

**THE EFFECT OF INDEPENDENT BOARD ON
STOCK LIQUIDITY IN EAST ASIAN COUNTRIES**

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**THE EFFECT OF INDEPENDENT BOARD ON
STOCK LIQUIDITY IN EAST ASIAN COUNTRIES**

By

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KESAN DARIPADA LEMBAGA BEBAS TERHADAP KECAIRAN SAHAM DI NEGARA ASIA TIMUR

ABSTRAK

Kajian ini menyiasat hubungan antara komposisi ahli lembaga dan kecairan saham syarikat dengan menggunakan sampel dari negara Asia Timur. Data yang dikumpulkan merangkumi 2,407 buah firma-tahun untuk syarikat disenaraikan dalam bursa saham di negara China, Hong Kong, Jepun, Malaysia, Singapura, Korea Selatan, Taiwan, Thailand, dan Indonesia dari tahun 2003 hingga 2013. Untuk menekankan isu endogeniti, kajian ini mengendalikan panel Generalized Method of Moments (GMM) yang dinamik bagi mengawal endogeniti yang dinamik, heterogeniti yang sukar diperhatikan dan keserentakan. Kajian ini menemui bukti yang kukuh bahawa secara signifikannya, semakin besar kebebasan lembaga maka semakin tinggi kecairan saham dalam syarikat tersebut. Kajian ini mencadangkan bahawa impak kebebasan ahli lembaga terhadap kecairan saham dipengaruhi oleh tiga saluran. Saluran-saluran tersebut adalah mengenai aliran maklumat daripada pengurus syarikat kepada pihak lembaga dan orang awam: (1) Apabila pihak lembaga sedang mempertimbangkan penggantian CEO, aliran maklumat daripada CEO kepada lembaga syarikat mungkin akan terhalang. Situasi menjadi semakin teruk apabila lembaga lebih bebas daripada CEO. Kajian ini mendapati dalam tempoh pertimbangan penggantian tersebut, pengaruh daripada kebebasan ahli lembaga terhadap kecairan saham akan terjejas. (2) Apabila

pembuat pasaran bersedia untuk memproses maklumat secara bebas, kepentingan kebebasan lembaga terhadap kecairan saham akan berkurang. (3) Akhirnya, kajian ini juga mendapati bahawa apabila terdapat perlindungan yang besar terhadap para pelabur, kepentingan penyeliaan lembaga pengurus terhadap kecairan saham berkurang, dan seterusnya mengurangkan pengaruh kebebasan ahli lembaga terhadap kecairan saham. Keputusan-keputusan kajian ini tidak konsisten dengan tanggapan umum bahawa peningkatan penyeliaan daripada lembaga pengarah yang bebas sentiasa membantu dalam mengurangkan jurang asimetri maklumat, memperbaiki keyakinan pembuat pasaran dan seterusnya kecairan saham syarikat. Hasil kajian ini menunjukkan bahawa lembaga pengarah memberi sumbangan dengan menasihati dan mendisiplinkan para pengurus syarikat. Nasihat dan penyeliaan yang efektif memerlukan kepercayaan dan perkongsian maklumat dalam syarikat. Apabila hubungan antara CEO dan lembaga pengarah adalah tegang, CEO akan cuba untuk menyekat aliran maklumat yang disampaikan kepada pihak lembaga, terutamanya apabila syarikat dikuasai oleh pengarah bebas. Oleh itu, kebebasan lembaga mungkin akan menjanakan kos agensi kerana para pengurus mempunyai insentif untuk memanipulasi kualiti maklumat yang disampaikan. Kajian ini memberikan empirikal bahawa kelebihan relatif untuk kebebasan lembaga perlu disyaratkan atas kekuatan perundingan CEO relatif dengan pihak lembaga dan persekitaran maklumat.

THE EFFECT OF INDEPENDENT BOARD ON STOCK LIQUIDITY IN EAST ASIAN COUNTRIES

ABSTRACT

This study investigates the relationship between board composition and liquidity of a firm's shares using sample from East Asian countries. The data comprises 2,407 firm-year observations of listed companies in the stock markets of China, Hong Kong, Japan, Malaysia, Singapore, South Korea, Taiwan, Thailand, and Indonesia over the period 2003-2013. To address endogeneity issue, this study conducts a dynamic panel generalized method of moments (GMM) to control for dynamic endogeneity, unobservable heterogeneity, and simultaneity. The present study finds strong evidence that greater board independence significantly increases liquidity. In this study, the impact of board independence on liquidity is suggested to be affected by three channels of information flow from managers to the board and the public: (1) when the board is in the midst of considering replacing the CEO, the flow of information from the CEO to the board may be impeded. This effect clearly can be exacerbated when the board is more independent of the CEO, and this study finds that in these periods, the beneficial impact of independence on liquidity is impaired; (2) when market makers are better equipped to process information independently, the importance of board independence on liquidity is reduced; (3) finally, when there are already greater investor protections in place that make board supervision of managers less crucial, this will reduce the impact of independence board on liquidity. These results are inconsistent with the general

notion that increasing monitoring by an independent board is always helpful in mitigating informational asymmetries, and then influence for better market makers' confidence, and ultimately liquidity. The results of this study indicate that boards may contribute value by advising as well as disciplining managers, and good advice and effective monitoring require a framework of trust and information sharing. When relations with their boards are strained, CEOs may actively attempt to suppress the information reaching the board, especially when it is dominated by independent directors. Therefore, board independence may generate its own agency costs by aggravating incentives for managers to manipulate the quality of information. This study provides empirical evidence that the relative advantage of board independence must be conditioned on both the negotiating strength of the CEO relative to the board as well as the information environment.

