# กรรมการบริษัทที่คำรงตำแหน่งในหลายบริษัท ผลการคำเนินงาน และบรรษัทภิบาลของบริษัทในประเทศไทย

นางสาววิภานุช อาจรักษา

สถาบันวิทยบริการ จุฬาลงกรณ์มหาวิทยาลัย

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต สาขาวิชาการเงิน ภาควิชาการธนาคารและการเงิน คณะพาณิชยศาสตร์และการบัญชี จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2550 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

# MULTIPLE DIRECTORSHIPS, FIRM PERFORMANCE AND CORPORATE GOVERNANCE OF FIRMS IN THAILAND

Miss Wipanuch Ardrugsa

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science Program in Finance

Department of Banking and Finance
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By Mi:

Miss Wipanuch Ardrugsa

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Thesis Advisor

Associate Professor Sunti Tirapat, Ph.D.

Accepted by the Faculty of Commerce and Accountancy, Chulalongkorn University in Partial Fulfillment of the Requirements for the Master's Degree

(Associate Professor Annop Tanlamai, Ph.D.)

## THESIS COMMITTEE

(Associate Professor Sothitorn Mallikamas, Ph.D.)

(Associate Professor Sunti Tirapat, Ph.D.)

(Anant Chiarawongse, Ph.D.)

.... Committe

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วิทยานิพนธ์ฉบับนี้ศึกษาผลกระทบจากการที่กรรมการบริษัทดำรงตำแหน่งในหลายบริษัท ต่อผลการดำเนินงานของบริษัท โดยแบ่งประเภทของกรรมการบริษัทออกเป็น 2 ประเภทคือ กรรมการบริหาร และกรรมการอิสระ จากตัวอย่างการศึกษาบริษัทจดทะเบียนในตลาดหลักทรัพย์ปี พ.ศ. 2536 — 2548 ผลการศึกษาพบว่า ความสัมพันธ์ระหว่างคณะกรรมการบริษัทซึ่งมีกรรมการ บริษัทที่ดำรงตำแหน่งในหลายบริษัท และผลการดำเนินงานตามราคาตลาดของบริษัทเป็นไปใน ทิศทางลบ แต่ในขณะเคียวกัน คณะกรรมการบริษัทที่มีลักษณะดังกล่าว และผลการคำเนินงานทาง บัญชีของบริษัทกลับมีความสัมพันธ์กันในทิศทางบวก ทั้งนี้ถึงแม้ว่าจะมีการศึกษาความสัมพันธ์ ดังกล่าวโดยแยกตามประเภทของกรรมการบริษัท แต่ก็ไม่พบว่ามีการเปลี่ยนแปลงในทิศทางของ ความสัมพันธ์ดังกล่าว นอกจากนั้นจากผลการศึกษาเมื่อพิจารณาความสัมพันธ์ ในช่วงเวลาก่อน และหลังวิกฤติเศรษฐกิจทางการเงินในเอเชียช่วงปีพ.ศ. 2540 พบว่าประเภทของกรรมการบริษัทจะ มีความสำคัญ และผลการศึกษายังพบหลักฐานที่แสคงถึงว่า ประเทศไทยมีการพัฒนาปรับปรุง บรรษัทภิบาลให้ดีขึ้นอย่างสม่ำเสมอภายหลังจากวิกฤติเศรษฐกิจดังกล่าว วิทยานิพนธ์ฉบับนี้ยังศึกษา ความสัมพันธ์ระหว่างคณะกรรมการบริษัทซึ่งมีกรรมการบริษัทที่คำรง ตำแหน่งในหลายแห่ง และผลการดำเนินงานของบริษัท เมื่อแยกบริษัทตาบความเป็นไปได้ในการ เกิดปัญหาของตัวแทน (Agency Problems) และพบว่าความสัมพันธ์ดังกล่าวโดยเฉพาะอย่างยิ่ง สำหรับกรรมการอิสระนั้นมีความขึ้นอยู่กับแนวโน้มในการเกิดปัญหาของตัวแทนในบริษัทด้วย

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This thesis generates novel empirical evidence on Thai corporate governance

in respect of the multiple-directorship impact on firm performance with classifying

the directors into two types, executive and non-executive ones. Employing the sample

of Thai listed firms in 1993 - 2005, this paper unfolds that boards in which directors

serving a number of seats penalize firm's market performance, but such boards create

more value to the company in terms of accounting value. Besides, when exploring the

relations by each type of directors, it is found that the directions of those relationships

still remain unchanged for both types. In addition, when investigating over the time of

pre- and post-Asian financial crisis in 1997, this thesis discovers that the types of

director do matter. Also, there is some evidence that Thai firm's governance is

constantly ameliorated after the crisis. What's more, when examining those relations

according to the potential agency problems, this paper finds that the associations of

boards in which non-executive directors holding numerous directorships with firm

value are actually driven by the probable agency problems.

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#### **CHAPTER I**

#### INTRODUCTION

# 1.1 Background and Problem Review

The Asian financial crisis in the year 1997 is the severest crisis that Thailand had ever experienced. Differing from the crisis in the year 1929 caused by the outside country factors, the Tom-yum-kung crisis was occurred by the fundamental weaknesses such as too rush to open the financial liberalization leading to the flooding of capital inflows, keeping the pegged exchange rate system despite it was much higher than the real value, and using wrong macroeconomic policies. Particularly, another cause of the financial crisis was the corporate governance failures both in the financial intermediaries and corporate sectors. Banks as the creditors should externally monitor their borrowers. Unfortunately, it is not the case; banks themselves also faced the mismatching maturity of loans whilst the individual firms had borrowed and invested excessively into the wasteful investments. In other words, there was an expropriation the minority shareholders' wealth.

Nevertheless, not too long after the financial crisis, there has been much strong attention to reform the corporate governance continuously. To begin with, the Code of Best Practices for directors as well as Thai Institute of Directors Association had been established in 1999, and there are several legal reforms such as the amendment of Bankruptcy Act commenced in order to improve the stakeholders' right. Moreover, several organizations, for instance, the Stock Exchange of Thailand, Securities and Exchange Commission, Bank of Thailand, Minister of Finance, Thai Rating and Information Services including Thai Institute of Directors Association, had gradually launched the implementation of corporate governance reform such as issuing the best

practice guidelines and passing new Acts and regulations. Besides, the corporate sectors had set up their own code of professional conduct such as Association of Securities Analysts. In 2004, the SEC encouraged all listed companies on the compliance with the SET 15 good corporate governance principles announced in 2002. Particularly, they strictly determined the definition of "independent directors" and emphasized on the roles and duties of directors and independent directors. At the present, SET publishes the Principles of Good Corporate Governance in 2006; there have been additional recommendations by the World Bank and some more principles added to be comprehensive and comparable to the Principles of the Organization for Economic Cooperation and Development (OECD). One of the five parts is about the responsibilities of the board clearly indicating the importance of board of directors to improve the internal corporate governance<sup>1</sup> of the individual firms. Similarly, most studies also perceive the boards of directors as the lynchpin of the firm governance as well (see Gillan (2005)).

A great deal of researches on corporate boards and firm's governance has been done extensively. Conventionally, they have focused on the board composition, board size and the board independence from corporate management. In recent time, the multiple-directorship serving of directors has been the issue. However, the preceding studies on the seat accumulations still have shown ambiguous results which can be categorized into two main groups: reputation and busyness hypotheses. The former is a crucial incentive for independent directors to hold a number of outside directorships so as to certify their experience and competence (see Fama and Jensen (1983)). Additionally, those who are in favor of the reputation effect argue that firms whose directors sitting on multiple board seats are likely to have superior performance

<sup>1</sup> Gillan (2005) indicates that the internal governance is mainly composed of the board of directors and management teams while the external one is the debtholders and the shareholders.

(Booth and Deli (1996), Harris and Shimizu (2004) and Loderer and Peyer (2002)). In contrast, since the time and effort are finite resource, directors serving on too many boards could become too busy to monitor management effectively. Thus, there are several studies supportive of the busyness hypothesis showing the negative relation between the seat accumulation and firm value (Fich and Shivdasani (2006)). Lastly, investigating the announcement effects for sender-firms supplying their executives as independent directors and examining the event study of those impacts on the agency problem proxy, Perry and Peyer (2005) find that when agency costs are low and insiders accept outside board seats, shareholders will benefit from the increasing abnormal return; however, when agency problems are high, investors react negatively.

Overall, even though there are a number of literatures empirically studying the issue of multiple directorships, the results are still ambiguous and fairly mixed. Consequently, revisiting the association between boards whose directors serving on numerous board seats and firm performance, this paper also adds on brand-new prominent features. Particularly, most previous literatures pay attention to the independent directors; however, Thai firms' proportion of outside directors is much lower than that of British and American firms.<sup>2</sup> As a result, this study explores further if the impacts are vary to the types of directors: executive and non-executive directors. What's more, unlike Perry and Peyer (2005) studying the sending-firm announcement effects of outside director appointments by conditioning the proxy of agency problem, this paper investigates around the agency cost in distinct angles. That is, this thesis examines whether the marginal impact of multiple directorships on company's performance is greater when the agency problem exists. Besides, with the unique

<sup>&</sup>lt;sup>2</sup> The mean percentage of independent directors on boards in Thai firms is only at 30 percent (see Cheung et al. (2004)) while that proportion in British and S&P 500 US firms is 90 percent and 80 percent, respectively (see Fernandez and Arrondo (2005)). Also, Fich and Shivdasani (2006) report the proportion of non-executive directors in US firms about 55 percent.

opportunity, this paper compares the associations between multiple directorships and firm performance both pre- and post- the Asian financial crisis.

