# THE EFFECT OF GOVERNMENT ECONOMIC POLICY ANNOUNCEMENT TOWARD THE STOCK PRICE IN INDONESIA STOCK EXCHANGE (IDX)

JOURNAL



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#### ABSTRACT

This study aims to analyze the effect of economic policy announcements toward the stock price. The economic policy announcement consists of: the announcement of the Economic Policy Package, Monetary Policy Announcement, the Fuel price announcement, and Tax Amnesty opening date and closing date in the period of the president Joko Widodo. Those effects is observed from the significance of abnormal return. The sample used in this study are LQ45 stocks listed Indonesia Stock Exchange (IDX). To know whether or not the significance of the two variables is done by the method of event study analysis using t-test. The results in general, showed that the announcement of Monetary Policy, and the opening and closing of Tax Amnesty announcement contain an information content, proved by the significance of abnormal return value during the observation period. The Economic Policy Package announcement, and the Fuel price announcement in general, does not contain any information content. Economic Policy Package, and the Fuel price announcement have non-significant abnormal return value in the observation with the probability (p-value) above the 10% error level.

Keywords: event study, abnormal return, economic policy.

## ABSTRAK

Penelitian ini bertujuan untuk mengukur ada tidaknya kandungan informasi dari pengumuman kebijakan ekonomi yang meliputi pengumuman Paket Kebijakan Ekonomi, pengumuman Kebijakan Moneter, pengumuman Harga BBM, dan pengumuman pembukaan dan penutupan Tax Amnesty pada periode presiden Joko Widodo dilihat dari signifikansi abnormal return. Periode pengamatan yang digunakan adalah 11 hari, dengan rincian 5 hari Sampel yang digunakan dalam penelitian ini adalah saham-saham LQ45 yang ter-list Indonesia Stock Exchange (IDXUntuk mengetahui ada tidaknya signifikansi dari kedua variabel dilakukan dengan metode analisis event study menggunkan t-test. Hasil penelitian secara keseluruhan menunjukkan bahwa pengumuman Kebijakan Moneter, dan pengumuman pembukaan dan penutupan Tax Amnesty memiliki kandungan informasi, hal ini dibuktikan dengan signifikannya nilai abnormal return selama periode pengamatan. Pada pengumuman Paket Kebijakan Ekonomi, dan pengumuman Harga BBM secara keseluruhan tidak memiliki kandungan informasi hal ini dibuktikan dengan tidak signifikannya nilai abnormal return pada pengamatan dengan probability (p-value) diatas taraf kesalahan 10%.

Kata kunci: event study, abnormal return, kebijakan ekonomi

## **INTRODUCTION**

There are three factors that influence the stock price; Firms factor, Industries factor and Macroeconomic factor. Firm's factor that can affect the stock price is like; news releases on revenue and earnings, and future earnings forecasts, dividend announcement, introduction of new products or product recall, get a new big contract, and scandal of the firm itself. Industries factor influenced the stock market when the market conditions affect companies in the same industry. When the market affect e certain industry, stock prices of companies in the same industry will move together. Macroeconomic factor can affect the stock price because it described the economic changes that affect many societies, companies, and markets.

The Economic Policy Package, which is made by the Government, is aimed to stimulate the economic growth of Indonesia. From previous study, Wibowo (2017) found that a significant positive abnormal return on before and after Economic Policy Package announcement Phase 1. Indonesian Investor considers this as good news, so they react positively. Wibowo (2017) also found a positive abnormal return for five consecutive days, ranging from t-1 to t+3.

Monetary policy can affect the stock price. According to Laopodis (2013), one view confirms that an increase in the money supply will increase share prices and stimulate economic activity. Monetary policy can have an impact on stock prices because it directly affected by interest rates, and indirectly through changes in the determinants of dividends.

Starting from January 1, 2015, Indonesian government revoked subsidies for fuel oil. after that the price of oil in Indonesia follow the world oil price. Changes in fuel prices can affect the daily costs of living. Fuel price changes could have further impact on the selling price of the goods. The increase in the price of goods could affect the earnings of the company that could have an impact on the company's stock price.

The tax amnesty is an amnesty program granted by the Government to the Taxpayer. If the tax amnesty program is successful, the state will have a bigger budget for the country's development and country expenditure budget. From the previous study, Lathifah Hp (2016) found that there is positive and negative reaction of tax amnesty announcement toward the stock price of property sector.

The importance of this study is because stock performance in the capital market indirectly can be influenced by the economic policy that has been made. This study find out whether the economic policy package, monetary policy, fuel price shocks, and tax amnesty affect the stock price in Indonesia. Therefore the researcher is interested to conduct an event study about the stock market reaction to the economic policy that has been made by the government.

### LITERATURE REVIEW

#### a. Capital Market

The capital market connects investors (parties with funds) to companies (parties that require long-term funds) or government institutions through long-term instruments trading, such as securities covering debt securities, commercial paper, stocks, bonds, debt tokens, warrants, and rights issues. According to Martalena & Malinda (2011) the capital market consists of the word market and capital. Thus, the stock market can be defined as a meeting place of demand and supply of capital.

## b. Efficient Market Hypothesis

Efficient market theory is a theory most widely attention and empirically tested in almost all the world's capital markets. Efficient Market Hypothesis was first introduced by Fama in 1970. According to Fama (1970) market efficiency divided into three levels, namely:

- 1 Weak Form Efficient Market The market is said to be efficient in a weak form if the stock or securities prices fully reflected the information of the past.
- 2 Semi-Strong Form Efficient Market Semi strong efficient market occurs if stock price completely reflected every information that has been published.
- 3 Strong Form Efficient Market The market can be stated as a strong form efficient market if stock prices completely reflected all of the information.

## c. The Effect of Economic Factor toward Stock Price

Macroeconomic variables can affect stock prices. The government makes economic policy to promote economic growth. Some government economic policies, whether discourse or official, may affect the company's stock price. There are many examples of Government policies that give rise to stock price volatility, such as import export policies, company policies, debt policies, foreign investment policies. This study takes four economic policies in Jokowi's government, that is; Economic Policy Package, Monetary Policy, Fuel Oil Price Shocks, and Tax Amnesty.

## 1 The effect of Economic Policy Packages announcement toward the stock price

The package of economic policies made by the government is to stimulate the Indonesian economy. This policy aims to assist the community in economic activities in a way such as simplify the bureaucracy, provide low-cost housing and provide assistance for small and medium enterprises. With that purpose, it can affect the condition of the capital market because indirectly the capital market will be affected by economic conditions. Study by Wibowo (2017) showed significant positive abnormal return on before and after responding information announcement Economic Policy Package Phase I Jokowi - JK. Indonesian Investor considers this as good news, so they react positively. Wibowo (2017) also found a positive abnormal return for five consecutive days, ranging from t-1 to t+3.

# 2 The effect of Monetary Policy announcement toward the stock price

Monetary policy issued by the central bank. Bodie, Kane, & Marcus (2005) stated that monetary policy largely impacts interest rates by manipulating money supply to influence macroeconomics. To increase investment and consumption, money supply is increased to lower interest rates. Some economists believe that there is no long-term effect on economic activity because of the high money supply. The high money suply only aims at higher price level. According to Iswardono (1997), Monetary policy is an integral part of macroeconomic policy. Monetary policy is aimed at supporting the achievement of macroeconomic goals, namely high economic growth, price stability, development and balance of payments balance. Brigham & Weston (1993) stated that the interest rate can affect the stock price by:

- a. Influence competition in the stock market between stocks with bonds, if the interest rate rises then the investor will sell its shares to be exchanged for bonds. This will lower the stock price. The opposite will also happen if the interest rate decreases.
- b. Influence corporate profits, this happens because the interest is the cost, the higher the interest rate the lower the company's profit. Interest rates also affect economic activity that will also affect corporate earnings.

## 3 The effect of Fuel Price announcement toward the stock price

The short-term impact of rising fuel prices is to reduce corporate earnings, which can indirectly affect the company's stock price. Herisiswanto & Fitria (2014) stated that the effects of increased fuel oil price are; increase factory overhead costs due to rising raw material costs, freight costs and employee demands to raise wages so that ultimately the company's decreased the profits. Rising fuel prices can also be bad news for investors that also have an impact on stock prices. So, investors are less interested to trade their shares in the market, which causes the selling power and purchasing power of investors to decline.

#### 4 The effect of Tax Amnesty announcement toward the stock price

The tax amnesty went well enough, even have many pros and cons in the beginning. According to Bodie, Kane, & Marcus (2005) fiscal policy is the control of government expenditure and revenue or state. This policy is a direct way to slow or stimulate economic activity. Tax amnesties play a role in state revenues. So, Tax Amnesty can be categorized as Fiscal Policy. Sukirno (2003) stated that Fiscal Policy is the government's steps to make changes in the tax system or in its expenditure to face the economic problems. Theoretically from a Keynesian, Classical or Ricardian perspective, each of which could have an economic impact from fiscal policy on the stock market. Possibly positive, negative or unimportant depending on the person taking the perspective (Chatziantoniou, Duffy, & Filis, 2013).

#### **Theoretical Framework**



## **RESEARCH METHODOLOGY**

#### **Population and sample**

The sampling technique is done by purposive sampling method. Its characteristic is entered in LQ45, since LQ45 consists of the most actively traded stock shares, it is expected to market reaction to the information obtained will be reflected through the movement of stock prices included in the LQ45, in the period of August 2014 until period of February 2017.

## **Source of Data**

The data is collected from Indonesia Stock Exchange (IDX) website (<u>http://www.idx.co.id/</u>), PERTAMINA website (<u>http://www.pertamina.com</u>), Direktorat Jenderal Pajak Kementrian Keuangan website (<u>http://www.pajak.go.id/</u>), Newspaper and Online Newspaper.

