

Abnormal Returns and Trading Volume in the Indonesian Stock Market in Relation to the Presidential Elections in 2004, 2009, and 2014

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Abstract. Presidential election is considered as relevant information for stock market's investors to make investment decision. The objective of this study is to examine differences in average abnormal return and trading volume activity on sectoral indices' stocks before and after the presidential elections in 2004, 2009, and 2014. The research uses the event study method. The data are collected from the Indonesia Stock Exchange. The daily closing prices on sectoral indices used in this study consist of 120 days preceding and 30 days succeeding the elections. There is a strong evidence of differences in average abnormal return on Indonesian's sectoral stock market before and after the presidential elections especially for the mining sector. However, the trading volume activities of the Indonesian's sectoral stock market before and after the elections were statistically the same. The litigation from the last election results had no impact on most Indonesian's sectoral stock, except for the financial as well basic industry and chemical sectors. The analysis concludes that the trade, services, and investment are the most stable sectors, while mining is the opposite one.

Keywords: average abnormal return, presidential election, trading volume

Abstrak. Pemilihan presiden dipertimbangkan sebagai informasi yang relevan bagi investor pasar saham untuk membuat keputusan investasi. Tujuan dari penelitian ini adalah untuk menguji perbedaan average abnormal return dan trading volume activity pada indeks saham sektoral sebelum dan sesudah pemilihan presiden 2004, 2009, dan 2014. Penelitian ini menggunakan metode event study. Data dikumpulkan dari Bursa Efek Indonesia. Harga penutupan indeks saham sektoral harian yang digunakan dalam penelitian ini terdiri dari 120 hari sebelum dan 30 hari setelah pemilihan presiden. Terdapat bukti perbedaan yang kuat pada average abnormal return indeks saham sektoral sebelum dan sesudah pemilihan presiden terutama pada sektor pertambangan. Akan tetapi, untuk trading volume activity indeks saham sektoral sebelum dan sesudah pemilihan presiden secara statistik sama. Adanya gugatan terhadap hasil pemilihan presiden terakhir tidak memberikan pengaruh pada hampir semua indeks saham sektoral, kecuali pada sektor keuangan dan sektor industri dasar dan kimia. Analisis ini menyimpulkan bahwa sektor perdagangan, jasa dan investasi merupakan sektor yang paling stabil, sedangkan sektor pertambangan merupakan sektor yang paling tidak stabil.

Kata kunci: average abnormal return, pemilihan presiden, trading volume

INTRODUCTION

Stock market has an important role for Indonesian economy. Stock market also functions as business funding facility for companies obtained from society or investors via initial public offering (IPO) of primary market. Jogiyanto (1998) explains that there are two types of efficient market, namely informationally efficient market in terms of the availability of information only and decisionally efficient market in terms of market participant's ability to take a decision based on the available information. The relation between stock market and efficient market's concept is how the information is processed by stock market to reach new equilibrium. This study only observes efficient market based on information only. Fama (1970) defines efficient stock market as a market in which the available information can be reflected totally on the stock price. Fama (1970)

also states that efficient market hypothesis is divided into three types, namely weak-form efficiency, semi strong-form efficiency, and strong-form efficiency. Weak-form efficiency is when the information only includes the history of the price or its return. Semi strong-form efficiency is when the information includes information known by stock market participants (public information), and strong-form efficiency is when relevant information of price structure can be accessed only by several market participants (private information). Indonesian stock market is semi-strong efficiency one (Husnan, 1998).

Brown and Reilly (2009) state that one of the methods to examine semi-strong efficiency market is Event Study, to examine how fast stock price adjusts to economic event significantly. Inefficient markets enable the investors to acquire abnormal return as the result of new information entry. The method is used to estimate abnormal return of various companies by using special events (Fadl, 2011).

Various extreme events can affect the movement of a country's stock market, so that investors face uncertainty on the stock market at the time of the ongoing event. There is an important relation between stock market's performance and political issues as non-economic factor and economic factor in countries all over the world (Pantzalis, et al (2000); Kristiana and Suratna, (2005)). Zaqi (2006) also states that an event containing positive information can encourage domestic economic activity. It will affect a company's capability in increasing the welfare of its stakeholders. On the contrary, an event containing negative information will hinder domestic economic activity so that the companies have a difficulty to grow and decrease company's value.

One of interesting political issues is election in which the presidential election has the biggest effect on stock market. Many researchers are interested in conducting a study relating to the effect of the presidential election on stock market (Chien, et al, 2014; Pantzalis, et al, 2000). Anomaly occurring on daily and weekly stock return gives an opportunity for investors to acquire abnormal return that does not last for a long time. Political election is an important event to be paid attention to by market participants among other political events, because (Pantzalis, et al., 2000): 1) through election event, investors as electors have an opportunity to affect the country's medium-term and long-term economic policy. The electors can also re-elect previous presidential candidates based on assessment prior to the election; 2) Election can attract the attention of media, survey institution, political and financial analysts as participants who sort out information between politician and public. The activity can also distribute information to financial market; 3) When the result of the election is more certain, the previous possibility predicted by financial market participants can be revised. The possibility includes the policy that will be implemented and the economic impact resulted; 4) Political issue such as presidential election affects stock market as suggested by the study of Nimkhunthod (2007) on the effect of political event on stock exchange in Thailand, saying that abnormal return is significant during a week before and after the political event. Pantzalis, et al. (2000) examines stock market's behavior during presidential election for international scale in 1974 to 1995 and finds out that abnormal return is positive during two weeks before the recovery week. However, a political issue such as presidential election does not always cause abnormal return on stock market. Dopke and Pierdzioch (2006) find out that there is no effect between political process and the movement of stock market in Germany. Politic and stock market in Germany is independent towards each other. Chan and Wei (1996) also examines stock market in Hongkong in relation to the effect of political news; the result shows that political news affects Hang Seng Index but does not affect Red Chip Index.