CHAPTER 1

INTRODUCTION

1.1 Introduction

Liquidity is generally recognized as a critical attribute of financial assets and is reflected in almost all aspects of working within stock markets such as stock price, the cost of transaction for trading, investment decision and trading strategy. The literature on market microstructure generally refers liquidity in ability to buy and sell assets easily, when buyers and sellers trade in and out of position quickly without having a large effect on prices (Easley & O'Hara, 2004).

Liquidity plays a central role in the motivation to trade, enhancing governance, reducing cost of capital valuation, and increasing asset return (Amihud & Mendelson, 1986; Heaton & Lucas, 1996; Brennan & Subrahmanyam, 1996; Brennan et al., 1998; Datar et al., 1998; Chordia et al., 2001; Lo et al., 2004). Importantly, a substantial body of research also demonstrates that the stock market liquidity contains leading information about the real economy, that consider as a particularly strong predictor of real GDP growth, unemployment and investment growth (Næs et al., 2011).

1.1.1 Liquidity and Corporate Governance

Given the essential role of liquidity in stock markets, it has aroused the attention of academics to find factors that drive liquidity. Prior research articles show that liquidity is affected mostly by several factors such as stock return's variation (Hameed et al., 2010), informational environment (Glosten & Milgrom, 1985; Amihud & Mendelson,

1986; Diamond & Verrecchia, 1991; Kim & Verrecchia, 1994; Easley & O'Hara, 2004), analyst following (Roulstone, 2003), trading algorithm (Hendershott et al., 2011), CEO compensation and some more other factors. Meanwhile, a substantial body of research argues that effective corporate governance is the main factor to explain the variation in stock liquidity (Chung et al., 2010; Chen et al., 2007; Jain et al., 2008). Corporate governance refers to the set of mechanisms that influence the decisions made by managers when there is a separation of ownership and control. An effective corporate governance system should align the interest of the managers with outsiders and curb opportunistic behavior that places a wedge between the interests of the outsiders and managers. Existing research studies believe that good corporate governance improve the firm's compliance with the disclosure requirements which in turn will enhance the quality and the frequency of information released by management (Forker, 1992). It also can increase the reliability of financial activities and the integrity of the financial reporting process (Watts & Zimmerman, 1986; Klein, 2002). Therefore, the stakeholders use corporate governance to ensure that they will get a return on their investments and activities with the company (Kanagaretnam et al., 2007). Otherwise, when the company reveals poor corporate governance, outsiders will take action to protect their prices for potential losses from investing in this type of company (Chung et al., 2010). They may tend to leave investing in the company or may increase their compensation as a reaction to the poor corporate governance. Therefore, we can expect that the poor corporate governance may influence for worse, the information environment, the confidence for trading, and ultimately liquidity.

1.1.2 Corporate Governance and Board of Directors

Board of directors is considered as the apex element of corporate governance among other elements such as ownership, competition for corporate control, law and regulation, and others (Gillan, 2006). The board of directors is responsible for evaluating CEO activities (Fama, 1980; Fama & Jensen, 1983; Baysinger & Butler, 1985; Shleifer & Vishny, 1997; Coles et al., 2008; Linck et al., 2008) and is an approach to ensure that CEO activities are in line with the interest of shareholders (Kanagaretnam et al., 2007). The board of directors is meant to perform the critical functions of monitoring and advising CEO. Broadly speaking, the monitoring function requires directors to scrutinize CEO to guard against harmful behavior, ranging from shirking to fraud. The board's advising function involves helping CEO make good decisions about firm strategy and actions. Conventional wisdom suggests that the optimal design of the board should be able to improve governance through enhancing both the monitoring role of the board and advising role of the board (Linck et al., 2008; Adams & Ferreira, 2007; Raheja, 2005). In the meantime, East Asian stock markets have legislated regulation reforms on increasing the representation of independent directors on boards. Policy makers in this area believe that the increase of independent directors is a critical way to avoid another potential financial crisis as well as restore market participants' confidence in stock markets after crisis and scandals. Relatively, Lin (2013) indicates that the increase of independent director in companies is a popular regulatory measure in Asia after the crisis. In addition, academic researchers have started paying attention to the monitoring role of the board as a means of improving corporate governance. For example, Google Scholar returned more than 1000 hits using 'independent board and

independent directors' as part of the title in the period from 1999 to November 2015 relative to before 1999 that is only 55 hits.