There are several reasons why corporate governance in the context of Thailand is interesting and attractive enough to investigate empirically. Firstly, according to La Porta et al. (1998) and Alba et al. (1998), Thai capital market has weak legal investor protection for the outside equity investors. They point out that firms in which poor investor protection countries have more concentrated ownership. Particularly, Wiwattanakantang (2000) uncovers that the controlling shareholders are involved in the firms' management about 70 percent of the sample firms. As a consequence, this could deteriorate the effectiveness of the mechanism of shareholder protection such as board of directors system. Specifically, the issue about the number of directorships held by directors on boards in Thailand has been primarily raised up into concern; Nikomborirak (1999) suggests that directors' holding too many board seats is another source of weak corporate governance partially contributing to the Asian financial crisis in 1997 since they cannot afford their time to monitor company's management teams appropriately. Additionally, there has just been the case of the Supreme Administrative Court's ruling to cancel the privatization of the Electricity Generating Authority (EGAT) recently, resulting from the conflict of interest of some nominated committee. This is because that committee serves on too many board seats which mostly have interests against one another and, certainly, against the EGAT. On the whole, it is valuable to explore further the issue of multiple directorships in the context of Thailand.

## 1.2 Statement of Problem/ Research Question

In general, this paper questions whether the multiple directorships in boards of directors have a negative impact on corporate performance and firm governance in Thailand.

# 1.3 Objective of the Study

- 1. To explore the impact of multiple directorships on firm performance. In addition, this paper is about to examine if multiple directorships by each director type, executive and non-executive directors, are likely to affect firm value differently.
- 2. To compare the relation between busy boards and corporate performance before the Asian financial crisis (weak governance environment) with the association after the crisis (better governance environment).
- 3. To examine if the impact of multiple directorships on company performance depends on whether the agency problem exists or not.

## 1.4 Scope of the Study

The sample comprises of all publicly industrial listed companies in the SET and mai during 1993 to 2005. However, this study excludes the financial services firms (banks, finance companies, and insurance firms) since there could be the divergence of regulatory influencing the role and duties of their board of directors to be limited.

#### 1.5 Contributions

Like no prior studies, this paper tries to build on the associations between the multiple directorships and firm performance by generating the relative classifications according to the types of directors. More importantly, this thesis also regards the impact of multiple directorships on company's performance when the agency cost exists. Last but not least, this paper provides not only the compared relationships before and after the Asian financial crisis but also the additional evidence of the associations with respect to the emerging economy as well.

# 1.6 Organization of the Paper

This paper is arranged as followings. Chapter II is going to discuss relevant theoretical and empirical findings from previous studies. Chapter III will provide an overview regarding the employed data, hypotheses and methodologies. Chapter IV will discuss the empirical results from the investigation. Chapter V will provide a conclusion and areas for future research.

#### **CHAPTER II**

#### LITERATURE REVIEW

This chapter is composed of two major sections. Section 2.1 describes the conceptual and theoretical background concerning the agency problem, corporate governance definitions and their relations to board of directors. The relevant empirical studies are appeared in section 2.2 comprising of the relationships among the multiple directorships, corporate governance and firm performance, and the boards of directors in Thailand's circumstance.

## 2.1 Conceptual and Theoretical Background

# 2.1.1 The Agency Problem

Jensen and Meckling (1976) view the agency relationship as a contract arising when the one or more individuals (principals or capital providers) engage another person (the agents), who is empowered for some decision making, to perform some service. If there is the separation of ownership and control and supposed that both parties are the utility maximizers, not surprisingly, the agents will not act in their best interests of the principal. For example, regardless to the expense occurring to the shareholder, managers (agents) may want to invest in the too risky project since they could be well-known if the project succeeds. To address and mitigate this conflict of interests, Jensen and Mecking (1976) propose to establish the proper incentives for the agents and initiate bonding costs ensuring that they will not do harm to the principals, but if it is the case, the principals will be compensated.

## 2.1.2 Corporate Governance Definitions

Claessens (2006) points out that though corporate governance has defined variously, it could be categorized into two facets. Firstly, it is around the firm's actual manners, for example, how efficiently board of directors operates including the relationships between directors' compensation and firm value. Secondly, it concerns with the rules from judicial and legal systems as well as financial and labor markets. In other words, it is about the frameworks or norms under which companies are supposed to follow.

Shleifer and Vishny (1997) narrowly define that corporate governance is all about the ways in which the suppliers of finance to corporations assure themselves of getting a return on their investment. Accordingly, this definition can be applied to resolve the problems about agency relationships and compromise the conflict of interest among agents.

Nonetheless, from a broader perspective, the Cadbury Committee (1992) views corporate governance as the system by which companies are directed and controlled. On the one hand, the boards of directors-- whose their actions are subject to laws, regulations as well as the shareholders in general meeting-- are responsible for their firm's governance such as setting firm's strategic aims, supervising company's management teams and reporting to shareholders on their stewardship. On the others, the shareholders play their roles as not only to appoint the directors and auditors but also to ensure their own benefit that the effective governance does exist. Similarly, the Stock Exchange of Thailand (2006) defines corporate governance as a set of mechanisms and processes of the associations among corporate board of directors, firm's management and its shareholders so as to enhance company's

competitiveness, its growth and shareholder value in the long run regarding to the interests of other company stakeholders.

# 2.1.3 The Agency Problem, Corporate Governance and Board of Directors

Jensen and Meckling (1976) propose that the agency problem arises when there is the divergence of the interests between the principals and the agents, so called the conflict of interest. Since each party wants to maximize his own utility, there could be the wealth expropriation of the agents from the principals. Jensen and Meckling (1976) suggest that as making principals' and agents' distinctive interests converged, the compensation incentives could resolve the conflict of interests problem. However, Fama (1980) tries to explain how the separation of security ownership and company's control can be an efficient form of economic organization. Indeed, he proposes that the firm is disciplined by the competition from other firms forcing the evolution of devices for monitoring firm's performance efficiently whereas the corporate individuals encounter the discipline from the outside managerial labor markets as well. In other words, Fama (1980) posits that the managers will be internally monitored by the managers themselves through the process of monitoring from higher to lower level of management and vice versa. Since each of them has a stake in the managers' performance above and below him, all managers will be monitored in both directions. Moreover, providing that the top managers compete against one another, Fama (1980) argues that they could be the best ones to control the board of directors. Due to their power in making decision, the top managers' opportunity wages determined by markets are inclined to be the signals to markets about firm's performance. Nonetheless, perhaps the top managers reckon that the expropriations of shareholder wealth are more attractive than competition

among themselves. Fama (1980) points out that the incorporating of outside directors could decrease the probability of such expropriation attempts and promote the board market-induced mechanism to be inexpensive and low-cost internal transfer of control. The outside directors' task is to stimulate and oversee the competition among the firm's top managers, and they, in turn, are disciplined by the market for their services which values them according to their reputation and performance. The board of directors is regarded as a market-induced evolution whose most crucial role is to scrutinize the highest decision makers within the firm.

Apart from the outside director, there could be other market-induced institutions such as the corporate unions to monitor management efficiently. In fact, even though the existence of an outside market could be another force susceptible to the internal managerial labor market, the board role provides mechanism whose costs is lower than the mechanism generated by an outside takeover for rearranging top managers. In short, the role of board of directors is one of the most important principles for having effective and good corporate governance.

## 2.2 Relevant Empirical Studies

#### 2.2.1 Corporate Governance and Firm Performance

Having better corporate governance, the companies are prone to have better performance since the effective governance interprets that the expropriations of controlling shareholders are less likely. As a result, the resources will be allocated appropriately, and the decision making will be better. Alternatively, firms with good corporate governance are more attractive for the investors and lenders to put their

money into the firms than firms with worse governance. Hence, good governance firms' costs of capital will decrease and, subsequently, firms will perform better.<sup>3</sup>

To consider the linkage between corporate governance and firm performance, most research papers has to do with the governance practices including the board composition and board size. In general, the results of the empirical studies about the relationships between board composition and firm value are inconclusive. Some papers point out that the firms mostly composed of outside directors will show better performance. For example, Rosenstein and Wyatt (1990) explore the reaction of shareholders to the outside director appointments, and they find that although boards are initially dominated by outsiders before the appointments, the addition of an outside director increase firm value. The potential explanation is that the outside directors can monitor and oversee management more efficiently than the insiders. This is because the outsiders are not subject to the top executive managers and they try to maintain their quality and reputation. Nevertheless, some find no such effects, for instance, using the sample of the publicly listed firms in New York Stock Exchange, Hermalin and Weisbach (2001) find that there is no the association between board composition and firm performance. While the relationships between board composition and firm value are quite mixed, those between board size and firm performance seem rather unambiguous showing negative associations. To illustrate, using a sample of small and medium size firms in Finland, Eisenberg et al. (1998) find that companies' board size is negatively correlated with the financial performance measuring from the company's return on assets. Using the sample having opposite characteristics to Eisenberg et al. (1998), Yermack (1996) finds the negative relationship between board size and firm's market value measuring from

<sup>3</sup> See Nam and Nam (2004)

Tobin's Q. Likewise, Hermalin and Weisbach (2001) find that board size is negatively related to corporate value neither. Furthermore, according to Hermalin and Weisbach (2001), having a big board, a company is prone to encounter the free-rider problems among directors in their monitoring and supervision of management.