The presidential election in Indonesia is a very important event as well, since the country adopts democratic system. The change of president is expected to change Indonesian economy. According to increasing trend of Composite Stock Price Index (IHSG) as the indicator of stocks' movement in Indonesia, the increase

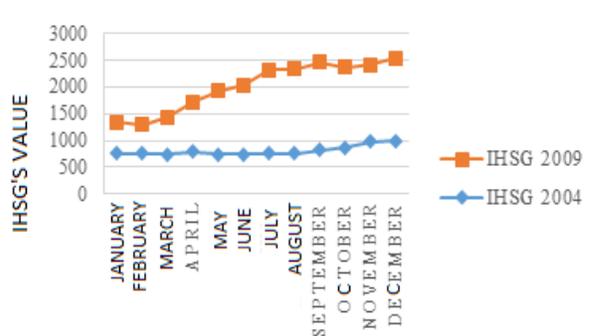


Figure 1. The Development of IHSG's Value in 2004 and 2009

Source: Yahoo Finance, 2014

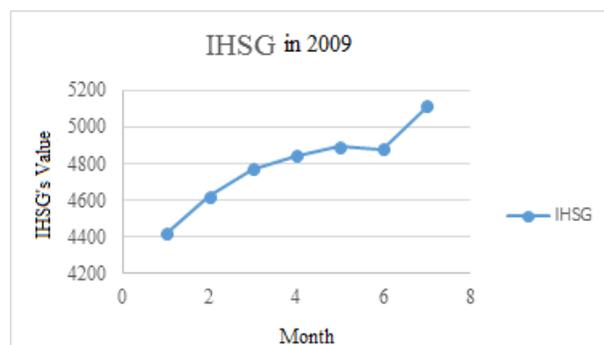


Figure 2. The Development of IHSG Value in 2014 Prior to the Month of the Presidential Election

Source: Yahoo Finance, 2014

reached 70% from 411.93 points to 676.9 points during post-election in 1999. The increasing trend also occurred during post-election in 2004, in which IHSG increased 44.6% from 752.93 points to 1,000.2 points. During the election in 2009, IHSG increased 87% from 1,332.66 points to 2,535.4 points (Figure 1) (Kusuma, 2014). IHSG in 2014 also increased every month until the month of election on July 9, 2014 (Figure 2).

It shows that Indonesian stock market still opens an opportunity for investors to invest. Investors want the increase of return as the repayment for the available uncertainty on stock market particularly when the presidential election day takes place. The research on the effect of the presidential election on sectoral Indonesian stock market has been conducted by Bilada (2011), however it is only limited to the analysis of abnormal return. Other researchers, namely Asmita (2004), Kabela and Hidayat (2009), and Chandra, et al (2014) show that there is no obvious difference between average abnormal return before and after the presidential election. The research was conducted on LQ45 group.

It is in contradiction to the actual return obtained from the indices of agricultural, trading, and misc-industry sectors during H-10 until H+10 after the presidential election on September 20, 2004, in which those three sectoral indices had experienced a fluctuation in actual return before and after the presidential election day (Figure 3). The similar phenomenon had occurred as well on the presidential election day on July 8, 2009, in which there was a fluctuation on those three sectoral indices

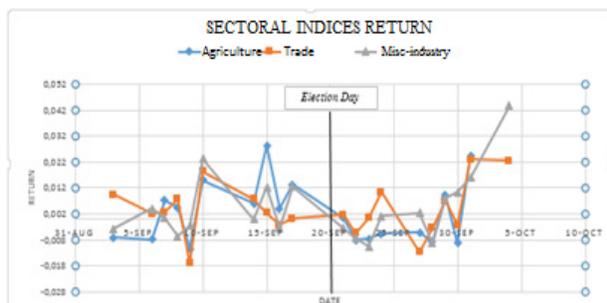


Figure 3. Sectoral Indices Return for Agriculture, Trade and Misc-Industry during H-10 until H+10 of the Presidential Election Day on September 20, 2004

Source: BEI, 2014

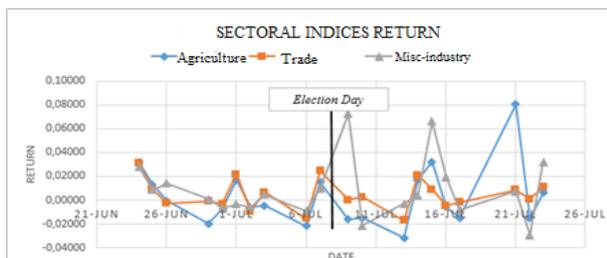


Figure 4. Sectoral Indices Return for Agriculture, Trade and Misc-Industry during H-10 until H+10 of the Presidential Election Day on July 8, 2009

Source: BEI, 2014

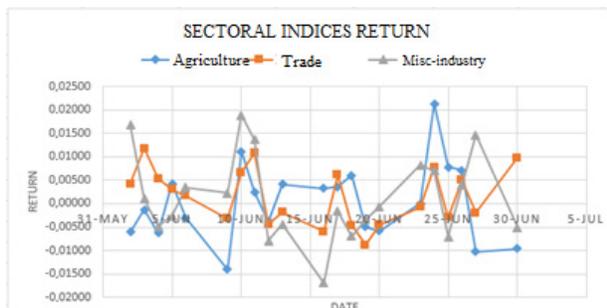


Figure 5. Sectoral Indices Return for Agriculture, Trade and Misc-Industry a Month before the Residential Election on July 9, 2014

Source: BEI, 2014

(Figure 4). The actual return of those three sectoral indices increased after the presidential election on July 8, 2009. The presidential election on July 9, 2014 also caused fluctuation on the actual return of those three sectoral indices even a month before the presidential election on July 9, 2014 (Figure 5).