## **Research Variables**

a. Stock Price

The dependent variable is the stock price, Stock price is calculated by Abnormal Return. According to Jogiyanto (2003), there are several step to calculate abnormal return:

1 Actual Return is calculated using the following formula:

$$Rit = \frac{Pit - Pit - 1}{Pit - 1}$$

Where:

Rit = Stock return i on day t

Pit = Stock price i on day t

Pit-1 = Stock price i on day t-1

2 Market Adjusted Model is the expected return for all securities is assumed to be equal (approximate equivalent) with the expected market return in that period. Market adjusted model formula is stated as follow:

$$E(Ri) = E(Rm)$$

Where:

E(Ri) = Expected Return of stock i

E(Rm) = Expected Return market

3 Calculates Abnormal Return shares during the event period. The formula is:

$$ARit = Rit - E[rit]$$

Where:

ARit = Abnormal return of stock i on day t

Rit = Actual return of stock i on day t

E [R it] = Expected Return of stock i on day t

Because this study uses Market Adjusted Model which has the assumption that the expected return of all shares or issuers is equal (close to equivalent) with expected market return, it will get the following formula:

$$ARit = Rit - Rm$$

Where	:
ARit	= Abnormal return of stock i on day t
Rit	= Actual return of stock i on day t
Rm	= Market return on day t

b. Economic Policy Package Announcement

Economic Policy Packages announcement is the independent variable. At the time this study was made, the government has released 15 announcements of economic policy package that is on:

Date	Policy
9 September 2015	Peningkatan Terhadap Tingkat Persaingan Industri
29 September 2015	Mempersingkat Proses Perizinan Ekspor
7 October 2015	Peningkatan Investasi, Memacu Ekspor, Dan
	Menjaga Daya Beli Masyarakat
15 October 2015	Memberikan Kepastian Perhitungan Upah
	Minimum Dan Meningkatan Kredit Bagi Ukm
22 October 2015	Memperkuat Iklim Industri & Investasi Dengan
	Insentif Pajak Serta Deregulasi Perbankan Syariah
5 November 2015	Memberikan Stimulus Ekonomi Di Daerah
	Perbatasan Dan Memfasilitiasi Ketersediaan
	Komoditas Strategis
7 December 2015	Insentif Bagi Industri Padat Karya Dan
	Mempermudah Proses Sertifikasi Lahan
21 December 2015	Menyelesaikan Masalah Akuisisi Lahan,
	Meningkatkan Produksi Minyak Domestik, Dan
	Menstimulus Industri Aviasi Nasional.
27 January 2016	Mempercepat Program Kelistrikan, Stabilisasi
	Harga Daging, Dan Meningkatkan Sektor Logistik
11 February 2016	Revisi daftar negatif investasi dan memperkuat
	proteksi ukm.
29 March 2016	Memberikan Pendampingan Bagi Ukm
28 April 2016	Menggenjot Tingkat Kemudahan Melakukan
	Bisnis Di Indonesia
24 Augustus 2016	Penyediaan Rumah Murah Bagi Masyarakat
	Berpenghasilan Rendah
10 November 2016	Membentuk Roadmap Bagi Industri E-Commerce
15 June 2017	Membentuk Roadmap Industri Logistik

c. Monetary Policy Announcement

Monetary Policy Announcement is the independent variable. At the time this study was made, the government has released 22 announcements of monetary policy that is on:

Date	BI Rate
13 November 2014	7.50 %
18 November 2014	7.75 %
11 December 2014	7.75 %
15 January 2015	7.75 %
17 February 2015	7.50 %
17 March 2015	7.50 %
14 April 2015	7.50 %
19 May 2015	7.50 %
18 June 2015	7.50 %
14 July 2015	7.50 %
18 Augustus 2015	7.50 %
17 September 2015	7.50 %
15 October 2015	7.50 %
17 November 2015	7.50 %
17 December 2015	7.50 %
14 January 2016	7.25 %
18 February 2016	7.00 %
17 March 2016	6.75 %
21 April 2016	6.75 %
19 Mei 2016	6.75 %
16 June 2016	6.50 %
21 July 2016	6.50 %

d. Fuel Price Announcement

Fuel Price announcement is the independent variables. At the time this study was made, fuel oil price has changed 25 times, that is on:

Date
1 September 2015
15 September 2015
15 October 2015
1 November 2015
19 November 2015
1 December 2015
20 January 2016
1 February 2016
5 February 2016
1 March 2016
30 March 2016
15 Mei 2016
1 Augustus 2016
15 Augustus 2016
1 September 2016
15 October 2016

16 November 2016
1 December 2016
16 December 2016
5 January 2017
21 March 2017
22 April 2017
29 April 2017

e. Tax Amnesty Announcement

Tax Amnesty announcement is the independent variable. Tax Amnesty divide in 3 periods which is: First Stage: Open: 1 July 2016 Close: 30 September 2016

Close: 30 September 2016 Second Stage: Open: 1 October 2016 Close: 31 December 2016 Third Stage: Open: 1 January 2017 Close: 31 March 2017

# **Analysis Technique**

# **Event Study**

According to Elton, Gruber, Brown, & Goetzmann (2014) there are several step to conduct event study:

1. Collect a sample of firms that had a surprise announcement (the event).

In this study the sample is the company that entered in LQ45. The event in this study is four economic event in Jokowi's reign (2014-2017), that is; Economy Package Policy announcement, Monetary Policy announcement, Fuel Oil Price announcement, and Tax Amnesty announcement.

- 2. Determine the precise day of the announcement and designate this day as zero. *This study using daily data*
- 3. Define the period to be studied. *This study use 10 days around the event.*



- 4 For each of the firms in the sample, compute the return on each of the days being studied. *This study is 11 days. It means 5 days before the event, D-day of the event, and 5 days after the event.*
- 5 Compute the "abnormal" return for each of the days being studied for each firm. *Abnormal return is actual return less the expected return.*
- 6 Compute for each day in the event period the average abnormal return for all the firms in the sample.

When this is done, we can examine the data in a figure.

- 7 Often the individual day's abnormal return is added together to compute the cumulative abnormal return from the beginning of the period.
- 8 Examine and discuss the results.

In this study, the difference in stock price return before and after each Economic Policy Announcement are tried with Using T test. This study is analyzed using E-views 9. Theory testing with T test is utilized to test relapse coefficients incompletely or independently. The t test comes about are at that point in contrast and the qualities in the table support or not support the hypothesis. This t test intends to know whether the stock return before, then after the Economic Policy Event difference or not.

# **Hyphotheses Testing**

The hypotheses are:

- H1: Economic Policy Packages announcement has positive impact toward stock price
- H2: Monetary Policy announcement has positive impact toward stock price
- H3: Fuel Oil Price shocks announcement has positive impact toward stock price
- H4: Tax Amnesty announcement has positive impact toward stock price.

Define significant level ( $\alpha$ ) = 10%. Based on the significance t value:

Ho: Average Abnormal Return = 0H1: Average Abnormal Return > 0

- 1. If probability  $\leq 0.10$ , then Ho is rejected and H1 is accepted, it means that there is a significant effect of Economic Policy Packages announcement toward the stock price.
- 2. If probability  $t \ge 0.10$ , then Ho is accepted and H1 is rejected, it means that there is no significant effect of Economic Policy Packages announcement toward the stock price.

How to conclude:

- 1. Event announcement are categorized as significant if one of or both T-1, T0, and T+1 showed a number below or equal to the error rate (0.10).
- 2. This event is conclude in aggregate, the economic event is categorized as significant if the total event announcements of each economic event that showed significant effect is more than 50%.

# DATA ANALYSIS AND DISCUSSIONS

## Statistic descriptive

In this study, the total companies that involve is 57 companies. There are three variables needed, which are; Abnormal Return, Market Return, and Stock Return. The total data of abnormal return is 32670, the total data of market return is 772, and the total data of stock return is 33660.

The statistic descriptive of research variables								
VARIABLES	Mean	Median	Maximum	Minimum	Std. Dev.			
Abnormal Return	0.0001	-0.001	0.234	-0.1269	0.0227			
Market Return (IHSG)	0.00074	0.0014	0.0455	-0.0401	0.01007			
Stock Return	0.00074	0.0000	0.2574	-0.1548	0.02554			

	1 able	4.1	
The statistic	descriptive	of research	variables

From the data, obtained the mean, median, maximum, minimum, and standard deviation of each item. The mean of abnormal return is 0.0001, the median is -0.001, the maximum of the abnormal return is 0.234, the minimum is -0.1269, and the Standard deviation is 0.0227. This study is market adjusted model, so the return that used is IHSG. Based on the data also, the mean of Market Return is 0.00074, the median is 0.0014. From the data, researcher has found the maximum number of Market Return is 0.0455, the minimum is -0.0401, and the standard deviation is 0.01007. From this data, the mean of the Stock Return that has been obtained is 0.00074, the median is 0.00074, the median is 0.02574, the minimum is -0.1548, and the standard deviation is 0.02554. The data is processed by E-Views 9 and will explain in the hypothesis testing.

# Hypothesis testing

1 The effect of Economic Policy Packages announcement toward the stock price

In the Economic Policy Packages announcement, there are two aspects that will be elaborated, first is on the whole date of the announcement and second is on each announcement date. Event are categorized as significant if one of or both T-1, T0, and T+1 showed a number below or equal to the error rate (0.10). On the overall date of Economic Policy Packages announcement, found not significant effect while on each date, there are 7 of 15 date of announcement showed significant effect.

Hypothesis testing result of the overall Economic Policy Packages announcement Tm5 Tm4 Tm3 Tm2 Tm1 T1 T2 Т3 T4 TO T5 SAMPLE MEAN -0.000246 0.003927 0.000908 -0.0000879 -0.001249 0.000940 -0.000687-0.000968 -0.001323 0.001490 -0.000943SAMPLE Std. Dev. 0.025995 0.027006 0.023597 0.022663 0.024456 0.024167 0.022056 0.024818 0.025692 0.025469 0.025681 T-VALUE -0.246231 3.777980 0.999402 -1.100715 -1.327381 0.959021 -0.689846 -1.017543 -1.558753 -1.559581 -0.954028 PROBABILITY 0.0002 0.8056 0.3180 0.9198 0.1848 0.3379 0.4905 0.3093 0.1195 0.1193

Table 4.2

The table above is the result of hypothesis testing on the whole announcement date. Five days before the announcement of the Economic Policy Packages, there is only one day that has significant abnormal return value, which is on T-4 with p-value 0.0002 with error level of 10% (0.10). Meanwhile, on the other five days before the event showed insignificant results. On the day of the announcement, the p-value is 0.3379, it means the event has insignificant effect, because p-values is greater than the error rate. At five days after the event announcement, it has insignificant effect because all the p-values are greater than the error rate. The results of the data showed that Ho is accepted and H1 is rejected, it means that there is no

significant effect of Economic Policy Package announcement, because the data result of T-1, T0, and T+1 is not significant.

