

ANALYSIS OF CHANGES FUEL PRICE DURING PRESIDENTIAL JOKO WIDODO 2014 – 2015 ON SHARE PRICE ON SUB SECTOR PROPERTY IN INDONESIA STOCK EXCHANGE

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***Abstract:** The aim of this research is to analyze the market reaction towards announcement of fuel price's changing during Joko Widodo's Era 2014 – October 2015. The indicators used in this study are abnormal return and trading volume activity. Event study method is used to examine the market's reaction and measure the differences before and after the announcement of fuel price changing. The sample are all companies listed in Subsector of Property in October 2013 - October 2015. The results showed that there are significant abnormal returns fluctuated during fuel price changing, and no significant difference in abnormal returns before and after the announcement. While trading volume activity showed no significant difference before and after the announcement of fuel price.*

Keywords: Fuel Price, Composite Stock Price Index, Abnormal return, Trading Volume Activity

INTRODUCTION

Fuel is a serious concern for many governments in the world, including Indonesia because it is one of the largest energy sources. Figure 1 showed Indonesia only has about 3.7 billion barrels reserves, or about 0.2 percent of world oil reserves. (BP Statistical Review of World Energy).

Table 1 showed the need for domestic oil production increase continuously, exceeded domestic production and it caused the state should import the oil. Indonesia as depending importer petroleum country caused fuel prices fluctuate which based on world oil prices. Increasing the amount of fuel consumption and world oil prices made condition in more poor.

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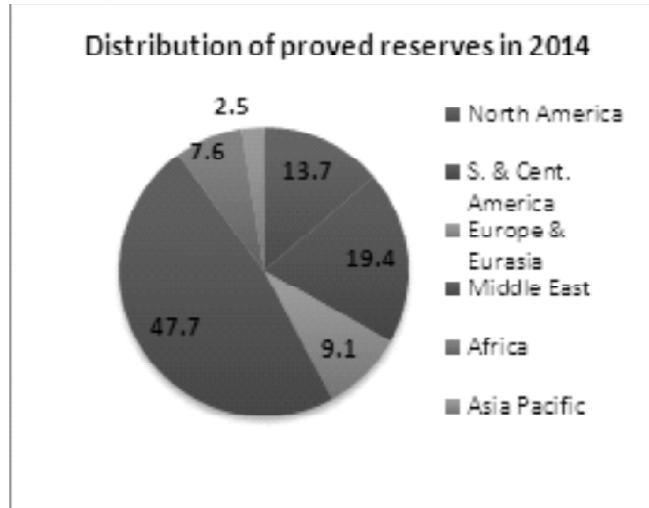


Figure 1: Distribution of proved reserves in 2014 (Percentage)

Table 1
Indonesia Oil Production & Consumption 2011-2014

Year	2011	2012	2013	2014
Production	952	918	882	852
Consumption	1572	1599	1615	1641

Source: Data processed in 2015

Government fuel subsidy in 2014 was 246.5 trillion rupiahs, or took up 13.13% of total government spending. Because of this situation, the Indonesian government issued a policy of increasing fuel price to as to reduce budgets of domestic fuel subsidy (Setiawan, 2006).

Announcement of subsidy fuel price changing in the first year of Joko Widodo's Era (five times) created pros and cons reaction from many parties. It also affected the stock price of property and transport sector. The condition draw in Table 2.

Table 2
Change in Fuel Price

Date	Price (Rp.)		
	Gasoline	Diesel	Kerosene
06/22/2013	6,500	5,500	2,500
11/18/2014	8,500	7,500	2,500
01/01/2015	7,600	7,250	2,500
01/19/2015	6,700	6,400	2,500
03/01/2015	6,800	6,400	2,500
03/28/2015	7,300	6,900	2,500

The increasing of fuel price raises inflation and will be responded variously by investors. (Nelson, 1976). Bank Indonesia will adjust reference interest rate (BI Rate) to hold inflation. It caused increasing of loan rates, decreasing of productive loan (investment and capital credit) and consumptive loan. It impacts indirectly on reduction consuming level and affects the economy a territory. The economy of a country said in good condition if government policy could be control inflation.