A key argument supports the changes in board structure, independent boards are strong and more effective at monitoring managers. It could presumably restore stakeholder confidence (Jain & Rezaee, 2006; Jain et al., 2008; Li, Pincus & Rego, 2008). However, board independence comes with its own challenges to do his duty. Good advice and effective monitoring require a framework of trust and information sharing. Boards monitor the CEO, who dislikes monitoring. CEOs may be particularly reluctant to share information with their boards. This limitation severely hinders the ability of even highly talented board members to contribute effectively to the monitoring of the CEO and the company's strategy (Jensen, 1993). In addition, the independent directors' advisory role depends critically on the information provided by the CEO (Song & Thakor, 2006; Adams & Ferreira, 2007), this may result in poor advising. Therefore, as with almost everything; independent board comes with benefits and costs (Adams & Ferreira, 2009). Nevertheless, the view that strong boards by more independent directors could be undesirable is almost never questioned. One of the key points we raise in this study, building on the above argument, is that if more independent boards in firms are optimal board structure, why countries have regulations for increasing the number of independent directors on boards? We expect that shareholders have already sought all available ways to maximize their economic self-interest, whether it is still necessary that regulators push shareholders to choose a special level of independent directors on board?

1.1.3 Liquidity and Market Maker's Confidence

The emphasis on market maker's confidence is motivated by microstructure theory, which, consider market maker as a supplier of liquidity (Grossman & Miller, 1988; Coughenour & Saad, 2004; Jain et al., 2008; Comerton-Forde et al., 2010; Glosten & Milgrom, 1985; Kim & Verrecchia, 1994; Almer, Gramling & Kaplan, 2008). Market makers refer to intermediaries who provide liquidity by using their own account to take the role of counterparty for submitted market orders. The view of the role of the market maker extends the conventional modeling of liquidity as a response to asymmetric information. Existing research studies show that market makers and other traders are less willing to supply liquidity when exposed to adverse information events. For example, evidences in Doukas et al. (2004), and Doukas and McKnight (2005) imply that uncertainty among market makers can affect liquidity. Coughenour and Saad (2004) showed that the liquidity provided by market makers depends on the risk of providing it. Inventory risk of market makers is reduced when there is less risk of adverse information shocks. Comerton-Forde et al. (2010) found that liquidity can worsen when market makers lose money from adverse information events. Market makers will be more willing to trade a stock with lower price concessions if there is less risk that their counterparties have access to privileged information. To sum up, adverse information events raise uncertainty among market makers about the value of companies; it would turn to rises trading expected returns (Fleming & Remolona, 1999). Liquidity will be greater when information events are less likely to happen, and liquidity dry-ups occur when market makers expect higher compensation from providing liquidity for facing high adverse information events.

Therefore, the focus is on market maker confidence, which may in turn be a function of governance arrangements. In corporate governance context, if compliance consequence of board structure involves the low level of information events, it will reflect to increase market maker's willingness for providing liquidity as market makers face a less risk of trading losses (Jain et al., 2008; Duchin et al., 2010; Adams & Ferreira, 2009). Likewise, if cost compliance of board structure exceeds its benefit, market makers are less likely to make more favorable inventory decisions by relying on board duties. This suggests an important role for board structure information in explaining liquidity.

1.1.4 Independent Board and Liquidity

As it was discussed, the board may enhance liquidity if it improves the trading environment for a stock, for example, by greater disclosure and greater certainty about the intrinsic value of the firm. Although governance activists have been strong proponents of having more independent directors on boards, however, the relation between independent board and liquidity theoretically is not clear, and there is little definitive evidence on the link between stock market liquidity and board characteristics such as independence.

One of the key points we can raise in this area of study is that an independent board should be viewed as a two-edged sword: increasing monitoring by an independent board may be helpful in mitigating informational asymmetries through demand additional number of disclosing information; but it can also generate its own agency costs by aggravating incentives for managers to affect the quality of information. This

point builds on the two groups of studies that have investigated the effect of independent board on the informational environment. Fama and Jensen (1983), Adams and Ferreira (2007), Kanagaretnam et al. (2007), Ajinkya et al. (2005), and Armstrong et al. (2014) are the main advocates of group of the study, noted that a greater level of board independence raises the number of voluntary disclosures. They believe that independent directors, as outsiders to the firm, demand a substantial amount of firm-specific information to effectively perform their advising and monitoring duties. While insider directors recognized as active traders in their company's stock earn substantial abnormal returns (Mishra, 2011; Chung & Charenwong, 1998), implying that heavy inside representation does in fact impose trading costs on less informed outsiders through a less number of disclosing information. Therefore, independent director domination of the board may enhance the number of disclosing information.

While another group of the study suggests that board independence may also entail costs (Adams & Ferreira, 2007; Charoenwong et al., 2011; Hermalin & Weisbach, 2012). These studies argue that the content of information is under CEO's control; and the CEO has fundamentally incentive to manipulate information to achieve stable position. The CEO is likely to wield a stronger influence over the board's decision on his replacement, for example, show that the current situation of the firm is adequately given disclosing information (Hermalin & Weisbach, 2012; Adams & Ferreira, 2007). When directors are outsiders, it is presumably a greater threat for CEO career. Thus, the incentive to manipulate of disclosure is stronger for information can be used for disciplining purposes. Moreover, independent directors typically have comparatively smaller equity stakes in firms they monitor, and so may lack strong financial incentives

to carefully act as agents of shareholders, uncovering the fact of information (Guo & Masulis, 2012). Existing research studies believe that the CEO attempts to withhold information or to otherwise resist efforts by boards to increase transparency have two more side consequences. First, reduce information sharing between managers and boards may cause a break in communication between CEOs and directors (Adams & Ferreira, 2009). CEO will lose the expertise of board members that might otherwise be available. Second, it may also erode the strength and speed of deliberation and decision-making. Faleye et al. (2011) noted that if independent directors are viewed with greater suspicion, decision-making may be slower and less cooperative.