# Table 4.3

Hypothesis testing result of each Economic Policy Packages announcement (Package 1 – Package 15)

PACKAGE 1	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.004500	0.010209	-0.010438	-0.00984	0.006364	0.010362	-0.001364	7.11E-05	-0.000931	-0.003433	0.00054
SAMPLE Std. Dev.	0.023659	0.031413	0.020012	0.026187	0.028117	0.033830	0.032182	0.029723	0.01635	0.020146	0.02194
T-VALUE	-1.275940	2.180119	-3.498758	-2.520679	1.518446	2.054772	-0.284411	0.016049	-0.382027	-1.143255	0.165104
PROBABILITY	0.2087	0.0346	0.0011	0.0154	0.1361	0.0459	0.7774	0.9873	0.7043	0.2591	0.8696
PACKAGE 2	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.002207	0.003793	0.003069	0.002793	-0.00266	0.001084	-0.000169	1.03E-02	-0.001469	0.011544	0.001691
SAMPLE Std. Dev.	0.016307	0.025537	0.025315	0.032108	0.022863	0.030663	0.032259	0.039209	0.02033	0.027653	0.041896
T-VALUE	-0.907753	0.996448	0.813223	0.583600	-0.780464	0.237247	-0.035121	1.761063	-0.484674	2.800557	0.270773
PROBABILITY	0.3690	0 3245	0.4205	0 5625	0.4393	0.8136	0.9721	0.0852	0.6303	0.0076	0.7878
PACKAGE 3	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T/	T5
SAMPLE MEAN	-0.000169	0.010203	-0.001/69	0.011544	0.001601	0.006227	-0.001887	0.011608	0.002596	-0.006629	0.001707
SAMPLE Std Dev	0.032259	0.010200	0.02033	0.027653	0.001071	0.000227	0.02226	0.011098	0.002370	0.03241	0.024299
T-VALUE	-0.035121	1 761063	-0.484674	2 800557	0.270773	0.991914	-0.568549	2 754075	0.809099	-1 372035	0.024255
PROBABILITY	0.0721	0.0852	0.6303	0.0076	0.270773	0.3267	0.5726	0.0085	0.000000	0.17700	0.6300
	0.9721	0.0032 Tm4	0.0505 Tm2	0.0070 Tm2	0.7878 Tm1	0.5207 TD	0.5720 T1	0.0005	0.4220 T2	0.17700 T4	0.0577
CAMPLE MEAN	0.006227	0.001997	0.011609	0.002506	0.006620	0.001707	0.000718	0.004479	1.5	0.005152	0.000100
SAMPLE MEAN	0.000227	-0.001887	0.011098	0.002390	-0.000029	0.001707	0.000718	0.004478	0.004831	0.005155	0.000109
T VALUE	0.04211	0.02220	0.028495	0.02132	1.272025	0.024299	0.052950	1 295402	1.210794	1.261072	0.02271
I-VALUE	0.991914	-0.508549	2.754075	0.809099	-1.3/2035	0.4/1105	0.146105	1.385492	0.10(7	1.3019/3	0.032164
PROBABILITY	0.3267	0.5726	0.0085	0.4228	0.1770	0.6399	0.8845	0.1729	0.1967	0.18010	0.9745
PACKAGE 5	Tm5	Tm4	Tm3	1m2	Tml	10	TI	12	13	14	15
SAMPLE MEAN	0.036756	0.007733	0.012884	-0.006924	-0.008147	0.000109	0.005851	-0.002749	0.000311	-0.003482	-0.010962
SAMPLE Std. Dev.	0.024303	0.03296	0.021677	0.024728	0.025382	0.02271	0.027435	0.025069	0.020128	0.019068	0.021994
T-VALUE	10.145580	1.573927	3.987188	-1.878459	-2.153080	0.032164	1.430650	-0.735559	0.103688	-1.225090	-3.343521
PROBABILITY	0.0000	0.1227	0.0002	0.067	0.0368	0.9745	0.1596	0.4659	0.9179	0.22710	0.0017
PACKAGE 6	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.010962	0.001918	-0.005698	0.003344	0.004736	-0.004291	-0.005411	-0.011373	-0.0045	-0.0027	0.003969
SAMPLE Std. Dev.	0.021994	0.023446	0.027384	0.026677	0.022725	0.018101	0.019947	0.022573	0.025642	0.029904	0.027453
T-VALUE	-3.343521	0.548691	-1.395753	0.840989	1.397865	-1.590288	-1.819752	-3.379891	-1.177236	-0.605666	0.969813
PROBABILITY	0.0017	0.5860	0.1698	0.4049	0.1692	0.1189	0.0756	0.0015	0.2454	0.54780	0.3374
PACKAGE 7	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.006129	0.006293	0.004298	-0.006969	-0.002853	0.004611	-0.003638	-0.013789	-0.000731	-0.00558	0.006931
SAMPLE Std. Dev.	0.030545	0.029624	0.019711	0.015655	0.018671	0.026233	0.030302	0.025301	0.023622	0.02484	0.031818
T-VALUE	-1.346006	1.425071	1.462675	-2.986166	-1.025170	1.179116	-0.805331	-3.655917	-0.207618	-1.506932	1.461273
PROBABILITY	0.1852	0.1612	0.1507	0.0046	0.3109	0.2447	0.425	0.0007	0.8365	0.13900	0.151
PACKAGE 8	Tm5	Tm4	Tm3	Tm2	Tml	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00558	0.006931	0.000249	0.005151	0.002793	-9.78E-05	-0.005309	0.000656	0.001962	0.003744	0.006238
SAMPLE Std. Dev.	0.02484	0.031818	0.020128	0.019082	0.026683	0.019917	0.021847	0.017874	0.019604	0.019464	0.032091
T-VALUE	-1 506932	1 461273	0.082950	1 810893	0.702244	-0.032932	-1.630098	0.246040	0.671453	1 290531	1 303937
PROBABILITY	0.1390	0.1510	0.9343	0.077	0.4862	0.9739	0.1102	0.8068	0.5054	0.20360	0.199
PACKAGE	Tm5	0.1510 Tm4	0.7545 Tm3	Tm2	0.4002 Tm1	0.9759 TD	0.1102 T1	0.0000 T2	T3	0.20500 T4	T5
SAMPLE MEAN	-0.007431	-0.001667	0.003684	-0.003224	-0.011851	-6 23E-03	0.000618	0.003631	-0.005971	0.00828	0.000389
SAMPLE Std. Dev	0.020016	0.025189	0.032024	0.003224	0.021868	0.026151	0.023794	0.024612	0.028957	0.008041	0.022194
T-VALUE	-2.490441	-0.443857	0.771708	0.022320	-3 635/32	-1 508057	0.023774	0.024012	-1 383275	6.007670	-0.117542
PROBABILITY	0.0166	0.6503	0.4444	0.3422	0.0007	0.117	0.8625	0.3277	0.1736	0.00000	0.907
DACKACE 10	0.0100	0.0575	0.4444 Tm2	0.5422 Tm2	0.0007	0.117	0.8025	0.3277 T2	0.1750	0.00000 T4	0.907
CAMPLE MEAN	0.11E.05	0.005060	0.001567	0.002216	0.001992	1.07E-04	0.005542	2.900.05	15	14	1.5
SAMPLE MEAN	-9.11E-03	0.003909	-0.001307	-0.002310	0.001862	1.0/E-04	0.003342	-2.89E-03	0.1047	0.000975	0.000109
SAMPLE SIG. Dev.	0.021988	1.440612	0.032293	0.021449	0.018344	0.021555	1.805(7)	0.01/042	0.1047	0.028237	0.02319
I-VALUE	-0.027797	1.449612	-0.325425	-0.724209	0.680876	0.033539	1.805676	-0.010985	0.875848	1.656639	0.028998
PROBABILITY	0.9779	0.1543	0.7464	0.4728	0.4995	0.9734	0.0778	0.9913	0.3859	0.1047	0.97700
PACKAGETI	Tm5	Tm4	Tm3	Tm2	Iml	10	11	12	13	14	15
SAMPLE MEAN	1.22E-03	0.005896	0.001127	-0.003707	0.0021	-3.84E-03	0.001049	-1.94E-03	0.003207	0.005171	-0.00512
SAMPLE Std. Dev.	0.018168	0.016215	0.02167	0.016148	0.016194	0.018651	0.025985	0.020155	0.015938	0.024932	0.01897
T-VALUE	0.448813	2.438940	0.348771	-1.539861	0.869906	-1.381128	0.270773	-0.644947	1.349627	1.391341	-1.810589
PROBABILITY	0.6558	0.0188	0.7289	0.1308	0.3891	0.1742	0.7878	0.5223	0.184	0.1711	0.07700
PACKAGE 12	Tm5	Tm4	Tm3	Tm2	Tml	10	T1	12	T3	T4	T5
SAMPLE MEAN	-2.73E-03	-0.004758	0.001224	0.005016	-0.005533	1.28E-03	-0.00266	-3.12E-03	-0.004184	-0.004878	-0.009873
SAMPLE Std. Dev.	0.016567	0.01525	0.016337	0.020984	0.020759	0.021099	0.021247	0.023145	0.025148	0.022345	0.024147
T-VALUE	-1.104934	-2.092905	0.502767	1.603401	-1.788048	0.406256	-0.839846	-0.902993	-1.116201	-1.464359	-2.742828
PROBABILITY	0.2752	0.0422	0.6176	0.116	0.0807	0.6865	0.4055	0.3714	0.2704	0.1502	0.00880
PACKAGE 13	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	2.57E-03	0.001078	-0.00474	0.000493	-0.00298	-2.04E-03	0.002707	-4.84E-03	-0.0039	0.000738	-0.002176
SAMPLE Std. Dev.	0.017452	0.035245	0.020348	0.014554	0.019049	0.022504	0.016042	0.013538	0.016215	0.024215	0.018899
T-VALUE	0.988293	0.205134	-1.562654	0.227388	-1.049430	-0.608099	1.131855	-2.400487	-1.613409	0.204382	-0.772194
PROBABILITY	0.3284	0.8384	0.1253	0.8212	0.2997	0.5462	0.2638	0.0207	0.1138	0.839	0.44410
PACKAGE 14	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-7.64E-03	0.004851	0.001264	-0.001913	-0.000591	7.94E-03	-0.003304	-7.36E-03	-0.012856	0.011236	-0.002836
SAMPLE Std. Dev.	0.017011	0.017106	0.019672	0.018239	0.013787	0.024314	0.036283	0.023958	0.027537	0.031308	0.021783
T-VALUE	-3.014545	1.902429	0.431173	-0.703720	-0.287619	2.189405	-0.610947	-2.059514	-3.131689	2.407407	-0.873228
PROBABILITY	0.0043	0.0637	0.6684	0.4853	0.7750	0.0339	0.5444	0.0454	0.0031	0.0203	0.38730
PACKAGE 15	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	-3.02E-03	0.002253	-0.001971	0.002638	0.002936	-2.82E-03	-0.003042	-1.53E-04	-0.00064	-0.003791	-0.004089
SAMPLE Std Dev	0.014972	0.016335	0.011095	0.017976	0.019293	0.014716	0.013254	0.015651	0.017656	0.014081	0.014469
T-VALUE	-1 354083	0.925374	-1 191782	0.984335	1 020679	-1 283430	-1 539780	-0.065719	-0.243165	-1 806146	-1 895703
PROBABILITY	0.1826	0 3598	0.2397	0 3303	0 3130	0.205450	0.1308	0.9479	0.809	0.0777	0.06460
I INCLUIDIDIDIDI I	0.1020	0.5570	1 0.2071	0.5505	0.5150	0.2001	0.1500	0.7417	0.007	0.0777	0.00400

## 2 The effect of Monetary Policy announcement toward the stock price

In the Monetary Policy announcement, there are two aspects that will be elaborated, first is on the whole date of the announcement and second is on each announcement date. Event are categorized as significant if one of or both T-1, T0, and T+1 showed a number below or equal to the error rate (0.10). On the overall date of Monetary Policy announcement, found not significant effect while on each date, there are 13 of 22 date of announcement showed significant effect.

