count.

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INTRODUCTION

The capital market is very sensitive to various events, both events from internal companies and from external companies. Events from internal companies are micro events that only affect the price volatility and trading activities of the company concerned, while the events from external companies are macro events, which will affect the price volatility and trading activities of companies in all sectors of the capital market. The volatility of the company's stock prices across sectors in the capital market is reflected in the volatility of the sectorial price index, while the trading activities of company shares in all sectors in the capital market are reflected in the frequency of sectorial trade.

An event that has a relevant information content for investors will have an impact on price volatility and stock trading activities, thus providing an overview of risk and expedited returns in order to form an optimal portfolio [1]. One macro event, which is considered to have the relevant information content for investors, is a quick count of the results of the presidential election. Quick count of the results of the presidential election is a macro event that will affect all sectors in the capital market.

The quick count of the presidential election is an interesting event to examine the impact on stock prices and trading activities in the Indonesian capital

market (IDX) because the winner of the presidential election will determine the Indonesian economy for the next five years, therefore investors in the capital market very much looking forward to the results of the presidential election. However, the winner of the official presidential election will only be known when the vote count recapitulation by the General Election Commission (KPU) ends on May 22, 2019. Therefore investors will rely on quick count results of the presidential election to make investment decisions, because for investors those who rely on the results of the KPU recapitulation will be late in making decisions, so the question arises whether the quick count results of the presidential election have information content for Indonesian capital market investors?

This study is intended to find empirical evidence in a different way from previous studies which generally only focus on one sector using price volatility data and individual stock trading activities. An event can affect a particular company, influence a particular sector, or influence all sectors in the capital market [2]. Quick count results of presidential elections are events that affect all sectors in the capital market, therefore in this study analyzed in aggregate, using price volatility and sectorial index trading activities.

HYPOTHESIS DEVELOPMENT

Domestic events, both economic and political events, which have information content can affect price volatility and stock trading activities in the capital market. This happens because these events can affect the size of the opportunity of the issuer in generating profits, so investors will recalculate the price of shares they trade based on expectations for the return and risk borne. Likewise, the quick count results of the presidential election.

The quick count of the presidential election results becomes the initial information and is statistically quite accurate about the elected president, so that it can provide an overview of the direction of the next five years in the economic and political fields. The elected president, who will run the government for the next five years, can be responded positively or negatively by investors. If investors view the elected president as friendly to investment, a positive response will be reflected, reflected in the increase in stock prices and frequency of trade. This increase in stock price can be measured through the indicator of a positive abnormal return, while the increase in trading frequency is measured through an indicator of a positive abnormal trading frequency. Conversely, if an investor views the elected president as being unfriendly to investment, a negative response will be reflected, which is reflected in a decline in prices. This negative reaction can be measured through an indicator of a negative abnormal return and a negative abnormal trading frequency.

Positive and negative reactions from investors to elected presidents can occur around quick count events, so there will be a statistically significant abnormal return around the occurrence of quick count events, i.e. within the range of the event period, and there will be an average difference in abnormal returns. Between before and after a quick count event. From this explanation, the following hypothesis is proposed.

H1: There is a significant abnormal return (AR) around the date of the quick count event resulting from the presidential election.

H2: There is a significant difference in average abnormal return (AAR) between the period before and after the quick count event of the results of the presidential election.

The positive reaction of investors to the elected president is also reflected in the increase in stock trading activities which can be measured through abnormal trading frequency. Stock trading activity is the frequency of every transaction that occurs in the capital market at a certain time and in certain stocks. Trading activity is one of the factors that influence stock price volatility. The frequency of stock trading is a key element in predicting stock price movements. The frequency of stock trading is seen as an important part of information that signals the next price volatility [3].

Trading volume consists of two components, namely: number of transactions (number of transactions / frequency of trade) and the average size of trades (size of trades / trade size) [4-7]. Trading frequency is the number of individual transactions for a certain number of shares [6] and the trade size is defined as the total number of traded shares in a period divided by the number of transactions [7] or average volume of shares per transaction [5]. Trading frequency contains more information than trading volume [4].

Many studies find a significant influence between the number of transactions and stock price volatility [4, 8, 9]. The number of trades is the best proxy for explaining market activity rather than volume [9]. The effect of number of transactions to be stronger than the trade size on intraday intervals [8]. From this explanation, the following hypothesis is proposed.

H3: There is a significant abnormal trading frequency (ATF) around the date of the quick count event resulting from the presidential election.

H4: There is a significant difference in the average abnormal trading frequency (AATF) between the period before and after the quick count event of the results of the presidential election.