This study employs interaction variables to investigate how the impact of board independence on stock market liquidity varies with several other governance variables, specifically, CEO career risk, and legal protections already in place. The goal is to test whether these variables interact the impact of the CEO-independent board relation and ultimately the information environment in which shares are traded. Based upon above arguments, one would expect that the relative benefits and costs of increasing board independence may well vary across firms and over time as the circumstances of the firm change. Therefore, the empirical analysis examines both the average effect of independent directors on stock market liquidity as well as the interacting effect of other variables on the impact of board independence. In particular, the present study asks whether market makers believe that more independent boards are viewed as a mitigating information risk, whether their trading behavior responds to board composition, and whether other variables may affect the relation between board composition and liquidity.

This study has argued that other factors can interact the baseline impact of board independence. While board independence can affect stock market liquidity through these general information channels concerning the transparency of the firm, it can also have a more direct effect through the impact of information on market makers. Market makers receive compensation for providing liquidity, but in the process bear trading risks. A market maker trades off a compensation wide enough to offset the trading losses, but narrow enough to attract an adequate number of liquidity-motivated transactions. As the market microstructure literature emphasizes, that tradeoff and the liquidity that market makers will provide depend on both information availability and asymmetry (e.g., Garman, 1976; Stoll, 1978; Ho & Stoll, 1981; O'Hara & Oldfield, 1986; Chordia et al., 2000; Hasbrouck & Seppi, 2001; Coughenour & Saad, 2004; Comerton-Forde et al., 2010). One would expect to observe meaningful variation across market makers in the ability to ferret out relevant information rather than relying solely or even primarily on firm disclosures. Griffin and Tversky (1992) also suggest that some biases commonly arise as functions of the characteristics of the information used by individual decision makers to update their expectations. Thus, professional decision makers are unlikely to overreact to the extremity of information, and underreact to reliability and more abstract information. This study uses the stock inventory of two active market makers in East Asia (Barclays Capital and Goldman Sachs) that have been cited as demonstrating particularly professional performance by the NYSE. They are recognized as biggest market maker companies all over the world with huge revenue from their trading. Goldman Sachs and Barclays have a strong reputation across the market maker companies to use sophisticated algorithm trading that is conducted by

complex computer programs and big data programming. Existing evidence claim that these programs determine various aspects of a trade, which include critical decisions like timing, trends and prices in the market and the all the factors associated with these factors that can either affect them positively or negatively (Viljoen et al., 2014).

This study will consider proxies for the differential abilities of market makers to value firms independently and estimate how that ability affects the net benefit of other governance arrangements. In actuality, every particular information is inferred by other available informative signals. When there is conflict among available information, decision makers don't rely on it. High-quality market makers better equipped to process information about the firm. Therefore, they are better able to assess the quality of the information the firm releases to the public, and their trading strategies may also allow for more sophisticated and effective risk management. It is reasonable to surmise that the average this type of market makers to place rely on the quality of information relative to the quantity of information when making a decision. The focus of this part of the study can answer this question that whether professional market makers share this belief that more independent boards are construed as optimal boards? Whether these higher-resource firms is less dependent on informational environment that provide by a greater level of independent board when assessing their vulnerability to information events?

Another interaction variable is the interaction of CEO turnover that estimate how tension within managers a company affects the net benefit of an independent board. Independent boards are recognized to be particularly effective in performing specific tasks, such as hiring and firing the CEO (Weisbach, 1988; Borokhovich, Parrino &

Trapani, 1996), adopting takeover defenses (Brickley, Coles & Terry, 1994), and negotiating takeovers (Cotter, Shivdasani & Zenner, 1997)¹ that all of these circumstances threaten job security. While to perform the tasks, independent board as an outsider to company needs information- information that is often controlled by the very CEO it is responsible to evaluate. While CEOs may generally have qualms about sharing information with independent directors, these reservations will be greater when their jobs are at risk thus puts a natural limit on the board's ability to effectively monitor him. Several research studies emphasize that CEOs may not willingly relinquish control to the board and may instead seek to entrench themselves that elicit actions aimed at signal distortion. For example, Hermalin and Weisbach (2012) show that when managers are concerned about losing employment, they change their investment strategy toward myopic behavior to improve reported performance. It is substituting away from longer-term investments such as R&D toward shorter-term investments or actions that affect reported numbers sooner. Charoenwong et al. (2011) argue that when subjected to greater scrutiny, CEOs direct their efforts toward increasing their firms' stock prices by managing or massaging information in order to prevent a takeover. To sum up, particularly when managers are concerned about their job security, we have noted that more independent boards may be more threatening to managers, which can induce management to impede the flow of information. In liquidity context, market makers would rationally limit trading exposure or demand higher compensation for inventory risk in these circumstances, as non-informed investors would be more sensitive to their exposure to adverse selection. Therefore, this study examines changes in the impact of

¹ Kaplan and Minton (2011) show that board-driven turnover rises significantly, increasing from 10.9% during the 1992 to 1999 period to 12.4% in the 2000 to 2007 period of the sample.

board independence during periods in which the board is engaged in considerations that threaten CEOs job security. The focus of this part of the study can answer this question: Whether liquidity in these periods would be particularly impeded and the relation between the proportion of independent directors and liquidity varies with proxy for CEO's turnover?

