

CHAPTER I

INTRODUCTION

1.1. Background

Jakarta which has five-year cycle of big floods was come to early 2013 that made Jakarta being under water again (www.antaranews.com). According to the history of major flooding in Jakarta that was happened in 1621, 1654, 1918, 1976, 1996, 2002, 2007 and last of big flood is in 2013 (www.gfdr.org). Jakarta is a place defined by its relationship to water, which is has 13 rivers flow through the city, and 40 percent of the current settlement lies below sea level (www.theatlanticcities.com).

According to final report which is made by *Badan Meteorologi, Klimatologi, dan Geofisika* (BMKG) after that event happened, Jakarta and Bogor were experienced heavy rain leading to several high river waves entering and flowing through Jakarta on January 15-18, 2013 (BMKG, 2013). On January 17, one of the river banks of Western Flood Channel (Banjir Kanal Barat, BKB) could not withstand the permanent high water level and collapsed over a length of 76 meters (BMKG, 2013). Floods were reported in more than 30 sub districts in Jakarta which is spread in all of area in Jakarta, including Daan Mogot and Grogol, in West Jakarta; Gunung Sahari and Kare Tengsin, in Central Jakarta; Jatinegara and Kampung Melayu, in East Jakarta; and Cawang, Kalibata, and Tebet, in South Jakarta, according to the Jakarta Police traffic corps. The worst floods were reported in North Jakarta neighborhoods, with Kelapa Gading, Pluit and Penjaringan under water,

because of its location near sea (www.thejakartaglobe.com). West Jakarta has been the most affected area, with 19 sub districts got heavy rain which led to flooding, some to a depth of 1.5 meters, followed by 15 sub districts in South Jakarta, 11 in North Jakarta, four in East Jakarta and three in Central Jakarta (www.thejakartapost.com).

Caused of flood in Jakarta, in generally could be from two factors, which are natural factors and human factors. Caused from nature factors is more than 40% area in Jakarta located in below the surface of high tides. So, it will be very vulnerable with the occurrence of flood. Besides that, in generally, topography area of Jakarta relatively flat and 40% area of Jakarta is located in flood plains of river such as Kali Angke, Pessangrahan, Ciliwung, Sunter, etc. (www.acehtraffic.com).

Heavy monsoon rain triggered severe flooding in large swathes of the Indonesian capital, Jakarta, on Thursday, bringing the city to a stop with many government offices and businesses, most of them was forced to close because their staffs could not get to work (www.reuters.com). At least 20,000 people were forced at their homes in the capital and weather officials warned to society of Jakarta that the rain could get worse over the next few days after most heavy rain already happened (www.reuters.com).

Vice President of Indonesian Chamber of Commerce and Industry (*Kamar Dagang dan Industri*) expected losses caused by flood in Jakarta can reach until Rp 1 trillion (www.lampost.co). The Jakarta Industrial Estate Pulogadung, one of the capital's manufacturing centers in East Jakarta, reported that most assembly and

logistics companies in that area were forced to halt operations on Thursday when big flood started to come, because that area was flooded by waters up to one meter (www.thejakartaglobe.com).

As capital city of a country which has 240 million populations, Jakarta is not only the place for the national government and the provincial government, this city is also become Indonesia's political center and economic center. Moreover, Jakarta is also the center and hub of Indonesia's national finance and trade as part of economic activity (www.indonesia.travel).

Jakarta is home to the Indonesia Stock Exchange (IDX), which has given significant role and influence on global markets. In general, Jakarta's industrial sector includes the electronics, automotives, chemicals, mechanicals engineering, and biomedical industries. Natural resource mining, such as oil, gas, coal and gold, is also of great importance of Indonesian economic sector which has its office in Jakarta (www.internations.org). Because of good movement of Indonesia Stock Market, and good development of economic growth of Indonesia, it can attract investors to take a role in investment activity in Indonesia Stock Exchange (www.thejakartaglobe.com).

The sheer magnitude of the super-typhoon that ripped through the middle of the archipelago on November 8, 2013 was unprecedented, with sustained winds of 250 kilometers per hour or 160mph (www.economist.com). The storm tracked across the Visayas region, bringing high winds, torrential rain and storm surge, ultimately impacting up to 16 million people (www.disasterphilanthropy.org). Nearly five weeks after Haiyan Typhoon tore through the Philippines, the government now says more

than 6,000 people have been reported dead. Nearly 1,800 more are still missing. More than 27,000 people have been reported injured, the county's National Disaster Risk Reduction and Management Council reported Friday (www.cnn.com). Philippines Finance Minister Cesar Purisma told CNBC that the typhoon would shave between 8 to 10 percent off the region's gross domestic product next year, and roughly 1 percent of the Philippines's overall growth (www.nbcnews.com).