The volume of stock trading is a variation from Event Study method seen from the function (Munawarah, 2009). The activity of available stock trading in stock exchange and investment decision by investors also can be seen from the change in the volume of stock trading in stock market (Meidawati and Harimawan, 2004). The volume of stock trading can be measured by using Trading Volume Activity. Trading volume activity (TVA) describes the ratio between the number of stocks traded and the number of stocks circulated in a certain period

(Munawarah 2009). Therefore, it is also required to analyze the volume of stock trading caused by the effect of a certain event.

Most investors utilize sectoral analysis in determining the long-term investment strategy. Investors capable to see quickly the important change in certain sectors are able to make better portfolio change (Jones, 2004). The study examining the impact of sectoral political issue on stock market is still narrowly conducted in Indonesia, the focus of which is generally on LQ-45 group. According to the description, the problem identifications for this study are: how the abnormal return and the trading volume for nine sectors on stock market are, and whether there is a difference between average abnormal return and trading volume activity by sectors or not, in relation to the presidential elections in 2004, 2009, and 2014.

This research have two objectives. First, to analyze abnormal return and trading volume for nine sectors on stock market, in relation to the presidential elections in 2004, 2009, and 2014. Second, to examine whether there is a difference or not between the average abnormal return and trading volume activity before and after the presidential elections in 2004, 2009, and 2014.

The research is conducted by using the Event Study method to find out abnormal return in relation to the presidential elections in 2004, 2009, and 2014 and trading volume activity in relation to the presidential elections in 2009 and 2014. This research was conducted in June to September 2014 towards nine sectoral indices in Indonesia Stock Exchange (BEI).

RESEARCH METHODS

The data used in this research is the closing price for daily sectoral indices, and daily Composite Stock Price Index (IHSG) for sectoral indices in 2004, 2009, and 2014. The data of trading volume for sectoral indices include the data in 2009 and 2014 due to their availability. All data are obtained from Indonesia Stock Exchange (BEI). Data processing technique and analysis for this research are conducted in several stages. The first stage is to analyze abnormal return by determining the event window. The event date used is: the presidential election on July 5, 2004; September 20, 2004; July 8, 2009; and July 9 2014, as well as the decision of Constitutional Court on August 22, 2014. The event date in which the presidential election day takes place is denoted by $t=0$. The duration of estimation period used in this research is 90 days. The test is conducted on 4 event windows, namely (-30,+30); (-15,+15); (-10,+10); and (-5,+5). This research takes event window on four points and long period of time based on the research conducted by Asmita (2004) and Chandra, et al. (2014) who does not find any difference between abnormal return and trading volume activity before and after the event when using event window for ten days. It is also based on the research conducted by Bilada (2011) proposing that there is a difference between abnormal return on event window for 20 days and estimation period for 55 days. If the event window and estimation period is lengthened, it is possible to obtain the difference between abnormal return and trading volume activity and how long the abnormal

return lasts.

To calculate normal and abnormal return, the formula used is index actual return as follows (Husnan, 1998).

$$R_{i,t} = ((P_{i,t} - P_{i,t-1}) / (P_{i,t-1})) \dots\dots\dots(1)$$

Explanation:

$R_{i,t}$ = actual return of sectoral indices i on day t

$P_{i,t}$ = sectoral price indices i on day t

$P_{i,t-1}$ = sectoral price indices i on day $t-1$

The expectation of return is measured by Ordinary Least Square (OLS) model. The formula of OLS model is shown as follows (Brown and Warner, 1985):

$$E(R_t) = \alpha_i + \beta_i R_{m,t} + u_t \dots\dots\dots(2)$$

Explanation:

$E(R_t)$ = expectation of stock indices return i on period t

α_i = stock intercept i

u_t = error term

β_i = beta stock i

$(R_{m,t})$ = return of market indices on period t

To calculate abnormal return, the formula used is as follows (Brown and Warner, 1985):

$$AR_{i,t} = R_{i,t} - E(R_{i,t}) \dots\dots\dots(3)$$

Explanation:

$AR_{i,t}$ = abnormal return of sectoral indices i on day t

$R_{i,t}$ = actual return of sectoral indices t

$E(R_{i,t})$ = return expectation of sectoral indices i on day t

To calculate average abnormal return, the formula used is as follows (Asri, 1996):

$$AAR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

Explanation:

AAR_t : average abnormal return.....(4)

$\sum_{i=1}^N AR_{it}$: the number of abnormal return during event period

N : number of event

To analyze the trading activity, namely trading volume activity (TVA), the formula used is as follows (Jones, 2004):

$$TVA = \frac{\text{The number of stocks } i \text{ traded on day } t}{\text{The number of stocks circulated}}$$

Difference Test is used to find out whether there is abnormal return or not in this event study research. Brown et al. (1991) states that difference test is one of the best solutions to test abnormal return since the other methods of event study often reject the hypothesis for zero (0) abnormal return ($AR=0$). Over 30 data samples are tested using t-test. T-test is also possible to be used for a test using only few data, however, the researcher should be certain that

the variable is distributed normally. If the researcher does not know the parameter variable of the population, non-parametric statistics should be conducted (Liu, 2007). The stages for AAR and TVA test in this research are conducted firstly by testing the abnormal return. The test is conducted towards $AR=0$ on confidence interval 95% ($\alpha = 5\%$) to find out possible significant abnormal return, with hypothesis as follows:

H_0 : $AR = 0$

H_1 : $AR \neq 0$

After the possible significant abnormal return is tested, paired simple t-test is conducted on confidence interval 95% ($\alpha = 5\%$). The hypothesis used is as follows:

H_0 = There is no actual difference of stocks' average abnormal return before and after the presidential election

H_1 = There is an actual difference of stocks' average abnormal return before and after the presidential election

The test of trading volume activity is also conducted using paired sample t-test. The hypothesis used is as follows:

H_0 = There is no actual difference of trading volume activity before and after the presidential election

H_1 = There is an actual difference of trading volume activity before and after the presidential election

RESULT AND DISCUSSION

On the period of the presidential election on July 5, 2004, agricultural sectors had negative average abnormal return from H-20 of the election day until the day subsequent to the presidential election for all periods of observation. The value of average abnormal return on basic industry and chemical and property, real estate and construction sectors tended to be negative before the presidential election and tended to be positive after the announcement of the elected president. Industrial products for consumption sectors and mining sectors tended to have positive average abnormal return; meanwhile financial, misc-industry, and service, investment and transportation sectors tended to have negative average abnormal return during the period of observation. Service, investment, and trading sectors tended to have positive average abnormal return from H-21 until the presidential election day. Negative average abnormal return indicates that the market reacts negatively against the presidential election and vice versa.

