INITIAL PUBLIC OFFERING (IPO) RETURNS AND POST-LISTING LIQUIDITY: EFFECT OF OWNERSHIP STRUCTURE AND DIVERGENCE OF INVESTORS' OPINION IN THE MALAYSIAN MARKET

By

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Thesis submitted in fulfilment of the Requirements
for the degree of
Doctor of Philosophy

MARCH 2013

ACKNOWLEDGEMENT

I would like to express my sincere gratitude to all those who have supported and rendered their assistance to me in my endeavour to complete this dissertation. First and foremost, I would like to offer my unreserved thanks to my supervisor, Professor Datin Ruhani Ali for her invaluable support and patience throughout my PhD journey. My appreciation also goes to my internal examiners, Dr. Zamri and Dr. Abdul Hadi for the constructive comments which have enriched my thesis in many ways. This dissertation would not have been possible without the assistance of many dedicated people. I particularly thank Associate Professor Dr. Jarita Duasa, Dr. Sharifah Raihan of IIUM and Alicia Lim of Thompson Reuters for helping me with the data and statistical analysis.

A special thanks to the participants and discussants at the 9th Asian Academy of Management and the 2012 Asian Finance Association (AsianFA) International Conference for their invaluable comments and suggestions offered. Thanks are also due to International Islamic University and Ministry of Higher Education for granting me study leave and scholarship to embark on this challenging assignment. Last but not least, my heartfelt gratitude to my family and friends for the support and inspiration. I could not have completed this dissertation without them. My parents, my parent in-laws, my husband Syed Alwi Mohamed Sultan and our children Iman, Syefa, Imran and Sofea are my sources of joy and adventure, thank you for your love.

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ABSTRAK

Kajian awal tentang perkaitan antara pulangan saham terbitan dan kecairan kebanyakannya berkisar kepada pasaran membangun. Struktur milik yang berserakan dan pelabur yang lebih berpengetahuan menyokong penemuan mereka. Sebaliknya, ciri semulajadi dan tingkahlaku pasaran sedang membangun seperti Malaysia berbeza dari pasaran membangun. Pemusatan pemilikan yang sebahagiannya disebabkan oleh pemilikan besar oleh kerajaan, tingkahlaku peserta pasaran dan juga polisi pasaran berkemungkinan memberi perspektif berbeza tentang perhubungan antara kecairan dan pulangan. Oleh itu, berpandukan perbezaan persekitaran ini, maka objektif kajian ini adalah untuk mengurangkan jurang yang ada dengan mengkaji perkaitan ini dari perspektif pasaran sedang membangun. Dengan menggunakan 299 sampel saham terbitan yang disenaraikan di Bursa Malaysia dari 1998 hingga 2008, ciri semulajadi perkaitan antara pulangan saham terbitan dan kecairan telah dikaji. Di samping itu, kesan struktur pemilikan, pemilikan kerajaan dan perbezaan pendapat pelabur terhadap perkaitan ini juga dikaji. Keputusan ujian empirik mendapati pulangan permulaan mempunyai kesan positif yang terus ke atas kecairan yang disukat dengan lima ukuran kecairan iaitu 1) sebutan spread 2) sebutan spread berkadar 3) nisbah pusing ganti 4) nisbah ketidakcairan amihud dan 5) nisbah kecairan amivest. Lagi, pulangan permulaan didapati mempunyai pengaruh yang positif keatas keluasan pemegang saham awal yang dibuktikan melalui jumlah pemegang saham dan lima pemegang saham terbesar. Kedua-dua proksi ini menjadi sebahagian pengantara kepada perhubungan antara pulangan permulaan dan kecairan. Pemilikan berpusat yang terdapat di dalam syarikat yang mempunyai pemilikan besar oleh kerajaan pula memberi kesan yang negatif ke atas nisbah pusing ganti dagangan tetapi mencapai lebih kecairan melalui kos transaksi yang rendah. Bagaimanapun, pemilikan besar

oleh kerajaan tidak mempengaruhi perhubungan di antara pulangan permulaan dan kecairan saham. Ujian empirik juga membuktikan proksi-proksi perbezaan pendapat pelabur iaitu 1) harga tertinggi and terendah pada hari pembukaan dan 2) nisbah 'flipping' secara positif dan signifikasinya mempengaruhi perkaitan antara pulangan permulaan saham terbitan dan kecairan. Manakala, pengenaan penangguhan didapati memberi kesan penyederhanaan terhadap perkaitan antara pulangan permulaan dan kecairan hanya apabila nisbah pusing ganti sebagai proksi kecairan. Akhirnya, hanya satu proksi kecaiaran jangka panjang, iaitu nisbah pusing ganti bulanan secara positif mempengaruhi pulangan jangka panjang apabila pulangan pemberat sama dikira. Bagaimanapun, pemilikan besar oleh kerajaan di dalam syarikat tidak memberi kesan penyerderhanaan terhadap perkaitan antara kecairan dan pulangan jangka panjang.

INITIAL PUBLIC OFFERING (IPO) RETURNS AND POST-LISTING LIQUIDITY: EFFECT OF OWNERSHIP STRUCTURE AND DIVERGENCE OF INVESTORS' OPINION IN THE MALAYSIAN MARKET

