IMPACT OF THAMRIN TERRORIST ATTACKS JANUARY 14, 2016 ON INDONESIA CAPITAL MARKET SENTIMENTS

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ABSTRACT

This study aims to determine whether there are symptoms of abnormal returns, differences in investor sentiment and overreaction on terrorism attacks, namely the Thamrin bomb attack in 2016 based on the company's financial fundamentals, types of industries and types of foreign ownership. The population used refers to the historical data of all companies listed in the LQ45 Index for the period August 2015 to January 2016 and are large companies that have high levels of liquidity and stocks of the highest quality so that their movements will affect the stability of the Indonesian capital market. The event study is one of the research methodologies that uses financial market data to measure the impact of an event on company value specifically and is reflected in the form of stock prices and volume. The purpose of the event study is to test the market reaction in the period of observation at the security price at the time of the event. This study aims to determine the presence or absence of symptoms abnormal return, differences in investor sentiment and overreaction on terrorism attacks, namely the bomb attack in Thamrin 2016 based on the company's financial fundamentals, types of industries and types of foreign ownership. The reason for using LQ45 shares as a population in this study is because the company is a large company that has a high level of liquidity and is the best quality stock so that its movement will affect the stability of the Indonesian capital market. The riots that occurred in Indonesia in 2010 and the terrorist events in 2016 tarnished the security of investors which might have resulted in unwillingness to invest. Sampling is based on saturated sampling, which is the entire observation data. The results show that there are differences in conditions between abnormal returns before the bombing and abnormal returns after the bombing. This riot had a major impact on changes in the country's economic stability and tarnished the security of investors.

Keywords: terrorist attack, abnormal return, event study

Introduction

During the last three years the Indonesian capital market experienced growth marked by the movement of the JCI. Based on analyst data through RTI Business, the JCI growth for three years reached 17.02% as of October 18, 2017. This domestic stock index has touched record highs throughout the period. Total market capitalization JCI also experienced growth over the last three years with a record increase of 25.35% yield to date. The latest data shows that the number market cap of the Indonesian capital market has reached IDR 6,533 trillion. (https://inharga.kontan.co.id). Information relevant to the conditions of the capital market as intended in the framework of the decision-making process for investing. This information can be in the form of micro and macro environmental conditions. The condition of the micro environment includes the company's performance, dividend distribution while the macro environment conditions include economic conditions, inflation, monetary policy, politics, and so on. The market will react to information indicated by

changes in stock prices if they exceed normal conditions so that it will cause symptoms of abnormal returns on market reactions **(Zaqi in Lia Nur Islami Endi Sarwoko, 2012)**. The influence of the non-economic environment cannot be separated from the activities of the stock exchange such as: concern for the environment, human rights and political events are often the main factors triggering fluctuations in stock prices on every stock exchange. The increasing importance of the role of the stock exchange in economic activities makes the market increasingly sensitive to various events around it. One of the events that is a concern for the loss of investors who invest is the event of terrorism. Based on the 2017 Global Terorism Index, the scale of the impact of terrorism in Indonesia is at the middle level with a score of 4.55 from the highest score 10. Of the 130 countries monitored, Indonesia is ranked 42. If this is not seriously anticipated, it does not rule out economic stretch will be disturbed. Momentary investor responses in the stock market must be addressed as an alarm of a greater potential threat. The market response to bomb terrorism can be seen in the JCI which tends to be negative.