Each pair of candidates for president and vice president will inform vision, mission, and other messages for the society through a campaign. A campaign is one of factors that can attract society's interest since it can give information about the objectives of the next government after the candidates are chosen as the next President and Vice President for the Republic of Indonesia. Electors who take an interest in one of the candidates for president and vice president try to acquire information by paying

attention to the campaign and messages delivered to ensure them to choose the candidates for president and vice president when the election day takes place (Anom, 2009).

Investors as the electors have their own expectation about the will-be-elected leaders and their objectives in government. Investors respond to them by giving sentiment in stock market. Sentiment from investors also plays an important role in return volatility in stock market (Rehman, 2013). Kurov (2008) states that trading feedback is affected by investors' expectation in which it will be positive if the sentiment is high. Positive sentiment shows that investors conduct more trading activities in trading floor and vice versa.

According to the test of AR=0, it is known that significant abnormal return occurred on the agricultural; basic industry and chemical; transportation, infrastructure and utilities; property, real estate and construction; trade, service and investment sectors. The result of average abnormal return test before and after the presidential election on July 5, 2014 is shown on Table 1.

Sectors in Indonesian stock market experienced actual difference of AAR before and after the presidential election. It shows that the presidential election affects the movement of stock market for those sectors. A safe and stable presidential election as well as the appearance of candidates and new policies that will be established to encourage economy in Indonesia will become a factor to encourage both domestic and foreign investors to invest as well (Bilada, 2011).

Table 1. The Result of Paired T-test for Average Abnormal Return Before and After the Presidential Election on July 5, 2004

Sectors	Event Window			
	I	II	III	IV
1. Agriculture	+	+	+	TB
2. Basic industry and chemical	-	-	-	-
3. Industrial products for consumption	TB	+	+	TB
4. Finance	-	-	-	-
5. Transportation, infrastructure, and utilities	-	-	-	-
6. Mining	+	+	+	+
7. Misc-industry	+	+	+	+
8. Property, real estate, and construction	-	-	-	-
9. Trade, service, and investment	-	TB	TB	-

Explanation:

Positive mark (+) shows the actual difference before and after, in the form of positive sentiment

Negative mark (-) shows the actual difference before and after, in the form of negative sentiment

TB shows that there is no actual difference before and after

Event window I, II, III, IV = event window (-30,+30), (-15,+15), (-10,+10), (-5,+5)

Since the pair of candidates for president and vice president SBY-JK had vision and mission to encourage Indonesian agriculture, positive sentiment emerged on agricultural sectors. Misc-industry and industrial products for consumption sectors also showed positive sentiment towards the presidential election event because of the needs of every campaign for cigarettes, food, drink, T-shirts, banners etc. (Liputan 6, 2014; Upeks, 2014). Mining sectors also showed positive sentiment towards the presidential election on July 5, 2004 as a respond to the new policies that would be established by the elected leaders since the new policies would affect the sustainability of the mining sectors, such as a policy about license on mining sectors.

Negative sentiment on stock market could be caused by investors taking precaution and tending to wait and see for the result of the presidential election on July 5, 2004. Furthermore, stock market participants still waited for the realization of Susilo Bambang Yudoyono-Jusuf Kalla's promises given in their campaign (Siregar and Sianturi, 2005). Sectors that remained stable during the presidential election on July 5, 2004 were industrial products for consumption and trade, service and investment sectors.

Industrial products for consumption sectors responded the presidential election positively but remained stable during the presidential election on July 5, 2004. The condition occurred because industrial products for consumption sectors functions to fulfill society's daily needs, so that the presidential election will not affect them significantly. It is in accordance with the result of the research conducted by Ramli (2010) stating that stocks on industrial products for consumption sectors are categorized as defensive stocks. In addition, trade, service and investment sectors tended to be stable when facing the presidential election on July 5, 2004 because of the economic globalization around the world leading to economic integration, marked by plenty of economic cooperation both regionally or internationally. The globalization also leads to great dependence between countries all over the world in which the mobility of goods, services, and labors is greater. Demand and offer between countries or provinces or regions lead to the increase of trade, service and investment sectors in conjunction with the increase of needs in a country.

On the period of the presidential election on September 20, 2004, agricultural and basic industry and chemical sectors tended to have positive average abnormal return before and after the presidential election. The average abnormal return of industrial products for consumption sectors tended to be positive before the presidential election and negative after the presidential election. The average abnormal return for financial sectors was positive upon the presidential election meanwhile it was negative for transportation, infrastructure, and utilities and property, real estate, and construction sectors upon and after the presidential election. Mining and trade, service and investment sectors had positive average abnormal return after the presidential election, meanwhile misc-industry sectors had positive average abnormal return after H+10.

AR=0 test shows that significant abnormal return occurred on agricultural; basic industry and chemical; industrial products for consumption; financial; transportation,

Table 2. The Result of Paired T-test for Average Abnormal Return Before and After the Presidential Election on September 20, 2004

Sectors	Event Window			
	I	II	III	IV
1. Agriculture	+	+	TB	+
2. Basic industry and chemical	-	-	-	TB
3. Industrial products for consumption	+	+	+	+
4. Finance	-	-	-	TB
5. Transportation, infrastructure, and utilities	-	-	-	TB
6. Mining	+	+	+	+
7. Misc-industry	+	TB	+	+
8. Property, real estate, and construction	-	-	-	-
9. Trade, service, and investment	-	-	TB	_TB

Explanation: similar to the explanation on Table 1.

infrastructure, and utilities; mining; and misc-industry sectors. Average abnormal return before and after the presidential election on September 20, 2004 is explained on Table 2.