Philippine Stock Exchange Index (PSEi) is the main stock market index of the Philippines. This index is home of major public companies in Philippines (www.level2001.hubpages.com). The Philippine Stock Exchange has integral role in Philippines economy. This stock exchange consolidates and updates all of companies which have role to raise capitals by bringing in this security. It lists all enterprises and respective shares. It also records each of their finances, growth of funds, expansion, and development of new companies' activities (www.en.wikipilipinas.org).

Stock market is the market in which shares of publicly held companies are issued and traded either through exchanges or over-the-counter markets (www.investopedia.com). According to Gul et al. (2013) Stock market has a strong link with several condition of a country, globally and also its uncertainty. Almost all of sectors in stock market will damages due to natural disasters, calamities and political uncertainties adversely affect the stock market stability and integrity.

As cited on Kim's research (2004), the expected return on an investment, either by an individual investor or a company, is determined by the future possible returns that could occur from making investment (Keown et al., 2001). Because of

lifestyle of people who lived in the world of uncertainty, risk must be considered in the process of making decision for some investment activity (Kim and Gu, 2004). Those events that already happen will give affect especially for country that got those kinds of several events. According to Aktas and Oncu (2006), in finance, Efficient Market Hypothesis (EMH) is widely tested proposition by researchers. An implication of EMH is that market prices reflect all available information and expectations, and that any new information is properly incorporated into prices without any delay.

Event study is an empirical study performed on a security that has experienced a significant catalyst occurrence, and has subsequently changed dramatically in value as a result of that catalyst (www.investopedia.com). That information will give negative or positive impact to the value of its stock price. This research will be conducted by using event study analysis in order to know about the application of Efficient Market Hypothesis (EMH) in certain stock market.

In this research, author would like to analyze impact of natural disaster to stock price in its countries, both of Philippines and Indonesia. Two events of natural disaster in two countries will be compared in order to see its impacts to each Stock Exchange based on its abnormal return. So, based on this research background, researcher made the title of this research is Impact of Jakarta Flood towards Indonesia Stock Exchange and Impact of Haiyan Typhoon in Philippines towards the Philippine Stock Exchange.

1.2. Problem Statements

This research will try to analyze the impact of natural disaster on certain country to its Stock Exchange. In several researches, stock price will behave differently if there is new information that has possibilities to affect investor's thought. Based on the research background above, problem statements will be conducted as follow:

1. Is there any difference in Average Abnormal Return between before event day and after event day of Jakarta Flood 2013 toward Indonesia Stock Exchange?
2. Is there any difference in Average Abnormal Return between before event day and after event day of Haiyan Typhoon 2013 toward the Philippine Stock Exchange?

1.3. Research Scope

The scopes of research are follows:

1. This research replicated previous study which is conducted by Chih-Jen Huang, Shu-Hsun Ho, and Chieh-Yuan Wu (2007) who investigated a paper with title "The Impact of the Asian Tsunami Attacks on Tourism-Related Industry Stock Returns" in several industries in Thailand and several countries beside Thailand.

2. The sample of this research is stock return of LQ45 of Indonesia Stock Exchange and Philippines Stock Exchange. Sample data that will be taken will come from prior to event; examine days of event; and days after the events.
3. Event study will be conducted for two kinds of natural disaster event in 2013 which is happen in two development countries who have its own different emerging stock market. Two natural disasters that will be used is Flood in Jakarta on 2013 and Haiyan Typhoon in Philippine on 2013.

1.4. Research Objectives

- a. To examine whether before event day and after event day of Flood in Jakarta in 2013 have different average abnormal return in Indonesia Stock Exchange or not.
- b. To examine whether before event day and after event day of Haiyan Typhoon in Philippine which was happen in 2013 have different average abnormal return in The Philippine Stock Exchange or not.

1.5. Research Benefit

Benefits of this research are:

- a. For Readers

Readers can know about the information related to the investment activity when several events happen, especially for natural disaster. Based on this

research, the readers can know about the true behavior of stock exchange when several events happen.

b. For Investors

This research is expected to help inventors in order to making decision when they will involve in stock market activity. Several events must be considered by investors to wisely choose the right stock.

c. For Academic

This research is expected to give more deeply understanding in order to analyze several events and its impact to stock price return. For further, researcher hopes future research will be conducted give more benefits to academic activity.

1.6. Research Report Outline

The writing of this thesis is divided into five chapters, such as:

a. Chapter I Introduction

In this chapter, the introduction of research will be explained. It consists of research background, problem statement, scope of the research, benefits of the research, and research report outline.

b. Chapter II Theoretical Background and Previous Research

This chapter contains will consist of theoretical background, related previous research, and hypotheses development.

c. Chapter III Research Methodology

This chapter will consist as population, sample, and sampling method; research method; data collection method; and analysis method.

d. Chapter IV Data Analysis

This chapter will examine about data analysis and explanation of research which is already conduct before.

e. Chapter V Conclusion and Recommendation

This chapter consists of the conclusion of this research and also recommendation for further and deeper research.