Table 1 Performance Current JCI Terrorism Events

Date	Event	JCI performance
26 September 2011	GBIS Kepunton Bom Solo (25 September 2011)	-3.22%
January 14, 2016	Bom Sarinah (January 14th 2016)	-0.53%
May 14, 2018	bombings Three Church Surabaya (May 13, 2018)	-0.16%

The standard approach is based on the estimation of the market model for each company by calculating abnormal returns **(McWilliams and Siegel in Anis Fitriani, 2013)**. Event study conducted by **Indarti in Putri Cahyaningtyas and Yanuar Rachmansyah (2015)** found a abnormal return negative that was significant at the event date and the difference in the average abnormal return and trading volume activity between before and after the Bali bombing on October 12, 2002. Often there was a condition of instability caused by political and security conditions in Indonesia. The events of the terrorist attacks have an impact on economic activities in Indonesia. This is because capital market activities in Indonesia are mostly caused by social, economic, political and security conditions. Seeing the economic impact caused, the government needs to conduct comprehensive mitigation to prevent acts of terrorism. Here is the chart data the abnormal return of H-3, event day, and H + 3 after the bombings Thamrin January 14, 2016:

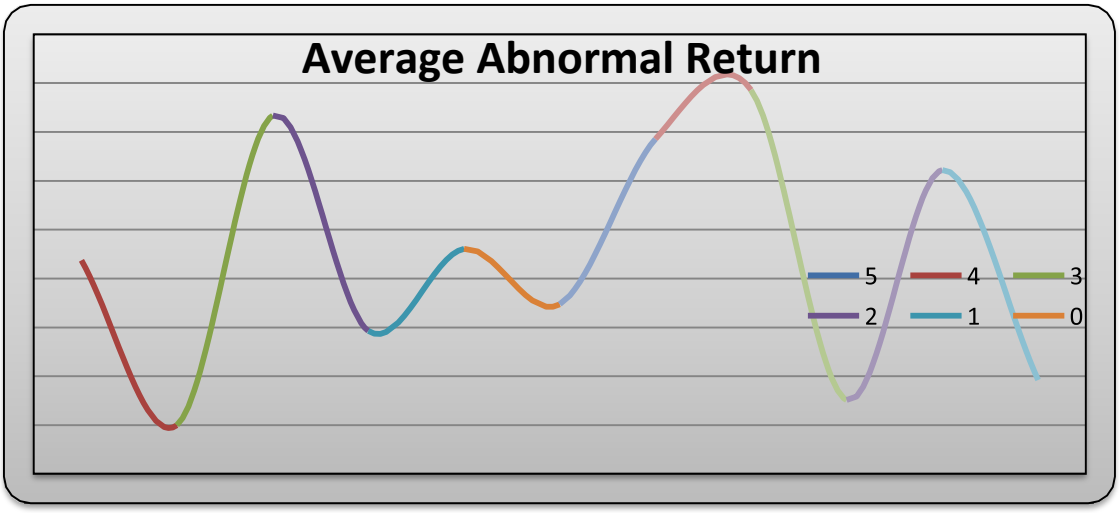

Figure 1 The abnormal return of H-3, event day, and H + 3 after the bombings Thamrin

Average abnormal return on H- 5, H-3, H0, H + 1, H +2, H + 4 and H + 5 are negative, while at H-4, H-2, H-1, and H + 3 are positive. Average abnormal return is obtained by summing the abnormal return for each day during the event period then the amount is divided by the number of shares studied. Research conducted by **Mine Aksoy (2014)** to look for abnormal returns regarding the reaction of the Turkish stock market to 13 terror attacks that occurred between 1996-2007, the results showed that of the 13 terrorist attack lists known to be 9 events there were abnormal returns negative. However, there is also research that does not produce significant influence on the negative effects of terrorist attacks on the capital market. **Melitina & Rianni (2010)** examined the reaction of the Indonesian capital market to the 2009 Brass bomb event, the results of his research showed that there symptoms of abnormal returns were no negative due to terrorist attacks.

Terrorism events occurred again on January 14, 2016 which resulted in the death toll as many as 7 people including members of terrorism. The attack was aimed at visitors to Starbucks cafes and police stations on the MH Thamrin street in Jakarta. (megapolitan.kompas.com). This event was enough to take the attention of the people because it happened in the Indonesian capital, which is a business center in Indonesia. With the occurrence of the incident which was enough to grab the attention of the public, it was necessary to examine whether the abnormal return that occurred due to the terrorist attack.