Finally, the legal environment may potentially affect the impact of board independence (Chung et al., 2012). High levels of investor protection may provide a substitute for transparency and reduce the importance of independent directors. For example, Klapper and Love (2004) show that investor protection is corporate governance provisions matter more in countries with weak investor protection. However, it is also plausible that legal protections are complementary to board independence, aiding boards in information production and dissemination, and thus increasing the beneficial impact of independent directors. Moreover, strong external protections that restrict executive prerogatives might take the pressure off the board to curtail management discretion and therefore remove a source of friction between them (Chung et al., 2012; Claessens et al., 2000; Berkowitz et al., 2003; Lombardo & Pagano, 2006; La Porta et al., 1999). Given that the most of East Asian companies follow other corporate governance styles (Jackson & Moerke, 2005) such as the United States (Sarbanes-Oxley regulation) that have strong legal and regulatory environments for investor protection rights, that is, it is important to ask whether the effectiveness of an independent board to promote liquidity provider to trade depends on the degree of investor protection provided by the legal system in the firm's home country?

1.2 Motivation and Contribution of the Study

Regarding above designed questions, this study can cite at least four motivations to investigate the relationship between independent board and liquidity in the East Asia area. First, the thesis is motivated by inconsistent results found in past research on the relationship between corporate governance and liquidity. The inconsistent result comes at a time when recent crisis and ongoing corporate governance concerns have made the board of directors, the center of policy debate and academic research (Adams et al., 2010). Second, there has been an ongoing discussion going back at least a decade about the proper number of independent directors on boards in East Asia companies. In particular, in the wake of the East Asia financial crisis, several countries implemented new legislation calling for an increase in the representation of outside directors on boards. This study can provide important context for the debate over the costs and benefits of regulation emerging from the crisis in East Asia stock markets, especially the debate focusing on reform of corporate governance. Third, East Asia stock markets are an interesting sample because of the role of liquidity in triggering the East Asian crisis of 1997-1998 (O'Hara, 2003; Fernando & Herring, 2003; Coughenour & Saad, 2004). Therefore, knowledge of what drives liquidity, and the characterization of its effects, will prove to be critical in preventing market crashes through the evaporation of liquidity (Persaud, 2000). The final motivation of the study is that East Asia markets recognize as an ideal setting for the study of liquidity issues. For example, Bekaert et al. (2007) noted that liquidity effects in emerging markets turn out to be more acuter than in United States stock markets, this is because, in the NYSE market for example, liquidity effects can be mitigated by large numbers of trade securities, diversified ownership

structures, and combinations of long- and short-term investors. Since, much of the research on this topic was conducted in United States stock markets and theories surrounding liquidity are formalized in United States stock markets, this suggests that, there is a critical gap in the liquidity area to find the best knowledge of what drives liquidity exactly. The growing size and great potential of the East Asian stock market also warrants a closer look at the liquidity of those markets. This study will fill these gaps in this area of study.

This study also contribute the existing research in at least two important aspects: first, in contrast to earlier studies that have relied on asymmetric information theory to explain relations surround liquidity area, this study expands a broader stream of research (Comerton-Forde et al., 2010; Jain et al., 2008) pertaining to the relation between the market maker confidence and market liquidity by showing whether the market makers as liquidity providers respond to perceived shifts to a greater level of independent board. Therefore, this study will consider professional market makers proxy for the differential abilities of market makers to value firms independently and estimate how that ability affects the net benefit of other governance arrangements. Second, while prior studies focus on monitoring of the board as the main mechanism affecting the information environment, we extend that focus to potential negotiations between the board and the CEO, arguing that the way a CEO deals with the board may influence, for better or for worse, the information environment. Therefore, this study will consider interacting variables (CEO turnover and investor protection) that measure the extent of negotiation inside companies. Overall, this study would contribute the existing literature to find a board structure that uniformly has a better consequence for all firms at all times.

1.3 Problem Statement

Liquidity is a major policy concern in East Asia stock markets. A significant strand of research shows that liquidity played a triggering role in the financial crisis 1997- 1998 (O'Hara, 2003; Fernando & Herring, 2003; Coughenour & Saad, 2004). They believe that the simultaneous decline in liquidity across several markets had a contributory factor in the East Asian crisis. The report by the Bank for International Settlements (1999) also noted that the sharp evaporation of liquidity from stock markets have posed a fatal threat to financial stability. The concern in East Asian markets is even stronger because the East Asian crisis also impaired the level of liquidity. O'Hara (2003) shows that stakeholders have felt uncertainty about the value of companies after the financial crisis. This has discourage the number of the investors who are interested to invest in a stock market and shifted market participants' beliefs about the market, which in turn exacerbate the functioning of the financial market such as liquidity (Fernando & Herring, 2003). Evidence of this liquidity reduction is clearly shown in Figures 1.1, which illustrates the trend of turnover ratio as market liquidity measurement² during crisis period from 1997 to 1998. The trend indicates that the total value of shares traded scaled by the average of market capitalization is reduced during the crisis period.

