CHAPTER I

INTRODUCTION

1. Background of the study

There are various associations to everything. When asked who is the writer's favorite character is, the first thing that comes floating into mind would be a fictional character by the name of Andrew Dufresne from the seven nominated academy awards film The Shawshank Redemption; the same metaphor could be said about liquidity. When it comes to this particular subject, the writer noticed that in almost every literature about liquidity, the name Yakov Amihud and Haim Mendelson shows up in the bibliography or in citation. In year 2000 journal of applied finance about the liquidity route to a lower cost of capital by Yakov Amihud and Haim Mendelson was the journal that piqued the interest of the writer to look for this subject. The elaboration on the connectivity between stock price and its level of liquidity was very interesting, which made the writer curious about the workings of liquidity, about its calculations and in the end decide to look into the journal by MdHamid about liquidity and its relative measure.

Liquidity research findings and statements varies with various people across the globe. Pastorand Stambaugh (2003) measure U.S. stock market liquidityby following theimpact of volume traded and price change. In one of their earlierstudies, Amihud and Mendelson (1986) measured the link between market liquidity andstockmarket returns. Chordia, Sarbar and Subrahmanyam (2002) find that volatility ofaggregate liquidity in the U.S. affects bonds and stocks and that it is correlatedwith monetarypolicy. Bortolotti et al. (2004) argue that liquidity is thefundamental aspect ofstock market development.

It has been widely known that liquidity is one of the factors of determining the decision of investment. Of course this also includes stocks and bonds. But, Investors usually seem to pay little attention to illiquidity cost or risk when investing in the equity market, probably because ‘liquidity’, which is invisible, intangible and hard to measure, does not pose a big problem in active markets. Liquidity is important for both individuals and companies in a sense that a person may be rich in terms of total value of assets owned although that particular person may also end up in trouble if he or she is unable to convert those assets into cash. The same can also be said for companies. Without cash coming in the door, they can quickly get into trouble with their creditors. Banks are important for both groups, providing financial intermediation between those who need cash and those who can offer it, thus keeping the cash flowing. An understanding of the liquidity of a company's stock within the market helps investors judge when to buy or sell shares.

However, there have been a number of research papers and journals which report that liquidity has been taken into account by investors in stock markets and there are significantly positive premiums on illiquidity in stock returns.Due to its multi-dimensional characteristics there is no singlemeasure that can capture all aspects of liquidity. Price volatility together with low levels of turnover on stockmarketsindicates illiquidity,and is a problem that we can perceive merely on the basis of the statistics of stockmarket trading.

The more liquidthe stock, the lower the company's cost of capitaland, for any given level of expected cash flowsgenerated by the company, the higher the stockprice. In other words, increasing the liquidity of thestock will increases its price without changinganythingin the company's fundamentals, such as thelevel and risk of future earnings.As an example, Zhiwu Chen, Roger Ibbotson and Wendy Hu (2012), studied the effect of liquidity risk on stock prices. Their measure of liquidity is annual turnover, defined simply as the number of shares traded divided by the stock's outstanding shares. High-turnover stocks tend to have low bid-ask spreads, high trading volume relative to the size of the company, and low price impact per dollar traded. The study covered the top 3,500 U.S. stocks by capitalization and the period 1972 through 2010. They sorted stocks into liquidity quartiles and contrasted them with size or capitalization quartiles.

It was found that liquidity has a substantial impact on the valuation and returns of all types of securities, having a positive long-run impact on returns.And that as measured by stock turnover or trading volume, is an economically significant investment style that is just as strong, but distinct from the other four factors known to explain investment returns (beta, size, value and momentum).When converted into a "less liquid against more liquid" liquidity factor, liquidity is negatively correlated with the market and size factors, but positively associated with value and momentum factors.After adjusting for the other four factors, there's still a positive and statistically significant alpha (or additional returns above a benchmark) remaining in almost every case.A portfolio investing in less-liquid stocks should be relatively stable over time, so that it can be readily implemented without frequent trading. Furthermore, liquidity premium holds regardless of market capitalization (size). However, the liquidity effect is the strongest among micro-cap stocks and declines from micro- to small- to mid- to large-cap stocks.Across the micro-cap quartile, the low-liquidity group earned a geometric average return of 18.2 percent a year in contrast to the high-liquidity group returning 6.2 percent a year. While across the large-cap quartile, the low- and high-liquidity groups returned 12.5 percent and 9.9 percent respectively, producing a liquidity effect of 2.6 percent.Within the two midsize groups, the liquidity return spread was also significant.

The liquidity premium also holds across growth and value stocks. For high-growth stocks, the low-liquidity stock portfolio has a compounded annual return of 11.9 percent, while the high-liquidity stock portfolio returned just 3.9 percent.For high-value stocks, low-liquidity stocks returned 20.8 percent return, while high-liquidity stocks returned 12.5 percent.The highest return comes from combining high-value with low-liquidity stocks, while the worst return comes from high-growth stocks with high-turnover stocks.