Using the event study method, the researcher intends to compare abnormal returns before the incident and after the Bom Thamrin incident on January 14, 2016.

LITERATURE REVIEW

1. Stock return

Stock return according to Gitman is all profits or losses generated when making an investment in a certain period (Gitman, 2012: 311). Abnormal return is the difference between the desired profit and the actual profit before official information is issued or information has leaked after official information has been published. Abnormal return is obtained by comparing the return expected (expected return) to actual return (Reilly & Brown, 2005). The actual level of profit is the difference between the current share price and the previous period. Abnormal returns occur because of information leakage (Pratama & Sudhiarta, 2014).

2. Abnormal return

Abnormal return (RTN_i) is the difference (positive or negative) from the actual return around the announcement (R_i) with the expected return E (R_i):

$$RTN_i = R_i - E(R_i) \quad \text{.....(1)}$$

3. Size of company

Company size is measured by market capitalization. Large companies are considered to have a smaller risk compared to small scale companies. Based on the relationship between company size and beta (β), it can be assumed that company size has a negative correlation with abnormal return (Ida Bagus in Chendrawan, 2012). In conducting research on company size, it can lead to bias, because the small size of the company shows a tendency towards abnormal returns using CAPM measurements (Handoko & Supramono, 2017).

a. Type of industry

The results of a preliminary study conducted by Utama and Hapsari (2012) regarding the type of industry and terrorist events through average difference tests showed that the reaction of the capital market within one day after a terrorist attack was lower for the type of tourism industry compared to other industries. This is reinforced by the results of multiple regression analysis which shows that the type of tourism industry has a lower market reaction compared to other industries, while the proportion of foreign ownership tends to be negative but statistically not significant (Utama & Hapsari, 2012).

b. Shareholding

Share ownership of a company can come from foreign investors and domestic investors. In the research conducted by Utama and Hapsari, it was found that there was no effect of share ownership on the incidence of terrorism, this is because the proportion of foreign share ownership is not the majority while terrorism attacks are considered not events that disrupt long-term company performance. The data used comes from the estimation of the number of shareholdings every year

(Utama & Hapsari, 2012).

c. Liquidity

Securities liquidity risk occurs when the faster a security is traded, the more liquid the security is, and vice versa. The more illiquid a security is, the greater the liquidity risk faced by the company. Company liquidity is if the company has fast funds to pay for operational costs or short-term debt. LQ45 is a large company that has high liquidity and abnormal returns with symptoms of negative sentiment over a bombing event (Handoko & Supramono, 2017). Liquidity variable is a tool to measure a company's ability to fulfill short-term obligations through measurement current ratio. Companies that have high liquidity will show the level of security of short-term creditors, so that it will give the bank confidence in providing debt loans. For management and investors, the liquidity ratio shows the level of efficiency of working capital that can be large or small in estimation. Through liquidity ratios, the shareholders can find out the prospects for the company's development in the short term (Ida Bagus in Chendrawan, 2012).

d. Leverage

Leverage leads to the effects of fixed costs that can generate profits for shareholders, the greater the, the greater the leverage shareholders' returns, but the benefits change. Operating leverage that gives an idea of how much a fixed cost for a company operates compared to company income and financial leverage that gives an idea of how much assets can cover debts (Gitman & Zutter, 2012). The higher the debt, the value of the company's debt assets ratio is also high, this is due to an increase in the company's stock price which results in high profits to be gained by investors (Ida Bagus in Chendrawan, 2012).

e. Trading volume

Abnormal return and trading volume activity (volume of stock trading) has increased and decreased the number of transactions every day continuously before and after the stock split event (Sadikin, 2011). The results of research conducted by Yudharnagara regarding the impact of terrorism on companies registered in LQ45 state that the trading volume of each company varies from the incidence of terrorism; some react positively and some react negatively (Yudhanagara, 2010).