Based on the Table 2 shown above, the reaction of stock market caused by the presidential election on September 20, 2004 was not much different with the reaction caused by the presidential election on July 5, 2004, if not more stable. It is because the vision and mission of SBY-JK were still the same. The voting on September 20, 2004 was conducted relatively better, swift and in accordance with the rules than the first round of the presidential election (LP3ES, 2004).

On this second round of the presidential election, a bomb exploded on September 9, 2004 at Kuningan, Jakarta, and negative sentiment from investors emerged. It did not last long and affected the return significantly since investors had got accustomed to such occurrence. Trade, service and investment sectors tended to be stable on the second round of the presidential election based on the test conducted on four event windows. The stability was caused by the increase of the needs such as goods, services, capitals and labors regionally and internationally, leading to the development and increase of trade, service and investment despite the political issue and event occurred in stock market.

On the period of the presidential election on July 8, 2009, agricultural and mining sectors tended to have negative average abnormal return during the period of observation, meanwhile the average abnormal return for basic industry and chemical sectors tended to be negative only prior to the election day until H+2. Industrial products for consumption and misc-industry sectors tended to have positive average abnormal return during the period of observation. Average abnormal return for financial sectors experienced a fluctuation either positive or negative upon and after the presidential election. Transportation, infrastructure, and utilities sectors had fluctuating average abnormal return during the period of observation, however, upon the election day and several days after the election day, the average abnormal return tended to be positive.

Table 3. The Result of Paired T-test for Average Abnormal Return Before and After the Presidential Election on July 8, 2009

Sectors	Event Window			
	I	II	III	IV
1. Agriculture	+	+	+	TB
2. Basic industry and chemical	-	-	-	-
3. Industrial products for consumption	+	+	+	TB
4. Finance	TB	TB	TB	TB
5. Transportation, infrastructure, and utilities	TB	TB	TB	TB
6. Mining	+	+	+	+
7. Misc-industry	+	+	+	+
8. Property, real estate, and construction	-	TB	TB	TB
9. Trade, service, and investment	-	-	TB	TB

Explanation: similar to the explanation on Table 1.

Contrary to the result of average abnormal return of previous sectors, property, real estate, and construction sectors tended to have positive average abnormal return before the presidential election, meanwhile trade, service, and investment sectors tended to have positive average abnormal return after the presidential election.

The AR=0 test shows that there is significant abnormal return on agricultural; basic industry and chemical; industrial products for consumption; mining; misc-industry; property, real estate, and construction; and trade, service, and investment sectors. Average abnormal return before and after the presidential election on July 8, 2009 is explained on Table 3.

Not only because the social political condition of Indonesia tended to be stable after the election, positive sentiment was shown by agricultural and trade, service, and investment sectors because the incumbent pair of Susilo Bambang Yudhoyono – Boediono campaigned for self-sufficient rice. It shows that those candidates for president and vice president wanted to encourage agricultural sectors in Indonesia. Misc-industry and industrial products for consumption sectors also showed positive sentiment towards the presidential election because of the needs of each campaign for cigarettes, food, drink, T-shirts, banners etc. Mining sectors also showed positive sentiment for the presidential election on July 8, 2009 since the new to-be-established policies by the elected leaders would affect the sustainability of mining sectors, such as license for mining sector.

Negative sentiment is caused by investors taking precaution and tending to wait and see for the result of the presidential election. In addition, the bombing at JW Marriot and Ritz Carlton Hotel in Mega Kuningan, South Jakarta on July 17, 2009 also gave an effect though not a significant one towards the stock return (Tecualu and Megge 2010).

There was no actual difference on several sectors because the market had an expectation on the pair of will-be-chosen president and vice president, SBY and Boediono. Luhur (2010) states that with the reelection

of SBY as the president, investors assumed that the new policies for five years ahead would not be much different from the policies from five years before. Sectors tending to be stable facing the presidential election on July 8, 2009 were financial; transportation, infrastructure, and utilities; property, real estate, and construction; and trade, service, and investment sectors.

Financial sectors did not experience ARR difference significantly due to the presidential election in 2009. Meidawati and Harimawan (2004) state that the phenomenon shows that even though the market responds to non-economic event such as the presidential election, the event does not affect significantly towards profit rate obtained by stakeholders. In addition, Bank of Indonesia (2009) explains that the investment growth in 2009 was expected to grow 3.9-4.3%, in which it declines compared to the growth in 2008 of about 11.7%. The decline occurred along with the decline of the prospect of economic growth that led to investment delay by investors.

Transportation, infrastructure, and utilities sectors also did not experience significant difference of AAR due to the presidential election on July 8, 2009. It was because the chosen president was incumbent Susilo Bambang Yudhoyono so that the policies would be more or less similar to or sustainable with previous policies and the investors had similar expectation (Luhur, 2010). Furthermore, on their campaign, the candidates SBY-Boediono focused more on the improvement on agricultural sector to encourage the economy in Indonesia.

The impact of global crisis in 2008 still affects Indonesian economy, even though in 2009 the economy of the United States and several countries in Asia including Indonesia had shown some recoveries (Bank of Indonesia, 2009). The global economic crisis crushes society's purchasing power and confidence. In addition, high interest rates in Indonesia affect the growth of property, real estate, and construction sectors in Indonesian stock market.

Similar to the presidential elections on July 5, 2004 and September 20, 2004, on the presidential election on July 8, 2009, property, real estate, and construction sectors remained stable. The sectors are defensive since they focus more to fulfill the needs both regionally and internationally so that such political issue or event will not affect them exceedingly.