## 2.2.2 Multiple Directorships and Firm Performance

Admittedly, even if there have been a great deal of studies on the multiple directorships, the impact of the directors' seat accumulation on corporate performance is still vague and controversial. In general, the results of previous studies could be grouped into two main competing arguments: the Reputation and the Busyness Hypotheses. Based on the Fama and Jensen (1983) work, market's demand for outside directorships could be perceived as the quality certification of directors to promote their reputations and settle the connecting network as well as the business contacts. This seems consistent to Jensen and Meckling (1976) arguing that the labor market pressure and reputation concerns disciplinarily affect both managers and board members. In addition, focusing on the supply of outside directors, Booth and Deli (1996) whose results support the former hypothesis examine factors influencing the number of outside directorships served by CEOs. By means of multivariate regression, they find that there is too little evidence to convince that CEOs accept the outside directorships as a form of perquisite consumption. What's more, investigating upon firm's acquisition performance, Harris and Shimizu (2004) find that the overboarded directors are essential sources of knowledge so lead to an informed acquisition decisions. Besides, Ferris et al. (2003) document the significantly positive relationship between the number of directorships held by directors in Forbes 500 firms and company performance; however, they find positive but insignificant relation between

the directorships per director in general firms and firm value. Furthermore, exploring the phenomenon of board overlap in publicly listed firms in Switzerland, Loderer and Peyer (2002) state that the chairmen of the board who serve multiple seats in listed firms are beneficial to corporate performance.

Nevertheless, Fich and Shivdasani (2006) argue that the paper of Ferris et al. (2003) fails to detect any evidence of systematic association between firm value and the average seat accumulations due to several facets of their methodology and research design. Thus, Fich and Shivdasani (2006) revisit the relationships between the multiple directorships and corporate performance, claiming that their methodology is better. They find that firms in which a majority of outside directors serve three or more directorships are related to weak firm governance; in particular, market-to-book ratios, operating return on assets, turnover ratio and operating return on sales of those companies are all decreased. This is consistent to the idea that directors sitting on a number of board seats become so much busy that they cannot spend their time, which is limited resource, monitoring management efficiently. This notion is well known as the Busyness Hypothesis. Moreover, Fich and Shivdasani (2006) point out that the appointment of busy directors into companies with poor performance is less likely. As a matter of fact, following such performance, those busy outside directors even tend to depart from boards, indeed. Consequently, the skepticism that poorly performing firms are inclined to appoint busy directors into their boards, so called the potential endogeneity, is dispersed. Additionally, exploring the announcement effects of executives' acceptance outside directorships for sending firm, Perry and Peyer (2005) find that when executive directors holding prior directorships undertake the additional outside director board seat in other firms and the agency problem are low, the sender firms' return will be greater. However, when executives holding prior directorships

accept the additional outside director appointments and the agency problem are high, the investors will react negatively. They also find that the announcement returns of home firm will be higher when the executive director undertakes an appointment to the board of directors in a financial firm, a firm operating in the related industry and a firm with relatively high-growth opportunities. Their results could be implied that the executives' outside directorships can improve firm performance via learning managerial strategies, develop directors' commercial network including signaling directors' reputation and quality to the outside labor market. More importantly, it could be inferred that the structural corporate governance measures, for instance, an independent board of directors, could have an obvious impact on firm performance. Finally, by theoretically focusing the costs and benefits facing firms and executives when director undertakes an additional outside directorship, Conyon and Read (2006) develop theoretical model for helping to empirically explain why companies allow their executives to accept external board seats and whether the outside directorships enhance shareholders' value. Their model shows that managers will spend more time and hold more on additional directorships than is value-maximizing for the home firm.

## 2.2.3 The Previous Studies of Boards of Directors in Thailand

Apart from practically director's role guideline and regulatory for listed firms, there are many research papers studying the corporate governance in Thailand in terms of boards of directors. Employing the data from 1998 to 2002, Tilkanan (2004) finds that the ownership of management has no influence on firm performance whereas the ownership concentration positively relates to firm performance only when using return on assets (ROA). Also, he finds that the economic condition has no effect on the association between corporate governance and firm performance.

Besides, with cross-section data in 1996 and 1998, Uangudom (2000) examines the relationship between firm performance and board structure which is board size, board composition and inside directors' ownership, finding that board structures have no impact on firm performance except the proportion of foreign directors who have a positive relation with firm performance. Additionally, she also finds that firm's past performance results in the adjustment of board structures, suggesting that boards of directors and independent directors are still used as crucial instruments for company's governance. Furthermore, Tangphakorn (1999) analyzes the structure and role of board of directors and cross-sectionally examines the impacts of the effectiveness of board of directors on listed companies' performance in 1998; she adopts the board size, board composition and directors' ownership to determine the board effectiveness in oversight. Then, she finds that over 70% of the firms have shareholder directors, and director's holdings are averagely around 15-16%. Moreover, she points out that the directors from founding family and directors' stock ownership of the level that more than or equal to 5% negatively impact on firm performance while directors' ownership at level more than or equal to 15% and 50% have positive impact on performance. Also, board size, percentage of independent outside directors, extra independent board, existence of foreign directors, directors with other appointment have no any significance on the performance. Lately, using cross-sectional data of SET-listed companies in 2003, Sathitmanwiwat (2005) investigates the relations between the control mechanisms in firm governance and corporate performance. He proxies the control mechanism by using the proportion of firm governance disclosure, the proportion of independent directors, board duality, and the proportion of family members in the board, finding that the proportion of family members in the board negatively and significantly relates to firm performance. In contrast, a proportion of firm governance disclosure, board duality and the proportion of independent directors have no significant impact on firm's performance.

On the whole, as Thai prior research papers mentioned above, even though there are a lot of enthusiastic attempts to address the board of directors issue, most of them study around the boards of directors in terms of board structures, director ownership and firm governance mechanism. Specifically, there is only one work skimming the surface of the issue of multiple directorships, but it does not scrutinize on this issue thoroughly. More importantly, the majority of preceding papers do the investigation with merely one year data; this could infer that there might have been the data insufficiency problem. Unlike the previous, this thesis employs data with fairly longer period of time comparing to Thai studies. Furthermore, this paper provides the classifications of busy boards according to the type of directors serving on several board seats. What's more, the issues of agency problem and the distinctiveness of before and after the crisis are also concerned in this investigation as well. In brief, this paper is about to contribute to more comprehensive results.



#### **CHAPTER III**

#### DATA AND METHODOLOGY

#### 3.1 Data

The data about internal corporate governance (board of directors) and financial characteristics are acquired from the SETSMART database and DataStream, respectively. In particular, the data about directors' number of directorships are collected manually by using SQL (Structured Query Language) program to count the number of directorships of every director whereas the ownership of each director is also gathered by hand as well.

#### **Definitions**

#### Directors

This paper defines the meaning of some important words aligning with the definitions given in the principles of good corporate governance for listed companies launched by SET in the year 2006 as followings.

- Executive directors are defined as an executive who is appointed as a member of the board of directors.
- Non-executive directors are perceived as a director who has no position in the company's management team, for example, an outside director or an independent director.

## A busy director

Similar to Fich and Shivdasani (2005) work, this paper considers the directors busy if they serve on three or more boards. Even if it might seem subjective to select this cutoff, there are many reasons behind this criterion. Firstly, according to Krungthep turakij newspaper on April 7, 2006, Thai Institute of Directors Association

contends that since there are no explicit regulations indicating the exact numbers of directorships, the directors are recommended that it is subject to the appropriateness and judgments whether a director has already served on any main company. More specifically, IOD points out that if directors already have a position in the board of their home firm, they should not sit on other boards more than two or three directorships. However, if it is not the case or they already retired, they could hold the outside directorships equal to five but not more than seven board seats. Secondly, the benchmark of this paper is also consistent with prior studies such as Ferris et al. (2003) and Fich and Shivdasani (2005).

## A busy board

To determine the prevalence of busy directors on the board, this paper defines that the board is busy if there are the amounts of busy directors equivalent to or more than 50% of the overall board's directors.

Similarly, when the classification cases are considered, their definitions are applied parallel to the primary circumstance. For example, when this paper focuses on the dominance of the "non-executive" or "outside" directors on the board, the board is considered as busy if 50% or more of the board's "outside" directors are busy.

# 3.2 Research Hypothesis

Hypothesis 1: Any boards which contain the majority of directors serving on multiple seats accumulation should experience the inferior firm performance.

According to La Porta et al. (1998) and Alba et al. (1998), Thai capital market has fragile legal investor protection for the outside equity investors. Furthermore, firm directors holding on too many seats could be so much busy that cannot monitor firm's

management effectively (Fich and Shivdasani. (2006)). Thus, this lack of oversights to managements could deteriorate the firm value

Hypothesis 2: Busy boards whose executive directors holding multiple directorships are likely to impact firm performance more negatively than busy boards with multiple-directorship non-executive directors.

Generally, since the executive directors are usually full-time employees, they have more responsibilities and duties to be in charge than the non-executive directors do. As a result, if the executives undertake the additional outside directorships, there could be more negative impact on corporate value, comparative to non-executives' undertaking.

Hypothesis 3: The association between busy boards and firm performance before the Asian financial crisis is supposed to differ from the relation after the crisis

Attributable to the 1997 Asian financial crisis partially resulting from poor corporate governance, there is subsequently the awakening of an improvement of the governance in Thailand by a large amount of organizations, for instance, SET, SEC, IOD as well as BOT. As a result, the distinction between before and after the 1997 financial crisis is more likely.

Hypothesis 4: The impact of boards with multiple directorships on company's value depends on the agency problem.