ABSTRACT

Prior studies on the relationship between Initial Public Offering (IPO) returns and liquidity are mostly for the developed markets. The disperse ownership in the corporations and more well informed investors support their findings. On the other hand, the nature and behaviour of emerging stock markets such as Malaysia differ from the developed markets. The concentrated ownership partly due to government ownership, the behaviour of market participants and market policies could provide different views on the relation between liquidity and return. Given the difference in the environment, it is the objective of this study to reduce the existing gap by examining this relationship from the emerging market perspective. Using 299 samples of stocks listed on Bursa Malaysia from 1998 to 2008, the nature of relationship between IPO returns and liquidity is examined. Additionally, the effects of firm's ownership structure, government ownership and the divergence in investor's opinion on the return and liquidity relationship are examined. The empirical results have demonstrated that initial return has a direct positive effect on liquidity which is captured by five liquidity measures of 1) quoted spread 2) proportional quoted spread 3) turnover 4) amihud illiquidity ratio and 5) amivest liquidity ratio. In addition, it is found that initial return has a significant positive influence on the broadness of initial shareholder base which is captured by breadth of shareholders and top five shareholders. Both proxies partially mediate the relation between initial return and liquidity. Moreover, concentrated ownership structure in IPOs with substantial government shareholding has negative effect on their trading turnover but greater liquidity is achieved through lower transaction cost. Nevertheless, substantial government ownership does not moderate the relation

between initial return and liquidity. Empirical test also proves that divergence of investors' opinion proxies, namely opening day highest and lowest price and flipping activity positively and significantly influence the relation between IPO initial returns and liquidity. Further, the imposition of moratorium provision is found to have moderating effect on the above mention relationship when turnover is the proxy of liquidity. Finally, only one long-term liquidity proxy, i.e. monthly turnover is able to positively explain the long-term returns of IPOs stocks when equally-weighted returns are calculated. Nonetheless, the government ownership in IPO firms again has no moderating effect on the relation between liquidity and long-term return.

CHAPTER ONE

INTRODUCTION

1.1 Research Background

Initial public offering (IPO), is an important instrument in the capital market machinery of any financial system. It is a process that allows companies to raise capital through the issuance and sale of shares. The proceeds of the IPO go directly to the issuing company's account to meet its projected growth plans. Therefore, IPO can be seen as an important tool for economic growth. Over the past few decades, a considerable number of companies around the globe have seized the opportunity to go public and enjoy greater access to capital.

One of the features of an IPO is the listing price. A company that is planning an IPO appoints underwriters to help it decides on an appropriate price at which the shares should be issued. An anomaly which has been widely covered in the literature of financial economics is the IPO underpricing (Ibbotson, 1975; Ritter 1984; Ibbotson, Sindelar and Ritter, 1994; and Ritter and Welch, 2002). While the issuing company would always try to maximize the issuing price, the lead managers would build in some degree of discount to the valuation of the company to make it attractive in enticing a wider pool of investors, hence making the issuance a success. Herein, the concept of initial returns and long term returns take root.

Initial return is the difference between the IPO offer price and the subsequent closing price in the secondary market after the first day of trading. Whilst the initial return could be a positive or negative number, generally the returns are positive based on findings from research done on stock markets in 39 countries worldwide (Ritter, 1998). Taking the Malaysian IPO as a case in point, the findings not only show initial returns are positive, they also demonstrate that Malaysia is at the top of the list among other emerging markets in providing initial returns to investors, with

average returns between 66.5% and 166.7% (Dawson, 1987; Ismail, Abidin, and Nasarudin, 1993; Loughran, Ritter and Rydgvist, 1994; Yong, 1996; Leong, Vos and Tourani-Rad, 2000; Abdullah and Taufil, 2004; and Chong, 2008).

Long-term return on the other hand, is the cumulative returns one year or more after the listing date. It is the return realized by investors in taking a buy and hold position on the IPO stock issued for a minimum of one year. Unlike the findings on initial returns, empirical evidence on long-term returns of IPO stocks are still inconclusive, with the majority of developed stock markets reporting underperformance (Ritter, 1991; Loughran and Ritter, 1995; and Ritter and Welch, 2003) whilst their developing counterparts showing over-performance. (Kiymaz, 2000; Chen, Hung and Wu, 2002; and Chan, Wang and Wei, 2004). For the Malaysian IPO, the study by Jelic, Saadouni and Briston (2001) using 182 IPOs listed on the Bursa Malaysia Main Board for the period from January 1980 to December 1995 found that the Malaysian IPOs have positive and statistically significant long-term returns up to 3 years after listing. Separately, Ahmad-Zaluki, Campbell and Goodacre (2007) also report a positive buy and hold returns of 17.86% for IPO listed on Bursa Malaysia Main Board over the period of 1990 to 2000.

In explaining the above anomaly, large amounts of research rely upon the various theoretical models of information asymmetries that exist between different participants in the offer which also include signaling and information cascade hypothesis (Rock, 1986; Allen and Faulhaber, 1989; Grinblatt and Huang, 1989; Welch, 1989; Booth and Chua, 1996; Jenkinson and Ljungqvist, 2001; and Aggarwal, Krigman and Womack, 2002). Among other theories related to higher initial return that are getting a lot of attention recently are the imposition of moratorium (Habib and Ljungvist, 2001) and the behavioral theory (Miller, 1977 and 2000; Loughran and Ritter, 2002; and Boehmer and Fishe, 2000). Similar to

underpricing phenomenon, various theories have been advanced to explain the long-term underperformance of IPO stocks. Among the theories of long-run underperformance are the presence of a class of irrationally exuberant investor (Ljungqvist, Nanda and Singh, 2005), earning management (Teoh, Welch, and Wong, 1998), fads (Shiller, 1990), window of opportunity (Ritter, 1991; Loughran and Ritter, 1995; and Kang, Kim and Stulz, 1999) and a pseudo-market timing (Schultz, 2003). However, attempts to examine the role of liquidity as one potential explanation to these anomalies of returns have only recently been explored among others by Booth and Chua (1996), Ellul and Pagano (2006), Pritsker (2006) and Eckbo and Noli (2005).

Liquidity can be defined as the ability to trade a large number of securities quickly at a low cost with little price impact (Liu, 2006). Liquidity in the market is contributed by investors, either individuals or institutions, predominantly in seeking profit from their investments and in search of reducing their transaction costs. Liquidity which is facilitated by the injection of capital is required by market authorities for maintaining a proper market for deals. In asset pricing literature, liquidity also appears to be a major determinant of a company's cost of capital (Amihud and Mendelson, 1986, Amihud and Mendelson, 2000; and Brennan and Tamarowski, 2000). Studies in the emerging market have also shown that expected return and cost of capital are related to liquidity (Jun, Marathe and Shawky, 2003; Dey, 2005; Engku-Chik, 2006; and Bekaert, Harvey and Lundblad, 2007).