On the period of the presidential election on July 9, 2014, agricultural; industrial products for consumption; and misc-industry sectors tended to have negative average abnormal return after the presidential election, meanwhile basic industry and chemical; financial; and property, real estate, and construction sectors tended to have positive average abnormal return several days after the presidential election. Transportation, infrastructure, and utilities; mining; and trade, service, and investment sectors tended to have negative average abnormal return during the period of observation. The AR=0 test shows that there is significant abnormal return occurred on agricultural; industrial products for consumption; finance; transportation, infrastructure, and utilities; mining; misc-industry; property, real estate, and construction; trade, service, and investment sectors due to the presidential election on July 9, 2014. The result of AAR test before and after the presidential election on July 9, 2004, is shown on Table 4.

Table 4. The Result of Paired T-test for Average Abnormal Return Before and After the Presidential Election on July 9, 2014

Sectors	Event Window			
	I	II	III	IV
1. Agriculture	+	+	+	+
2. Basic industry and chemical	TB	+	+	+
3. Industrial products for consumption	+	TB	+	+
4. Finance	+	+	+	+
5. Transportation, infrastructure, and utilities	+	TB	+	+
6. Mining	+	+	+	+
7. Misc-industry	+	+	+	+
8. Property, real estate, and construction	+	+	+	+
9. Trade, service, and investment	TB	-	-	-

Explanation: similar to the explanation on Table 1.

Based on the Table 4 above, it can be seen that Indonesian stock market experienced greater movement to face the presidential election on July 9, 2014 compared to the previous presidential election. All sectors experienced significant difference of AAR before and after the presidential election on July 9, 2014. The presidential election in 2014 only nominated two pairs of president and vice president from two political parties. Moreover, the two candidates of president were not incumbent, that attracted bigger respond from society and stock market. The movement of stock market experienced by all sectors in stock exchange could be seen from the significant difference of AAR before and after the presidential election.

Positive sentiment was shown by agricultural sectors since the two candidates of president, Joko Widodo-Jusuf Kalla and Prabowo-Hatta, planned to establish policies encouraging agriculture, animal husbandry, and environment on their campaign. The chosen candidates will open the opportunity of the plan's realization. Industrial products for consumption and misc-industry sectors responded the presidential election positively because of the increase of the needs of cigarettes, food, drink, T-shirts, banners etc. during the campaign of the presidential election.

Industrial products for consumption and misc-industry sectors responded the presidential election positively since the needs of cigarettes, food, drink, T-shirts, banners, etc. increased during the presidential election. Financial sectors also responded the presidential election on July 9, 2014 positively since the presidential candidates would take a more protective approach towards banking sectors. Jokowi had proposed a restriction on the sale of national bank to foreign investors; meanwhile Prabowo would focus on banking and insurance sectors (Setiaji, 2014).

Transportation, infrastructure, and utilities sectors also gave positive sentiment since the two candidates for president and vice president noticed that the infrastructural factor has an important role in achieving the economic growth. Infrastructural development was the vision and

mission of the candidates in their campaign and those would be realized after they were chosen as the president and the vice president. It is in accordance to the result of the research conducted by Coloumb and Sangnier (2014) that the return can be obtained from the relation between individual and politician and the policies established by the candidates during their campaign.

The presidential election on July 9, 2014 became a main attention for investors. Basic industry and chemical sectors were viewed profitable when seen from the vision and mission given by the two presidential candidates. They had planned to improve the infrastructures in Indonesia so basic industry and chemical sectors, particularly cement, would affect the plan exceedingly. As a consequence, basic industry and chemical sectors responded the presidential election on July 9, 2014 positively. Stocks with connection to the infrastructural development are infrastructure, property, cement and banking sectors. Those sectors gave positive respond towards the presidential election on July 9, 2014 since they had an excellent prospect in relation to the plan of infrastructural development during the governance of Jokowi-JK (Kata Data, 2014).

The new policy that would be established by the chosen leader, particularly license in relation to the sustainability of the mining sectors, highly affects mining sectors. Therefore, mining sectors responded the presidential election in 2014 positively, as well as the presidential elections in 2004 and 2009. Negative sentiment from trade, service and investment sectors was especially given by foreign investors tending to wait and see and taking precaution in doing trading activity in trading floor. Those investors waited for certain result of presidential election so that the investment climate experienced a slight decline (Upeks, 2014).

Average abnormal return for agricultural; industrial products for consumption; transportation, infrastructure, and utilities; and misc-industrial sectors tended to be negative before and after the announcement by the Constitutional Court on August 22, 2014. Financial and trade, service, and investment sectors tended to have positive average abnormal return during the period of observation. Property, real estate, and construction and mining sectors tended to be negative upon and several days after the announcement by the Constitutional Court. According to the AR=0 test on 95% the confidence interval for all of sectors in Indonesian stock market, it is known that there was no significant abnormal return due to the announcement by the Constitutional Court on August 22, 2014. The result of average abnormal return before and after the announcement by the Constitutional Court is explained on Table 5.

According to the table, it is concluded that seven of nine sectors in Indonesian stock market did not experience any significant difference of AAR before and after the announcement by the Constitutional Court on August 22, 2014. It occurred since the market had confidence in the decision of the Constitutional Court announcing Joko Widodo and Jusuf Kalla as the elected president and vice president. The result is contrary to the statement of Hasen (2005) that public has an interest in litigation of the election result, so that the court should prevent the litigation as a protective safeguard against

Table 5. The Result of Paired T-test for Average Abnormal Return Before and After the Announcement by the Constitutional Court on August 22, 2014

Sectors	August 22, 2014			
1. Agriculture	TB	-	-	-
2. Basic industry and chemical	-	-	-	-
3. Industrial products for consumption	TB	-	-	-
4. Finance	-	+	+	TB
5. Transportation, infrastructure, and utilities	TB	TB	TB	TB
6. Mining	TB	TB	TB	TB
7. Misc-industry	TB	+	+	+
8. Property, real estate, and construction	TB	+	+	+
9. Trade, service, and investment	TB	TB	TB	TB

Explanation: similar to the explanation on Table 1.

election issue. Basic industry and chemical and financial sectors experienced an actual difference of AAR since the investors for these sectors tended to take precaution and wait and see towards the decision of the Constitutional Court, leading to the increase of AAR on both sectors afterwards.