The decision making of directors to undertake numerous outside directorships could lead to the conflict of interests and make them involve the potential agency problem especially when the executives' ownership is low (Jesadpisit (2001)). This is because directors with low incentive behave for their own interests rather than companies'. Therefore, the effect of multiple-directorship boards on firm value tends to be driven by the existence of the agency problems.

#### 3.3 Methodology

#### 3.3.1 <u>Dependent Variables</u>

This paper uses the firm performance as the dependent variable measuring by both market value and operating profits. In terms of market value, this study uses Market-to-Book ratio while return on assets, asset turnover ratio and return on sales are employed as accounting profits.

Market-to-Book ratio<sub>it</sub> = Market value of the common equity/ Book value of

the common equity in the company

 $ROA_{it}$  = Earning before interest and tax (EBIT)/ Total assets

ROS<sub>it</sub> = Earning before interest and tax (EBIT)/Total sales

# 3.3.2 Independent Variables

The models in this paper are applied from that of Fich and Shivdasani (2006). The investigation employs three measures of multiple directorships as independent variables. The main independent variables embraced from Fich and Shivdasani (2006) to investigate the first two hypotheses are the busy board indicators, which are the busy board dummy variables, and the percentage of busy directors. Besides, according to Ferris et al. (2003), this paper provides another alternative measure of multiple directorships which is the average directorships held by directors in a board as well. For the second hypothesis, extended the evidence of the relations between busy board and firm value, this study is also about to classify the busy board according to the type of directors – executive and non-executive ones. What's more, due to adopting the model from the first hypothesis, there is no extra independent variable for the third one whilst the fourth hypothesis is pursued by adding the proxy for agency costs to

the model with all variables for multiple-directorship measures including their interaction terms to explore the specification test of the models.

The definitions of independent variables are as follows:

BB<sub>it</sub> = Busy board's directors dummy variable of firm i at year t

= 1; if 50% or more of the board's directors of firm i at year t serving on three or more directorships

= 0: otherwise

PBUSYDI<sub>it</sub> = Percentage of busy directors

DB<sub>it</sub> = Average directorships held by directors in a board

When this paper investigates the second hypothesis, the busyness measurements will be re-defined and classified by the directors' types – executive and non-executive directors. Hence, the dummy BBED<sub>it</sub> and BBNED<sub>it</sub> are perceived as the busy board (BB<sub>it</sub>) attributed to busy executive directors and busy non-executive directors. Similarly, PBUSYED<sub>it</sub> and PBUSYNED<sub>it</sub> are the percentage of busy executive and non-executive directors whereas DCEO<sub>it</sub> and DNED<sub>it</sub> are the directorships held by executive and non-executive directors in a board, respectively.

 $AP_{it}$  = Agency problem proxy using executives' ownership of firm i at time t

= 1; if executives' ownership in firm i at time t is equal to or less than the sample median.

= 0; if otherwise

## 3.3.3 Control Variables

It is necessary that the regressions control the firm governance and financial characteristics prone to affect firm performance. Yermack (1996) points out that firm

value negatively and significantly relates to the board size. Thus, this paper adds the log of board size into the model. Also, board composition is also controlled since there are the previous studies finding the relationship between firm value and board composition by the proportion of outside directors. Yermack (1996) suggests that a high percentage of independent directors results in the worst performance; however, Krivogorsky (2006) reports that there is a strongly positive relationship between a portion of independent directors on the board and profitability ratios. In addition, there are several studies showing the effect of share ownership on firm value, for instance, Yermack (1996) and Fich and Shivdasani (2006) posit that the ownership by officers and directors positively and significantly associates with firm value. Nonetheless, Morck et al. (1988) point out that the relationship between management ownerships and firm's market value is significantly non-monotonic. Thus, this paper incorporates the executive director's ownership in the model. Furthermore, this paper controls for company's profitability by using return on assets since ROA is likely to drive firm performance in the same direction. Aside from controlling the board characteristics, it is important to control the firm characteristics as well which are firm size and firm's investment opportunity measured by the ratio of capital expenditures to total sales. To illustrate, since the Market-to-Book ratio could measure the value added by management and the value of intangible assets, for instance, the future investment opportunities, the investigation employing this ratio without considering the growth opportunities could lead to the distorted results' interpretation. Therefore, this paper incorporates the growth opportunities into the model. In fact, the fixedeffect regression, which this paper will employ, is adopted to control the unobservable heterogeneity and attributes such as firm's history and companies' culture, which could influence corporate performance as well.

# 3.4 Regression Analysis

Himmelberg et al. (1999) suggest that using firm fixed-effects could control for unobserved heterogeneity in the contracting environment such as differences in managerial quality. More specifically, they argue that the compensation contracts observable from the data endogenously depend on the contracting environment, which differs across firms in both observable and unobservable ways. Hence, like Fich and Shivdasani (2006) approach, this paper employs the panel data with the fixed-effect regressions so as to avoid biasness from existence of omitted firm-specific variables.

## 3.4.1 Models

$$FV = f {β1 (Busy board variables), [Control variables] β}4$$
(1)

 $FV = \{Q, ROA, ROS\}$ 

Busy board variables = {DB, DCEO, DNED, PBUSYDI, PBUSYED, PBUSYNED,
BB, BBED, BBNED }

Control variables = {OCEO, BSIZE, PROPOD, Log(ROA), FSIZE, GWTO}

## 3.4.2 Multiple Directorships and Firm Performance

$$FV = \beta_0 + \beta_1 (BB_{it}) + [Control variables] \beta + u$$
 (2)

Hypothesis 1: Any boards which contain the majority of directors serving on multiple seats accumulation should experience the inferior firm performance.

 $H_0: \beta_1 \geq 0$ 

 $H_1: \beta_1 < 0$ 

<sup>4</sup> The bold letters denote the vectors.

$$FV = \beta_0 + \beta_1 (BBED_{it}) + \beta_2 (BBNED_{it}) + [Control variables] \beta + u$$
 (3)

Hypothesis 2: Boards in which executive directors holding multiple directorships are likely to impact firm performance more negatively than boards with multiple-directorship non-executive directors.

$$H_0: \beta_1 \ge 0$$
  $H_0: \beta_2 \ge 0$ 

$$H_1: \beta_1 < 0$$
 And,  $H_1: \beta_2 < 0$ 

# 3.4.3 <u>Multiple Directorships and Firm Performance Before and After the</u> Asian Financial Crisis

Expecting there is the different results of pre- and post- crisis, this paper divides the sample into two categories which are 1993 to 1997 and 1998 to 2005; in other words, this paper is about to investigate whether there is a structural change in the relationship or not. Hence, the results are explored from hypothesis as follow.

Hypothesis 3: The association between firms with multiple directorships and company performance before the Asian financial crisis is supposed to differ from after the crisis.

Time period 1993 - 1997: 
$$\mathbf{FV} = \alpha_0 + \alpha_1(BBED_{it}) + \alpha_2(BBNED_{it})$$

+ [Control variables] 
$$\beta + \mathbf{u}$$
,  $n_1$  (4)

Time period 1998 - 2005:  $\mathbf{FV} = \beta_0 + \beta_1(BBED_{it}) + \beta_2(BBNED_{it})$ 

+ [Control variables] 
$$\beta + \mathbf{u}$$
,  $n_2$  (5)

Time period 1993 - 2005: **FV** =  $\lambda_0 + \lambda_1(BBED_{it}) + \lambda_2(BBNED_{it})$ 

+ [Control variables] 
$$\beta + \mathbf{u}$$
,  $n_1 + n_2$  (6)

$$H_0: \ \alpha_0 = \ \beta_0 = \ \lambda_0 \quad \text{and} \quad \alpha_1 = \ \beta_1 = \ \lambda_1 \quad \text{and} \quad \alpha_2 = \ \beta_2 = \ \lambda_2$$

$$H_1: \alpha_0 \neq \beta_0 \neq \lambda_0$$
 and  $\alpha_1 \neq \beta_1 \neq \lambda_1$  and  $\alpha_2 \neq \beta_2 \neq \lambda_2$ 

# 3.4.4 The Potential Agency Problem in the Firm

This paper anticipates that the effect of busy boards on firm performance depends on whether the agency cost proxy exists or not.

Hypothesis 4: The impact of boards with multiple directorships on company's value depends on the agency problem.

$$\textbf{FV} = \beta_0 + \ \beta_1(AP_{it}) + \ \beta_2(BBED_{it}) + \ \beta_3(AP_{it}*BBED_{it}) + \ \beta_4(BBNED_{it}) + \ \beta_5(AP_{it}*BBNED_{it})$$

+ [Control variables]
$$\beta$$
 + u (7)

 $H_0: \ \beta_3 = 0$ 

 $H_0: \ \beta_5=0$ 

 $H_1:\ \beta_3\neq 0$ 

And,

 $H_1:\;\beta_5\neq 0$ 

#### **CHAPTER IV**

#### RESULTS

This chapter is separated into three main findings as follows: 1) the effects of the multiple directorships on firm performance, 2) the effects of multiple-directorship boards on company value before and after the Asian financial crisis, and 3) the multiple directorships and the agency problem.

Descriptive statistics for the directorships of directors from all firms in the sample are reported in Table 1. Specifically, Panel A demonstrates the distribution of directorships held by directors sorted by number of directorships in 1996 which is close to the time of the Asian financial crisis. Admittedly, the multiple directorships in Thai sample are moderately high since there are around 23% of directors serving more than one directorship whilst near 10% of directors hold more than or equal to three directorships. Panel B shows the summary of primary statistics about the amount of directorships and the number of directors from all firms in the sample sorted by year. Furthermore, the mean value of directorships per director is larger than the median; therefore, the pattern of directorships' distribution is skewed to the right, suggesting that some directors serving on several seats upper to 15 directorships.