Essentially, liquidity is a key concern in an IPO exercise. More often, despite businesses' ability to stay private, the reason that companies go public is that the founders or major investors of corporations hope to have an avenue for an exit strategy to provide themselves with access to liquidity. According to Dave Friedman (2010) companies that are looking to go public now are doing so for the same

reason that they sought during the dot-com bubble; that is their investors want liquidity. Manchester United, the English Premier League football club, despite receiving permission to list from the Singapore Exchange (SGX) in September 2011, decided to abort their listing plans because of the volatility in the markets during that time. Even though, no specific reason was given by the management of the club, liquidity concerns driven by skepticism of analysts and observers about the valuation of the listing exercise was the cause. The club eventually was floated in the New York Stock Exchange in August 2012, for a valuation far below what they had initially targeted. The shareholders, the Glazer family sold half of the shares on offer for their own use, with only the remaining half sold by the company for paring down debt ("Manchester United IPO Sold Below Bottom of Forecast Range", 2012).

In addition, despite making headline as one of Asia's largest IPOs listing in 2011, Singapore Exchange (SGX) has suffered a minor blow where several mid-cap Chinese companies to exit from SGX and seek a listing in Hong Kong (Dow Jones Investment Banker, 2011). The average daily trading volume which is correlated to levels of liquidity played an important role together with wider following of sell-side research analysts and higher valuations are cited as the reasons for seeking quotation in Hong Kong. The above two examples, prove that liquidity is an important variable for an IPO to succeed.

Due to the importance of liquidity in the IPO market, a limited number of academic researchers have come out with theoretical models to relate IPO stocks liquidity and its returns. The main focus of the research is to model the relation between IPO returns; both initial and long-term return and the secondary market liquidity. The concept of liquidity in IPO market is proposed by Booth and Chua (1996) who argued that higher discount on the offer price can be used as a tool to create liquidity in the secondary market as initial return drives the broadness of shareholder

base through participation of retail and uninformed investors. The dispersed ownership by retail investors in turn drives liquidity in the secondary market. In line with this argument, Pritsker (2006) shows that the allocation and concentration of IPO shares in a handful of institutional investors with market power results in pronounced aftermarket illiquidity. This would lead to poor long run performance. However, in a contradictory argument, Ellul and Pagano (2006) conjectured that there is a negative relation between initial return and post-listing liquidity as investors are compensated in the form of higher initial return for the expected illiquidity and illiquidity risk in the aftermarket. Additionally, Habib and Ljungvist (2001) in their investors' attention hypothesis argued that underpricing is an alternative to promotion to entice investors to trade. An increase in the number of investors would stimulate trading thus liquidity in the secondary market.

In addition, recent literature widely supports that dispersed ownership structure in IPO firms provide a link to initial return and liquidity relationship (Pham, Kalev and Steen, 2003; and Zheng and Li, 2008). All these studies done on developed markets highlight that dispersed ownership structure in the corporations in their respective countries support the positive relation between liquidity and initial return. This is consistent with liquidity proposition of ownership structure that larger proportion of small retail shareholders (Bhide, 1993; and Holmstrom and Tirole, 1993) and non-block institutional shareholders (Kini and Mian, 1985; Barbatov and McNamara, 2002; and Rubin, 2007) will lead to a greater liquidity.

However, in the emerging markets such as Malaysia, the government presence in corporations is quite dominant and resulted in concentration of ownership in local corporations. These Government-Linked Corporations (GLCs) and their controlling shareholders, Government-Linked Investment Companies (GLICs) constitute a significant part of the Malaysian economy, accounting, for approximately 36% of the

market capitalization of Bursa Malaysia (PCG, 2005). In response to the report that highlights the Malaysian stock market as one of the most illiquid market in Asia, the Malaysian exchange attributes the lack of liquidity in the market partly due to the concentration of ownership by government and family ownership. Therefore, a clear understanding of the effect of concentrated ownership and government ownership on liquidity and stock returns needs to be explored. Past studies provide evidence comparing initial return of government-linked against private companies IPOs (Menyah and Paudyal, 1996; and Ljungqvist, Jenkinson and Wilhem, 2000). Beyond that there is no evidence showing the effect of government ownership on post-IPO liquidity. Thus, this study aims to examine whether government shareholding in local companies leads to a concentrated ownership and negatively affect the companies' stock post-listing liquidity and returns or vice versa.

Market liquidity and return can also be influenced by investors' behavior, especially the uninformed ones. The theory of divergence of opinion introduced by Miller (1977) suggests that due to the variation in terms of information acquired and information interpreted, different levels of uncertainty arise among investors. The higher the level of dispersion in investors' opinion, the bigger is the short run overreaction. However, over time when more information flows into the market, overreaction will drop and market will move to equilibrium (Miller, 2000). The theoretical models and empirical studies provide evidence that stocks which are subject to greater divergence of opinion earn higher return (Doukas, Kim and Pantzalis, 2004). Additionally, liquidity literature indicates that divergence of opinion about the stock performance among investors leads to higher liquidity. Trading can occur when no individual has superior information, but every individual differs in their assessment of common information. For instance, in Varian (1986) investors differ in their prior beliefs regarding value, while in Harris and Raviv (1993) and Shalen (1993) investors differ in their interpretation of common signals. Therefore, by linking

the IPO returns and divergence of opinion literature; and divergence of opinion and liquidity literature, the study aims to propose divergence of opinion as a new mediating variable that may influence the relation between initial return and post-IPO liquidity.