RESEARCH METHODS

The population of this research is all sectorial indices on the Indonesia Stock Exchange (IDX) as many as 10 sectorial indices. This research is census research because it uses all sectorial indices on the IDX as data. The unit of analysis of this study is a sectorial index based on the consideration that the quick count of the presidential election is a macro event, which affects all shares listed on the IDX, and the impact is not only momentary, so that the aggregate using sectorial indices.

The date on which the event was published for the first time was specified as event day (t_0). This research day event is dated April 17, 2019. Because the date is a holiday date for stock trading, the next closest stock trading date is set as the day event, which is April 18, 2019. The event period of this study is two trading days before the event ($t-2$) to two trading days after the event ($t+2$). With the five-day event period, it is expected that the impact of the quick count of the presidential election on stock prices and trading activities on the IDX can be known and not affected by other events. If the event period is too long, it is feared there are other events that also have an impact on the IDX, so the results of the research become biased [10]. To get the expected return during the event period, an estimation period of 30 days is used, that is, from three days of stock trading before the event ($t-3$) to 32 days of stock trading before the event ($t-33$). An estimation period of 30 days is considered adequate to predict the expected return during the event period. The event period and estimation period for each event are summarized in the following Figure-1.

t-32	t-3	t-2	t0	t+2
28/2/2019	12/4/2019	15/4/2019	18/4/2019	23/4/2019
<i>Estimation Period</i>			<i>Event Period</i>	

Fig-1: Periode of Research

The quick count impact of the presidential election on stock prices and trading activities in the Indonesian capital market was measured using abnormal returns (AR) and abnormal trading frequency (ATF). Abnormal return is defined as the difference between the actual return and the expected return. Mathematically abnormal return is formulated as follows:

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

Where,

$AR_{i,t}$ = abnormal return sector i on day t.
 $R_{i,t}$ = actual sector return on day t.
 $E(R_i)$ = expected return sector i.

Actual return sector i on day t, can be calculated by the formula:

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

Where,

R_i = actual return sector i on day t.
 $P_{i,t}$ = sector index i on day t.
 $P_{i,t-1}$ = sector index i on day t-1.

Expected returns are calculated using the Mean-adjusted Model with the equation:

$$E(R_i) = \frac{\sum R_i}{n}$$

Where,

$E(R_i)$ = expected return sector i during the event period.
 $\sum R_i$ = number of sectoral returns i.
 n = the number of sector returns i for the period t-3 to t-32.

Average Abnormal Return (AAR) is calculated using the following equation:

$$AAR_i = \frac{\sum AR_i}{n}$$

Where,

AAR_i = average abnormal return sector i during the event period.
 $\sum AR_i$ = number of abnormal sectoral returns i.
 n = number of counts of abnormal return sector i during periods t-2 to t-1.

Whereas to measure trading activity, abnormal trading frequency (ATF) is calculated using the following formula.

$$AATF_i = \frac{\sum ATF_i}{n}$$

Where,

$ATF_{i,t}$ = abnormal trading frequency sector i on day t.

$TF_{i,t}$ = trading frequency sector i on day t.

$E(TF_i)$ = expected trading frequency sector i.

Expected trading frequency is calculated using the Mean-adjusted Model with the equation:

$$E(TF_i) = \frac{\sum TF_i}{n}$$

Where,

$E(TF_i)$ = expected trading frequency sector i during the event period.

$\sum TF_i$ = number of trading frequency sectors i.
 n = number of sector i trading frequency counts during periods t-3 to t-32.

Average Abnormal Trading Frequency (AATF) is calculated using the following equation:

$$AATF_i = \frac{\sum ATF_i}{n}$$

Where,

$AATAT_i$ = average abnormal trading frequency sector i during the event period.

$\sum ATF_i$ = number of abnormal sectoral frequency trading i.

n = the number of abnormal counts of the trading frequency sector i during periods t-2 to t-1.

The testing of the hypothesis of abnormal return (H1) and abnormal trading frequency (H3) which is significant around the quick count event resulting from the presidential election is used by One Sample T-test where the null hypothesis is average abnormal return and the average abnormal trading frequency is zero. If the significance of One Sample T-test is smaller than 0.05, then the null hypothesis is rejected or accepts H1 and H3, meaning that there are significant abnormal returns and abnormal trading frequency around the quick count event of the presidential election.

Testing the hypothesis that there are significant differences in average abnormal return (H2) and average abnormal trading frequency (H4) between before and after the quick count event of the presidential election results used the Paired Samples T-test difference test, where the null hypothesis is Different average abnormal returns and abnormal average trading frequency between before and after the quick count results of the presidential election are zero. If the Paired Samples T-test significance value is smaller than 0.05, then the null hypothesis is rejected or accepts H2 and H4, meaning that there is a difference in average abnormal return and abnormal average trading frequency between before and after a quick count of election results. General presidents or quick count events have an impact on the Indonesian capital market.