In addition, descriptive statistics for sample's characteristics are presented in Table 2. Panel A presents summary statistics for boards of directors and firm characteristics. On average, directors in Thai listed companies from 1993 to 2005 hold 1.9099 directorships. In particular, the executive directors averagely served 1.7594 seats whereas the non-executive directors hold 2.4835 directorships. In addition, according to the definition of busy boards mentioned in the chapter 3, 10.6857% of companies in the sample have busy boards. Particularly, the percentage of busy non-

executive directors is 25.1306% whilst only 16.0786% of executive directors are considered as busy. Moreover, 10.5433% of the firms in the sample have busy board by busy directors. Specifically, the percentage of busy boards by busy executives and by busy non-executive directors is 10.7325% and 27.2194%, respectively. Table 2 also presents the univariate analysis illustrating the Spearman's rank correlation of board and company characteristics with a busy board dummy variable. Consistent with Fich and Shivdasani (2006), the busy board indicator is positively correlated with the average directorships, board composition, board size, return on assets, market-to-book ratio, and total sales.

Besides, the comparisons of statistics of Thai board characteristics with the United States' are reported in Panel B of Table 2. The collated US statistics are obtained from Fich and Shivdasani (2006) for the data during 1989 to 1995, Ferris et al. (2003) for the data in 1995 and Jiraporn et al. (2007) for the data during 1998 to 2002. Roughly speaking, the average directorships held by directors and outside directors in a board of Thailand from 1993 to 2005 is a little more than that of the US in 1995(Ferris et al. (2003)). However, when comparing with the US figures around 1989-1995 (Fich and Shivdasani (2006)), it seems that the average directorships held by outside directors in a board of Thailand is fewer. Interestingly, the percentage of busy directors of Thailand from 1993 to 2005 is greater than that of the 1995 US number. Meanwhile, the percentage of busy outside directors in Thailand in from 1993 to 2005 is less than the US figures in the period 1989-1995, but it is very close to the US number in the period 1998-2002. What's more, a Thai figure for the percentage of busy board by busy non-executive directors is greater than the US numbers both in the period of 1989-1995 and 1998-2002. Furthermore, the proportion of independent directors in the US is almost twice as much as in Thailand. Lastly,

boards of Thai and US are around the same size. In general, the circumstance of multiple directorships in Thailand may be not as intense as the US; however, it can be manifestly seen that such situation in Thailand is a non-trivial matter. Especially, those figures were computed from the different period of time. Thus, it could not compare one another explicitly. As a consequence, this paper provides the distributions for alternative multiple-directorship measures of each type of directors sorted by year illustrated in Panel C and D of Table 2. The mean's patterns of the average directorships and the percentage of directors' busyness are quite alike. That is, the figures start going up constantly in the pre-crisis period, and then reach the peak around the time of crisis. After that, they gradually drop and level off later on. This could stem from the improving of corporate governance in Thailand. Additionally, Panel E reports comparative Thai board characteristics among pre-crisis, post-crisis and the whole period. All measures of multiple directorships in Panel E share the same pattern; in other words, their numbers before the crisis are more than the period after the crisis.

#### 4.1 The Effects of the Multiple Directorships on Firm Performance

#### 4.1.1 Multiple Directorships and Firm Performance

The firm-fixed effects multivariate regressions between the multiple directorships and firm value are reported in Table 3 and Table 4. Dependent variables in this analysis are market-to-book ratio, return on assets, and return on sales. This investigation employs three main measurements of the multiple directorships which are the average directorships held by director in a board, the percentage of busy directors, and the dummy variable of busy board by busy directors. Moreover, this paper also controls for firm governance and financial characteristics prone to impact

the corporate performance as followings: company insiders' ownerships, board size, board composition, company's current profitability, firm size, and growth opportunities.

Firstly, focusing on models whose dependent variable is market performance in Table 3, there are two out of three multiple-directorship measures which are the average directorships held by directors per board and the percentage of busy directors showing statistically significant and negative relations to the market-to-book ratio at the 1% and 5% level, correspondingly. These results point out that when directors serve too many boards, firm's market performance will be harmed. Like Fich and Shivdasani (2006) and Jiraporn et al. (2007) pointing out that directors holding a number of directorships are detrimental to firm's market value, the results are supportive of the Busyness Hypothesis which is referred to the fact that the multiple directorships of directors will result in deteriorated firm performance since a decrease in monitoring effectiveness.

In contrast, according to Table 4, when concentrating the dependent variables as the accounting performance, it can be seen that the coefficients for measures of multiple directorships indicate statistically significant relations to the operating performance in a positive way. Particularly, there are statistically significant and positive relationships between the average directorships held by directors in a board and firm's accounting performance, both return on assets and return on sales, at 5% and 1% level. This suggests that when directors serve multiple directorships, the company's operating performance figures seem to be better, consistent with the Reputation Hypothesis. In other words, when directors hold multiple directorships, they are recognized as the experienced, high-quality, expert, competent and attractive ones. The results are similar to Ferris et al. (2003) who indicate that the firm's market

value is enhanced when directors in Forbes 500 firms have many seat accumulations. Besides, Loderer and Peyer (2002) report that the number of directorships served by the chairman of board in listed firms is found to be significantly and positively related to company's performance as well. What's more, Harris and Shimizu (2004) also point out that the overboarded directors can boost corporate's acquisition performance since those sorts of directors compiled a variety of knowledge and information from other boards.

Besides, in terms of control variables, there are several associations align with the preceding investigations. Specifically, in line with the previous studies of Eisenberg et al. (1998), Loderer and Peyer (2002), and Yermack (1996), board size has significantly negative impacts on the market-to-book ratio and return on assets at 10% level. This could result from an increase in problems of communication, coordination and decision making which in turn reduce board's ability to control management teams finally causing the agency problems (Jensen (1993)). On the other hand, board size is found to be associated with return on sales in a positive direction at 5% level of significance; this is similar to Haniffa and Hudaib (2006) who report significantly positive relations between board size and return on assets. This could stem from diversity of experienced specialists in various areas bringing more benefits, value and resources to the companies (Pfeffer (1973)).

Additionally, with respect to board composition, the relationships between board composition and firm value have presented diverse directions. That is, there are statistically and positively significant associations between the proportion of independent directors and return on sales at 5% and 10%, consistent with Fich and Shivdasani (2006) and Krivogorsky (2006). This could be a result of the fact that boards dominated by outside directors may help to monitor managements' behavior

and reduce agency costs (Jensen and Meckling (1976)). In contrast, the results document statistically significant and negative relations between board composition and corporate performance, not only market-to-book ratio but also return on assets at 1% level of significance. This is in line with the prior studies of Agrawal and Knoeber (1996) and Yermack (1996) who indicate statistically significant and negative relations between the portion of independent directors and company value. The plausible explanation for the negative relations is that it would be extremely risky to the firms whose boards are overwhelmed with non-executive directors who are lacked of independence as well as experience, and miss proper qualifications (Haniffa and Hudaib (2006)). Moreover, a greater number of outside directors could diminish firm value if the outsiders have been on the boards just for the political reasons (Agrawal and Knoeber (1996)). Besides, departing from the traditional wisdom that more independence of boards improves firm's profitability, Bhagat and Black (2002) document that there is no evidence that an increase in boards' independence results in better company performance.

For the company's profitability, supportive of Yermack (1996), it is found that the current return on assets is positively associated with market-to-book ratio at 1% level of significance. In addition, firm size has statistically significant and positive relations to return on assets at 1% level, consistent with Fich and Shivdasani (2006) and Yermack (1996). However, there are statistically significant and negative relations between firm size and return on sales, in line with Aggrawal and Knoeber (1996) and Haniffa and Hudaib (2006). Last but not least, it is found that firm's growth opportunities show statistically significant associations both with return on assets and with return on sales in a positive direction at 5% and 1% level, supporting Fich and Shivdasani (2006), Haniffa and Hudaib (2006) and Jiraporn et al. (2007).

These findings can be inferred that the corporate value will be increased when companies invest more in fixed assets such as properties, plants and equipments.

In summary, companies with directors serving several directorships have negative impacts on firm's market performance, but such companies have significantly positive effects on firm's accounting profitability. These findings could be implied that firms with multiple-seat directors can enhance company's operating performance even if the market has perceived them in a negative direction.

# 4.1.2 <u>Multiple Directorships categorized by types of directors and Firm</u> Performance

Table 5 and Table 6 present the impact of multiple directorships sorted by types of directors on corporate market and accounting performances. To begin with, according to Table 5, every significant association between the measures of multiple directorships and market performance indicates negative signs. In particular, the average directorships held by executive directors is significantly and negatively associated with market-to-book ratio at 5% level. What's more, the percentage of busy non-executive directors and the indicator of busy boards by busy non-executive directors are also negatively related to market-to-book ratio at 1% and 5% level of significance. These findings suggest that companies whose executive and non-executive directors serving several seats have significantly negative impacts on firm's market value.

On the contrary, Table 6 demonstrates different finding; that is, the average directorships held by executive directors in a board is positively related to return on assets at 5% level of significance. However, there is no any significant relation between multiple-directorship measures for independent directors and accounting

performance. This suggests that the effects of firms with multiple-directorship directors on corporate operating performance are statistically significant and positive only for executives. What's more, all associations between the control variables and firm's market as well as accounting performance are exactly like the previous examination. In addition, supporting Fich and Shivdasani (2006) and Yermack (1996), the executives' ownerships positively relate to firm's value at 10% level as well.