The Malaysian stock market is an ideal setting to propose the divergence of opinion as a new mediating variable in the study because it was reported from past studies that the market is inefficient and does not follow the random walk hypothesis (Yong, 1986; Mat Nor, Lai and Hussein, 2002; and Husni, 2005). The findings are supported by the profile of the Malaysian stock market that consists of more retail, not-well informed (Chen Hung and Wu, 2002), irrational investors who are easily influenced by marketing gimmicks. Examples of irrational behaviour and repeated errors in judgement have been documented in academic studies. For instance, Bernstein (1996) in Against the Gods, states that the evidence "reveals repeated patterns of irrationality, inconsistency, and incompetence in the ways human beings arrive at decisions and choices when faced with uncertainty" (p. 281). Hence, some researchers believe that these imperfections of humans are consistent, predictable, and can be exploited for profit. The less knowledgeable and less skilful investors are, the greater the opportunities open for exploitations. Consequently, in a market such as Malaysia, higher IPO initial return may be used as a lever to influence the behaviour of the investors to achieve the issuing firm's strategies and objectives.

With the above issues and evidences, coupled with lack of research on liquidity of IPO stocks on emerging markets, it is the purpose of this study to seek an explanation on the anomalies in the Malaysian IPO market from a liquidity perspective. To do so, this study will look at the relation between post-listing liquidity and returns; both initial and long-term return. Additionally, one area that this research will particularly focus on is the relationship between liquidity and returns

among listed companies with substantial government shareholding and others which do not have substantial government shareholding. Divergence of opinion is also examined in this study as a feature of the Malaysian market as an emerging market that lack market efficiency and are dominated by not so well-informed investors.

1.2 Problem Statement

In response to the growth strategies outlined in the Malaysian Capital Market Master Plan for the need to expand the role of the capital market, Bursa Malaysia took a task to position Malaysia as 'the preferred listing destination". Despite efforts to enhance the trading environment through upgrading market infrastructure and widening participation, liquidity in the secondary market in Malaysia remained persistently low throughout the last decade. As a result, turnover velocity has lagged the other Asian stock markets. The low liquidity is also reflected in Malaysia's narrow risk-return profile. The annualized standard deviation of return for Malaysia's stock market index, FBMKLCI was around an average value of 13.1% over the past decade, far below the average of 22.8% recorded by other markets (Securities Commission, 2011) .

Bursa Malaysia attributes the low liquidity in the market partly to the concentrated ownership of Malaysian listed firms by major shareholders, government or government-link corporations (GLCs) which hold significant amount of shares in some companies. In addition, the concentration of ownership is also due to a large set of family owned listed companies. This thus reduces shares available for public trading and curtails trading activity. The inflexibility of moving in and out of the market is an impediment to investors. For issuing firms or investors; liquidity and return are equally important for the decision to list or invest in a particular market, especially when the global capital market landscape is undergoing radical

transformation where over the decade there has been intensifying competition among exchanges to attract players.

In the context of the Malaysian stock market, most information on the state of return and liquidity currently is based on the practitioner's point of view. Even so, prior academic studies testing the relationship between IPO returns and liquidity are mostly for the developed markets. These studies consistently reported higher underpricing or initial return results in higher liquidity than overpriced IPOs in the secondary market (Miller and Reilly, 1987; Hanley, 1993; Schultz and Zaman, 1994; and Hahn and Ligon, 2004). It has also been argued in the IPO literature that higher discount on the offer price can be used as a tool to create liquidity in the secondary market either directly by serving as a promotional tool to boost trading (Habib and Ljungvist, 2001) or indirectly by creating broader initial shareholder base (Booth and Chua, 1996). This argument is supported by the findings of Pritsker (2006) who shows that the allocation and concentration of IPO shares in a handful of institutional investors with market power results in pronounced aftermarket illiquidity which eventually leads to poor long run performance. Inversely, Ellul and Pagano (2006) shows the more illiquid the IPOs are expected to be, the less predictable their liquidity is, thus, the larger the risk premium needed to compensate the investors, leading to more underpricing by issuers.

Hence, how initial return affects post listing liquidity in the Malaysian IPO stock remains an empirical question. Observing the Malaysian IPO market, it is a common practice in the allocation process that small investors are allocated a higher proportion of the shares on offer with the average of 70% (Paudyal, Saadouni and Briston, 1998). And the retail investors who are mostly not well informed and liquidity traders constitute an average of 44% of the market participants from 1998-2008 (Bursa Malaysia Annual Report, 1998-2008). With these facts, there is high

probability that the strategy of extremely intentionally underpricing the IPO shares by the issuing firm could achieve its intention to attract this kind of investors and create dispersed ownership and induce post-listing liquidity. Moreover, high initial return can also manipulate investors by creating public attention in the market and cause differences in the investors' opinion which ultimately encourage trading.

Nevertheless, empirical findings show that emerging markets characteristics differ from developed markets whereby the emerging markets are always associated with less efficient, smaller number of firms, thin trading and relatively segmented from global markets. With the emerging market status, the Malaysian market can be classified as relatively illiquid, with limited disclosure (Campos, Newell and Wilson, 2002), inefficient (Mat Nor, Lai and Hussin, 2002; Lai Guru and Mat Nor, 2003; and Husni, 2005) and the asymmetry information persists after the IPO stage. These market characteristics seem to favour Ellul and Pagano (2006) model that higher initial return in the Malaysian IPO is to attract investors to participate in the offer by rewarding them in advance for the expected post-listing illiquidity. Therefore, how initial return and post-listing liquidity is related in the Malaysian stock market has to be empirically examined.

In addition to addressing unresolved relationship between post-liquidity and return, the literature also supports that ownership structure of a firm has important influences on the relationship between IPO return and liquidity. This relation holds in studies done in the developed countries with dispersed ownership (Pham, Kalev and Steen, 2003; and Zheng and Li, 2008) where higher return drives more investors to participate in the offer and thus enhances liquidity in the secondary market. However, in emerging markets such as Malaysia, government and family ownership in the corporations have caused the concentrated ownership in these corporations. The concentrated ownership has reduced shares availability for public trading and

thus the liquidity in the post-listing. The lack of liquidity in the emerging market is a weakness that has resulted in foreign issuers and investors to opt for more liquid market (Chuhan, 1992), as liquid market allows them to enter and exit investments without causing too much ripples. Hence, whether the concentrated ownership structure in the Malaysian IPO companies has the same influence to mediate the relation between return and liquidity as in developed markets needs to be empirically explored.