Capital market has important part in economy of a country. It is as link between investor and organization and participate in increasing economy of country (Ghazi, 2012). Indonesia Stock Price Index (JKSE) is one of Indonesian economy indicator. Development of JKSE reflects the successful of Indonesian economy. The movement of stock price are influenced by development of micro and macro economy environment. Such as fiscal and monetary policy and government regulation could affect stock price fluctuation in capital market (Suryawijaya & Setiawan, 1998). Fuel price fluctuation will impact indirectly on increasing cost of property development. It is because the increasing of cost distribution process and construction materials that used fuel to process it. Bank Indonesia data showed 40.07 percent of property sales in the fourth quarter 2014, fell into 26.62 percent in the first quarter 2015. In second quarter 2015 showed reduction into 10.84 percent, in third quarter 2015 into 7.66 percent, and in fourth quarter 2015 into 6.02 percent. The weakening of rupiah impacts the increasing of property's price which will sell around 5-7%. Its increasing of property adjusted to materials price and construction cost which need to company development. Many people invest their capital in property and real estate industry because they aware that land price is tendency to rise and landowner is the determiner not market. The cause is fixed land supply whereas demand will always be greater as population increasing. In stock investing, investors always expect their return or profit (Ang, 2010).

The increasing of company operating cost will cause reduction of company's net profit. This information will response negatively by investor (bad news). Market reaction that indicated by this stock price changing could be measured by event study. If the announcement contains information, it is expected market will react against the announcement. The period of this study are 5 days before and after the fuel price announcement intended to describe real investor reaction. By taking 5 days study period before and after fuel price announcement, the researcher expected the study is not contaminated by other events such as stock split, dividend announcements and other. (Chandra, 2013).

Abnormal return is difference between actual return and expected return of investor (Jogiyanto, 2010). Most investor expect to get maximal return without considering the influence of macroeconomic variabel in capital market (Kuwornu, 2012).

Trading Volume Activity is an instrument uses to perceive capital market reaction toward information through parameter of trading volume activity movement in stock market (Suryawijaya and Setiawan, 1998). High trading volume on securities will produce high stock return (Chordia *et al.*, 2002).

There are some researchers who got different conclusion in their study. Setiawan (2006), Hikmah (2009), Made & Ratnadi (2014), Chandra (2013) and Laksana (2014) showed that there is no differences abnormal return before and after the announcement of fuel price increasing while research which did by Arisyahidin (2012) and Ramadan (2013) showed that there is differences abnormal return before and after the announcement of fuel price increasing.

Study which are done by Setiawan (2006), Hikmah (2009), Arisyahidin (2012), Made & Ratnadi (2014), Chandra (2013) and Ramadan (2013) stated that there is no differences trading volume activity before and after the announcement of fuel price increasing. Laksana (2014) in his study stated that there is significant differences trading activity before and after the fuel price increasing.

By finding differences result of studies, so it is necessary to re-examine abnormal return stock to fuel price changing during Presidential Joko Widodo 2014 - 2015, differences of abnormal return stock before and after announcement of fuel price changing during Joko Widodo's Era 2014 - 2015 and differences of Trading Volume Activity (TVA) before and after announcement of fuel price increasing during Joko Widodo's Era 2014-2015 of property and real estate companies listed in Indonesia Stock Exchange.

LITERATURE REVIEW

Go public company is company that sells and offers new stock from authorized capital nor old stocks of society or investors through capital market (Pagano & Zingales, 1998). There are several reasons why a company does go public is related with alternative financial resources for company's investment program (Kim et al., 2004), constrained by debt, larger bargaining with bank, diversification of risk, monitoring, investor's admission and changing of company control (Pagano & Zingales, 1998), while some other companies do IPO with its purpose is acquisition.

Generally capital market are grouped into three forms based on traded of shape and good price. The grouping of market according to Harahap (2010) are as follows:

- a) Stock exchange, form market that trade stock and other securities.
- b) Money exchange, form market that trade money (currency).
- c) Commodity exchange, form market that trade commodity.

Overreaction Theory

Overreaction theory is theory that describes investor's condition who are reactive in facing information. Investor will take action immediately in order to get benefit from good news (favorable news) or do anticipation of bad news (unfavorable news). But investor tendency will react to good news and bad news excessively. This excessive reaction caused stock price become too high or contrarily stock price will become too low (Daniel & Subrahmanyam, 1998).

Stock Price

According to Jogiyanto (2010) stock price is price that occurs in stock market at certain time and the stock price determined by investor.

Stock Returns

In stock investment, investors always expect their return or profit. Stock return is return rate that getting by investor of his investment (Ang, 2010). Capital gain is receiving profit due to difference of selling and buying price of an investment instrument. Capital gain or capital loss is very dependent on stock trading that will create changing of an investment value.