	Hypothesis testing result of the overall Monetary Policy announcement											
	ALL	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
ĺ	SAMPLE MEAN	0.001017	-0.002072	-0.000344	0.001102	0.000000	0.000171	0.000366	0.001330	0.000557	-0.000228	0.00013
l	SAMPLE Std. Dev.	0.023089	0.022124	0.021203	0.022498	0.020273	0.020496	0.020612	0.019652	0.021994	0.022489	0.02201
ĺ	T-VALUE	1.386305	-2.946703	-0.510539	1.540508	-0.000157	0.262372	0.558957	2.129123	0.796519	-0.318399	0.185985
ĺ	PROBABILITY	0.1660	0.0033	0.6098	0.1238	0.9999	0.7931	0.5763	0.0335	0.4259	0.7502	0.8525

Table 4.4

The table above is the result of hypothesis testing on the whole announcement date. Five days before the announcement of the Monetary Policy, there is one day that showed significant. In T-4 (p-value: 0.0033) it significant because it less than the error level. The other four days before the event is insignificant because have a greater p-value than the error level of 10% (0.10). On the day of the announcement, the p-value is 0.7931. At five days after the event announcement, there is one day after the event showed a significant because it less than the error rate, that is T+2. The p-value of T+2 is 0.0335, the other four days there are no significant effect because the p-values are greater than the error level. The results of the data showed that Ho is accepted and H1 is rejected, it means that there is no significant effect of Monetary Policy announcement, because the data result of T-1, T0, and T+1 is not significant.

Table 4.5

Hypothesis testing result of each Monetary Policy announcement

			· ·				/				
MONETARY 1	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.002344	-0.001542	0.000833	-0.00028	-0.003689	0.001593	-0.003558	0.003836	0.002344	0.003758	0.004902
SAMPLE Std. Dev.	0.014328	0.019195	0.0139	0.01737	0.019281	0.014700	0.015156	0.016129	0.014778	0.013448	0.015609
T-VALUE	1.097676	-0.538982	0.402173	-0.108134	-1.283418	0.727091	-1.574675	1.595195	1.064189	1.874479	2.106862
PROBABILITY	0.2783	0.5926	0.6895	0.9144	0.2061	0.4710	0.1225	0.1178	0.2930	0.0675	0.0409
MONETARY 2	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00028	-0.003689	0.001593	-0.003558	0.003836	0.002344	0.003758	0.004902	0.004633	0.00652	-0.000173
SAMPLE Std. Dev.	0.01737	0.019281	0.0147	0.015156	0.016129	0.014778	0.013448	0.015609	0.018319	0.013628	0.017931
T-VALUE	-0.108134	-1.283418	0.727091	-1.574675	1.595195	1.064189	1.874479	2.106862	1.696668	3.209414	-0.064847
PROBABILITY	0.9144	0.2061	0.4710	0.1225	0.1178	0.2930	0.0675	0.0409	0.0968	0.0025	0.9486
MONETARY 3	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.005091	-0.002687	-0.006369	0.002682	0.000782	0.000869	-0.000593	0.003744	-0.011382	0.00326	0.003227
SAMPLE Std. Dev.	0.017221	0.013354	0.013301	0.0139	0.020977	0.012397	0.016102	0.020205	0.020776	0.022309	0.016119
T-VALUE	1.983162	-1.349649	-3.212177	1.294422	0.250146	0.470187	-0.247193	1.243172	-3.675056	0.980271	1.342805
PROBABILITY	0.0536	0.1840	0.0025	0.2023	0.8036	0.6405	0.8059	0.2204	0.0006	0.3323	0.1862
MONETARY 4	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.004098	0.001764	-0.000316	0.000429	-0.006380	0.002311	-0.003131	-0.000340	0.0049	8.67E-05	0.006653
SAMPLE Std. Dev.	0.019365	0.018208	0.020103	0.033427	0.019638	0.013025	0.022734	0.020722	0.01764	0.028241	0.020239
T-VALUE	1.419521	0.650075	-0.105300	0.086072	-2.179339	1.190311	-0.923907	-0.110068	1.863389	0.020586	2.205200
PROBABILITY	0.1628	0.5190	0.9166	0.9318	0.0347	0.2403	0.3606	0.9129	0.0691	0.9837	0.0327
MONETARY 5	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.000307	-0.000209	-0.0003	0.00168	-0.001922	0.001004	0.005033	0.000287	-0.002596	-3.54E-03	-0.001298
SAMPLE Std. Dev.	0.012769	0.014197	0.012239	0.011685	0.014398	0.017412	0.024308	0.012999	0.013444	0.016505	0.010952
T-VALUE	-0.161112	-0.098701	-0.164427	0.964468	-0.895584	0.386972	1.389047	0.147939	-1.295114	-1.436973	-0.794894
PROBABILITY	0.8727	0.9218	0.8701	0.3401	0.3753	0.7006	0.1718	0.8831	0.2020	0.1578	0.4309
MONETARY 6	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.000458	-0.006509	0.000951	0.000304	-0.002771	0.003780	0.000844	0.003831	-0.0026	-5.78E-04	-0.000771
SAMPLE Std. Dev.	0.014798	0.014519	0.01406	0.012089	0.016175	0.014965	0.017406	0.015392	0.022727	0.015645	0.013872
T-VALUE	-0.207521	-3.007382	0.453798	0.168941	-1.149220	1.694382	0.325454	1.669640	-0.767415	-0.247733	-0.372904
PROBABILITY	0.8366	0.0043	0.6522	0.8666	0.2567	0.0973	0.7464	0.1021	0.4469	0.8055	0.711
MONETARY 7	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.005518	0.002271	-0.003682	-0.003316	-0.002229	-0.004229	0.003302	0.003536	0.000347	-1.31E-03	0.003093
SAMPLE Std. Dev.	0.019919	0.01426	0.01465	0.010695	0.016973	0.016773	0.017386	0.018245	0.024829	0.018204	0.016381
T-VALUE	1.858271	1.068358	-1.686052	-2.079612	-0.880922	-1.691283	1.274132	1.299945	0.093660	-0.482320	1.266718
PROBABILITY	0.0698	0.2912	0.0989	0.0434	0.3831	0.0979	0.2093	0.2004	0.9258	0.632	0.2119

(Monetary 1 – Monetary 22)