² Turnover ratio is the total value of shares traded during the period divided by the average market capitalization for the period. Using data for the year 2015 obtained from the World Bank

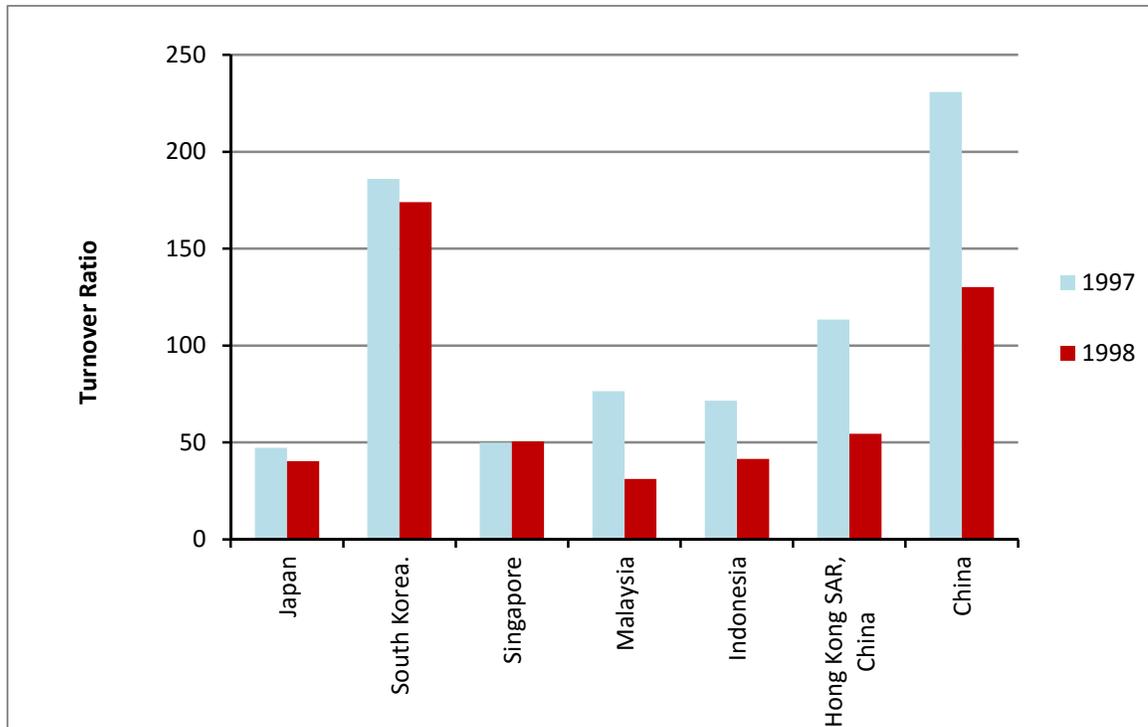


Figure 1.1

Liquidity, Turnover Ratio, During Crisis Period

Source: World Bank (2015)

The Asian corporate governance mechanisms also were criticized as being relatively inefficient in maintaining fairness and integrity in the stock markets during the East Asian crisis (Stiglitz, 1998; Harvey & Roper, 1999; Greenspan, 1999). Therefore, seeking to better corporate governance levels as well as introducing requirements for corporate governance is increasingly important for restoring the confidence of market participant on the fairness and integrity in the East Asia stock markets. The policy makers for corporate governance practices in the developed and developing countries indicate that directors who dependent to CEO played impairing role in the string of

corporate scandals and crises.³ Following regulations and recommendations in developed western stock markets for having a greater level of board independence,⁴ the most of East Asian stock markets started paying attention to have independent board, and implemented new legislation calling for an increase in the representation of independent directors on boards in the last decade. Lin (2013) noted that this is a popular regulatory reform in Asia after the crisis. Therefore, the percentage of independent director on board exogenously increases after regulation reforms. While East Asian stock markets have experienced a greater level of independent board, the amount of turnover ratio has been stopped moving forward. As can be seen from Figure 1-2, the average annual turnover ratio on a Malaysian stock market decreases from 44.3 to 32.7 comparing the pre-1997 crisis period (from 1989 to 1996) to after-reform period (from 2001 to 2014). Similarly, China experienced significant deterioration in market liquidity after the regulation reform. Indonesia, Hong Kong, and Thailand also share similar changes comparing pre-crisis period with post-reform period. Given the significant increase in turnover ratio in developed western countries during this time period, including in the United States and the United Kingdom⁵; it reveals that there seems to be a threat on liquidity in the majority of East Asian countries.

³ For example, US Senate reports that the dependent directors have failed in its fiduciary duties to shareholders (US Senate, 2002).