To sum up, after this paper classified directors by their types, the results have illustrated negative relations between multiple-directorship measures and company's market value for both executive and non-executive directors. On the other hand, there is positive relationship between company's accounting performance and multiple-directorship measure for executive directors only. Generally, this confirms the findings in the first hypothesis; that is, the market performance of firms with directors serving several directorships would be deteriorated, but operating performance of such firms would be improved. Moreover, there is no any difference among types of directors for the association of firm market value and multiple-directorship measures.

# 4.2 The Effects of the Multiple Directorships on Firm Performance Before and After the Asian Financial Crisis

#### 4.2.1 Multiple Directorships and Firm Performance Before and After the crisis

Panel A and Panel B from Table 7 illustrate the impacts of firms with directors holding several seat accumulations on company's performance before and after 1997 crisis, respectively. Firstly, from Panel A of Table 7, the average directorships held by directors in a board and the percentage of busy directors are negatively associated with market-to-book ratio at 1% level of significance. Nonetheless, it is not found the significant relationships between multiple-directorship measures and return on assets.

These results suggest that, the period prior to 1997 crisis, despite the fact that firms with multiple-directorship directors do nothing to firm's operating profitability, the market responds to such companies negatively. This could result from the weakness of corporate governance at that time. According to Panel B from Table 7 showing after crisis period, it is found that the average directorships held by directors in a board and the percentage of busy directors have significantly positive relations to return on assets at 1% level. However, there is no any significant relationship between measures of seat accumulations and market-to-book ratio. These results mean that, after the time of crisis, firms whose directors serving numerous seats could enhance company's accounting profitability, but not for market value. Also, the relationships between most of control variables and firm performance exhibit similar relations as the previous explorations except for a few ones as follows. Before the crisis, firm size is significantly and negatively related to market value at 1% level (Agrawal and Knoeber (1996) and Haniffa and Hudaib (2006)). The probable explanation is that, during the time of pre-crisis, most of larger firms seem to be affected by the crisis and reduced their values. However, in the post-crisis time, the relations turn out positive. After the crisis, consistent with Haniffa and Hudaib (2006), the executive directors' ownership is negatively and significantly associated with market-to-book ratio at 5% and 10% level. These negative relations imply that the executives may pursue agendas riskily so as to maximize their own interests. This could bring about a declination of company's value. Moreover, board size shows positive associations with company's market value at 5% level of significance after the crisis.

What's more, the Chow test computed to explore whether or not the structural change in relationships over the whole period exists is shown in Panel C of Table 7.

This paper finds that there is the structural change in the associations, as expected, over the pre- and post-crisis periods.

In conclusion, these findings imply that the market's initial negative perception about firms with directors holding loads of directorships in the prior crisis period is seem to be improved and disappeared due to the absence of those former negative signs. Meanwhile, the associations between multiple-directorship measures and firm's accounting performance in the period of pre-crisis are not significant at all. However, as time goes by, those relations turn out significantly positive in the post-crisis period. The plausible explanation for these phenomena is that after the crisis there are the gradually reforms of Thai corporate governance from many counterparts. For instance, in 1999 SET established the Code of Best Practices for directors, which is the guidelines recommending all directors accepting the appropriate number of firm directorship to hold and how they should behave themselves. Furthermore, it is found that there is the structural change in the relationships over before and after 1997 crisis.

# 4.2.2 <u>Multiple Directorships categorized by Types of Directors and Firm</u> Performance Before and After the crisis

Panel A and Panel B from Table 8 present the effect of multiple directorships classified according to director types on company performance before and after the crisis. From Panel A, in the period of prior to 1997 crisis, the average directorships held by outside directors in a board, the percentage of busy independent directors and the dummy variable for busy boards by busy executive directors have significantly negative impacts on firm's market value at 1% level. Furthermore, the percentage of busy independent directors and the dichotomous variable for busy board by busy non-executive directors are negatively related to market-to-book ratio at 1% and 5% level

of significance, respectively. Meanwhile, for the associations with accounting value, it is not found any significant relations between the measures of multiple directorships by executives and firm's operating performance. Nevertheless, both percentage of busy outside directors and the proxy of busy boards by busy independent directors are significantly and positively associated with return on assets at 1% and 10% level, correspondingly. From these results, it can be explained that no matter what types of directors, firms with multiple-directorship directors exhibit negative effects on firm's market performance in the pre- crisis period. However, the companies with outside directors having several seat accumulations would have better firm accounting value.

Interestingly, according to Panel B from Table 8, in the after 1997 crisis period, the relationships between measures of multiple-directorship and company performance are explicitly different according to the types of directors. For the executive directors, every significant association of measures for seat accumulations with firm's market and accounting performance illustrates significantly positive results. Especially, despite showing significantly negative relations before the crisis, the percentage of busy executive directors and the dummy of busy boards by busy executive directors turn out to affect market-to-book ratio positively at 5% and 1% level of significance after the time of crisis. The reason why those previous negative impacts have turned out to be significantly positive in the post-crisis period could arise from the fact that the market's prior negative opinion to firms whose executive directors holding multiple directorships is prone to be removed. What's more, in spite of the insignificant relations before the crisis, the average directorships held by executive directors in a board is positively related to return on assets at 1% level of significance after the crisis. These findings suggest that after the crisis the firms whose executive directors holding several directorships would experience a significant improvement in firm performance, both market and operating ones, although the value of such companies is harmed by the multiple directorships before the crisis.

On the other hand, for the non-executive directors, the relationships between multiple-directorship measures for outside directors and firm performance are similar to the pre-crisis period. In other words, there is a statistically and significantly negative association between the percentage of independent directors and market-to-book ratio at 1% level. Nevertheless, the percentage of busy outside directors and the proxy for busy boards by busy independent directors demonstrate statistically significant and positive impacts on return on assets at 1% and 5% level, respectively. These findings imply that, in the post-crisis time, companies with non-executive directors serving numerous seats could be perceived by the market negatively even if firms with such independent directors could enhance companies' operating value. Additionally, the relations between control variables and firm value are exactly the same as the most recent investigations both pre- and post- crisis.

Moreover, from Panel C of Table 8, this paper computes the Chow test to investigate if there is structural change between the two time periods, pre- and post-crisis. Afterward, it is found that the Chow test results seem to support this paper's initial expectation that the relations between multiple-directorship measures and firm performance have undergone a structural change over the period 1993 – 2005.

In a nutshell, for executive directors, there are significant changes from negative (before the crisis) to positive (after the crisis) direction of the relations between measures of multiple directorships and firm performance. The plausible reason of this occurrence is that there are explicit improvements of corporate governance in Thailand especially about the effectiveness of board of directors. For

Instance, there is the Code of Best Practices for directors settled up since 1999. Nonetheless, for non-executive directors, when comparing between pre- and post-crisis, there is no any different direction of the associations of multiple-seat measures for outside directors with firm performance. Still, the perception of the market to firms whose non-executive directors serving several directorships seems to be negative even though those sorts of firms illustrate the enhancement of their performance. This could stem from the fact that independent directors are supposed to have direct responsibilities to monitor firm's management and to determine if there is anything shareholders' equitable treatment. Hence, if they hold too many directorships, they could not spend time on their duties properly and efficiently. Therefore, the market is still likely to perceive them negatively even though there is considerable amelioration in corporate governance in Thailand. More importantly, as hypothesized, there is the structural change in relations over the period.

### 4.3 Multiple Directorships, Firm Performance and Agency Problems

Table 9 demonstrates if the effect of multiple-directorship measures on corporate performance is driven by the potential agency problem or not. Firstly, the proxy for agency costs is significantly and positively associated with firm's market value at 10% and 1% level. What's more, the average directorships held by executive directors in a board is negatively related to market-to-book ratio at 5% level of significance. In addition, the percentage of busy independent directors has significantly negative effect on corporate market value at 1% level. To put it more simply, when there is less likely the potential agency problem in the firm (the agency proxy is equal to zero), the measures of multiple directorships for executive and non-executive directors have significantly negative impacts on firm's market performance,

corroborating the earlier investigations of this paper. Furthermore, the products of dummy variable for busy board by independent directors and the agency proxy (when the agency proxy is equal to one) have statistically significant and negative effects on firm's market performance at 10% level. This finding suggests that the associations between boards in which outside directors serving several seats and firm's market value are dependent of the probable agency costs occurred in the company.

Meanwhile, the relationships between the multiple-directorship measures and corporate accounting performance present significantly positive results, confirming the initial examinations of this paper. Specifically, there is statistically significant and positive association between the average directorships served by non-executive directors in a board and return on assets at 10% level. Besides, both the percentage of busy independent directors and the indicator of busy boards by busy non-executive directors are also positively related to return on assets at 5% level of significance. In other words, when the agency proxy is equal to zero, the effect of multiple directorships by outside directors on firm's operating value is significantly positive. Conversely, the impact of interaction terms between three multiple-seat measures for non-executive directors and the agency proxy (when the agency proxy is equal to one) on return on assets are all negative at 1% and 5% level of significance. To put it more simply, at first, when the potential agency problem is less likely, each measure of multiple directorships for outside directors is positively associated with return on asset. However, when the potential agency problem is more likely, the relations between all three measures of seat accumulation and operating performance have been altered from positive into negative direction. That is, when the company whose independent directors holding numerous seats concurrently has the potential agency costs, firm's accounting performance would have been inferior. This is similar to

Jiraporn et al. (2007) positing that the impact of directors' busyness on boards driven by the agency conflicts. From the results, it can be implied that the effect of multiple directorships by non-executive directors on firm's market and operating performance depends on the potential agency problems. In contrast, that impact of seats accumulation by executive directors on firm value is independent of the agency costs. The plausible explanation for this incident is that, admittedly, the independent directors incorporated on the boards have main duty to monitor company's management, and they are able to diminish the agency cost of shareholder's wealth expropriation according to Fama (1980). Therefore, if non-executive directors hold several seats in spite of having the potential agency problems in the firms, corporate operating performance could have been damaged. Additionally, the estimated coefficients for all control variables are align with those previous relations reported earlier in the initial tables.