Return realization (realized return) is occurred return and calculates based on historical stock price data. Return realization would be useful to measure company's performance company and used as basic in measuring of expected return. Return realization is addition return of stock price (capital gain yield) and return of dividend (dividend yield). Capital gain yield formula is as follows (Brigham & Daves, 2004):

$$\text{Capital gain yield} = \frac{P1 - P0}{P0}$$

Where :

P1: Stock price of tomorrow

P0: Current stock price

Capital gain yield describes gain or loss of investor in investing. Beside capital gains, investor will also get direct income. Deposit and saving will get interest while bond will get coupon. And stock will give direct income in dividend form. To calculate profit magnitude in dividend form could be calculated with dividend yield that is obtained with formula:

$$\text{Dividend yield} = \frac{D0(1+g)}{P0}$$

Where :

D0: Current dividend.

G : growth.

Stock returns could be obtained by adding capital gain yield and dividend yield with formula (Jogiyanto, 2010):

$$\text{Return Total} = \frac{P1 - P0}{P0} + \frac{D0(1+g)}{P0}$$

Expected Return with Capital Asset Pricing Model (CAPM) Approach

Return Expectation (expected return) is expected income in the future. To get return or certain profit, an investor should also notice the risk that will be borne.

Capital Asset Pricing Model (CAPM) Approach related closely with risk especially market risk (β). Basic shape of CAPM approach is linear relation between individual stock return with stock market return. By using linear regression analysis least square could be made formula as follows (Brigham & Daves, 2004):

$$K_j = \alpha + \beta K_m + \varepsilon$$

Where :

K_j : Return on individual common stock of company.

α : Alpha, the intercept on the Y-axis.

β : Beta the coefficient.

K_m : Return on stock market.

e : Error term of regression equation.

The formula above uses historical data to calculate beta coefficient ($\hat{\alpha}$) which is size of stock return performance compared with market return performance. Because of the greater risk that investor should face, so they claim higher return as premium for the risk that should be faced which called market risk premium. From the basic formula then developed a formula that could accommodate the market risk premium as follows (Brigham & Daves, 2004):

$$K_j = R_f + \beta (K_m - R_f)$$

Where :

K_j : Return on individual common stock of company.

R_f : Risk free rate of return.

β : Beta the coefficient.

K_m : Return on stock market.

$K_m - R_f$: Premium or excess return of the market versus the risk free rate.

$\beta (K_m - R_f)$: Expected return above the risk free rate for the stock of company.

Abnormal Return

According to Jogiyanto (2010), event study analyze abnormal return of securities that may occur around the announcement of an event such as the uncertain political atmosphere. Abnormal return is differences between actual return that occur with return expectation (expected return by investor).

The formula that used to calculate the abnormal return (Jogiyanto, 2010) is as follows:

$$AR_{it} = R_{it} - E(R_{it})$$

Where :

AR_{it} = abnormal stock return i in period t

Rit= actual stock return i in period t

E(Rit) = expected stock return i in period t

Trading Volume Activity

According to Ghoniyah, *et al.* (2008) stated that Trading Volume Activity is an instrument that could be used to see stock market reaction toward an information through parameter of stock trading volume parameter in stock market. Information that circulated in stock market could affect investor decision.

Trading Volume Activity calculation did by comparing the amount of traded company's stock in certain period with total amount of circulate company's stock in the same period, according to Jones, Charles P. in Ghoniyah *et al.* (2008):

$$TVA = \frac{\text{trading volume of stock n in t period}}{\text{amount of circulate stock in t period}}$$

RESEARCH METHOD

Type and Source of Data

Data is used secondary data. Company's stock data is companies that listed in property and real estate sub-sector of Indonesia Stock Exchange. Data sources are from the site www.idx.co.id and www.finance.yahoo.com which include highest price, lowest price and closing price of stock price of property and real estate movement.

Population and Sample

Population is all good value calculation and measurement, both quantitative and qualitative, of certain characteristics about a group of object that complete and clear (Usman, 2006: 181)

Population in this study is all companies that listed in property and realestate sub-sector of Indonesia Stock Exchange (BEI). While the selection of sample is based on purposive sampling method; is sampling method based on certain criteria or consideration (Sugiyono, 2012). Sample collected by using following criteria:

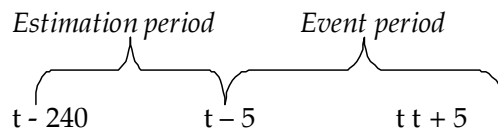
Table 2
Sample Filtering Based on Purposive Sampling Method

No.	Criteria	Amount
1.	Property and Real Estate companies listed in Indonesia Stock Exchange until October 2015	50
2.	Property and Real Estate Company listed after October 20, 2013	5
	Total of Sample	45

Event Study

According to Peterson (1989), event study is an observation about stock movement in stock market to find out if any abnormal return obtained by shareholder as result of certain event. Event study could be used to measure information content of an announcement.