Trading activity for agricultural, basic industry and chemical and industrial products for consumption sectors can be seen on Figure 6. The activity for agricultural sectors experienced fluctuation since early 2009 but subsequent to July 2009, the trading volume activity for these sectors continued to decline to 0.03454 on July 2009. Trading volume activity on agricultural sectors increased on August after the presidential election, however, in the months afterwards, the TVA declined even though the fluctuation was not abrupt. The TVA for basic industry and chemical sectors experienced a fluctuation in the beginning of the year and increased upon July 2009. Trading volume activity declined on the month of the presidential election and increased once more after the presidential election until the end of the year.

The pattern of TVA for industrial products for consumption sectors was similar to the pattern for basic industry and chemical sectors, however the TVA for basic industry and chemical sectors increased sharply upon the presidential election in July 2009 meanwhile the TVA for industrial products for consumption sectors declined sharply on the presidential election day and continued to decline until the end of the year. The pattern for trading volume activity on industrial products for consumption

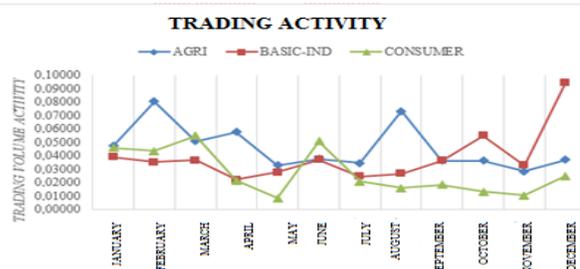


Figure 6. Trading Activity for Agricultural; Basic Industry and Chemical; and Industrial Products for Consumption Sectors in 2009

sectors is in accordance with the statement by Pasquariello and Zafeiridou (2014) that trading volume increases on months before the presidential election due to the political uncertainty and diverse information and declines after the presidential election since the political uncertainty has been resolved. TVA for financial; transportation, infrastructure, and utilities; and mining sectors also experienced fluctuation as explained on Figure 7.

Trading activity for financial sectors tended to be stable during 2009 even though there was a fluctuation. TVA for financial sectors increased at the month of the presidential election and turned to normal after the presidential election. TVA for transportation, infrastructure, and utilities sectors had increased sharply since April but it declined upon the presidential election, to increase once more in August 2009 and continued to fluctuate until the end of the year. TVA for mining sectors had been high in early 2009; however it continued to decline upon the month of the election and increased at the month of the election. TVA for mining sectors declined after the presidential election. Khan and Ahmed (2009) states that the increase of trading volume will decline the stock return since the stock price declines as well. Furthermore, if an investor sells the stocks when the trading volume increases then the investor will only obtain low profit. TVA for misc-industry; property, real estate, and construction; and trade, service, and investment sectors can be seen on Figure 8. Misc-industry sectors had an increasing pattern of TVA in the months after the presidential election in July 2009, meanwhile TVA for trade, service, and investment sectors increased before and after the presidential election. Property, real estate, and construction sectors experienced the increase of TVA before the presidential election until

the event took place, then declined in August 2009. The increase of TVA shows that the market responded to the presidential election on July 8, 2009, leading to the increase of trading activity on trading floor.

Besides average abnormal return and cumulative average abnormal return, trading volume activity is another indicator to observe investors' sentiment in stock market in relation to the presidential election on July 9, 2014. Based on the analysis, it is known that most sectors in stock market experienced decline during the presidential election as shown on Figure 9, 10 and 11.

Agricultural sectors had the highest TVA in March 2014 about 0.0885 and continued to decline upon the month of the presidential election. TVA for agricultural sectors increased gradually after the presidential election. The pattern of TVA for agricultural sectors also occurred on basic industry and chemical sectors that declined before the presidential election, however, after the presidential

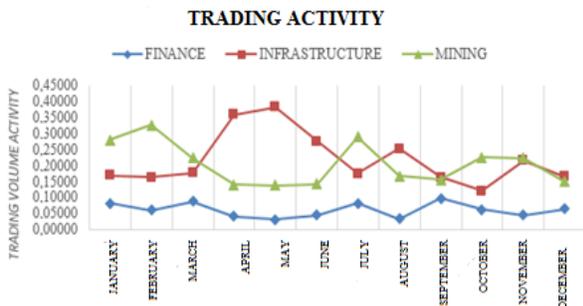


Figure 7. Trading Activity for Financial; Transportation, Infrastructure, and Utilities; and Mining Sectors in 2009

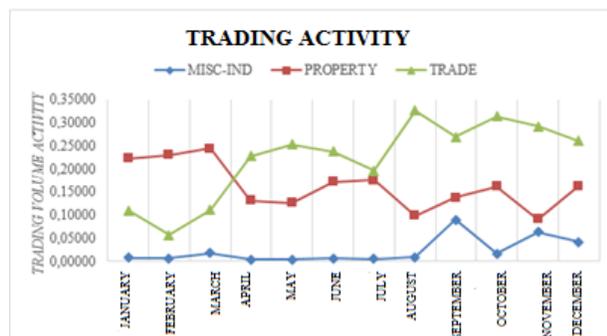


Figure 8. Trading activity on misc-industry; property, real estate, and construction; and trade, service, and investment sectors in 2009



Figure 9. Trading Activities for Agricultural; Basic Industry and Chemical; and Industrial Products for Consumption Sectors in 2014