Despite adverse effects of concentrated government ownership on liquidity, the government shareholding in the companies essentially boosts confidence on their stability and risk among the investors. This could entice more investors both institutional and retail to invest and generate more liquidity in the market. Past studies which include Malaysia in the sample suggest that on average government related IPOs have higher initial premium than their private sector counterparts (Menyah and Paudyal, 1996; and Perotti and Guney, 1993) and they are also reported to outperform in the long-run in many multi-country studies (Boardman and Laurin, 2000; and Dewenter and Malatesta, 2001). Thus, whether the government's substantial ownership in IPO firms moderates the relation between returns (both initial and long-term) and liquidity has to be examined empirically to substantiate the findings of practitioners' researches. In short, driven by lack of academic research and the differences in market environments, it is the objective of this study to reduce the existing gap by examining the relationship between IPO returns and liquidity from the emerging market perspective.

1.3 Research Questions

Based on the problem statement above, the following research questions are forwarded for this study:

1. Is there a significant positive initial return reported in the Malaysian IPO stocks from 1998 to 2008 period?
2. Is there a significant relation between initial return and post-listing liquidity of the Malaysian IPO stocks?
3. Does dispersed ownership structure mediate the relation between initial return and post-listing liquidity of the Malaysian IPO stocks?
4. Does the government ownership moderate the relation between initial return and post-listing liquidity of the Malaysian IPO stocks?
5. Does the divergence of investors' opinion mediate the relation between initial returns and post-listing liquidity of the Malaysian IPO stocks?
6. Does the imposition of moratorium provision moderate the relation between initial returns and post-listing liquidity of the Malaysian IPO stocks?
7. Is there a significant relation between long-term liquidity and long-term returns of the Malaysian IPO stocks?
8. Does the government ownership moderate the relation between long-term liquidity and long-term returns of the Malaysian IPO stocks?

1.4 Research Objectives

The main objective of this study is to examine the effect of post-listing liquidity on the initial return and long-term returns of Malaysian IPO stocks. In order to answer the research questions, the following objectives are developed:

1. To infer whether there is a significant positive initial return reported in the Malaysian IPO stocks from 1998 to 2008 period.
2. To examine the relation between initial return and post-listing liquidity of the Malaysian IPO stocks.

3. To examine the role of ownership structure in mediating the relation between initial return and post-listing liquidity of the Malaysian IPO stocks.
4. To examine the moderating effect of government substantial ownership in the IPO firms on the relation between initial returns and post-listing liquidity of the Malaysian IPO stocks
5. To examine the role of divergence of opinion theory in mediating the relation between initial return and post-listing liquidity of the Malaysian IPO stocks.
6. To examine the moderating effect of moratorium provision on the relation between initial returns and post-listing liquidity of the Malaysian IPO stocks.
7. To examine the relation between post-listing liquidity and long-term performance of the Malaysian IPO stocks.
8. To examine the moderating effect of government substantial ownership in the IPO firms on the relation between post-listing liquidity and long-term performance of the Malaysian IPO stocks.

1.5 Significance of Study

The central theme of this study is to examine the relation between liquidity and returns of IPO stocks. This paper contributes to the theory and practical aspects in several distinctive ways. Firstly, the theoretical contribution of this study includes advancing the knowledge of ownership structure and divergence of opinion theory in the context of an emerging country. Specifically, the unique institutional background in Malaysia provides an alternative view on the effect of the concentrated corporate ownership due to government shareholdings in the local firms especially in the top tier firms. Thus, this paper will provide evidence on the mediating effect of ownership structure as well as the moderating effect of government ownership on the relation between IPO initial return and liquidity. This is an additional contribution to the literature as most of the presently available studies look at the ownership structure based on the proportion of retail and institutional holdings to capture the

ownership effect of the sample firms. Further, it is proposed that the divergence of opinion among investors mediates the relation between liquidity and initial return. The proposed theory is deduced from the observation in the literature related to the divergence of opinion, liquidity and return.

In addition to the theoretical contribution, the empirical results from this study would also have practical contributions to issuing firms, investors and policy makers and regulatory agencies. With regards to the issuing firms, currently the government is actively promoting Malaysia as a preferred listing and investment destination for both domestic as well as foreign companies to consider it for their primary or secondary listings. The findings of this study could provide valuable information on the state of liquidity, return and the relationship between the two which would help the issuing firms in making the listing decisions. At the same time, the study would also reveal how the ownership structure after the IPO issue and the divergence of opinion among investors on the IPO issue influence the relation between liquidity and return.

Therefore, the findings are hoped to assist the issuer in considering all the relation among the variables above in formulating their optimal IPO pricing. This is particularly possible since the Securities Commission of Malaysia has in 1996 abolished the IPO pricing guideline that requires the issuing firm to use price to earnings (PE) multiple to set the offer price. Thus, the issuing firm and its underwriter have more freedom to formulate their optimal and competitive offer price. This could assist the issuing firms among others, to achieve the desired amount to be raised during the issue, assist to set target cost of capital, the post-listing ownership structure, as well as good return to investors.

Additionally, the findings of this study could provide valuable information on the state of liquidity, return and the relationship between the two which would assist the investors in making investment decisions. Investors need this information in designing their investment strategy. The study will be useful for investors and fund managers in making calculated investment decisions on stocks going public in Malaysia. This is because the findings from this study will demonstrate what kind of long term or short-term trend returns can be anticipated by looking at the liquidity, underpricing, investor base and other variables that would be used to analyze a public issuance. Hence, investors and fund managers can become more intuitive in deciding whether a stock fits into their investment profile.