MONETARY 8	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.006364	0.004811	0.007742	0.003836	-0.001700	0.001091	0.000776	-0.003598	-0.000107	-7.18E-04	0.001151
SAMPLE Std. Dev.	0.019956	0.03134	0.025007	0.020786	0.017563	0.018349	0.016873	0.017341	0.014395	0.013674	0.01816
T-VALUE	2.139399	1.029785	2.076888	1.237813	-0.649327	0.398902	0.308341	-1.391796	-0.049706	-0.352137	0.425222
PROBABILITY	0.0380	0.3087	0.0437	0.2224	0.5195	0.6919	0.7593	0.171	0.9606	0.7264	0.6727
MONETARY 9	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	0.003362	-0.012207	-0.010116	0.003733	0.001780	0.002807	-0.001367	-0.001244	0.004451	5 90E-03	0.001102
SAMPLE Std Dev	0.025511	0.022014	0.02026	0.017214	0.020401	0.022180	0.018028	0.020682	0.0015682	0.025917	0.026467
T-VALUE	0.884103	-3 719749	-3 349273	1 454830	0.585292	0.848853	-0.508541	-0.403634	1 904025	1 527673	0.279360
PROBABILITY	0 3814	0.0006	0.0017	0.1528	0.5613	0.4006	0.6136	0.6884	0.0635	0.1338	0.7813
MONETARY 10	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.005667	-0.008573	-0.00108	0.004793	-0.001438	-0.002573	0.001860	0.000149	0.000222	-6 37E-03	-0.004058
SAMPLE Std. Dev	0.024119	0.02437	0.019925	0.004773	0.019135	0.020553	0.017480	0.030624	0.020676	0.021463	0.023196
T-VALUE	1 576038	-2.359950	-0.363611	1 74073	-0 504051	-0.839905	0.713817	0.032614	0.020070	-1 990554	-1 173505
PROBABILITY	0.1222	0.0228	0.7179	0.0887	0.6167	0.4055	0.4791	0.9741	0.9428	0.0528	0.2469
MONETARY 11	Tm5	Tm4	Tm2	0.0007 Tm2	Tm1	T0	T1	T)	T2	T4	0.2407 TS
SAMPLE MEAN	-0.003827	-0.000076	-0.013203	0.017536	-0.002373	-0.005091	0.000244	-0.007098	-0.006853	-1.40E-02	-0.005278
SAMPLE Std. Dev	0.015381	0.02545	0.029255	0.043218	0.016377	0.032774	0.000244	0.017731	0.02709	0.036603	0.04263
T VALUE	1 668022	2 202128	2.048202	2 721815	0.010377	1.042067	0.01/500	2 685228	1.607028	2 572280	0.04205
PROBABILITY	0.1022	0.0211	0.0030	0.0003	0.3363	0.3031	0.0334	0.0102	0.0068	0.0136	0.4107
MONETARY 12	Tm5	Tm4	Tm2	0.0075 Tm2	0.5505 Tm1	T0	0.9354 T1	0.0102 T2	T2	0.0150 T4	0.4107 TS
SAMPLE MEAN	0.001264	7.11E.05	0.000021	0.002422	0.000540	0.006284	0.005202	0.002207	0.002702	2 07E 02	0.002702
SAMPLE MILAN	-0.001304	0.020722	-0.000931	-0.003433	0.000340	0.000384	0.005595	-0.002207	0.003793	0.025215	0.002793
T_VALUE	-0.284411	0.027723	-0.382027	-1 1/2255	0.02194	2.008272	1 701515	-0.007752	0.025557	0.020010	0.032108
I- VALUE	0.7774	0.010049	0.302027	0.2501	0.103104	0.0500	0.0901	0.240	0.2245	0.013223	0.565000
MONETARY 12	0.7774	U.70/3	0.7045	0.2391 Tr2	0.0090	0.0508	0.0001	0.309	0.5245 T2	0.4203	0.5025
SAMDLE MEAN	100062227	1.805.02	10011608	1m2	1ml	10	11	12	15	14 5 15E 02	13
SAMPLE MEAN	0.006227	-1.09E-03	0.011098	0.002590	-0.000029	0.001707	0.000/18	0.004478	0.004831	0.025292	0.000109
SAMPLE Std. Dev.	0.04211	0.02226	0.028493	0.021520	0.03241	0.024299	0.032956	0.021680	0.024724	0.025382	0.022/1
I-VALUE	0.991914	-0.508549	2.754075	0.809099	-1.3/2035	0.4/1105	0.146105	1.385492	1.310/84	1.3019/3	0.032104
PROBABILITY	0.3267	0.5726	0.0085	0.4228	0.177	0.6399	0.8845	0.1729	0.1967	0.1801	0.9745
MONETARY 14	Tm5	1m4	Tm3	Tm2	Iml	10	11	12	13	14	15
SAMPLE MEAN	-0.0045	-2.70E-03	0.003969	-0.01172	-0.005351	0.005798	0.002144	0.011069	0.004291	-5.54E-03	-0.003718
SAMPLE Std. Dev.	0.025642	0.029904	0.027453	0.029005	0.01864	0.023742	0.02/220	0.021470	0.02507	0.022373	0.02024
T-VALUE	-1.177236	-0.605666	0.969813	-2.710614	-1.925769	1.638134	0.528476	3.458368	1.148208	-1.660388	-1.232177
PROBABILITY	0.2454	0.5478	0.3374	0.0095	0.0606	0.1085	0.5998	0.0012	0.2571	0.1039	0.2244
MONETARY 15	Tm5	Tm4	Tm3	Tm2	Tml	10	T1	12	13	14	15
SAMPLE MEAN	-0.013789	-7.31E-04	-0.00558	0.006931	0.000249	0.005151	0.002793	-0.000098	-0.005309	6.56E-04	0.001962
SAMPLE Std. Dev.	0.025301	0.023622	0.02484	0.031818	0.020128	0.019082	0.026683	0.019917	0.021847	0.017874	0.019604
T-VALUE	-3.655917	-0.207618	-1.506932	1.461273	0.082950	1.810893	0.702244	-0.032932	-1.630098	0.246040	0.671453
PROBABILITY	0.0007	0.8365	0.1390	0.151	0.9343	0.0770	0.4862	0.9739	0.1102	0.8068	0.5054
MONETARY 16	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	3.56E-05	9.87E-04	-0.001311	0.002122	0.002184	-0.003976	-0.005978	-0.002571	0.007691	-7.43E-03	-0.001667
SAMPLE Std. Dev.	0.019619	0.018019	0.016376	0.019465	0.01836	0.019077	0.014820	0.018918	0.021127	0.020016	0.025189
T-VALUE	0.012157	0.367320	-0.537081	0.731375	0.798131	-1.397943	-2.705901	-0.911698	2.442039	-2.490441	-0.443857
PROBABILITY	0.9904	0.7151	0.5939	0.4684	0.4291	0.1691	0.0097	0.3669	0.0187	0.0166	0.6593
MONETARY 17	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	1.07E-04	5.54E-03	-2.89E-05	0.002427	0.006973	0.000109	-0.004371	0.001589	-0.006262	4.25E-03	-0.004513
SAMPLE Std. Dev.	0.021335	0.02059	0.017642	0.018586	0.028237	0.025190	0.021631	0.027632	0.022025	0.027396	0.026902
T-VALUE	0.033539	1.805676	-0.010985	0.875848	1.656639	0.028998	-1.355594	0.385729	-1.907272	1.041482	-1.125431
PROBABILITY	0.9734	0.0778	0.9913	0.3859	0.1047	0.9770	0.1821	0.7016	0.0630	0.3033	0.2665
MONETARY 18	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	6.81E-03	-1.03E-03	2.72E-03	-0.000789	0.002460	0.007193	-0.004547	0.001216	0.005896	1.13E-03	-0.003707
SAMPLE Std. Dev.	0.030013	0.019109	0.021614	0.019923	0.021389	0.019576	0.025921	0.018168	0.016215	0.02167	0.016148
T-VALUE	1.522861	-0.362752	0.844183	-0.265622	0.771528	2.465022	-1.176643	0.448813	2.438940	0.348771	-1.539861
PROBABILITY	0.1349	0.7185	0.4031	0.7918	0.4445	0.0177	0.2457	0.6558	0.0188	0.7289	0.1308
MONETARY 19	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-7.58E-04	-7.42E-03	3.10E-03	0.00344	0.005727	-0.002729	-0.004758	0.001224	0.005016	-5.53E-03	0.001278
SAMPLE Std. Dev.	0.016566	0.020737	0.020183	0.018818	0.01679	0.016567	0.015250	0.016337	0.020984	0.020759	0.021099
T-VALUE	-0.306853	-2.401715	1.029600	1.226297	2.287977	-1.104934	-2.092905	0.502767	1.603401	-1.788048	0.406256
PROBABILITY	0.7604	0.0206	0.3088	0.2266	0.027	0.2752	0.0422	0.6176	0.1160	0.0807	0.6865
MONETARY 20	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-1.66E-03	-1.45E-03	-2.05E-03	0.003231	0.006933	-0.007849	0.001600	0.000887	1.56E-05	3.33E-03	0.003116
SAMPLE Std. Dev.	0.022126	0.032123	0.0188	0.023494	0.022665	0.028005	0.016217	0.019612	0.019937	0.02033	0.017888
T-VALUE	-0.503279	-0.302573	-0.730300	0.922585	2.052042	-1.880100	0.661834	0.303287	0.005234	1.099897	1.168352
PROBABILITY	0.6173	0.7636	0.4691	0.3613	0.0461	0.0667	0.5115	0.7631	0.9958	0.2774	0.249
MONETARY 21	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	4.73E-03	7.11E-04	-2.88E-03	-0.006144	0.007087	-0.006329	0.005371	0.005807	2.05E-03	4.19E-03	-0.001687
SAMPLE Std. Dev.	0.027908	0.015102	0.016348	0.018213	0.019137	0.019032	0.021441	0.017376	0.036131	0.025743	0.01533
T-VALUE	1.136137	0.315865	-1.182666	-2.263116	2.484115	-2.230756	1.680452	2.241741	0.380820	1.092147	-0.738051
PROBABILITY	0.2620	0.7536	0.2433	0.0286	0.0169	0.0308	0.1000	0.0301	0.7052	0.2807	0.4644
MONETARY 22	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-1.03E-03	-2.02E-03	7.76E-03	-0.002267	-0.004071	-0.005607	0.002520	-0.000142	-3.12E-03	-1.27E-03	0.022573
SAMPLE Std. Dev.	0.01665	0.019222	0.032438	0.021394	0.015419	0.019127	0.018668	0.017723	0.020451	0.019923	0.022573
T-VALUE	-0.415438	-0.706492	1.605224	-0.710713	-1.771148	-1.966356	0.905545	-0.053831	-1.024846	-0.427233	0.102363
DDODADILITY	0.6708	0.4836	0.1156	0.481	0.0835	0.0556	0.3701	0.9573	0.3110	0.6713	0.0180

# **3** The effect of Fuel Price announcement toward the stock price

In the Fuel Price announcement, there are two aspects that will be elaborated, first is on the whole date of the announcement and second is on each announcement date. Event are categorized as significant if one of or both T-1, T0, and T+1 showed a number below or equal

to the error rate (0.10). On the overall Fuel Price announcement date, found not significant effect while on each date, there are 7 of 23 date of announcement showed significant effect.

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Hypothesis testing result of the overall Fuel Price announcement

ALL	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.000202	-0.00083	0.00047	0.000171	-0.00017	-0.000297	0.00034	0.001383	0.000211	-0.00159	-2.29E-05
SAMPLE Std. Dev.	0.023946	0.022103	0.02318	0.022876	0.024519	0.024525	0.0215	0.021958	0.021262	0.02212	0.021762
T-VALUE	-0.271300	-1.209143	0.645351	0.240509	-0.224517	-0.389859	0.51504	2.026317	-0.318997	-2.314116	-0.033852
PROBABILITY	0.7862	0.2269	0.5188	0.8100	0.8224	0.6967	0.6066	0.043	0.7498	0.0209	0.973

The table above is the result of hypothesis testing on the whole announcement date.

Five days before the announcement of Fuel price, there is no p-value that has significant abnormal return value, all the p-value before the event is greater than the error level of 10% (0.10). On the day of the announcement, the p-value is 0.6967. At five days after the event announcement, two days after the event showed a significant because it less than the error rate, that is T+2 and T+4. The p-value of T+2 is 0.0043, T+4 is 0.0209, and the other three days showed insignificant results because the p-values are greater than the error level. The results of the data showed that Ho is accepted and H1 is rejected, it means that there is no significant effect of the Fuel price announcement, because the data result of T-1, T0, and T+1 is not significant.