To sum up, corroborating the prior exploration of this paper, the results illustrate that when the agency costs in the firms are less likely, companies' market value of firms in which executive and non-executive directors serving on multiple directorships are deteriorated whilst the operating performance of companies whose independent directors holding several directorships are augmented. What's more, the relations of multiple-directorship measures for executive directors to firm's market and accounting performance are all independent of the agency problems. On the contrary, the effect of multiple directorships by non-executive directors on firm's market and operating value is prone to be driven by the potential agency costs.

### **Table 1 Descriptive Statistics for Directorships of Directors**

This table demonstrates the characteristics of directors' directorships in terms of the distribution and primary statistics for all directors in 478 firms listed on Stock Exchange of Thailand (SET) and Market for Alternative Investment (mai) during 1993 to 2005, excluding companies in the financial sector. Panel A reports the distribution of directorships held by directors in 1996 which is close to the time of crisis. The summary of primary statistics about the amount of directorships held by directors and the number of directors from all firms in the sample is presented in Panel B sorted by year.

Panel A: Distribution of Directorships served by Each Director in 1996 sorted by the Number of Directorships

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2813	76.86	2813	76.86
2	495	13.52	3308	90.38
3	152	4.15	3460	94.54
4	85	2.32	3545	96.86
5	47	1.28	3592	98.14
6	24	0.66	3616	98.80
7	18	0.49	3634	99.29
8	6	0.16	3640	99.45
9	8	0.22	3648	99.67
10	1	0.03	3649	99.70
11	4	0.11	3653	99.81
12	4	0.11	3657	99.92
13	2	0.05	3659	99.97
15	1	0.03	3660	100.00
Total	3660	100.00	3660	100.00

Panel B: Summary Statistics of Directorships held by Directors sorted by Year

Year	Total Number of	Total Number of	Mean	Max	Min	Median
	Directorships (seats)	Directors				
1993	2110	1611	1.31	10	1	1
1994	3510	2493	1.41	13	1	1
1995	4425	3070	1.44	14	1	1
1996	5367	3660	1.47	15	1	1
1997	5442	3731	1.46	14	1	1
1998	5444	3783	1.44	14	1	1
1999	5545	3967	1.40	13	1	1
2000	5426	3996	1.36	14	1	1
2001	5300	3938	1.35	14	1	1
2002	5431	4028	1.35	14	1	1
2003	5745	4242	1.35	15	1	1
2004	6175	4549	1.36	14	1	1
2005	6355	4670	1.36	13	1	1

### **Table 2: Descriptive Statistics for Sample's Characteristics**

This table provides descriptive statistics for characteristics of the sample firms. The sample comprises of 478 companies listed in the Stock Exchange of Thailand (SET) and Market for Alternative Investment (mai) during 1993 to 2005. The sample excludes companies in the financial sector. Panel A of this table presents mean, median, max, min and standard deviation for each variable, including the Spearman's rank correlations between variables and a busy board indicator equaling to one if the board of director is busy. The board is defined as busy if 50% or more of the board's directors served three or more directorships. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5%, and 10% levels (two-tailed test), respectively. Panel B illustrates the comparison of Thai statistics of board characteristics with US'. The comparative data were acquired from Fich and Shivdasani (2006) for US statistics during 1989 to 1995, Ferris et al. (2003) for US statistics in 1995 and Jiraporn et al. (2007) for US statistics during 1998 to 2002. The distributions for multiple-directorship measures of each director type are presented in Panel C and D. Panel E reports comparative Thai board characteristics among before the crisis, after the crisis and the whole period.

Panel A: Summary Statistics for Board of Directors and Firm Characteristics

Variables	Mean	Median	Max	Min	SD	Spearman's Correlation with Busy Board
Board Characteristics						
Average directorships held by	1.9099	1.6250	10.0000	1.0000	0.9645	0.2166***
directors per board						
Average directorships held by	1.7594	1.4000	10.0000	1.0000	0.9582	0.3671***
executive directors per board						
Average directorships held by	2.4835	2.0000	12.0000	1.0000	1.6813	0.5989***
non-executive directors per board						
Percentage of executive directors	76.3996	75.0000	100.0000	0.0000	14.5142	0.6725***
Percentage of non-executive directors	23.6005	25.0000	100.0000	0.0000	14.5142	0.8504***
Percentage of busy directors	18.8970	12.5000	100.0000	0.0000	20.4810	-
Percentage of busy executive directors	16.0786	7.6923	100.0000	0.0000	20.9908	-
Percentage of busy non-executive directors	25.1306	0.0000	100.0000	0.0000	31.5046	-
Percentage of busy boards by busy directors	10.5433	-	- /	-	-	-
Percentage of busy boards by busy	10.7325	-		4 -	-	-
executive directors						
Percentage of busy boards by busy	27.2194	-	-	-	-	-
non-executive directors						
Board size	10.5902	10.0000	32.0000	1.0000	4.9053	0.1811***
Firm Characteristics						
Market-to-Book	1.6834	0.9500	239.4300	-71.3800	6.8276	0.6923***
EBIT/total assets	0.0536	0.0782	7.2626	-10.3838	0.2867	0.5560***
Total sales	5,184,068	1,395,942	929,716,091	-780,654	24,070,357	0.5678***

 Table 2 - continued

 Panel B: Thai Summary Statistics for Board of Directors Characteristics Compared with the US

Variables	Thailand	US	US	US
	1993-2005	1989-1995	1995	1998-2002
Average Directorships held by directors per board				
Mean	1.9099	-	1.6000	-
Median	1.6250	-	1.4000	-
Standard deviation	0.9645	-	-	-
Average Directorships held by executive directors per board				
Mean	1.7594	-	-	-
Median	1.4000	-	-	-
Standard deviation	0.9582	-	-	-
Average Directorships held by non-executive directors per board	i			
Mean	2.4835	3.1100	1.8900	-
Median	2.0000	2.8900	1.7000	-
Standard deviation	1.6813	2.2300	-	-
Percentage of busy directors				
Mean	18.8970	-	14.9700	-
Median	12.5000	-	9.0900	-
Standard deviation	20.4810	-	-	-
Percentage of busy executive directors				
Mean	16.0786	_	_	_
Median	7.6923	-	_	_
Standard deviation	20.9908	-	-	-
Percentage of busy non-executive directors				
Mean	25.1306	52.2600	_	26.0000
Median	0.0000	-	_	-
Standard deviation	31.5046	_	_	_
Percentage of busy boards by busy directors				
Mean	10.5433		_	_
(2)/	10.5455			
Percentage of busy boards by busy executive directors	10.7225			
Mean	10.7325	-	-	-
Percentage of busy boards by busy non-executive directors				
Mean	27.2194	21.4200	-	22.6600
Percentage of non-executive directors				
Mean	23.6005	55.3300	-	-
Median	25.0000	56.2300	-	-
Standard deviation	14.5142	17.1200	-	-
Board size				
Mean	10.5902	11.8800	001	8.6100
Median	10.0000	12.0000	OI FI	8.0000
Standard deviation	4.9053	2.9500		-

 $\begin{tabular}{ll} \textbf{Table 2}-continued \\ Panel C: Distributions for Average Directorships per Each Type of Directors in a Board by Year \\ \end{tabular}$ 

Year	Average Directorships By Directors Per Firm (DB)						
_	Mean	Median	Max	Min	SD		
1993	1.6323	1.3333	6.0000	1.0000	0.8401		
1994	1.9854	1.6667	7.3333	1.0000	1.0985		
1995	2.1038	1.8182	10.0000	1.0000	1.1563		
1996	2.1890	1.8750	8.5000	1.0000	1.1748		
1997	2.1896	1.8944	8.5000	1.0000	1.2013		
1998	2.0929	1.7857	8.0000	1.0000	1.1104		
1999	1.9283	1.6667	6.7500	1.0000	0.9808		
2000	1.7993	1.5556	5.8000	1.0000	0.8416		
2001	1.7396	1.5000	5.3333	1.0000	0.7722		
2002	1.7536	1.5192	5.0000	1.0000	0.7836		
2003	1.7765	1.5714	4.7500	1.0000	0.7800		
2004	1.8128	1.6250	4.6667	1.0000	0.7593		
2005	1.8605	1.6364	5.3333	1.0000	0.7905		
Year	Aver	age Directorships	s By Executive Di	irectors Per Firm	(DCEO)		
_	Mean	Median	Max	Min	SD		
1993	1.6053	1.2500	6.0000	1.0000	0.8501		
1994	1.8246	1.4000	7.3333	1.0000	1.0838		
				1 0000			