Finally this study has implications on policy making direction. This is particularly in the involvement of government related investments in top tier corporations and corporations of key industry sectors. Investors have long been frustrated on the lack of ability to invest in economic sectors which are seen as key in the development of the Malaysian economy, where government tenders and funds would potentially go to the top corporations operating in that space. In most cases, such corporations are also predominantly controlled by government or its agencies which results in the wealth of the country circulating within the few and not available for a larger pool of investors. Specifically this study hopes to provide evidence on the involvement of government in the Malaysian IPO market and its effects on liquidity. If opening up the market to a wider pool of owners would contribute to the increase in liquidity in the market, the study will propose suggestions that would become policy directions for the government. For instance, the government may consider imposing a reasonable limit on the degree of ownership and involvement of the government agencies in the Government Linked Companies (GLCs) or/and top companies. This eventually makes shares more available for public ownership for trading.

In conclusion, an intuitive understanding of the features and the relation between liquidity and return, both from academic and practitioner standpoint is crucial as it help the market participants to profit from this knowledge.

1.6 Organization of Thesis

This thesis is organized into six chapters. Following this introductory chapter is the chapter on institutional setting, the Malaysian stock market. Chapter Three discusses the literature review which includes liquidity and asset pricing theory, theoretical explanations and variables affecting initial return and underperformance of long-run IPO returns, privatization initial public offerings; literature related to ownership structure and liquidity as well as divergence of opinion and liquidity. The research flow, hypotheses and methodology are presented in Chapter Four. Subsequently, Chapter Five discusses data analysis and empirical findings. Finally, conclusions and recommendations are presented in Chapter Six.

1.7 Definition of Terms

AMIHUD Illiquidity ratio	-	A liquidity proxy that is defined as an absolute return divided by the dollar trading volume. It measures the liquidity with regards to price impact (Amihud, 2002).
AMIVEST liquidity ratio	-	A ratio of the dollar value of trades to absolute return. It is price impact dimension of liquidity proxy that measures how well a stock investment is able to absorb trading volumes without significant move in price (Amihud, 2002).
Average proportional quoted spread	-	A liquidity proxy that is defined as the difference between quoted asks price and the quoted bid price scaled by their mid-point. It is associated with transaction cost (Amihud and Mendelson, 1986; and Huberman and Halka (2001)
Average Quoted spread	-	A liquidity proxy that is defined as the difference between quoted asks price and the quoted bid price. It is associated with transaction cost (Amihud and Mendelson, 1986, 1989).
Block-holders	-	Investors who hold more than 5% of the firm's issued capital (Wruck, 1989).
Breadth	-	The size of shareholders immediately after IPO (Pham, Kalev and Steen, 2003).

Buy-and-hold-return (BAHR)	-	The return obtained from holding shares for a long time horizon (Loughran and Ritter 1995)
Concentrated ownership	-	A situation where large blocks of shares held by a few shareholders in a firm (Zingales, 1995).
Developed markets	-	Countries that have sound, well-established economies and are therefore thought to offer safer, more stable investment opportunities than developing markets. (http://www.investopedia.com/terms/d/developed-economy)
Dispersed ownership	-	A situation where a large number of shareholders with smallholdings and few, if any, large-block shareholders in a firm (Zingales, 1995).
Divergence of opinion	-	A state when two or more investors fail to show confirming trend of thinking on the value of the same asset (Miller, 1977).
Emerging markets	-	An emerging market is defined by the International Finance Corporation (IFC) as a stock market that is in transition; increasing in size, activity, or level of sophistication. The term "emerging market" is applied to a country making an effort to change, and thereby improve, its economy to reach the same level of sophistication as nations defined as "developed." The term was coined in 1981 by Antoine W. Van Agtmael of the International Finance Corporation of the World Bank (http://data.worldbank.org/about/faq/specific-data-series)
Flipping ratio	-	The percentage of opening day trading volume divided by the number of shares offered on the first trading day (Miller and Reily, 1987; Krigman, Shaw and Womack, 1999; Houge, Loughran, Suchanek and Yan, 2001; and Cheng, Mak and Chan, 2002)
Government link companies (GLCs)	-	Government-owned corporation, state-owned company, state-owned entity, state enterprise, publicly owned corporation or government business enterprise is a legal entity created by a government to undertake commercial activities on behalf of an owner government. (http://www.khazanah.com.my/faq)
Initial Public Offerings (IPO)	-	An initial public offering (IPO) occurs when a security is sold to the general public for the first time, with the expectation that a liquid market will develop. It is also known as new issue or new listing (Ritter, 1998).
Initial return	-	The difference between the closing price of the fifth day IPO and the offer price. The vast majority of empirical work has used the first day closing price to measure initial return (Ritter and Welch 2002). Some studies have used the closing date of second day or one week later for comparison to the offer price. Using different closing price and adjustment to market returns generally makes little difference in the findings.

		Academics use the terms initial returns and underpricing interchangeably.
Irrational investors	-	The not well-informed investors who tend to overprice the IPO and are not able to respond efficiently to the changes in the aftermarket (Miller, 2000). Investors who trade based on noise rather than fundamentals (Delong, Shleifer, Summers and Waldmann, 1990).
Lead Underwriter	-	The investment bank in charge of setting the offering price of an IPO and allocating shares to other members of the syndicate. Lead underwriter is also called lead manager.
Liquidity	-	Liquidity can be defined as the ability to trade a large number of securities quickly at a low cost with little price impact (Liu, 2006).
Long-term return		The cumulative returns or the buy-and-hold returns of an IPO one year or more after the listing date (Chong, 2008). In this study long-term return is calculated for the period of 12, 24 and 36 months.
Turnover	-	An average daily share trading volume as a fraction of total number of shares outstanding (Datar, Naik and Radcliffe, 1998).
Market adjusted initial return	-	Initial return adjusted for the market index return (KLCI).
Mediator Variable	-	"In general, a given variable may be said to function as a mediator to the extent that it accounts for the relation between the predictor and the criterion. Mediators explain how external physical events take on internal psychological significance. Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur." (Baron and Kenny, 1996, *p. 1176)*. Also called by some authors "intervening variable" or "intermediary variable."
Moderator Variable	-	"In general terms, a moderator is a qualitative (e.g., sex, race, class) or quantitative (e.g., level of reward) variable that affects the direction and/or strength of the relation between an independent or predictor variable and a dependent or criterion variable. Specifically within a correlational analysis framework, a moderator is a third variable that affects the zero-order correlation between two other variables. A basic moderator effect can be represented as an interaction between a focal independent variable and a factor that specifies the appropriate conditions for its operation." (Baron and Kenny, 1996, *p. 1174)*
Non-block holders		Institutional and/or individual shareholders holding at least 100,000 units to 5% of the total shares (Zheng and Li, 2008).