			(ruei	Price	I — ГИ	el Price	e 23)				
FUEL PRICE 1	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00528	-0.00124	0.02184	0.00808	0.002609	-0.004024	-0.0045	0.010209	-0.01044	-0.00984	0.006364
SAMPLE Std. Dev.	0.04263	0.03017	0.03371	0.033361	0.028677	0.027789	0.02366	0.031413	0.020012	0.026187	0.028117
T-VALUE	-0.83051	-0.2767	4.34696	1.624719	0.610275	-0.9715	-1.2759	2.180119	-3.49876	-2.52068	1.518446
PROBABILITY	0.4107	0.7833	0.0001	0.1114	0.5448	0.3366	0.2087	0.0346	0.0011	0.0154	0.1361
FUEL PRICE 2	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.006364	0.010362	-0.00136	7.11E-05	-0.00093	-0.00343	0.00054	0.006384	0.005393	-0.00221	0.003793
SAMPLE Std. Dev.	0.028117	0.03383	0.03218	0.029723	0.01635	0.020146	0.02194	0.021326	0.020195	0.016307	0.025537
T-VALUE	1.518446	2.054772	-0.28441	0.016049	-0.38203	-1.14326	0.1651	2.008272	1.791515	-0.90775	0.996448
PROBABILITY	0.1361	0.0459	0.7774	0.9873	0.7043	0.2591	0.8696	0.0508	0.0801	0.369	0.3245
FUEL PRICE 3	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.006227	-0.00189	0.0117	0.002596	-0.00663	0.001707	0.00072	0.004478	0.004831	0.005153	0.000109
SAMPLE Std. Dev.	0.04211	0.02226	0.02849	0.02152	0.03241	0.024299	0.03296	0.02168	0.024724	0.025382	0.02271
T-VALUE	0.991914	-0.56855	2.75408	0.809099	-1.37204	0.471163	0.14611	1.385492	1.310784	1.361973	0.032164
PROBABILITY	0.3267	0.5726	0.0085	0.4228	0.177	0.6399	0.8845	0.1729	0.1967	0.1801	0.9745
FUEL PRICE 4	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00275	0.000311	-0.00348	-0.01096	0.001918	-0.0057	0.00334	0.004736	-0.00429	-0.00541	-0.01137
SAMPLE Std. Dev.	0.025069	0.020128	0.01907	0.021994	0.023446	0.027384	0.02668	0.022725	0.018101	0.019947	0.022573
T-VALUE	-0.73556	0.103688	-1.22509	-3.34352	0.548691	-1.39575	0.84099	1.397865	-1.59029	-1.81975	-3.37989
PROBABILITY	0.4659	0.9179	0.2271	0.0017	0.586	0.1698	0.4049	0.1692	0.1189	0.0756	0.0015
FUEL PRICE 5	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.003969	-0.01172	-0.00535	0.005798	0.002144	0.011069	0.00429	-0.00554	-0.00372	-5.33E-05	0.001413
SAMPLE Std. Dev.	0.027453	0.029005	0.01864	0.023742	0.02722	0.02147	0.02507	0.022373	0.02024	0.016646	0.017669
T-VALUE	0.969813	-2.71061	-1.92577	1.638134	0.528476	3.458368	1.14821	-1.66039	-1.23218	-0.02149	0.536591
PROBABILITY	0.3374	0.0095	0.0606	0.1085	0.5998	0.0012	0.2571	0.1039	0.2244	0.9829	0.5943
FUEL PRICE 6	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00372	-5.33E-05	0.00141	-0.00581	-0.00613	0.006293	0.0043	-0.00697	-0.00285	0.004611	-0.00364
SAMPLE Std. Dev.	0.02024	0.016646	0.01767	0.017137	0.030545	0.029624	0.01971	0.015655	0.018671	0.026233	0.030302
T-VALUE	-1.23218	-0.02149	0.53659	-2.2747	-1.34601	1.425071	1.46268	-2.98617	-1.02517	1.179116	-0.80533
PROBABILITY	0.2244	0.9829	0.5943	0.0279	0.1852	0.1612	0.1507	0.0046	0.3109	0.2447	0.425
FUEL PRICE 7	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.002184	-0.00398	-0.00598	-0.00257	0.007691	-0.00743	-0.0017	0.003684	-0.00322	-0.01185	-0.00623
SAMPLE Std. Dev.	0.01836	0.019077	0.01482	0.018918	0.021127	0.020016	0.02519	0.032024	0.022526	0.021868	0.026151
T-VALUE	0.798131	-1.39794	-2.7059	-0.9117	2.442039	-2.49044	-0.4439	0.771798	-0.96023	-3.63543	-1.59896
PROBABILITY	0.4291	0.1691	0.0097	0.3669	0.0187	0.0166	0.6593	0.4444	0.3422	0.0007	0.117
FUEL PRICE 8	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00275	-0.007	-0.00204	0.001524	0.00104	-0.00669	0.00983	-9.11E-05	0.005969	-0.00157	-0.00232
SAMPLE Std. Dev.	0.021351	0.020262	0.02682	0.023028	0.022627	0.028685	0.01617	0.021988	0.027622	0.032295	0.021449
T-VALUE	-0.86367	-2.31825	-0.51019	0.444076	0.308322	-1.56375	4.07799	-0.0278	1.449612	-0.32542	-0.72421
PROBABILITY	0.3925	0.0251	0.6125	0.6592	0.7593	0.125	0.0002	0.9779	0.1543	0.7464	0.4728

Table 4.7 Hypothesis testing result of each Fuel Price announcement (Fuel Price 1 – Fuel Price 23)

FUEL PRICE 9	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.00104	-0.00669	0.00983	-9.11E-05	0.005969	-0.00157	-0.0023	0.001882	5.11E-05	0.004829	0.000311
SAMPLE Std. Dev.	0.022627	0.028685	0.01617	0.021988	0.027622	0.032295	0.02145	0.018544	0.021273	0.021448	0.017879
T-VALUE	0.308322	-1.56375	4.07799	-0.0278	1.449612	-0.32542	-0.7242	0.680876	0.016118	1.510293	0.116729
PROBABILITY	0.7593	0.125	0.0002	0.9779	0.1543	0.7464	0.4728	0.4995	0.9872	0.1381	0.9076
FUEL PRICE 10	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00626	0.004253	-0.00451	0.00158	0.001127	0.004384	-0.0015	0.0013	0.003049	0.009091	0.005447
SAMPLE Std. Dev.	0.022025	0.027396	0.0269	0.025266	0.021911	0.029207	0.02224	0.01743	0.020779	0.032504	0.014321
T-VALUE	-1.90727	1.041482	-1.12543	0.419495	0.344942	1.007017	-0.4445	0.500329	0.984285	1.876211	2.551301
PROBABILITY	0.063	0.3033	0.2665	0.6769	0.7318	0.3194	0.6589	0.6193	0.3304	0.0673	0.0143
FUEL PRICE 11	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.005896	0.001127	-0.00371	0.0021	-0.00384	0.001049	-0.0019	0.003207	0.005171	-0.00512	0.003529
SAMPLE Std. Dev.	0.016215	0.02167	0.01615	0.016194	0.018651	0.025985	0.02016	0.015938	0.024932	0.01897	0.003529
T-VALUE	2.43894	0.348771	-1.53986	0.869906	-1.38113	0.270773	-0.6449	1.349627	1.391341	-1.81059	1.424439
PROBABILITY	0.0188	0.7289	0.1308	0.3891	0.1742	0.7878	0.5223	0.184	0.1711	0.077	0.1614
FUEL PRICE 12	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00987	-0.00465	0.00401	-0.00166	-0.00145	-0.00205	0.00323	0.006933	-0.00785	0.0016	0.000887
SAMPLE Std. Dev.	0.024147	0.024113	0.02123	0.022126	0.032123	0.0188	0.02349	0.022665	0.028005	0.016217	0.019612
T-VALUE	-2.74283	-1.29331	1.26746	-0.50328	-0.30257	-0.7303	0.92259	2.052042	-1.8801	0.661834	0.303287
PROBABILITY	0.0088	0.2027	0.2117	0.6173	0.7636	0.4691	0.3613	0.0461	0.0667	0.5115	0.7631
FUEL PRICE 13	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00066	-0.00378	0.00054	0.00078	-0.00085	-0.00158	-0.0046	0.001293	0.003658	-0.00142	0.000209
SAMPLE Std. Dev.	0.018074	0.020847	0.01908	0.022662	0.027417	0.023352	0.02137	0.018089	0.023636	0.020732	0.018097
T-VALUE	-0.24579	-1.21779	0.18831	0.230889	-0.20824	-0.45388	-1.4509	0.479613	1.038108	-0.45946	0.077432
PROBABILITY	0.807	0.2298	0.8515	0.8185	0.836	0.6521	0.1539	0.6339	0.3049	0.6482	0.9386
FUEL PRICE 14	Tm5	Tm4	Tm3	Tm2	Tml	<u>T0</u>	T1	T2	T3	T4	T5
SAMPLE MEAN	0.000209	0.004104	0.00272	-0.00419	0.00076	0.002378	0.00257	0.001078	-0.00474	0.000493	-0.00298
SAMPLE Std. Dev.	0.018097	0.021882	0.02473	0.022283	0.017383	0.022561	0.01745	0.035245	0.020348	0.014554	0.019049
T-VALUE	0.077432	1.258297	0.73656	-1.26103	0.293287	0.706987	0.98829	0.205134	-1.56265	0.227388	-1.04943
PROBABILITY	0.9386	0.2149	0.4653	0.2139	0.7707	0.4833	0.3284	0.8384	0.1253	0.8212	0.2997
FUEL PRICE 15	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.002707	-0.00484	-0.0039	0.000738	-0.00218	-0.00495	0.00146	0.006262	0.003611	-0.00078	-0.00518
SAMPLE Std. Dev.	0.016042	0.013538	0.01622	0.024215	0.018899	0.019425	0.0165	0.017378	0.016603	0.014334	0.013021
T-VALUE	1.131855	-2.40049	-1.61341	0.204382	-0.77219	-1.70906	0.59277	2.417285	1.459025	-0.36607	-2.66862
PROBABILITY	0.2638	0.0207	0.1138	0.839	0.4441	0.0945	0.5564	0.0198	0.1517	0.7161	0.0106
FUEL PRICE 16	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00409	0.00226	-0.0019	-0.00078	0.002004	0.000358	0.00365	0.000213	6.89E-05	-0.00452	0.005073
SAMPLE Std. Dev.	0.012162	0.017506	0.013	0.01565	0.019351	0.018974	0.01793	0.019883	0.013742	0.025371	0.017597
T-VALUE	-2.25655	0.86603	-0.97933	-0.33243	0.694844	0.126493	1.36531	0.071975	0.033627	-1.19392	1.934041
PROBABILITY	0.0291	0.3912	0.3328	0.7411	0.4908	0.8999	0.1791	0.9429	0.9733	0.2389	0.0596
FUEL PRICE 17	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	Т2	Т3	T4	T5
SAMPLE MEAN	-0.00059	0.007936	-0.0033	-0.00736	-0.01286	0.011236	-0.0028	-0.00284	-0.00186	0.001258	0.004924
SAMPLE Std Dev	0.013787	0.024314	0.03628	0.023958	0.027537	0.031308	0.02178	0.015479	0.017042	0.027721	0.023254
T-VALUE	-0.28762	2.189405	-0.61095	-2.05951	-3.13169	2.407407	-0.8732	-1.2327	-0.73301	0.304367	1.420566
PROBABILITY	0.775	0.0339	0.5444	0.0454	0.0031	0.0203	0.3873	0.2242	0.4674	0.7623	0.1625
FUEL PRICE 18	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.0003	0.000171	-0.0013	0.00878	0.005956	-0.00151	0.0009	0.002053	0.000551	-0.00382	0.00342
SAMPLE Std Dev	0.023058	0.018297	0.02432	0.02983	0.028125	0.030191	0.0257	0.020489	0.016621	0.015684	0.03322
T-VALUE	-0.08663	0.062735	-0.35793	0.02983	1.420484	-0.33477	0.23609	0.672284	0.222431	-1.63291	0.69061
PROBABILITY	0.9314	0.9503	0.7221	0.0546	0.1625	0.7394	0.8145	0.5049	0.825	0.1096	0.4934
FUEL PRICE 19	Tm5	Tm4	Tm3	Tm2	Tml	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	0.00342	-0.00222	-0.00054	-0.00299	0.000251	-0.00307	-0.0059	-0.00729	-0.00117	-0.00548	-0.00126
SAMPLE Std. Dev	0.03322	0.011822	0.0164	0.01344	0.024308	0.017896	0.01883	0.014709	0.021217	0.019084	0.018379
T-VALUE	0.69061	-1.26091	-0.22091	-1.4929	0.069299	-1.15037	-2.1171	-3.32509	-0.37097	-1.92784	-0.46071
PROBABILITY	0.4934	0.214	0.8262	0.1426	0.9451	0.2562	0.0399	0.0018	0.7124	0.0603	0.6473
EUEL PRICE 20	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	0.005829	0.001982	-0.00513	0.003102	0.006687	0.001004	-0.0002	-0.00116	0.002658	0.001149	-0.0005
SAMPLE Std. Dev	0.01734	0.01892	0.01596	0.016704	0.028886	0.019878	0.01154	0.017021	0.018142	0.014371	0.013264
T-VALUE	2.25502	0.702801	-2.15564	1.245862	1.552873	0.338974	-0.1395	-0.45892	0.982755	0.536275	-0.25286
PROBABILITY	0.0292	0.4859	0.0366	0.2194	0.1276	0.7362	0.8897	0.6486	0.3311	0.5945	0.8016
FUEL PRICE 21	Tm5	Tm4	Tm3	Tm2	Tm1	TO	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.0009	-0.00494	-0.0013	0.006149	-0.00159	0.001878	0.00287	0.000662	-0.00466	-0.00434	0.007422
SAMPLE Std. Dev	0.016862	0.011983	0.02145	0.02762	0.016719	0.019136	0.01594	0.013723	0.017189	0.021035	0.025894
T-VALUE	-0.35716	-2.76305	-0.40726	1.493395	-0.63752	0.658272	1.20814	0.323713	-1.81771	-1.38338	1.922866
PROBABILITY	0.7227	0.0083	0.6858	0.1425	0.5271	0.5138	0.2334	0.7477	0.0759	0.1735	0.061
EUEL PRICE 22	Tm5	Tm4	Tm3	Tm?	Tm1	то	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00142	-0.0023	0.00272	-0.0067	-0.0039	0.003687	-0,0003	0.00574	-0.00175	-0.00989	-0.00399
SAMPLE Std Dev	0.017382	0.013791	0.02057	0.0163	0.021621	0.016596	0.01797	0.019142	0.013318	0.020924	0.018305
T-VALUE	-0.54973	-1.11662	0.88578	-2,75653	-1.20864	1,490135	-0.0971	2.011508	-0.87979	-3.1697	-1.46343
PROBABILITY	0.5853	0.2702	0.3805	0.0085	0.2333	0.1433	0.9231	0.0504	0.3838	0.0028	0.1505
EUEL PRICE 23	Tm5	Tm/	Tm <sup>3</sup>	Tm?	Tm1	T0	T1	T7	T3	T4	T5
SAMPLE MEAN	-0.0039	0.003687	-0.00026	0.00574	-0.00175	-0.00989	-0.004	-0.00441	0.006693	0.001513	-0.00595
SAMPLE Std Dev	0.021621	0.016596	0.01797	0.019142	0.013318	0.020924	0.01831	0.027801	0.028555	0.017924	0.016261
T-VALUE	-1.20864	1.490135	-0.09707	2.011508	-0.87979	-3.1697	-1.4634	-1.06384	1.572391	0.566366	-2.45588
PROBABILITY	0.2333	0.1433	0.9231	0.0504	0.3838	0.0028	0.1505	0.2932	0.123	0.574	0.0181