4. Signaling theory

Management actions that are believed to reflect his views on the value of company shares; generally, debt financing is seen as a positive signal that management believes the stock is "undervalued," and stock issues are seen as a negative signal that management believes the stock is "overvalued."

5. Event study methods

- Market responses in cluster event studies tend to be more unpredictable.
- This type of study besides being suitable for testing information efficiency (speed of response to information) is also relevant for testing the efficiency of decisions (the accuracy of responses to information).
- To test the efficiency of a decision, researchers can divide the sample into two parts, namely the main company cluster (the group of companies suspected of being affected by the event) and the control company cluster (the group of companies suspected of not being affected by the event).

6. Acts of terror and their consequences

The National Disaster Management Agency states that disasters are events or events that can threaten and disrupt people's lives both from the moment of life or to fulfill their daily needs. The causes of disaster can come from nature and / or non-natural factors or human factors resulting in human casualties, environmental damage, property losses, and psychological impacts. (BNPB, 2016). The Law of the Republic of Indonesia number 24 of 2007 states that:

Social disasters are disasters caused by events or a series of events that are caused by humans which include social conflicts between groups or between communities, and terror.

Terror Action is an action carried out by anyone who intentionally uses violence or threats of violence so as to create an atmosphere of terror or fear of people in a widespread manner or cause mass casualties, by seizing independence resulting in loss of life and property, resulting in damage or destruction of strategic vital objects, the environment or international public facilities. One of the consequences of terrorism is the move of investors from areas that experience terror to countries with

better security and it is hoped that the safe situation will continue in the future. Another result of acts of terror is the existence of abnormal returns on the capital market where acts of terror occur. Depending on the location of the occurrence of acts of terrorism and the stock exchange office. As well as the magnitude of the impact of losses classified asimpacts catastrophic , abnormal returns are increasingly occurring (Liargovas & Repousis, 2010). Megawati Chen and Yulius Jogi Christiawan examined abnormally return with ROE control variable has a negative effect and PBV has no effect (Megawati Cheng & Yulius Jogi Christiawan, 2011). Terrorism actions have a positive and negative effect on the movement of returns on commodity markets and capital markets (Chesney, Reshetar & Karaman, 2011). Factors that cause investors to be unable to obtain abnormal returns through bombings are if the bombings are known to be fast by the general public, if people in the area often get terrorist attacks and public trust in the government is very large (Tecualu & Megge, 2010)

RESEARCH METHODS

This research method uses a quantitative approach with a descriptive comparative form to see whether there is a market reaction during the attack in the Thamrin region and has an impact on the reaction of the Indonesian capital market to all companies listed on the LQ45 Index for the period August 2015 to January 2016. This study uses quantitative data types namely data in the form of numbers or ratios using historically secondary data sources.

Operationalization of Variables used in this study are described through a checklist tables in the form of "concepts, indicators, the size and scale" as follows:

Table 2 Operationalization Variable

Variable	Concept Variable	Indicator	Size	Scale
Return	The difference between the stock price daily closing minus the cost of separation the previous day and then divided with the stock price of the previous day (Jogiyanto, 2013: 236)	R_i	percentag e	Ratio
Expected return	Expectation of average	$E(R_i)$	Percentag	Ratio
	return expected by investor		e	
Abnormal return	Is the excess of actual return actual return on expectations	$RTN_i = R_i - E(R_i)$	Percentag e of	Ratios

Type and Data Source

Data used is quantitative expressed in numbers, shows the value of the quantity or variable represented. Sources of data in this study use secondary data obtained from documents, publications or official research reports, institutions and other supporting sources (Darmawan, 2014).

Data in the form of the company's daily stock price and daily IHSG data (3 days before the event, the day of the event, and 3 days after the event).