Refer to the second category of shareholders division in the annual report of the Malaysian companies.

Substantial Ownership	-	A person has a substantial shareholding in a company if he has an interest or interests in one or more voting shares in the company and the nominal amount of that share, or the aggregate of the nominal amount of those shares, is not less than five per centum of the aggregate of the nominal amount of all the voting shares in the company Based on the Securities Industry Act 1983 (Securities Industry Act 1983: Reporting of Substantial Shareholding Regulations 1998).
IPOs with Substantial Government Ownership	-	An IPO company is considered as having substantial government ownership if it is a government privatization company (PIPO), a company that is categorized as a Government Linked Corporation (GLC) and a private company that has substantial shareholding by government agencies both at federal and state level and/or government linked investment companies and/or the subsidiary of the above two categories. For all categories, the government must have the minimum of five percent shareholdings.

CHAPTER TWO

INSTITUTIONAL SETTING: THE MALAYSIAN STOCK MARKET

2.1 Introduction

Historically, the first securities business association in Malaysia was established in 1930 and officially known as the Singapore Stockbrokers' Association before it was re-registered as the Malayan Stockbrokers' Association in 1937. The public trading of shares only begun in 1960 after The Malayan Stock Exchange was established. In 1964, the Stock Exchange of Malaysia was established and later became known as the Stock Exchange of Malaysia and Singapore after the secession of Singapore from Malaysia in 1965. In 1973, The Stock Exchange of Malaysia and Singapore was separated into the Kuala Lumpur Stock Exchange Berhad and the Stock Exchange of Singapore when currency inter-changeability between Malaysia and Singapore ceased. The Kuala Lumpur Stock Exchange which was incorporated on December 14, 1976 as a company limited by guarantee took over the operations of the Kuala Lumpur Stock Exchange Berhad in the same year (Source: http://bursamalaysia.com.my).

Under direction of the Demutualization Act, in 2004 the KLSE stock market was converted from a not-for-profit organization limited by the guarantee of its membership, to an entity limited by its shares, called the Bursa Malaysia Berhad. Following the conversion, the securities exchange business was transferred to a wholly-owned subsidiary, Bursa Malaysia Securities Berhad. On 18 March 2005, Bursa Malaysia was listed on the Main Board of Bursa Malaysia Securities Berhad. Key shareholders of the company include the Ministry of Finance with 19% of shares; the Capital Market Development Fund, a government-created investment vehicle; with an identical stake; and UK-based Newton Investment Management with 8.5% stake. Foreign shareholders owned 21% of the shares as at the end of

2008 and the market capitalization of the company was RM2.7billion (The Report Malaysia, 2010).

Initially, only large companies were listed on the Bursa Malaysia Securities Main Board. Meanwhile medium sized companies were listed on the Second Board which was introduced in 1988 with the objective of encouraging small and medium enterprises (SME) to raise capital in the market. Then in 1997 Malaysian Exchange of Securities Dealing and Automated Quotation (MESDAQ) was set up to provide high growth and technology companies with little or no proven track record the ability to raise funding from the market. Meanwhile, the Derivatives Exchange, operated by Bursa Derivatives, is used to trade futures and options contracts.

Subsequently, Bursa Malaysia introduced a new framework for listings and equity fund-raisings on 3rd of August 2009 by introducing Main Market and ACE Market. Main Market is a streamlining of the current two boards; Main Board and Second Board to form a unified board for more established corporations. Meanwhile, the ACE Market is the revamp of MESDAQ market. This new framework is aimed at allowing more efficient access to capital and investments for all listed companies as well as making Bursa Malaysia a more attractive platform for Malaysian and foreign companies (Source: http://bursamalaysia.com.my).

The Malaysian capital market is regulated by various acts of parliament. The primary act governing the companies is the Company Act 1965. It is in the jurisdiction of the Company Commission of Malaysia, CCM (formerly known as Registrar of Company, ROC) to ensure companies, both private and public, comply with the provisions of Companies Act and the subsidiary legislation made thereunder. Meanwhile, the regulatory body of the securities industry in Malaysia is the Securities Commission (SC). SC was established on 1 March 1993 to provide regulations and governance

for the capital market and at the same time act as advisor to the Ministry of Finance on matters related to the capital market. The Security Industry Act, 1983 and the Security Commission Act, 1993 are the two statues that directly govern the public listed companies. The Bursa Malaysia, on the other hand, governs the conduct of public listed companies and enforces listing and disclosure requirements.

2.2 Market Profile

2.2.1 Market Performance

The development of Bursa Malaysia has been quite impressive since its commencement. It has been one of the largest stock market in the Asian region and was ranked third after India and Hong Kong for the largest number of listed companies among countries outside the Organization for Economic Co-operation and Developed (OECD) in 2003. It was also ranked the largest stock market in Southeast Asia in terms of market value in 2003 (Securities Commission, 2004). The assessment of Bursa Malaysia market valuation was estimated at RM 43 billion in the 80's and has grown to about RM 1 trillion in 2007. The market was off to a strong start, continuing its 2007 performance, which was at its best since 1997-98 financial crises, but tailed off as global economic conditions deteriorated in the wake of the US subprime loan collapse. The drop in share price in 2008 left total market capitalization at RM664 billion at the end of the year. The market regained its momentum when it surpassed RM 1 trillion thresholds again in 2010 and 2011. The main index, called the Kuala Lumpur Composite Index (KLCI) passed the 1,000 milestone in 2006 and hit its all-time high of 1654.85 on July 19, 2012 ("KLCI Advances to Fresh Record High, Maybank Lifts", 2012).