According to Jogiyanto (2010) window period or window event is period of occur event and its effect. While estimation period is period before event period.



From above picture could be seen that:

1. Estimation period starts 5 days before and 5 days after the event, where study are 240 days / 1 year before the increasing of fuel price announcement.

The use of 5 days before and after fuel price announcement intended that could describe actual investor reaction. If the taken time is too long, it is feared that there is influence from other events which will affect this study. It is expected with taking 5 days before and after the increasing of fuel price announcement is not contaminated by effect of other events such as stock split, dividend announcement and other events.

Actual Return

Is closing stock price of period t minus closing stock price of period $t-1$ then divided by closing stock price period $t-1$ (Chandra, 2015):

$$R_{it} = \frac{P_t - P_{t-1}}{P_{t-1}}$$

R_{it} = stock return i in period t

P_t = closing price at period t

P_{t-1} = closing price at period $t-1$

Market Return

Is composite stock price index period t minus composite stock price index period $t-1$ then divided by composite stock price index period $t-1$ (Chandra, 2015):

$$R_{mt} = \frac{IHSG_t - IHSG_{t-1}}{IHSG_{t-1}}$$

R_{mt} = expected return for stock i on day t

$IHSG_t$ = composite stock price index on day t

$IHSG_{t-1}$ = composite stock price index on previous day

Expected Return

Is expected estimation that will be received by investors during a period of time in the future (Chandra, 2015):

$$E(R_{it}) = \alpha_i - \beta_i \cdot R_{mt}$$

$E(R_{it})$ = Expected return for stock i in period t

R_{mt} = market return in period t

α and β coefficients obtained from calculation of time series regression equation between stock return (R_{it}) with market return (R_m)

Abnormal Return

Is level excess returns that earned by investor with develops trading rules based on information obtained (Chandra, 2015):

$$AR_{it} = R_{it} - E(R_{it})$$

AR_{it} = abnormal stock return i in period t

R_{it} = actual stock return i in period t

$E(R_{it})$ = expected stock return i in period t

Average Abnormal Return

Is average of excess return that earned by investor (Chandra, 2015):

$$\overline{AR}_{it} = \frac{\sum_{i=1}^n AR_{it}}{n}$$

\overline{AR}_{nt} = average abnormal stock return i in period t

AR_{it} = abnormal stock return i in period t

n = amount of sample

Cumulative Average Abnormal Return

Is sum of all abnormal return that obtained by investor (Chandra, 2015)

$$CAAR = \sum \overline{AR}_{it}$$

$CAAR$ = cumulative average abnormal return

$\sum \overline{AR}_{it}$ = total average abnormal stock return i in period t

Standard Deviation Abnormal Return

Is statistical value that used to determine how the distribution sample data and how close the individual data point to the average - average (mean) of sample value (Chandra, 2015)

$$\sigma_{ie} = \sqrt{\frac{\sum (AR_{it} - \overline{AR_{it}})^2}{n-1}}$$

σ_{ie} = standard deviation of securities i

AR_{it} = abnormal stock return i in period t

$\overline{AR_{it}}$ = average abnormal stock return i in period t

n = amount of sample

Standardized Abnormal Return

Is standardized abnormal return data in sample (Chandra, 2015)

$$SAR_{nt} = \frac{AR_{it}}{\sigma_{ie}}$$

SAR_{nt} = standardized abnormal stock return in period t

AR_{it} = abnormal stock return i in period t

σ_{ie} = standard deviation of securities i

One Sample t – Test Abnormal Return

An analysis technique to compare an independent variable to examine certain value different significantly or not (Chandra, 2015)

$$t = \frac{\sum SAR_{nt}}{\sqrt{n}}$$

$\sum SAR_{nt}$ = total standardized abnormal stock return in period t

n = amount of sample

Average Abnormal Return

Before the announcement of fuel price changing.

$$\overline{AR}_{before} = \frac{\sum_{t=-3}^{t=-1} AR_{before}}{n}$$

After the announcement of fuel price changing.