⁴ In 1990, the United Kingdom government appointed the Cadbury Committee to make recommendations on improving corporate governance. The Code of Best Practice, issued by the Cadbury Committee included a recommendation for having at least 3 non-executive directors on the board.

⁵ The average of annual turnover ratio on United States and United Kingdom stock markets becomes triple from the 1989 to 1996 period to the 2001 to 2013 period.

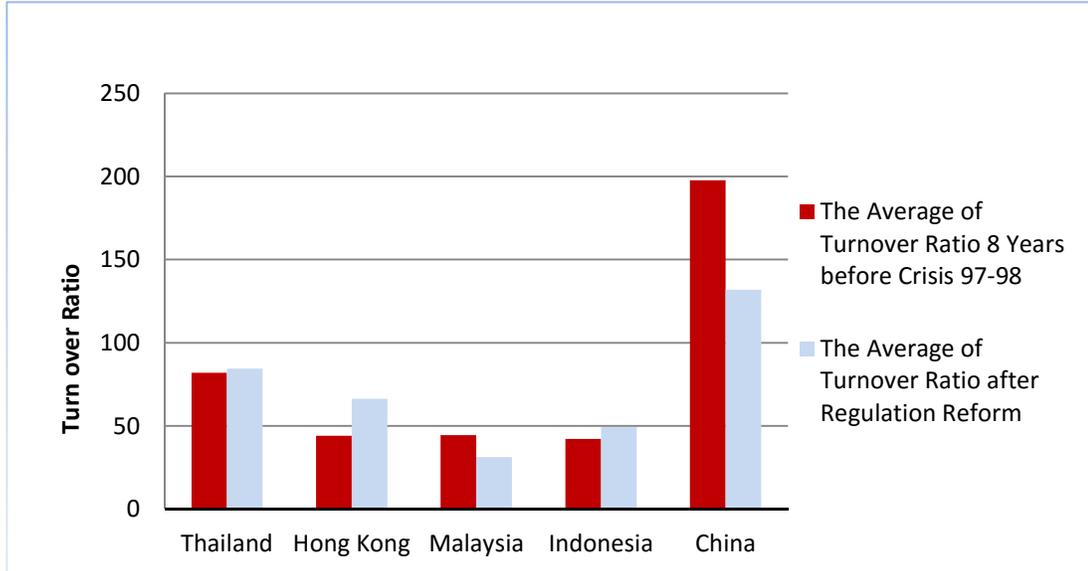


Figure 1.2

The Average of Annual Turnover Ratio, Liquidity Measurement, Before the East Asian Crisis 97-98 and after the regulation reform

Source: World Bank (2015)

There are at least three problems related to the regulation reforms for increasing independent directors on the corporate boards in the East Asia firms that deserve further attention. First, prior studies believe that the effectiveness of corporate governance depends upon the existing business environment in which the firm operates (Chung et al., 2012; La Porta et al., 1999). While the East Asian Codes of Corporate Governance is based on the Anglo-Saxon on codes of governance (Jackson & Moerke, 2005; Roszaini & Mohamad, 2006). Anglo-Saxon codes set the base for Sarbanes-Oxley act in the United States where companies have strong legal and regulatory environments, but whether the Anglo-Saxon code is appropriate to induce better economy prosperity and firm performance for Asian businesses remain an open question to be observed. Second, East Asian countries have had ongoing policy debates about the proper number of

independent directors on corporate boards. This is also a contentious issue for financial accounting literature (Morck, 2008). Policy makers in this area stipulate different minimum levels for the representation of independent directors on boards and involve it in different time. For example, Korea adopted governance rules, effective partly in 2000 and fully in 2001, which require large firms to have 50% outside directors, but small firms must have 25% outside directors (Black & Kim, 2012). In 2001, Kuala Lumpur stock exchange requires the board of directors of all listed companies to consist of one-third of independent directors or at least two directors. Taiwanese public firms had to appoint at least two independent directors in 2007 (Chang & Wei, 2011). While Japanese policy makers require only one independent director as a minimum in 2009⁶. Therefore, there is a need to investigate the debate over the costs and benefits of the regulations that emerged from the crisis. Third, empirical research reveals evidence related to notable upward trend in CEO turnover over the world after regulatory bodies require a majority of independent directors on boards (Kaplan & Minton, 2012; Hermalin & Weisbach, 2012). CEO turnover entails costs that are considered as the dark side of independent board (Hermalin & Weisbach, 2012). Compelling evidence to support the conventional wisdom about the dark side of independent board is still limited, it is therefore a puzzle that the present study trying to gauge.

To sum up, stock markets in East Asia are an interesting sample both because of the role of liquidity in the East Asian financial crisis of 1997-1998 (O'Hara, 2003; Fernando and Herring, 2003; Coughenour and Saad, 2004) and because of the regulatory response it elicited on the governance reforms. Based on observations on

⁶ See Table2-1 for more details about the progress of adoption of independent directors on board in East Asia Countries

liquidity and the scenario surrounding corporate governance reforms in the East Asian stock markets, there is a need for further academic address on the relation between independent board and liquidity.