Sampling Method The

Population of this study was taken from all companies listed on the LQ45 Index for the period of August 2015 to January 2016. Sampling was saturated by sampling for the entire population. The reason for using

LQ45 shares as a population is because the company has a large capitalization value with high liquidity and is the highest quality stock so that its movement will affect the stability of the Indonesian capital market.

Technical Data Analysis

Research design in event studies. Terrorism attack events are one of the events that affect the company's stock price by using one of the market effectiveness test tools, namely the extent to which the market responds to the event. The event period is from H-3 to H + 3 from the day of the terrorism attack. The hypothesis that will be used relates to the presence or absence of differences between the variables studied. The null hypothesis (Ho) that is determined shows that there is no difference between the variables studied, while the alternative hypothesis (Ha) that is determined shows the difference between the variables studied, then the difference analysis is used using the SPSS program through the analysis Paired Sample t-Test Testing for abnormal returns is needed based on the theory mean adjusted model with the steps that have been set. While the data analysis technique uses the estimation period and the event period as follows:

Estimated Period a Calculates the actual return b. Calculate the expected return based on the average return during the estimation period with mean adjusted model Event Period.

a. Calculate returns individual daily stock

b. Calculate the expected return based on the average return during the estimated period

c. Calculate abnormal returns (individual RTNit),

d. Calculating the average abnormal return daily

RESULTS AND DISCUSSION

Descriptive statistics

Data from all companies listed on the LQ45 Index for the period August 2015 to January 2016, from which data obtained variables used in this study are Abnormal Return. Descriptive statistical data serves to describe the characteristics of the sample used.

Table 3
Descriptive Statistics of Variables Abnormal Return

			Statistic	Std. Error
sebelum	Mean		-.005595158	.0022625377
	95% Confidence Interval for Mean	Lower Bound	-.010155003	
		Upper Bound	-.001035313	
	5% Trimmed Mean		-.004305216	
	Median		-.001745301	
	Variance		.000	
	Std. Deviation		.0151775642	
	Minimum		-.0598529	
	Maximum		.0196105	
	Range		.0794634	
	Interquartile Range		.0085566	
	Skewness		-1.774	.354
	Kurtosis		3.518	.695
sesudah	Mean		.002079012	.0018807776
	95% Confidence Interval for Mean	Lower Bound	-.001711446	
		Upper Bound	.005869470	
	5% Trimmed Mean		.002906793	
	Median		.000178639	
	Variance		.000	
	Std. Deviation		.0126166400	
	Minimum		-.0593033	
	Maximum		.0268414	
	Range		.0861447	
	Interquartile Range		.0094280	
	Skewness		-2.388	.354
	Kurtosis		12.399	.695

Source: data processed SPSS. 2019

Based on table 3 the descriptive results of the Abnormal Return research variable can be explained as

follows:

a. Abnormal Return before the bomb incident in Thamrin Jakarta has a minimum value of - 0,0598529 and a maximum value of 0,0196105. The average value of abnormal returns before the bomb incident in Thamrin Jakarta was -0.005595158 and the standard deviation was 0.0151775642. Because the value of the standard deviation is higher than the average, it shows a high variation between maximum and minimum values.

b. Abnormal Return after the bomb incident in Thamrin Jakarta has a minimum value of - 0,0593033 and a maximum value of 0,0268414. The average value of abnormal returns after the bomb incident in Thamrin Jakarta was 0.002029012 and the standard deviation was 0.0126166400. Because the value of the standard deviation is higher than the average, it shows a high variation between maximum and minimum values.

Data Analysis Abnormal Return

Normality

Test uses the Kolmogorov-Smirnov test method, with the aim of knowing the data used is normally distributed. or not. Samples are declared to be normally distributed if the probability value is greater than the specified significance level or □ = 0.05. If the sample normality test results are normally distributed then the different test used in this study is a parametric test, and vice versa if the sample is not normally distributed, the different test used in this study is a non- parametric test.