There is problem in that a stock's co-movement with the market or market beta was seen as the onlyform of systematic risk. But, market beta fails to explain the cross-sectional expected returns makes people wonder if market beta is the only determinant of stock return (Fama and French, 1992, 1993). In response to this, other determinants such as firm size and book to market ratio are now confirmed to be contributing to generated stock return. And liquidity is also investigated for that purpose. Chordia et al. (2000) and Fiori (2000) have established a negative relationshipbetween stock's return and the level of its liquidity. This is often interpreted asreflection of liquidity risk premium which is a segment of a three-part theory that works to explain the behavior of yield curves for interest rates. The upwards-curving component of the interest yield can be explained by the liquidity premium. The reason behind this is that short term securities are less risky compared to long term rates due to the difference in maturity dates. Therefore investors expect a premium, or risk premium for investing in the risky security. Liquidity risk premiums are recommended to be used with longer term investments, where those particular investments are illiquid or assets that are traded on an organized market are more liquid. Financial disclosure requirements are more stringent for quoted companies. For a given economic result, organized liquidity and transparency make the value of quoted share higher than the market value of an unquoted share.

It is also noted in papers that encompass liquidity that liquidityrepresents thepossibility of any form of asset to be transformed into an other form ofasset in ashort period without losing its value, i.e. change in price. Schmukler, Yeyati andVan Horen (2007) define a liquid market "as one where market participants canpromptlyexecute large volume transaction without significant price impact".Liquidity is a very significant issue for market participants when deciding whichinvestmentsto take. Liquidity provides them with safety and diminishes the riskof lossesif they want to execute large volume transactions as Schmukler et al.(2007) argue.

Stahel(2004) argues that due to stock market integration, investorswould tend to move theircapital where they expect higher returns on theirinvestments. The presence of stock marketliberalisation and integration can beseen through the large increase in capital movementsin the last 30 years. From aliquidity perspective, a less liquid market enables higherreturns due to high pricevolatility, which also implies higher risk.Market liquidity significantly varies over time, so unpredictability of liquidity is alsoimportant source of risk.

2. Scope of The Study

So that the research can remain focused on the primary problem, therefore we limit this research to be conducted by using the data from Indonesian Capital Market Directory (ICMD) and daily price data of the companies that are always listed in the LQ45 stock index for 10 years period of 2002-2012. Because of that the research does not cover the results that would result from calculating weekly and monthly historical price.

3. Research Motivation

The writer has always been interested in the workings of stock capital market. There are of course many factors that will decide whether you will win big or lose big in trading stocks such as: economic condition whether its domestic or international, exchange rate, current trend in society, some even say human psychology. But the thing is, the writer never considers liquidity to be part of it. In result, the writer aims to achieve a better understanding of liquidity risk and its method of measurement because undoubtedly liquidity risk plays a part in investment decision.

4. Objective of the Research

The objective of this research is to help us examine and to analyze the variables of the stock market gathered from their historical data with its relationship to liquidity, its comparative form or relative measure of liquidity, and the level of the excess stock return.

5. Benefits of the Research

This section hereby presents the benefits that can be achieved by doing this research for various parties involved.

1) Investor

   This research could become an additional information for investors and become a factor of guidelines to consider when they are making an investment in stocks which, of course ultimately will help them in their investment decision.

2) Atmajaya Yogyakarta University

   This study can pool the inteligence which are information and references for the study of the same topic.

3) The Readers

It is hoped that through this research, the readers could also be insipired to contribute and broaden the knowledge and deepen the concept regarding the topic. Furthermore, it is hoped that this study could become a refference to a study of the same topic in the future.

4) The Author

To apply the theories that has been learned through lectures mostly reffering to the financial management and to add insight and knowledge of liquidity risk measurement analysis method.

6. Originality of the Writing

This research is done based on some previous researches that had been done in the past. This research is an replication of the journal with the same title only with the study on Indonesian capital market which is *analysis ofliquidityfactors that influence excess stock returnwithrelative measure of liquidity included; within companies always listed in LQ452002-2012.*

The writer made and compiled this research study by himself. For the data sources there are some that are obtained from the internet (will be recognized as is) and financial journals that were used as supporting references in this research study.

This research is based on the previous research formed by Hamid, Md. 2009.*Reexamination of Stock Liquidity Risk with a Relative Measure*.College of Business Admiration, University of Sharjah.

7. Writing Structure

This section will discuss the layout of the paper tha will be presented in such order as depicted below.

Chapter I : Introduction

This chapter provides the background of the study, the problem formulation of the study, the problem limitation, research motivation, objective of the research, benefits of the study, and writing structures.

Chapter II : Theoritical Background

This chapter wil be divided into three parts, the first one would be the literature review and the previous researches, the third one is the hypothesis. The literature review discusses the theories used in the research study to analyze and to elaborate the problems. The review of previous researches provide some results from similar research studies pooled by other researches. The final part is the hypothesis which present the findings of the research study in detail.

Chapter III: Methodology

Chapter III will be divided into scope of the research, observation period, research data, data gathering, data sources, assumptions, the method and the steps of analysis including the tests.

Chapter IV: Data Analysis

Chapter IV provides the discussion of the results and explanation on each of them. It will present the analysis of the findings, the analysis of hypothesis testing, and the summary of analysis result.

Chapter V : Conclusions and Recommendations

The fifth chapter will conclude the research study, the implication of the study, the limitation, and further research, which provides some points that can be made to improve research with similar topics.