CHAPTER I

INTRODUCTION

Background

Investors will invest their resource for some purposes. Some of them invest their money as savings in bank or deposit, some invest to property, gold, or foreign exchange, some invest to avoid inflation of the country, some invest their money for its prospect in the future, and many others. In Indonesia, the understanding about investing has its own interest. As informed by tempo.co (2016), one of the top universities in Indonesia, Bandung Institute of Technology had partnership with Indonesia Stock Exchange to expert its students about capital market. The Dean of Business Management School, Sudarso Kaderi Wiryono stated that the students will do investment as their study for a semester, facilitated by own laboratory of capital market and included peer to some securities. Then, the students are expected to have well and clearer understanding about investment. The initiation can result huge amount of trading that done not only by students but also lecturers and external people which earns 70 until 80 billion rupiahs.

Investment in company’s stock become the usual trend as well. Invest in stock means to own part of company. The investors’ behavior will come after final information announced whether the company got profit, zero profit, or loss. Generally, the investors will receive dividend if it is profitable, then they sell stock on market with higher price or lower; the higher price results capital gain and the
total returns will be formed. In another side, not all of investors will do the same steps in case of zero profit or loss. There are some factors that will influence investors’ decision. As stated by Bagus (2009), the factors are return, risk, and the time factor.

Return is a reward for investors after invest their money in specified period. The return can be formed by profit through trading or in the form of dividends given by the company to its shareholders from time to time (Economywatch, 2010). There are two types of return; expected return that is expected by investors for future period, and realized return that is already received by investors based on historical date. The returns that are received can be based on daily, weekly, monthly, or yearly interval. Then, investors can determine the appropriate return interval for appropriate target period.

The risk in investing decision is correlate with return; the more return that investors get, the more risk that investors must concern. The risk is a gap between return that is expected and return that is received. The investors’ behavior about risk will come after invested their resource in which they accepted the risk (aggressive investors), rejected it (defensive investors), or by none accepted and rejected (balanced investors). The risk can be unsystematic or systematic; the unsystematic risk that comes from and only affects the company, and the systematic risk that can affects many industries, stocks, assets, overall market, and it is difficult to predict (Investopedia, 2015). In systematic risk, it is a must for investors to not only diversify the stocks, but also able to estimate the risk too.
The measure of an asset’s risk in relation to the market, or to an alternative benchmark or factors is Beta (Financial Glossary, 2011). The investors will interpret beta as comparison of return between company and its market. As suggested by Investopedia.com, the beta estimation is useful to measure the volatility and in investing decision. Investors can choose securities that meet the criteria based on the risk that they want to face. It is added that many analysts, brokers, and planners have used beta for many years to determine the risk level of an investment. Some investors may estimate beta with concerning its market index as reference. In Indonesia, there is LQ45 index that commonly present as one of market indexes. This market index ranks top 45 companies based on their liquidity, trading value, and it always updates per semester. The investors that invest their resource in the listed companies do not need to face its unsystematic risk, especially liquidity risk because those companies are assumed to have better liquidity. So, the investors that want to focus on beta estimation are better to choose this market index with the assumption that the constitute companies are recognized to have less unsystematic risk than others.

The time factor in investing decision is the time of when the investors will invest their resource and for how long the investment be taken. The target period can be short or long term, depend on their preferable. After the investors evaluate the return based on the period, they can decide whether to keep invest for the same length in the future, or change the period to be shorter or longer, just in between. If the investors want to invest their money on stocks, there are available price of each stock with different time interval; the daily, weekly, monthly, or yearly price. The
investors may look the market price too before deciding what suitable time interval used for investing.

It is important for investors to have well understanding about their investment. The decision always has its consequences and influences which are concerned by the factors; return, risk, and the time factor. Many researchers had study about risk and return, but not all of them had concerned the time factor. All the factors have their own issue in which one of them is an intervaling effect that commonly present as some of researchers’ case study.

The intervaling effect is the different result in beta estimation, because of different time interval used for the same period of time. This effect previously studied by Corhay (1992) that show beta estimation dependency on different time interval used. Since beta estimation is useful for investing decision, the investors should aware about this effect, especially for investors that invest their resource for specified period, need higher return with eagerness to take higher risks. Some researchers had found this effect on their study, but some are not.

It is well known that a variety of beta estimates can result for one stock depending on various factors such as the calculation of returns, choice of market index, sample period and length of the estimation period (Retnowati & Endah, 2008). Betas determined on the basis of daily, weekly or yearly rates of return differ even when they are calculated for the same period of time. This phenomenon is known as intervalling effect in the literature (Momcilovic, Begovic, & Tomasevic, 2014). Retnowati & Endah, were support the idea with empirical results at the Jakarta Stock Exchange that show the existent of intervalling effect; change in the
beta estimate as a result of changes in the return interval (2008). The same finding reveal the existence of a significant intervalling effect on ETFs' beta obtained by the ordinary least squares method (OLS) (Milonas & Rompotis, 2013). But, the other study from Momcilovic, Begovic, & Tomasevic (2014) shows contra result when 12 stocks listed on BSE that constitute index BELEX 15 were examined and resulted no statistically significant difference between the betas based on daily, weekly and monthly return intervals. Another study also mentioned that when using the Dimson’s model, the difference between the estimated betas is not statistically significant (Fotis, Pekka-Oikonomou, & Polemis, 2015). So, the writer eager to know more about the impact of return interval differences on beta estimation with empirical study on companies listed in Jakarta Stock Exchange that constitute LQ45 index from March 2013 until February 2016 to extent the studies about intervaling effect.

**Research Question**

The problem that will discuss in this study is:

Does daily, weekly, and monthly rate of returns result different beta estimation of companies listed in Jakarta Stock Exchange that constitute LQ45 index from March 2013 until February 2016 significantly?
Research Purpose

The aim of this study is:

To examine the impact of daily, weekly, and monthly rate of returns to the beta estimation of companies listed in Jakarta Stock Exchange that constitute LQ45 index from March 2013 until February 2016.

Research Benefit

The benefit that is expected for this study are:

- Theoretical Benefit
  To gain knowledge about intervaling effect, beta estimation and its interpretation

- Methodology
  To give contribution in improving the methodology

- Practical Benefit
  To share information that can be used as suggestion for some type of investors with long term purpose of investing and seek for beta estimation.

Writing Systematics

The content of this thesis consist of:

Chapter I  Introduction

This chapter will be divided into research background, research question, research purpose, and research benefit
Chapter II  Literature Review

This chapter will be divided into the explanation of basic concepts, theories related to this research, include theoretical framework, and hypothesis development

Chapter III  Methodology

This chapter will be divided into research design, research data, research sampling, types of data, also data sources, collection, technique, and its analysis method

Chapter IV  Discussion and Analysis

This chapter will be divided into the result of data analysis and methodology, include interpretation of the analysis, and related explanations

Chapter V  Conclusion

This chapter will be divided into conclusion, suggestion, implication, and limitation of the study.