Testing using Paired Samples T-test requires data to be normally distributed, if the data is not normally distributed then the Wilcoxon test is used, the basis of the conclusion is that if the p-value Wilcoxon test statistic < 0.05 then the null hypothesis is rejected or accepted H_a .

This study uses secondary data collected from the official website of the Indonesia Stock Exchange (www.IDX.co.id).

The data collected are: (1) Sectoral indices obtained from the official website of the Indonesia Stock Exchange (www.IDX.co.id). (2) The frequency of trade in sectoral shares transacted on the first day is obtained from the official website of the Indonesia Stock Exchange (www.IDX.co.id).

RESULT

The results of descriptive abnormal return and abnormal trading frequency sectoral index are presented in table 1. Based on table 1, it is known that two days before the quick count of the results of the presidential election (t-2), investors took a cautious attitude by reducing trading activity, this indicated by the average abnormal trading frequency at t-2 which is negative. This decrease in trading activity results in a decline in stock prices as indicated by the average abnormal return t-2 which is negative.

One day before the quick count of the results of the presidential election (t-1), investors began to be optimistic by increasing trading activities so that stock prices rose, this is indicated by abnormal trading frequency and average abnormal returns that are positive. During the quick count event of the presidential election (t0), investors were still optimistic by increasing trading activity so that stock prices rose, this was indicated by

the average abnormal return and the average abnormal trading frequency at t0 was positive. However, the positive impact of the quick count of the presidential election began to disappear at t + 1 or a day after the quick count of the results of the capital market presidential election has resumed normally, this is indicated by the average abnormal trading frequency at t + 1 which is negative which indicates a decline in stock trading activity.

Hypothesis testing (H1) which states that there is a significant abnormal return (AR) around the date of the quick count event resulting from the presidential election is presented in Table-2. Based on Table-2, it can be seen that during the event period, starting from t-2 to t + 2 shows that the average of abnormal returns has a significance of > 0.05 so that the hypothesis (H1) which states that there is a significant abnormal return (AR) around the date of the quick count of the presidential election results is rejected.

The hypothesis testing (H2) which states that there is a significant difference in average abnormal return (AAR) between the period before and after the quick count event of the presidential election results is presented in Table-3. Based on Table-3, it can be seen that during the period before and after the event a quick count of results presidential elections increased by an average abnormal return of 0.25930 with a significance of 0.204 so that it was statistically stated to be insignificant, so H2 was rejected.

Hypothesis testing (H3) which states that there is a significant abnormal trading frequency (ATF) around the date of the quick count event resulting from the presidential election is presented in table 4. Based on Table-4, it can be seen that during the event period, starting from t-2 to t +2 shows that the average of abnormal trading frequency has a significance > 0.05 so the hypothesis (H3) which states that there is a significant abnormal trading frequency (ATF) around the date of the quick count event of the presidential election results is rejected.

The hypothesis testing (H4) which states that there is a significant difference in the average abnormal trading frequency (AATF) between the period before and after the quick count event of the presidential election is presented in Table-5. Based on Table-5, it can be seen that during the period before and after the quick count event the results of the presidential election decreased by the average abnormal trading frequency of 3747 which was not statistically significant so it could be concluded that H4 was rejected.

Table-1: Average Abnormal Return and Abnormal Trading Frequency During the Event Period

Period	Date	Average of Abnormal Return	Average of Abnormal Trading Frequency	Explanation
t-2	15/4/2019	-0,853	-912	Investors are careful to reduce trading activities so that stock prices fall.
t-1	16/4/2019	0,406	5749	Investors are optimistic by increasing trading activities so that stock prices rise or there is a positive impact from the quick count event of the presidential election results.
t0	18/4/2019	0,041	11795	
t+1	22/4/2019	0,023	-2843	The average abnormal return is positive but the average of abnormal trading frequency at t + 1 has a negative sign indicating the positive impact of the quick count event has disappeared, the capital market has returned to normal.
t+2	23/4/2019	0,048	186	

Table-2: Test Results Abnormal Return (AR) Significant Around the Event Period

Period	Average of Abnormal Return	Deviation Standard	Significance	Explanation
t-2	-0,853	2,05587	0,222	Not Significant
t-1	0,406	0,97181	0,219	Not Significant
t0	0,041	0,09714	0,214	Not Significant
t+1	0,023	0,10410	0,504	Not Significant
t+2	0,048	0,09836	0,158	Not Significant

Table-3: Testing Results of Average Abnormal Return (AAR) Before and After (H2) Events of Quick Count Results of Presidential Election

	Event	Different of Average Abnormal Return	Standard Deviation	Sig. (2-tailed)
Pair 1	Post Event - Pre Event	0,25930	0,59893	0,204