1.4 Objective of the Study

The theoretical literature points to the costs and benefits of having more independent directors on the board. To sum up, researchers classify board's activities into two major functions: monitoring and advising (Linck et al., 2008; Adams & Ferreira, 2007; Raheja, 2005). By increasing independent directors on the board, the board's principal role shifted from the "advising board" to the "monitoring board". Increase in monitoring provides benefits, but it also entails costs. Benefit: having a better ability to monitor CEO would result in encouraging CEO to disclose more information to outside investors and limit managerial opportunism. Cost: the increasing monitoring gives CEO incentives to engage in value reducing activities intended to make himself appear more capable (Hermalin & Weisbach, 2011). As noted by Holmstrom (2005), Adams and Ferreira (2009), and others, if managements believe that a more independent board will monitor more intensively, they may be reluctant to disclose credible information that can be used for disciplining purposes. The board's structure may influence, for better or for worse, the information environment, market makers' confidence, and ultimately liquidity.

While theoretical and empirical evidence emphasize the positive consequences of independent board in times of corporate scandals and financial crises (Adams & Ferreira, 2009) but compelling evidence to support the benefits of a greater level of

independent board in times of normalcy is limited yet. The compliance cost of an independent board may exceed its benefits at normal time, and then liquidity might actually worsen. Therefore, the present study would like to fill up the gap of this academic research in this area since there has been little evidence about cost and benefit independent board in the present of professional market makers, CEO turnover time, and weak investor protection. It would be surprising, therefore, to find a board structure that uniformly has better consequence for all firms at all times.

In the view of issues discussed above, the following research objectives would be worthy of investigation.

- 1) To investigate the relationship between the proportion of independent directors and stock liquidity.
- 2) To examine whether the professional market maker interacts the relationship between the proportion of independent directors and liquidity.
- 3) To examine whether the CEO turnover interacts the relationship between the proportion of independent directors and liquidity.
- 4) To examine whether the investor protection interacts the relationship between the proportion of independent directors and liquidity.

1.5 Research Questions

This study will try to answer the following research questions:

1. What is the relationship between the proportion of independent directors and stock liquidity?
2. What is the role of professional market makers in the relationship between the proportion of independent directors and liquidity?
3. What is the role of CEO turnover in the relationship between the proportion of independent directors and liquidity?
4. What is the role of investor protection in the relationship between the proportion of independent directors and liquidity?

1.6 Significance of the Study

This study focuses on variation in board structure and liquidity across a sample of East Asian firms. Identifying the factors drive liquidity has been an ongoing discussion going back at least three decades. The results of this study shed further light on relations surrounding liquidity. The findings will also provide important context for the debate over the costs and benefits of regulation emerging from the crisis in East Asia stock markets, especially the debate focusing on reform of corporate governance. In particular, this study will offer explanation whether well-equipped market makers

consider high independent board as an important factor to adjust their trading risk. This study will add to the literature whether the tension among managers is the dark side of a greater level of independent board, which liquidity in these periods would be particularly impeded. Further, this study will also extend literature that whether independent boards work in combination with investor protection at the county level or there may be substituted relation between them. The following subsections present more details about the significance of this study.

1.6.1 Significance of the Study for Academic Research

The study extends the corporate governance literature by providing evidence that liquidity would be adjusted in a greater level of independent board. This study also can answer to some scholarly studies that found no statistically significant (or negative) relationship between board independence and liquidity. This study employs interaction terms that measure market makers quality and the extent of tension to make a deep analysis of the relation between independent board and stock liquidity. The findings will suggest that negotiations may better align the interest of the CEO with outsiders or may generate higher tension within the company that places a wedge between the interests of the CEO and outsiders. The present study will add to the literature that the net benefit of board independence may depend on conditions such as the negotiating strength of the board versus the manager, and other investor protections already in place. Focusing on above relations is also important for existing literature because it could shed some light on the channel through which effective board affects shareholder wealth.

1.6.2 Significance of the Study for Policy Makers

The evidence of this study forms an important consideration in the debate on the costs and benefits of the recent regulation in the East Asian countries. The findings of study complement calls in the contemporaneous accounting and finance literature for companies to consider the optimal design of corporate governance, which improves stock liquidity through effective board, and then attract more investors to participate in the stock market. As it was discussed, liquidity is widely considered as a major policy concern in East Asian markets. This study will present new feedbacks on the relation board-liquidity that help to make better decisions by policy makers in both companies and stock markets, for whom corporate governance for better liquidity are an option. This study also helps to explain the differences in the observed liquidity level across the countries by focusing on independent board in nine East Asia markets.

1.6.3 Significance of the Study for Investors

Market participants, especially foreign institutional investors fear to invest in emerging market because of liquidity concern (Lesmond, 2005; Chuhan, 1994). Understanding the source of liquidity movements is important for market participants, because, this understanding will help investors bear this risk with greater efficiency (Lesmond, 2005). This study highlight factors that drive liquidity in East Asian markets. Understanding about the factors that drive liquidity will help market participants to decide on their liquidity exposures and the rewards they would require. From investor perspectives, a better perception of the dynamics of liquidity both within and across markets could help investors to design better trading strategies. From market maker perspectives, they will