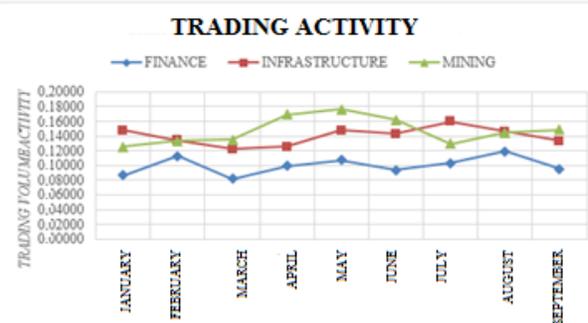


Figure 10. Trading Activity for Financial; Transportation, Infrastructure, and Utilities; and Mining Sectors in 2014

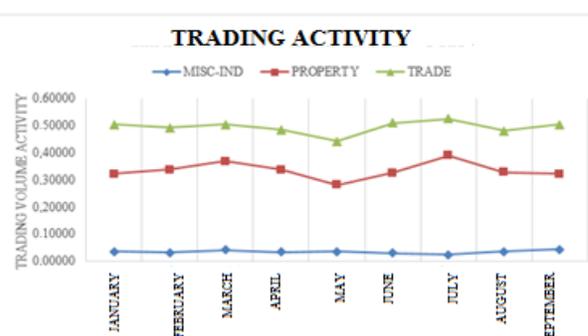


Figure 11. Trading Activity on Misc-Industry; Property, Real Estate, and Construction; and Trade, Service, and Investment Sectors in 2014

election, the TVA increased sharply. TVA for industrial products for consumption sectors declined from the early year until upon the presidential election and increased again in August 2014. The condition is in accordance with the result of the research conducted by Pasquariello and Zafeiridou (2014) that the trading volume declined five months before the election and increased three months after the presidential election.

TVA of financial sectors declined upon the presidential election and increased after the presidential election. It is a different condition with transportation, infrastructure, and utilities sectors that experienced an increase on TVA in the month of the presidential election and a decline before and after the presidential election. Mining sectors had a different pattern of TVA compared to financial and transportation, infrastructure, and utilities sectors since the TVA declined in the month of the presidential election and increased before and after the presidential election. It shows that the market responded to the presidential election and considered it as good news. Khan and Ahmed (2009) states that political event affects trading volume activity, meanwhile stock return is affected by trading volume activity that leads to fluctuation on stock return.

TVA for misc-industry sectors tended to be stable during January to September 2014, even though the value declined in July 2009 to 0.02272 from 0.02847 in June 2009. The value increased to 0.04178 after the presidential election in September 2014.

Property, real estate, and construction sectors also experienced a pattern of TVA similar to the pattern of misc-industry sectors, in which the TVA increased before and after the election and declined in the month of the presidential election. The fluctuation on the TVA shows that the market responded to the information about the presidential election. Prastowo (2008) states that the increase of sale and the lack of demand in trading activity will decline the stock price, meanwhile the increase of purchase and the lack of sale will increase the stock price. Trade, service, and investment sectors had increasing TVA upon the month of the presidential election and after the presidential election, but it declined in the month of the presidential election. TVA before and after the presidential elections in 2009 and 2014 is explained on Table 6.

Most sectors in Indonesian stock market did not experienced actual difference of trading volume activity before and after both the presidential elections on July 8, 2009 and July 9, 2014. It shows that investors in stock market particularly for those eight sectors had anticipated the event of the presidential election in 2009 so that they tended to wait and see to conduct stock sale and purchase. Luhur (2010) states that the absence of the difference of TVA before and after the presidential election significantly shows that there is no any increase on trading activity on trading floor massively.

Sectors experiencing actual significant difference of TVA before and after the presidential election on July 8, 2009 were trade, service, and investment sectors, meanwhile on July 9, 2014 were industrial products for consumption sectors. It caused by positive sentiment of investors towards the presidential election so that the trading activity on both sectors were increasing. Asmita (2005) explains that upon the election, the trading activity

Table 6. The Result of Paired T-test for Trading Volume Activity Before and After the Presidential Elections in 2009 and 2014

Sectors	2009	2014
1. Agriculture	TB	TB
2. Basic industry and chemical	TB	TB
3. Industrial products for consumption	TB	TB
4. Finance	TB	+
5. Transportation, infrastructure, and utilities	TB	TB
6. Mining	TB	TB
7. Misc-industry	TB	TB
8. Property, real estate, and construction	TB	TB
9. Trade, service, and investment	+	TB

Explanation: similar to the explanation on Table 1.

is increasing marked by the speculative sale and purchase from market participants. In addition, Meidiawan and Harimawan (2004) states that the increase of trading volume of stocks shows that the election event can be considered as good news by investors so that the market responded to the event.

CONCLUSION

It can be concluded that Indonesian stock market tends to be inefficient since the AR=0 tests show either positive or negative abnormal return as the effect of the presidential elections in Indonesia. In addition, the test towards average abnormal return before and after the presidential election shows that the event affects the movement of stock in Indonesia with different responds from each sector. Political factor relatively affects mining sectors but does not give an actual effect on trade, service, and investment sectors. Litigation towards the decision made by the Constitutional Court about the result of the presidential election does not affect the movement of stock market at all. Since the TVA test does not show any actual differences of TVA before and after the presidential election, it can be concluded that the presidential election does not affect the trading volume for most sectors in Indonesian stock market significantly.

The presidential election is information that can affect investors' profit rate. Investors can choose to invest on trade, service and investment sectors as the most stable sectors in facing the presidential election. The most unstable sectors in facing the presidential election are mining sectors, thus, investors should be careful in choosing the stocks.

The authority of Financial Services needs to consider tightening the supervision on the presidential election as a political factor that can affect the movement of Indonesian stock market. The event can also encourage the interest of both domestic and foreign investors to invest in Indonesian stock market. However the event can also discourage both domestic and foreign investors to invest in Indonesian stock market whenever anarchy triggering economic and political instability occurs.

Emitter in stock market should keep the stability of the stock market by maintaining and improving the

performance of the emitters especially around and in the time of the presidential election since the event can affect the stock price of the emitters in stock market. The impact can be in the form of positive return or negative return in accordance with positive sentiment or negative sentiment given by investors.

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