Table-4: Significant Abnormal Trading Frequency (ATF) Test Results around the Event Period

Period	Average of Abnormal Trading Frequency	Deviation Standard	Significance	Explanation
t-2	-912	7239,58020	0,700	Not Significant
t-1	5749	22334,53544	0,437	Not Significant
t0	11796	19671,67992	0,090	Not Significant
t+1	-2843	6471,88451	0,198	Not Significant
t+2	186	7274,53977	0,937	Not Significant

Table-5: Test Results of Average Abnormal Trading Frequency (AATF) Before and After (H4) Quick Count Event of Presidential Election Results

	Event	Different of Average Abnormal Trading Frequency	Standard Deviation	Sig. (2-tailed)
Pair 1	Post Event - Pre Event	-3747	14099,6080	0,422

DISCUSSION

Descriptively it was known that the day before (t-1) and at (t0) the quick count event of the presidential general election results were an average abnormal return of 0.406 and 0.041, but the average abnormal return was very small, so it needed to be confirmed by testing hypothesis H1 and H2. As it turns out, the results of testing the H1 hypothesis indicate that there are no significant abnormal returns (AR) around the date of the quick count event of the presidential election results. This indicates that the quick count event resulting from the presidential election did not affect stock prices in the Indonesian capital market.

The results of the H2 hypothesis testing which states that there are significant differences in average

abnormal return (AAR) between the period before and after the quick count event the results of the presidential election show significant results of 0.204 which is greater than 0.05 so statistically not significant. These results reinforce the results of the H1 hypothesis testing, so it can be concluded that there is no impact from the quick count event of the presidential election results on stock prices in the Indonesian capital market.

The results of this study support previous studies. There was no overreaction from the shares of Dubai Financial Market, especially financial sector shares in connection with the 2013 EXPO announcement in 2013 or afterwards [11]. Another study also found no significant effect of abnormal returns before and after President Joko Widodo's inauguration [12, 13].

Similarly, also found no significant effect of abnormal returns in the pre-event and post-event parliamentary elections in 2014 [14] and investors did not react to information on cash dividends on the Indonesia Stock Exchange [15, 16].

Descriptively, it was known that the day before (t-1) and at (t0) the quick count event of the presidential election results in a row there were an average abnormal trading frequency of 5749 and 11795, but the abnormal average trading frequency needs to be confirmed by testing the H3 hypothesis and H4. Testing of the hypothesis (H3) shows that there is no significant abnormal trading frequency (ATF) around the date of the quick count event of the presidential election results. This indicates that the quick count of the results of the presidential election also did not affect stock trading activities in the Indonesian capital market.

The results of testing the H4 hypothesis which states that there are significant differences in average abnormal trading frequency (AATF) between the period before and after the quick count event of the presidential election results show a significance of 0.422 which is greater than 0.05, so statistically not significant. The results of testing the H4 hypothesis reinforce the results of testing the H3 hypothesis, so it can be concluded that there is no impact from the quick count event of the results of the presidential election on stock trading activities in the Indonesian capital market. This was allegedly caused by the presidential election through quite a long stages, so investors were anticipating the impact from the start, as a result when the time for a quick count of the presidential election was held, the impact of the quick count had begun to disappear.

The results of this study support previous studies. There was no difference in Trading Volume Activity (TVA) before and after a change in regulation on the capital market price fraction on May 2, 2016 [17] and there were no significant differences in trading volume activity (TVA) in the period before and during, during and after, and before and after the events of the implementation of Tax Amnesty [1]. Another study also found no difference in the average volume of trading activities, the average frequency of trade both before and after the announcement of the Work Cabinet [18] and no significant difference in average trading volume activity between before and after the announcement of bonus distribution [19].

CONCLUSIONS AND SUGGESTION CONCLUSION

The results showed that there was no significant abnormal return (AR) around the date of the quick count event of the presidential election and between before and after the date of the quick count of the presidential election results, this indicated that the quick count event of the presidential election had no impact towards stock prices in the Indonesian capital market.

The results also show that there is no significant abnormal trading frequency (ATF) around the date of the quick count results of the presidential election and between before and after the date of the quick count results of the presidential election, this shows that the quick count results of the presidential election does not affect stock trading activities in the Indonesian capital market.

SUGGESTION

This study in estimating the expected return using mean-adjusted model. Therefore, for further research it is recommended to try to use the market adjusted model and market model or use the three models, so that the results of the calculations of the three models can be compared to determine the impact on the results of the study. This study only uses two indicators, namely changes in stock prices, as measured by abnormal returns, and stock trading activities, as measured by abnormal trading frequency, therefore for further research it is recommended to develop other indicators to determine the impact of events on capital markets Indonesia, for example such as stock trading volume and bid-ask spread to enrich research results.

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