CHAPTER I
INTRODUCTION

A. Research Background

Developed by Fama (1970) by assuming "Fair game", where the price of stock move randomly, so the investor couldn't earn abnormal return or return exceed the annual return because the future price couldn't be predicted using the previous price or fundamental analysis . He also stated that market is fully reflected the information. If the market quickly reacts to an event or information, it could be assumed that market is efficient, but when its need much times to be adjusted, the market could be identify as inefficient market.

This hypothesis being questionable wherefore some evidence uncover the market invariably efficient. The theories of market anomalies appear as market hypothesis deviation, and the long debate between these theories is still happen.

Literary the meaning of an anomaly is a strange or unusual occurrence. The word anomaly refers to scientific and technological matters (Latif et al., 2011). According to Merriam Webster, anomaly could define as something different, abnormal, peculiar, or not easily classified. Thus, market anomalies can be defines as untypical situation which deviant with the market efficiency concept.

Calendar anomaly is time and event based anomalies. Several events have been studied as calendar anomalies are January effect (Thaler, 1987), Sell in May and go away (Bouman and Jacobsen, 2002), Week-end effect (Jaffe and

Westerfield, 1985), Monday effect (Mehdian and Perry, 2002). Besides that, the holiday effect also become researcher interest. The holiday effect research was popularized by Ariel (1990). He documents that before holiday, the returns could reach nine times and fourteen times higher on value weighted index.

Holiday Effect might not always appear but it could be found. Shan (2014) Assume that religious holiday does not exist in Malaysian Stock Market. Rowjee (2014) not found any existence pre-holiday effect on nine economic sector of Johannesburg Stock Exchange. Despite that, several studies has documented the effect. Some of researcher ((Chia, 2019), (Ziemba, 1990), (Dodd and Gakhovinch ,2011), (Marret and Worthington, 2007) had found significant holiday effect. Chia (2019) focusing her research on tourism sector, listed restaurant firm on United States market during of 14 holidays from 2011-2016. She report that, the abnormal return are significantly greater on post-holiday than before thus holiday comes up and it shows negative abnormal volatility. Similarly, Dodd and Gakhovinch (2011) investigates how CEE (central and eastern Europe) countries, which consist of 14 market react to the holiday effect. Followed Cao et. al (2009), by using the OLS regression, it found that significant abnormal return around Christmas, New year and Easter holiday, but the pre-holiday effect begins to blur of the most market by the time. Besides that, the evidence also show low turnover market before the holiday. Where Ziemba (1990) and Marret and Worthington (2007) report that pre-holiday could generates five times returns than usual day. Ziemba (1990) report that five times return on NSA from 1949-1988 does appear on pre-holiday, where it's greater than the daily stock return with overall 0,246%. Marret and Worthington (2007) documents a significant holiday effect, especially on pre-holiday, on Australia Market. From their result, the daily returns are five times greater than other days.

Some of the holidays are specifically related with religious festival. Each religion festivals have their own calendar, like Islam has Eid al-Fitr after Ramadan, Jewish has Rosh Hashanah and Yom Kippur, while Chinese has Lunar New Year. It's persuade of several research where they believed religion will affect people behavior and sentiment in decision making ((Kumar et al., 2011), (Mansour and Jlassi, 2014), (Albaity and Rahman, 2012)).

Yuan and Gupta (2014) has examine the effect of Chinese Lunar New year on major Asian stock market from 1999-2012. Significant pre effect found on return changes, pre and post of CLNW found in Malaysia, moreover pre CLNW on South Korea appear as most pervasive among other country. They assume that China's CLNW effect is slightly different, where the high return correlate with high market risk. Besides that, because it's widely celebrated by offering about nine days holiday, which makes China's traders tend to trade earlier.

McGowan and Jakob (2010) investigate Eid al-Fitr effect in Malaysia Syariah Index and assume that this effect is not significant. But on the other hand, Satt (2019) believes that the benefit could be gain by issuing pessimistic recommendation on pre- holiday and issuing optimistic recommendation for post-holiday. Besides that, Tan and Ozlem (2018) and Al-Ississ (2010) states that 10 days before Eid Fitr is where the market experience greatest performance. Ali et al., (2017) investigates Muslim Holy day in Asia stock market, where it includes Pakistan, Bahrain, Saudi Arabia and Turkey as research sample. They found that retun on Eid-ul-Fitr higher than common days daily return and it's become the highest average among Muslim holy day. Despite that, The Eid-ul-Fitr become the only effect were found on Asia market after controlling Gregorian calendar effect (i.e Monday, Friday and January Effect). Atala (2015) investigate Muslim holiday on Nairobi Securities Exchange. Eid Al-Fitr, and found that high changes of positive cumulative abnormal return on 2013. Meanwhile, on 2014 the cumulative returns are decreasing on the pre-holiday window period but turns to be positive on post-window period. This effect is believe related with the investor behavior and sentiment.