Standard Deviation Abnormal Return

$$\overline{AR}_{after} = \frac{\sum_{t=+5}^{t=+1} AR_{after}}{n}$$

Before the announcement of fuel price changing.

$$\sigma_{before} = \sqrt{\frac{\sum_{t=-5}^{t=-1} (AR_{before} - \overline{AR}_{before})^2}{(n-1)}}$$

After the announcement of fuel price changing.

$$\sigma_{after} = \sqrt{\frac{\sum_{t=+5}^{t=+1} (AR_{after} - \overline{AR}_{after})^2}{(n-1)}}$$

Statistic Test (with=5%)

$$t = \frac{\overline{AR}_{after} - \overline{AR}_{before}}{\frac{\sigma_{after}^2}{n} + \frac{\sigma_{before}^2}{n}}$$

Trading Volume Activity (TVA)

Is trading volume activity for each stock (Chandra, 2015)

$$TVA = \frac{\text{Stock trading volume at period } t}{\text{Number of outstanding shares at period } t}$$

Average Trading Volume Activity

Is average trading volume activity for each stock (Chandra, 2015)

$$\overline{TVA} = \frac{\sum_{i=1}^n TVA}{n}$$

TVA = average stock trading volume activity in period t

TVA = stock trading volume activity i in period t

n = amount of sample

Standard Deviation Trading Volume Activity

$$\sigma_{ic} = \sqrt{\frac{\sum (TVA - \overline{TVA})^2}{n-1}}$$

σ_{ie} = standard deviation of securities i

\overline{TVA} = average stock trading volume activity in period t

TVA = stock trading volume activity i in period t

n = period of time

Standardized Trading Volume Activity

Average TVA

Before the event.

$$\overline{TVA}_{before} = \frac{\sum_{t=-5}^{t=-1} TVA_{before}}{n}$$

After the event.

$$\overline{TVA}_{after} = \frac{\sum_{t=+5}^{t=+1} TVA_{after}}{n}$$

Standard Deviation

Before the event.

$$\sigma_{before} = \sqrt{\frac{\sum_{t=-5}^{t=-1} (TVA_{before} - \overline{TVA}_{before})^2}{(n-1)}}$$

After the event.

$$\sigma_{after} = \sqrt{\frac{\sum_{t=+5}^{t=+1} (TVA_{after} - \overline{TVA}_{after})^2}{(n-1)}}$$

Statistic Test (with $\alpha = 5\%$)

$$t = \frac{\overline{TVA}_{after} - \overline{TVA}_{before}}{\frac{\sigma_{after}^2}{n} + \frac{\sigma_{before}^2}{n}}$$

Standardized Trading Volume Activity

Is standardized *trading volume activity* sample data (Chandra, 2015)

$$STVA_{nt} = \frac{TVA}{\sigma_{ie}}$$

$STVA_{nt}$ = standardized stock trading volume activity in period t

TVA = stock trading volume activity i period t

σ_{ie} = standard deviation securities i

One Sample t – TestTVA

$$t = \frac{\sum STVA_{nt}}{\sqrt{\frac{\sum_{n=1}^{\sqrt{n}} STVA_{nt}^2}{n}}}$$

$\sum_{n=1}^{\sqrt{n}} STVA_{nt}$ = total standardized stock trading volume activity in period t
 = amount of sample

Average Trading Volume Activity

Before the announcement of fuel price changing.

$$\overline{TVA}_{before} = \frac{\sum_{t=-5}^{t=-1} TVA_{before}}{n}$$

After the announcement of fuel price changing.

$$\overline{TVA}_{after} = \frac{\sum_{t=+5}^{t=+1} TVA_{after}}{n}$$

Standardized Deviation Trading Volume Activity

Before the announcement of fuel price changing.

$$\sigma_{before} = \sqrt{\frac{\sum_{t=-5}^{t=-1} (TVA_{before} - \overline{TVA}_{before})^2}{n - 1}}$$

After the announcement of fuel price changing.

$$\sigma_{after} = \sqrt{\frac{\sum_{t=+5}^{t=+1} (TVA_{after} - \overline{TVA}_{after})^2}{n - 1}}$$

Statistic Test ($\alpha = 5\%$)

$$t = \frac{\overline{TVA}_{after} - \overline{TVA}_{before}}{\sqrt{\frac{\sigma_{after}^2}{n} + \frac{\sigma_{before}^2}{n}}}$$

RESULTS AND DISCUSSION

Hypothesis I

Hypothesis I declared that there is fluctuation abnormal return on the announcement of fuel price changing during Joko Widodo's Era 2014-20 October 2015. Result of the test is as follows:

Table 3
Result Testing of Hypothesis I

<i>Event</i>	<i>Average Abnormal Return</i>	<i>Sig.</i>	<i>Conclusion</i>
Increasing of fuel price 18 November 2014			
H-5	0.0029	0.223	Not Significant
H-4	0.0001	0.472	Not Significant
H-3	-0.0012	0.403	Not Significant
H-2	0.0006	0.716	Not Significant
H-1	0.0012	0.769	Not Significant
H+1	0.0146	0.001	Significant
H+2	-0.0022	0.436	Not Significant
H+3	0.0125	0.005	Significant
H+4	-0.0114	0.069	Not Significant
H+5	-0.0054	0.526	Not Significant
Reduction of fuel price 1 January 2015			
H-5	0.0009	0.196	Not Significant
H-4	-0.0001	0.865	Not Significant
H-3	0.0037	0.160	Not Significant
H-2	0.0091	0.145	Not Significant
H-1	-0.0012	0.000	Significant
H+1	0.0048	0.261	Not Significant
H+2	-0.0017	0.345	Not Significant
H+3	-0.0111	0.000	Significant
H+4	0.0123	0.005	Significant
H+5	0.0024	0.330	Not Significant
H-5	0.0019	0.555	Not Significant
Reduction of fuel price 19 January 2015			
H-5H-4	0.0019-0.0057	0.5550.197	Not Significant
H-3	-0.0104	0.000	Significant
H-2	0.0048	0.092	Not Significant
H-1	-0.0031	0.358	Not Significant
H+1	-0.0002	0.896	Not Significant
H+2	0.0026	0.435	Not Significant
H+3	0.0172	0.000	Significant
H+4	0.0034	0.545	Not Significant
H+5	-0.0091	0.001	Significant

Increasing of fuel price 1 March 2015

H-5	-0.0077	0.001	Significant
H-4	0.0036	0.245	Not Significant
H-3	0.0014	0.410	Not Significant
H-2	0.0037	0.164	Not Significant
H-1	0.0012	0.345	Not Significant
H+1	-0.0050	0.015	Significant
H+2	-0.0079	0.002	Significant
H+3	-0.0043	0.002	Significant
H+4	-0.0087	0.020	Significant
H+5	0.0017	0.795	Not Significant

Increasing of fuel price 28 March 2015

H-5	-0.0055	0.090	Not Significant
H-4	0.0003	0.271	Not Significant
H-3	-0.0099	0.002	Significant
H-2	-0.0078	0.016	Significant
H-1	0.0063	0.011	Significant
H+1	0.0127	0.000	Significant
H+2	0.0028	0.410	Not Significant
H+3	-0.0055	0.250	Not Significant
H+4	0.0004	0.772	Not Significant
H+5	0.0082	0.155	Not Significant

Source: Proceed Secondary Data

One month after the Joko Widodo's inauguration, he announced the increasing of fuel price clearly on 18th November 2014. Investor reacted positively of it. The positive reaction rose after the the announcement. On 1st January 2015, Joko Widodo announced reduction of fuel price because of the reduction of world oil that reached under US\$ 53 per barrel at the end of 2014. Market was not respond the announcement well. Negative respond rose on H-1 and H-3.

Because of the continuously condition of world oil reduction caused by excess supply and running down of world economy, Joko Widodo re-announced of fuel price reduction on 19th January 2015. The haste of the announcement made negative respond rose before the announcement and positive respond rose after the announcement.

To maintain stability of domestic economy and ensure availability domestic fuel, Indonesian government decided to increase fuel price on 1st March 2015. Reaction of investor before the increasing of fuel price tend positive but negative respond rose after the increasing.

The increasing of world oil average price and weakening of rupiah exchange rate, Indonesian government re-announced the increasing of fuel price on 28th March 2015. Investor responded negatively on H-3 and H-2. But positive respond of investor changed the condition better on H-1 and H+1.

Hypothesis II

Hypothesis II stated that there is no differences abnormal return significantly before and after the announcement of fuel price changing on Joko Widodo's Era 2014-20th October 2015. The result of the test is as follows:

Tabel 4
Result Testing of Hypothesis II

<i>Event</i>	<i>t - Stat</i>	<i>Sig.</i>	<i>Conclusion</i>
The Increasing of Fuel Price 18 November 2014	-0.171	0.873	Not Significant
The Reduction of Fuel Price 1 January 2015	0.220	0.837	Not Significant
The Reduction of Fuel Price 19 January 2015	-0.819	0.459	Not Significant
The Increasing of Fuel Price 1 March 2015	1.351	0.248	Not Significant
The Increasing of Fuel Price 28 March 2015	-2.977	0.041	Significant

Average of abnormal return before and after the announcement of fuel price changing showed that there was no differences significantly except 28th March 2015. It was happened because the changing of fuel price could be predicted by investor. Generally, announcement of fuel price changing is bad news for business. If there is no reaction from investor about the announcement reflected un-profit action from investor of the event.