#### 4 The effect of Tax Amnesty announcement toward the stock price

In the Tax Amnesty announcement, there are four aspects that will be elaborated, first is on the whole of opening date of the announcement, second is on the whole of closing date of the announcement, third is on each of opening date, and fourth is on each of closing date of the announcement. Event are categorized as significant if one of or both T-1, T0, and T+1 showed a number below or equal to the error rate (0.10). On the overall opening date of Tax Amnesty announcement, found significant effect while on closing date of Tax Amnesty announcement, found not significant effect. There are 4 of 6 date of announcement showed significant effect.

Table 4	1.	8
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Hypothesis testing result of the three period of Tax Amnesty's opening date announcement

	OPEN	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
5	SAMPLE MEAN	-0.00324	0.002971	-8.22E-05	0.00289	-0.005307	0.00346	0.003702	0.001824	0.001902	0.000505	-0.00115
S	AMPLE Std. Dev.	0.017656	0.024319	0.023061	0.02197	0.015266	0.01773	0.023918	0.023412	0.021429	0.016666	0.016911
	T-VALUE	-2.135053	1.419490	-0.041427	1.530752	-4.038794	2.26669	1.798467	0.905422	1.031416	0.352204	-0.791885
	PROBABILITY	0.0346	0.1581	0.9670	0.1282	0.0001	0.025	0.0744	0.3669	0 3042	0.7252	0.4298

The table above is the result of hypothesis testing on the all of open period date of Tax Amnesty. Five days before the open period of the Tax Amnesty, there is two days that showed significant. In T-5 (p-value: 0.0346) and T-1 (p-value: 0.0001) it significant because it less than the error level. The other three days before the event is insignificant because have a greater p-value than the error level of 10% (0.10). On the day of the announcement, the p-value is 0.0250. At five days after the event announcement, there is one day after the event showed a significant because it less than the error rate, that is T+1. The p-value of T+1 is 0.0744, the other four days is not significant because the p-values are greater than the error level. The results of the data showed that H1 is accepted and Ho is rejected, because at T-1, T0, and T+1 showed significant effect.

Table 4.9

## Hypothesis testing result of the three period of Tax Amnesty's closing date announcement

	-			_					-		
CLOSE	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.000226	-0.0036	2.06E-03	0.00241	-0.001098	-0.0011	0.002463	0.002691	-0.00257	-0.00225	0.001667
SAMPLE Std. Dev.	0.018004	0.018602	0.025507	0.02428	0.022682	0.0185	0.025901	0.027615	0.015916	0.019644	0.016944
T-VALUE	0.145800	-2.246778	0.940380	1.155114	-0.562344	-0.6794	1.104844	1.132266	-1.876371	-1.331500	1.143369
PROBABILITY	0.8843	0.0263	0.3487	0.2501	0.5748	0.4981	0.2712	0.2595	0.0628	0.1853	0.2549

The table above is the result of data processing on the all of closing period date of Tax Amnesty. Five days before the open period of the Tax Amnesty, there is one day that showed significant. In T-4 (p-value: 0.0263) it significant because it less than the error level. The other four days before the event is insignificant because have a greater p-value than the error level of 10% (0.10). On the day of the announcement, the p-value is 0.4981. At five days after the event announcement, one day after the event showed a significant because it less than the error rate, that is T+3. The p-value of T+3 is 0.0628, the other four days showed insignificant results because the p-values are greater than the error level. The results of the data showed that Ho is accepted and H1 is rejected, it means that there is no significant effect of the announcement, because the data result of T-1, T0, and T+1 is not significant

Table 4.10

Hypothesis testing result of each opening date of Tax Amnesty announcement

 $(1^{st} \text{ Opening} - 3^{rd} \text{ Opening})$ 

				1	$\mathcal{C}$	1	$\mathcal{O}$				
OPEN 1st PERIOD	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00118	0.003056	-0.00391	0.00099	-0.0017	0.00052	0.004587	0.005787	0.00588	-0.00103	-0.00202
SAMPLE Std. Dev.	0.014043	0.017004	0.023342	0.01891	0.011877	0.01448	0.023139	0.029307	0.026832	0.01665	0.019222
T-VALUE	-0.56473	1.205467	-1.12401	0.35231	-0.96019	0.24083	1.329727	1.324545	1.470034	-0.41544	-0.70649
PROBABILITY	0.5751	0.2345	0.2671	0.7263	0.3422	0.8108	0.1905	0.1922	0.1487	0.6798	0.4836

OPEN 2nd PERIOD	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00729	0.004702	-0.00216	0.00571	-0.00909	0.00675	-0.000167	-0.00132	6.67E-05	0.003711	-0.00409
SAMPLE Std. Dev.	0.019731	0.034276	0.026812	0.02723	0.016911	0.02117	0.018634	0.01971	0.022826	0.016222	0.012162
T-VALUE	-2.47807	0.92029	-0.54153	1.40607	-3.60614	2.13966	-0.06000	-0.4485	0.019593	1.534645	-2.25655
PROBABILITY	0.0171	0.3624	0.5909	0.1667	0.0008	0.038	0.9524	0.656	0.9845	0.132	0.0291
OPEN 3rd PERIOD	Tm5	Tm4	Tm3	Tm2	Tml	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00126	0.001156	0.005829	0.00198	-0.005129	0.0031	0.006687	0.001004	-2.40E-04	-0.00116	0.002658
SAMPLE Std. Dev.	0.018379	0.018188	0.01734	0.01892	0.015961	0.0167	0.028886	0.019878	0.011538	0.017021	0.018142
T-VALUE	-0.46071	0.426196	2.25502	0.7028	-2.15564	1.24586	1.55287	0.338974	-0.139534	-0.45892	0.982755
PROBABILITY	0.6473	0.672	0.0292	0.4859	0.0366	0.2194	0.1276	0.7362	0.8897	0.6486	0.3311

#### Table 4.11

Hypothesis testing result of each closing date of Tax Amnesty announcement  $(1^{st} \text{ Opening} - 3^{rd} \text{ Opening})$ 