Talking about behavior, clinical research find that low levels of anxiety and increased level of euphoria and social interactions are experienced during Ramadan (Daradkeh, 1992; Knerr and Pearl, 2008 on Bialkowski et al., (2012)). Bialkowski et al., (2012) also assume that the Ramadan effect is part of pyscho-religious factor. Where writer believe this also could affected the investor around Eid Al-Fitr festives.

Besides the abnormal return, the changes of volume trading pattern often used for interpret market reaction or behavior through some event. Al-Ississ (2010) identify significant downturn of volume traded related with Ashoura negative sentiment. Wasiuzzaman (2017) states that lower volume traded during Al-Hajj and higher volatility caused by investor perception about gambling in Islam.

After being observed, Muslims calendar effect are properly investigated on Islamic country based. According to Worldatlas.com (www.Worldatlas.com) Indonesia was on the first rank of the most populated Muslims at the word with total 227.226.404 followers on 2019. So, it might be a proper object to evaluate the Muslim calendar anomaly, especially Eid Al-Fitr Effect. After observed, Indonesian welcoming Eid Al-Fitr with great enthusiasm. Eid Al-Fitr indeed known as a celebration for muslims. Social caring and consumption, even internet users rose up on Ramadan also before Eid Al-Fitr. *Mudik*, Homeward tradition, is one of Eid Al- Fitr characteristic. Total travellers rose each year. Eid Al-Fitr also become profitable occasion for the company to boost their profit and for investor to earn abnormal return.

Based on all statement above, writer aims arranging the research paper in titled "Exploring Indonesia Stock Exchange Market: Eid Al-Fitr Holiday Anomalies, Case Study of Infrastructure, Utilities and Transportation Sector on 2017-2019". Infrastructure, Utilities and Transportation Sector was chosen caused the phenomenon of *mudik*, infrastructure development, and heavy internet used around Eid al-Fitr holiday.

B. Research Problem

Based on the background, the authors establish the research problem as follows:

1. Does the Eid Fitri Holiday present a significant differences of average abnormal return before and after Eid Fitri Holiday on Infrastructure, Utilities and Telecommunication sector in Indonesian Stock Exchange in 2017-2019?
2. Does the Eid Fitri Holiday present a significant differences of average trading volume activity before and after Eid Fitri Holiday on Infrastructure, Utilities and Telecommunication sector in Indonesian Stock Exchange in 2017-2019?

C. Research Objective

Based on the background and research problem, the objectives to be achieved on this study are:

1. To find out whether there is a significant differences of average abnormal return before and after Eid Fitri Holiday on Infrastructure, Utilities and Telecommunication sector in Indonesian Stock Exchange in 2017-2019.
2. To find out whether there is a significant differences of average trading volume activity before and after Eid Fitri Holiday on Infrastructure, Utilities and Telecommunication sector in Indonesian Stock Exchange during 2017-2019.

D. Research Benefit

Despite just achieving the research goals, the author also hopes this research will contribute more benefit to many parties. The benefits that can be taken from this study are as follows:

1. Theoretically

This paper expected could be a reference and empirical data for further researcher. Besides that, this paper might broaden the researcher insight about market efficiency hypothesis and market anomalies, especially related with religious anomaly, Eid al-Fitr holiday effect. Whether it impact the abnormal return and volume of stock on sector studied exist or not, it's could be academician consideration for continuous studies.

2. Practically

   a. For the writers, its expected could enhance writer insight about the Eid al-Fitr anomaly existence in Indonesia.
   b. For the company, its expected as source of information about the investor reaction to the Eid al-Fitr holiday and comparison of their performance during Eid al-Fitr holiday within years or other company.
   c. For the Investor, its expected become information source, which maintains clear information of Indonesia capital market condition. Moreover it will ease and assist them in formulating investment strategy for beat the market, so they could maximize their wealth or gain higher return.