Hypothesis III

Hypothesis III stated that there is no differences trading volume activity significantly before and after the announcement of fuel price changing on Joko Widodo's Era 2014-20th October 2015. The result of the test shows as follows:

Tabel 5
Result Testing of Hypothesis III

<i>Event</i>	<i>t - Stat</i>	<i>Sig.</i>	<i>Conclusion</i>
The Increasing of Fuel Price 18 November 2014	3.699	0.021	Significant
The Reduction of Fuel Price 1 January 2015	-1.225	0.288	Not Significant
The Reduction of Fuel Price 19 January 2015	-2.158	0.097	Not Significant
The Increasing of Fuel Price 1 March 2015	2.077	0.106	Not Significant
The Increasing of Fuel Price 28 March 2015	-2.649	0.057	Not Significant

While trading volume activity before and after the announcement of the fuel price changing showed there is differences significantly except on 18th November 2014. On the 18th November 2014, investor shocked with the fuel price changing and they tried to get profit from the event. But it was not valid for the following events. It could be happened because of predictable event by investor and unreacted investor reflected that there is trust changing aggregate of market.

CONCLUSION

The fuel price changing on Joko Widodo's Era 2014-20th October 2015 caused stock price in Indonesia Stock Exchange fluctuated. Based on data analysis result, there is fluctuate abnormal return during the fuel price changing.

The firmness of Joko Widodo as Indonesia's president welcomed positively by market after the announcement of fuel price increasing on 18th November 2014. Joko Widodo announced fuel price reduction because of the continuity of world oil price reduction. The rushed policy of fuel price reduction on 1st January 2015 and 19th January 2015, market responded negative trendy before and after the reduction announcement. Indonesian government decided to increase fuel price on 1st March 2015 because of ensuring the availability of domestic fuel. Investor reaction before fuel price increasing positive trendy but negative after the increasing on 1st March 2015. This reaction was different with fuel price increasing on 28th March 2015 which there was negative responded before the event and positive responded after the event.

Based on analyzing the differences of abnormal return and trading volume activity, there is no differences significantly before and after the announcement of fuel price changing. It caused predictable information by investor. But different result got on 18th November 2014, showed that there was difference trading volume activity significantly before and after the event. It was also happened on 28th March 2015 which showed that there was difference abnormal return before and after the event. Investor shocked because the increasing of the fuel was very high and the information reflected profit action by investor.

Implication

The investor's aim in doing investment in stock market is to get dividend and capital gain. But most of investor want high capital gain. High capital gain could be get by investor if market in weak form. Indonesian stock market forms semi strong market trendy. Relevant information with the market condition is something that always try to find by investor in taking investment decision. Because of not all information was valuable, investor should choose relevant information appropriately in taking decision in order to get excess return.

This announcement of fuel price increasing had given positive abnormal return (good news) significantly for investor. But abnormal return and trading volume activity (tva) before and after the announcement was not different significantly. As the result, if investors want to get high capital gain, information of fuel price increasing was not much help investor for it.

Limitation of Research

The period of this study is only 10 days; 5 days before the announcement of the changing and 5 days after the announcement. It is to minimize the effect of other factors in

contaminated abnormal return. Short period of the study is limitation of this study. This study only considers the announcement of the fuel changing as influencing factor of investor reaction. Besides, basic ratio in predicting fuel price changing was only abnormal return and trading volume activity. This study was not measured the magnitude factor of influences announcement fuel price changing of investor reaction.

Suggestion

Based on the conclusion and limitation of the study, investor should take decision carefully of their stock investment before and after the announcement of fuel price changing because information in an announcement was not reflected real company condition at all.

For following study, could add the amount of the sample and variables so that could describe the influences of an event more accurate.