The results of the normality test with the *Kolmogrov-Smirnov test* can be seen from Table 4.3 below:

Table 4
Test for Normality Abnormal Return

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of sebelum is normal with mean -0.01 and standard deviation 0.02.	One-Sample Kolmogorov-Smirnov Test	.006	Reject the null hypothesis.
2	The distribution of sesudah is normal with mean 0.00 and standard deviation 0.01.	One-Sample Kolmogorov-Smirnov Test	.010	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Source: data processed by SPSS. 2019

Table 4 shows that samples from before and after events are normally distributed.

Differential Test Results

Hypotheses were tested to determine whether before Thamrin events and after Thamrin events there were differences in abnormal returns. Analysis of differences with abnormal returns is measured using the Paired Sample Test as follows:

Table 5
Test of Different Abnormal Return

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1 sebelum - sesudah	-.0076741695	.0193582108	.0028857517	-.0134900198	-.0018583191	-2.659	44	.011

Source: data processed by SPSS. 2019

Table 5 shows the results of different tests abnormal returns from 3 days before and 3 days after the Thamrin bombing in Jakarta. It can be seen that the value of t count on the abnormal return for the Thamrin bombing in Jakarta is 2.659 with a P-Value value of 0,011 (because p value is <0.05, there is a difference between before the event and after the incident of terrorism). From the results above, it can be concluded that there is a difference between the abnormal return before the Thamrin Jakarta bombing and the abnormal return after the Thamrin bombing in Jakarta.

Average abnormal return

Table 6 Average abnormal return

Date	Windows Event	Abnormal return
BEFOR E		
11-Jan-16	t-3	-0.0056
12-Jan-16	t-2	0.002215
13-Jan-16	t-1	-0.00169
AFTER		
15-Jan-16	t+1	-0.0024
18-Jan-16	t+2	-0.00372
19-Jan-16	t+3	0.002079

Source: processed data

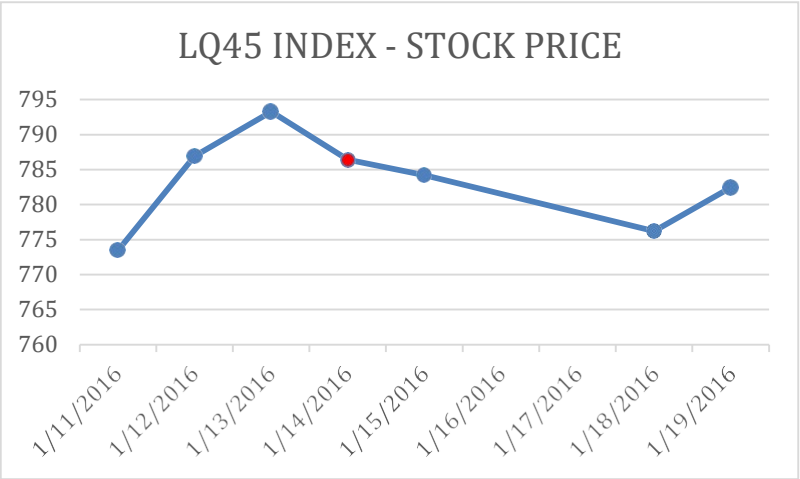

Figure 2 Fluctuation of LQ45 index

The LQ45 stock index decline after bombing attack, there become negative sentiment from investor because

LQ 45 is the liquid stock in Jakarta stock exchange. Fluctuation of LQ45 index indicated, that LQ45 consists of 45 companies that are not in one sector there are sectors of manufacturing, telecommunications, construction etc. so that the abnormal return from each company is different. Then LQ 45 index has decreased

CONCLUSION

This event caused a difference between abnormal returns before the Jakarta Thamrin bombing and abnormal returns after the Thamrin bombing in Jakarta.
Events of terrorism in the form of bombings in Jakarta Menara Thamrin in the shooting at the police station and then a shootout with police who initially would secure the demonstration at Monas.

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