Furthermore, the Malaysian market is considered as one of the most expensive in South-east Asia. Measured by the ratio of earnings to stock prices, the price-to-

earnings (PE) ratio at the end of 2008 was 10.1 and the forward ratio which anticipates future earnings was 11.2. Despite that, the market offered the fourth highest dividend yield in the region, at 6.4% at the end of 2008. That total is surpassed only by the exchanges in Taiwan, Thailand and Australia (The Report Malaysia, 2010). In addition, the number of listed companies has also increased steadily from just 262 firms in 1973 to 1027 firms in 2006. However, the number of listed companies slightly declined to 931 firms in 2011. Among the reasons cited for lower number of listed companies are the pace of delisting of the companies that have not managed to keep up with listing requirements. Some companies delisted on their own accord, citing lower liquidity and economic conditions that would make further share issue difficult, reducing the rationale for maintaining public listing. As with other markets globally, Malaysian companies have also been adversely impacted by the financial turmoil resulting from the US sub-prime crises in 2008.

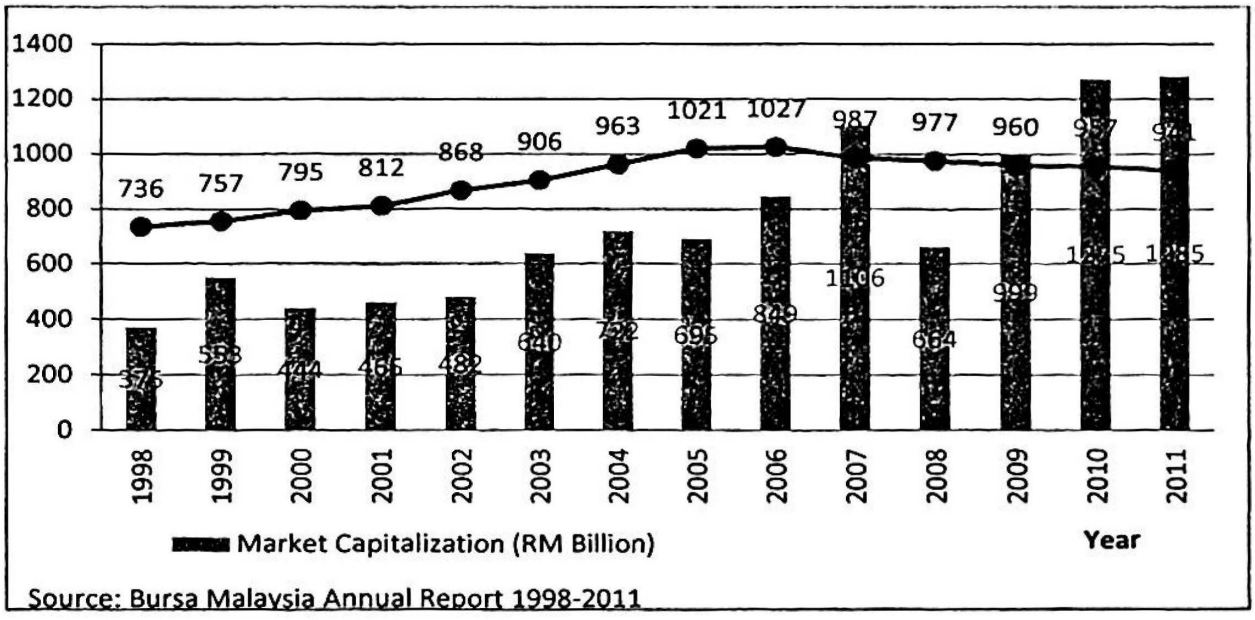

Figure 2.1: Bursa Malaysia Market Capitalization and No. Of Listed Companies 1998-2011

Despite the impressive statistics, compared to other capital markets worldwide, Bursa Malaysia is relatively new and it is still very much considered an emerging

market. Figure 2.1 illustrates the market valuation and the number of listed companies in the Malaysian stock market for the period of 1998 to 2011.

2.2.2 Market Liberalization

Bursa Malaysia has gone through some liberalization process since 1980s (Engku-Chik, 2006). However, the process was ceased by the unforeseen capital control exercise during the financial crises 1997. Afterwards, the Malaysian government was committed towards increased liberalization both in term of deregulation and foreign participation. Liberalization policy was implemented with a view to creating an optimal mix of strong domestic intermediaries and foreign participants. The biggest beneficiaries of market liberalization are domestic investors and issuers who increasingly demand extensive innovative products and services from their capital markets service providers.

In its effort to pitch itself as a top destination for investors Malaysia further liberalized the economy in the area of foreign investment under the deregulation of the Foreign Investment Committee (FIC) investment guidelines. In July 2009, The Prime Minister of Malaysia announced a move to abolish the 30% 'Bumiputera' or indigenous Malays quota for Public Limited Companies, for a sub-number of sectors within the services industry in its bid to make the country more competitive. This relaxation which took effect on 12 November 2008 is to ensure the Malaysian capital investment market stays progressive and competitive ("Government Relaxes 30 Percent Bumiputera Equity Ownership for Companies Seeking Listing", 2008). This market liberalization is expected to contribute to the Malaysian economy through enhancing liquidity and vibrancy of Malaysian capital markets.

In addition, Malaysia has the most comprehensive Islamic Capital Market (ICM) in the world that offers the broadest range of Shariah-compliant products and services