Bibliography

- Ang, Robert, (2010), *Buku Pintar Pasar Modal Indonesia 7th Edition*, Media Soft Indonesia, Jakarta.
- Arisyahidin HS, (2012), *Dampak Kebijakan Kenaikan Harga Bahan Bakar Minyak (BBM) Terhadap Investasi Saham di Bursa Efek Indonesia (BEI)*, *Jurnal Ilmu Manajemen, REVITALISASI*, Vol. 1, Nomor 2, September 2012.
- Brigham, Eugene, Philip R. Daves, (2004), *Intermediate Financial Management*, 8th edition, South Western, Thomson, USA.
- Chandra, Teddy, (2013), *The Impact of Fuel Price Increase on Stock Price in Indonesia Stock Exchange*, *Journal of Economics, Business, and Accountancy Ventura*, Volume 16, No. 3, December 2013, p. 385-398.
- , (2015), *Impact of Indonesia's 2014 Presidential Election Towards Stock Prices on Indonesia Stock Exchange*, *International Journal of Business and Management*, Volume 10 issue 7, 2015.
- Chordia, Tarun and Bhaskaran Swaminathan, (2002), *Trading Volume and Cross-Autocorrelations in Stock Return*, *The Journal of Finance*, Vol IV, No. 2, April, p. 913-935.
- Daniel, K., D. Hirshleifer, and A. Subrahmanyam, (1998), *Investor Psychology and Security Market Under- and Overreactions*, *Journal of Finance*, 53, 1839-1885.
- Ghazi F Momani, (2012), *Impact of Economic Factors on the Stock Price at Amman Stock Market (1992-2010)*, *International Journal of Economics and Finance*, January 2012.
- Ghoniayah, Nunung, Mutamimah dan Jenar Widayati, (2008), *Reaksi Pasar Modal Indonesia Terhadap Pengumuman Obligasi Syariah*, SNA XI 2008.
- Harahap, Sofyan Syafri, (2010), *Analisis Kritis Atas Laporan Keuangan*, Edisi Pertama, Jakarta, PT. RajaGrafindo Persada.
- Hikmah, Utami Nur, (2009), *Pengaruh Pengumuman Kenaikan Harga BBM Terhadap Abnormal Return dan Volume Perdagangan Saham*, Fakultas Syariah Universitas Islam Negeri Sunan Kalijaga.

- Jogiyanto HM, (2010), *Teori Portofolio dan Analisis Investasi*, Edisi ketujuh, BPFE, Yogyakarta.
- Kim, K.A., Kitsabunnarat, P., & Nofsinger, J.R., (2004), Ownership and operating performance in an emerging market : evidence from Thai IPO firms, *Journal of Corporate Finance*, 10, pp. 355-381.
- Kuwornu J K M. (2012), Effect of Macroeconomic Variables on the Ghanaian Stock Market Return: A Co-Integration Analysis, *Agris on-line Papers in Economics and Informatics*.
- Laksana, Agung. (2014), Pengaruh Kenaikan Harga Bahan Bakar Minyak Bersubsidi tahun 2013 terhadap *abnormal return* dan *trading volume activity* saham pada perusahaan yang termasuk dalam Indeks LQ45, Fakultas Ekonomi Universitas Negeri Yogyakarta 2014.
- Made, I Joni Suparsa dan Ni Made Dwi Ratnadi, (2014), Perbedaan *Abnormal Return* dan *Trading Volume Activity* atas Pengumuman Kenaikan Harga BBM pada Saham LQ45, *E-Jurnal Akuntansi*. 7(2), pp : 382-389.
- Nelson, C.R., (1976), Inflation and Rates of Return on Common Stocks, *The Journal of Finance.*, 31(2) : 471-483.
- Pagano, M., Panetta, F., & Zingales, L., (1998), Why do companies go public? An empirical analysis, *Journal of Finance*, 53, pp. 27-64.
- Peterson, P. P., (1989), Event studies: A review of issues and methodology, *Quarterly Journal of Business and Economics*, 28, 36-66.
- Ramadhan, Farid Siliwangi, (2013), Pengaruh Kenaikan Harga Bahan Bakar Minyak (BBM) Tahun 2013 Terhadap Investasi Saham (Event Strudy Saham pada Perusahaan Otomotif dan Komponen yang Terdaftar di Bursa Efek Indonesia), Universitas Andalas.
- Setiawan, St Tri Adi, (2006), Analisa Reaksi Pasar Modal Terhadap Kenaikan Harga BBM, Tesis pada Program Studi Magister Manajemen Program Pascasarjana Universitas Diponegoro, Semarang.
- Sugiyono, (2012), *Memahami Penelitian Kualitatif*, Bandung, Alfabeta.
- Suryawijaya, MA dan Setiawan, FA, (1998), Reaksi Pasar Modal Indonesia Terhadap Peristiwa Politik Dalam Negeri, Even Studi pada Peristiwa 27 Juli 1996, *Kelola* No.18/VII/1998, Hal.137-153.
- Usman, Husaini, (2006), *Pengantar Statistika*, PT Bumi Aksara, Jakarta.