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CLOSE 1st PERIOD	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.001278	-0.00729	0.004702	-0.00216	0.005707	-0.0091	0.006753	-0.00017	-0.001318	6.67E-05	0.003711
SAMPLE Std. Dev.	0.021389	0.019731	0.034276	0.02681	0.027226	0.01691	0.021173	0.018634	0.01971	0.022826	0.016222
T-VALUE	0.400739	-2.47807	0.92029	-0.54153	1.406072	-3.6061	2.139661	-0.06	-0.448495	0.019593	1.534645
PROBABILITY	0.6906	0.0171	0.3624	0.5909	0.1667	0.0008	0.038	0.9524	0.656	0.9845	0.132
CLOSE 2nd PERIOD	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	-0.00126	0.001156	0.005829	0.00198	-0.005129	0.0031	0.006687	0.001004	-2.40E-04	-0.00116	0.002658
SAMPLE Std. Dev.	0.018379	0.018188	0.01734	0.01892	0.015961	0.0167	0.028886	0.019878	0.011538	0.017021	0.018142
T-VALUE	-0.46071	0.426196	2.25502	0.7028	-2.15564	1.24586	1.55287	0.338974	-0.139534	-0.45892	0.982755
PROBABILITY	0.6473	0.672	0.0292	0.4859	0.0366	0.2194	0.1276	0.7362	0.8897	0.6486	0.3311
CLOSE 3rd PERIOD	Tm5	Tm4	Tm3	Tm2	Tm1	T0	T1	T2	T3	T4	T5
SAMPLE MEAN	0.000662	-0.00466	-0.004338	0.00742	-0.003871	0.00274	-0.006051	0.007236	-6.15E-03	-0.00566	-0.00137
SAMPLE Std. Dev.	0.013723	0.017189	0.021035	0.02589	0.022337	0.01945	0.025481	0.039341	0.015152	0.018598	0.016353
T-VALUE	0.323713	-1.81771	-1.38338	1.92287	-1.16254	0.94639	-1.59304	1.233755	-2.724163	-2.03997	-0.56064
PROBABILITY	0.7477	0.0759	0.1735	0.061	0.2513	0.3491	0.1183	0.2238	0.0092	0.0474	0.5779

## **Discussions of Research Results**

This section is the explanation of data analysis result as described in previous chapter. Discussion of research results in this chapter is arranged sequentially based on the problem formulation and research hypotheses.

## 1 The effect of Economic Policy Packages announcement toward the stock price

In the Economic Policy Packages announcement, when viewed one by one in each date of event, there are 7 of 15 events that showed significant on the day of the announcement, which are Package 1, Package 5, Package 6, Package 9, Package 10, Package 12, and Package 14.

Based on the results of the hypothesis testing in the previous chapter, if it viewed as a whole, it can be stated that the Economic Policy Packages announcement has no information content which is attractive to investors, because less than 50% of announcements that have an effect on stock prices. With the more than 50% result that not significant, it can be said investors do not consider the Economic Policy Packages as a policy that will affect the stock price.

According to the researcher, the difference between Economic Policy Package announcement that have significant effects and which have no significant effects is due to the information content that spread over each Economic Policy Package announcement. In the Economic Policy Package that showed significant effect, it can be said that investors are optimistic with the policy, and while the event is not significant, it could be because of investor's doubt about the policy or lack of dispersed news and lack of information received by investors that lead to instability response by investors. Because, all of every policy made by the government aims to be the same, that is to stimulate economic growth.

#### 2 The effect of Monetary Policy announcement toward the stock price

Based on the result in previous chapter, there are 13 of 22 events that have a significant effect on the monetary policy announcement. But, if the data is processed as a whole, the event is not significant. The significant effects that found are fluctuated. Investors have a random response to BI rate announcements. Investors are not always respond to certain condition of the announcement. For example on 17 February 2015 (Monetary 5) and 17 March 2015 (Monetary 6) Bank Indonesia announced the same BI rate of 7.50%. In Monetary 5, Bank Indonesia announced a BI rate of 7.50%. But, investors did not respond to anything about the announcement. Meanwhile, based on the data results, there is a significant effect in Monetary 6 with the same BI rate.

From the result, also found a response from the investors that refers to the change rate announcement. On March 17, 2016 (Monetary 18) with BI rate 6.75% and on June 16, 2016 (Monetary 21) with BI rate 6.50%. In this case, investors consider this a good news because the rate which announced by Bank Indonesia fell by 0.25%.

This study has found different results with studies that have been done by Ricci (2015) and Vithessonthi & Techarongrojwongb (2012) that have negative relatioship between monetary policy and stock price. Even it viewed in a whole, the monetary policy announcement is not significant, but inevitable, and it have 13 of 22 events that significant. It can be said the announcement have an information content that could affect investors' decision in the capital market, because more than 50% of announcements showed significant effect.

In researcher opinion, the difference effect that occurs in every Monetary Policy announcement is due to the different economic conditions occurring on each date and other external factors. Significant effect can also occur as because the presence of other events that are happening around the Monetary Policy announcement and then support it.

## 3 The effect of Fuel Price announcement toward the stock price

Viewed in general, the result of hypothesis testing stated that the price of fuel is not affects the stock price. In other words, a significant effect on the market on the day of the announcement of the fuel oil price announcement did not occur. Even so, there are two times that indicate a significant number that is on T+2 and T+4. Can be interpreted that investors late response to the fuel price increase.

This result is the same as the study done by Parmadi, Adiputra, & Dharmawan (2014). The study also showed no significant difference in before and after event. This study has found different result with study conducted by Herisiswanto & Fitria (2014) found different abnormal return before and after the fuel oil price announcement.

Because of very few announcements of fuel prices that have significant effects, the researcher think that the significant effect is influenced by other factors that occur in the capital market. In previous studies, such as; Parmadi, Adiputra, & Dharmawan (2014), Fithriyana, Nur DP, & Ratnawati (2014) also did not found significant effect of fuel price announcement. This study, with 23 samples was also not able to prove the existence of many significant effects on Fuel oil price announcement. Fuel price announcement can be said do not have information content that can influence investor decision in capital market (Parmadi, Adiputra, & Dharmawan, 2014). Fuel prices could have a direct effect on small business, but not directly affect the company companies that are in the capital market. The absence of significant effect in announcement date of fuel price showed that the change of fuel price has not become the main factor causing stock price change.

#### 4 The effect of Tax Amnesty announcement toward the stock price

On the announcement of the opening date period of the Tax Amnesty as a whole, it has significant effect. This represent how the enthusiast the investors with the tax amnesty. At the T-5 and T-1 opening of the amnesty tax there are a significant effect. It means, tax amnesty has brought important information that necessary for investors in buying or selling stocks in the capital market. This result is consistent with the study by Wulandari, Wahyuni, & Sujana (2017) also found significant value in their study.

On the other hand, not significant effect is found when viewed in full on the closing date of the tax amnesty period. It is different with the opening of the tax amnesty, in closing, investors didn't get the information content from this event. But, there is a significant value that occurred on T+3 and T-4. In T+3 the abnormal occurs because of the late response of tax amnesty or it is inserted with the opening date of the Tax Amnesty, so it influenced by the opening date also. In T-4, this abnormal occurs due to the preparation of investors ahead of the closing Tax Amnesty and welcomed the opening of the next period.

The differences effect of opening and closing occurred due to the optimistic market enthusiasm at the opening date of Tax Amnesty. Investors consider this a good news and they immediately react in the stock market. This is fair because at the closing date, investors do not find the essential information content to determine which investors will buy or sell the stocks. According to Wulandari, Wahyuni, & Sujana (2017) the flow of funds that go back to Indonesia mainly through the stock market due to the enactment of the Tax Amnesty, causing the businessman to invest in Indonesian companies. This is causing a positive impact on the rise of Composite Stock Price Index (IHSG).

## CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to find out whether independent variables such as Economic Policy Package, Monetary Policy, Fuel Price, and Amnesty Tax have an effect on stock price. The sample was collected by purposive sampling method and the analysis technique used in this study was T-test. Based on the analysis and discussion from the previous chapter, this result can be concluded as follows:

- 1. Economic Policy Package announcement in general has no significant effect toward the stock price, because only 7 of 15 announcement (less than 50%) that have significant effects which are; Package 1, Package 5, Package 6, Package 9, Package 10, Package 12, and Package 14. Even though all of this policy announcement is related to the macroeconomic, but in cumulative, the event announcement showed that it has no significant effect. It means, the Economic Policy Package do not have an information content that needed by investors to make investment decisions.
- 2. Monetary Policy announcement in general has significant effect toward the stock price, because 13 of 22 announcement (more than 50%) that have significant effects. 13 events that have significant effects has their own condition. There are effects that occur when the rate drops, and also there are effects that occur when the rate is the same. Those event announcement has a fluctuate effects toward the stock price. Even it announce same rate in several date, it have different reaction in each announcement date and also same when the rate is drop. It may happened because different economic conditions occurring on each date and the presence of other events that are happening around the Monetary Policy announcement.
- 3. Fuel Price announcement in general has no significant effect toward the stock price, because only 7 of 23 announcement (less than 50%) that have significant effects. From 23

date of fuel price, the significant effect that found is still few. So, it can be conclude that the Fuel Price announcement has no information content that needed by the investors to make e investment decisions and showed that the change of fuel price has not become the main factor causing stock price change.

4. Tax Amnesty announcement in general has significant effect toward the stock price, because 4 of 6 announcement (more than 50%) that have significant effects. If it seen as a whole, in this study found that the opening of Tax Amnesty has a significant effect to the stock price, meanwhile the closing date is have no significant effect. It means, the investors have an enthusiasm and an optimism when Tax Amnesty is starting.

This study has the following limitations, such as:

- 1. The sample is only LQ45.
- 2. This study only considers information about the confounding effect of news available on the internet that has been issued by the company and has not considered macro conditions.
- 3. The effect on the abnormal return that occurred in the study period can be caused by other aspects outside the study or announcement of other information from the company, such as the economic condition and the business environment, changes in corporate strategy and so on.
- 4. The method of calculating the abnormal return only using the Market Adjusted Model method.

After looking at the conclusions and limitations of this study, the researcher proposed some suggestions for investors and further research as follows:

- 1. Investors should always be careful in making investment decisions by continuing to monitor the information that may affect stock prices. Investors should filter information relevant to the capital market, so as to determine a good investment decision.
- 2. Based on the limitations of this study, the next research can conduct a study with different samples, so the results can be compared with each sector samples. Other factors that may affect the research result also need to be considered, such as macro conditions, political stability, and others. In addition, the method of calculating abnormal return that can be done by using another model. Research with different models will likely showed different results.

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