Year _	Average Directorships By Executive Directors Per Firm (DCEO)						
	Mean	Median	Max	Min	SD		
1993	1.6053	1.2500	6.0000	1.0000	0.8501		
1994	1.8246	1.4000	7.3333	1.0000	1.0838		
1995	1.9119	1.5000	10.0000	1.0000	1.1487		
1996	1.9895	1.5556	8.5000	1.0000	1.1805		
1997	1.9793	1.5833	8.5000	1.0000	1.1736		
1998	1.9096	1.5714	8.0000	1.0000	1.0947		
1999	1.7738	1.4226	6.7500	1.0000	0.9757		
2000	1.6706	1.3333	5.8000	1.0000	0.8382		
2001	1.6138	1.3333	5.3333	1.0000	0.7703		
2002	1.6343	1.3333	5.5714	1.0000	0.7891		
2003	1.6629	1.3693	5.2857	1.0000	0.7940		
2004	1.6609	1.4000	4.7143	1.0000	0.7633		
2005	1.6911	1.3750	5.8750	1.0000	0.8349		

Year	Average Directorships By Non-Executive Directors Per Firm (DNED)						
7	Mean	Median	Max	Min	SD		
1993	2.1343	1.5000	10.0000	1.0000	1.7935		
1994	2.7191	2.0000	12.0000	1.0000	1.9896		
1995	2.9815	2.2917	12.0000	1.0000	2.1679		
1996	3.1409	2.5000	12.0000	1.0000	2.2076		
1997	3.1612	2.5000	12.0000	1.0000	2.2302		
1998	2.9288	2.2917	11.0000	1.0000	2.1062		
1999	2.4184	2.0000	9.0000	1.0000	1.4621		
2000	2.2039	2.0000	7.3333	1.0000	1.2306		
2001	2.1305	1.8000	7.0000	1.0000	1.1489		
2002	2.1239	1.7500	7.6667	1.0000	1.1644		
2003	2.1321	1.6667	7.6667	1.0000	1.2211		
2004	2.1721	1.7500	7.6667	1.0000	1.2166		
2005	2.2101	1.8333	7.6667	1.0000	1.2091		

 $\begin{tabular}{ll} \textbf{Table 2}-continued \\ \\ \textbf{Panel D: Distributions for Percentages of Busyness of Each Director Type in a Board by Year} \\ \end{tabular}$ 

Year	Percentage of Busy Directors (PBUSYDI)				
	Mean	Median	Max	Min	SD
1993	12.9590	0.0000	83.3333	0.0000	19.3734
1994	19.6913	13.3333	100.0000	0.0000	22.1221
1995	21.7125	15.3846	100.0000	0.0000	22.0178
1996	23.2474	18.1818	100.0000	0.0000	22.4862
1997	22.8245	18.1818	100.0000	0.0000	21.9847
1998	21.6655	16.6667	100.0000	0.0000	21.3015
1999	19.0886	12.5000	100.0000	0.0000	20.6401
2000	17.0777	11.1111	100.0000	0.0000	19.3572
2001	16.0320	10.0000	92.3077	0.0000	18.4931
2002	16.7264	11.1111	100.0000	0.0000	19.2201
2003	17.0586	11.1111	84.6154	0.0000	18.7935
2004	18.1237	12.5000	88.8889	0.0000	19.2568
2005	19.0760	12.5000	88.8889	0.0000	19.6274

Year	P	Percentage of Busy Executive Directors (PBUSYED)						
	Mean	Median	Max	Min	SD			
1993	12.3536	0.0000	83.3333	0.0000	19.3086			
1994	16.6433	0.0000	100.0000	0.0000	22.5977			
1995	18.0819	11.1111	100.0000	0.0000	22.2474			
1996	19.6257	12.5000	100.0000	0.0000	22.8071			
1997	19.1677	12.5000	100.0000	0.0000	22.1048			
1998	18.2992	12.5000	100.0000	0.0000	21.4045			
1999	16.2856	9.0909	100.0000	0.0000	20.9577			
2000	14.6321	0.0000	100.0000	0.0000	20.1119			
2001	13.5847	0.0000	100.0000	0.0000	19.3806			
2002	14.3783	0.0000	100.0000	0.0000	20.4174			
2003	14.7226	0.0000	85.7143	0.0000	19.5193			
2004	15.3224	6.6667	85.7143	0.0000	20.1257			
2005	15.9457	7.6923	85.7143	0.0000	21.0012			

Year	Perc	Percentage of Busy Non-Executive Directors (PBUSYNED)						
- 1	Mean	Median	Max	Min	SD			
1993	6.6725	0.0000	100.0000	0.0000	23.4336			
1994	28.1727	0.0000	100.0000	0.0000	36.8995			
1995	31.5844	0.0000	100.0000	0.0000	36.7567			
1996	34.1256	33.3333	100.0000	0.0000	36.4666			
1997	34.4290	33.3333	100.0000	0.0000	36.1544			
1998	31.2440	25.0000	100.0000	0.0000	35.3144			
1999	24.0820	16.6667	100.0000	0.0000	28.8191			
2000	21.5708	0.0000	100.0000	0.0000	27.0493			
2001	20.5437	0.0000	100.0000	0.0000	26.4013			
2002	20.6473	0.0000	100.0000	0.0000	27.0681			
2003	21.5010	0.0000	100.0000	0.0000	27.4327			
2004	24.0026	20.0000	100.0000	0.0000	28.7735			
2005	25.6776	25.0000	100.0000	0.0000	28.0866			

 $\begin{tabular}{ll} \textbf{Table 2}-continued \\ \\ \textbf{Panel E: Summary Statistics for Board Characteristics Compared with Before and After Crisis} \\ \end{tabular}$ 

Variables	_	Period	
	1993-2005	1993-1997	1998-2005
Average directorships by directors per firm (DB)			
Mean	1.9099	2.0441	1.8424
Median	1.6250	1.7500	1.6000
Max	10.0000	10.0000	8.0000
Min	1.0000	1.0000	1.0000
Standard deviation	0.9645	1.1314	0.8605
Average directorships by executive directors per firm (DCEO)			
Mean	1.7594	1.8797	1.6991
Median	1.4000	1.5000	1.3846
Max	10.0000	10.0000	8.0000
Min	1.0000	1.0000	1.0000
Standard deviation	0.9582	1.1147	0.8632
Average directorships by non-executive directors per firm (DNED)			
Mean	2.4835	2.9607	2.2767
Median	2.0000	2.0000	2.0000
Max	12.0000	12.0000	11.0000
Min	1.0000	1.0000	1.0000
Standard deviation	1.6813	2.1518	1.3803
Percentage of busy directors (PBUSYDI)	1.0015	2.1010	1.0000
Mean	18.8970	20.5166	18.0810
Median	12.5000	14.2857	12.5000
Max	100.0000	100.0000	100.0000
Min	0.0000	0.0000	0.0000
Standard deviation	20.4810	21.9939	19.6274
Percentage of busy executive directors (PBUSYED)	20.4010	21.7737	17.0274
Mean	16.0786	17.4792	15.3729
Median	7.6923	9.0909	6.6667
Max	100.0000	100.0000	100.0000
Min	0.0000	0.0000	0.0000
Standard deviation	20.9908	22.0762	20.3888
Percentage of busy non-executive directors (PBUSYNED)	20.9908	22.0702	20.3666
Mean	25 1206	20 1267	22 6150
Median	25.1306	28.1367	23.6159
Max	0.0000	0.0000	14.2857 100.0000
	100.0000	100.0000	
Min	0.0000	0.0000	0.0000
Standard deviation	31.5046	36.0550	28.8292
Percentage of busy boards by busy directors	10.7100	12 2000	0.4000
Mean	10.5433	13.3898	9.1090
Percentage of busy boards by busy executive directors	10.7005	10.7604	0.7060
Mean	10.7325	12.7684	9.7068
Percentage of busy boards by busy non-executive directors			
Mean	27.2194	36.8362	22.3740
Percentage of non-executive directors			
Mean	23.6005	12.6451	24.7018
Median	25.0000	12.5000	26.6667
Max	100.0000	100.0000	100.0000
Min	0.0000	0.0000	0.0000
Standard deviation	14.5142	14.1738	14.9971
Board size			
Mean	10.5902	7.1423	10.1668
Median	10.0000	8.0000	10.0000
Max	32.0000	30.0000	32.0000
Min	1.0000	0.0000	0.0000
Standard deviation	4.9053	6.0150	5.5079

### Table 3: Multiple Directorships and Firm's Market Performance

This table presents fixed-effects multivariate regressions between firm's market performance and busy boards. Dependent variable in this analysis is market-to-book ratio. The investigation employs three multiple directorships measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use a dummy variable equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Variables		MTB	
	(1)	(2)	(3)
Intercept	5.0403**	4.2340*	4.2377*
	(0.0325)	(0.0597)	(0.0674)
Board Characteristics			
Average directorships held by directors	-0.5045***		
	(0.0046)		
Percentage of busy directors		-1.9051**	
		(0.0186)	
Busy boards by busy directors			-0.2162
			(0.2477)
Executive directors' ownership	0.0046	0.0038	0.0032
	(0.4622)	(0.5407)	(0.5881)
Board size	-0.0600*	-0.0650*	-0.0658*
	(0.0848)	(0.0850)	(0.0904)
Board composition	-2.8750***	-2.7052***	-2.7499***
	(0.0010)	(0.0039)	(0.0070)
Firm Characteristics			
Log (Return on assets)	0.5250***	0.5302***	0.5302***
	(0.0000)	(0.0000)	(0.0000)
Firm size	0.0115	0.0505	0.0002
	(0.9707)	(0.8692)	(0.9995)
Growth opportunities	0.3866	0.3825	0.3620
	(0.1065)	(0.1104)	(0.1275)
A.V. 172	0.2642	0.2625	0.2501
Adjusted R <sup>2</sup>	0.3642	0.3625	0.3581
F-statistic	4.1609	4.1369	4.0778
P-value	(0.0000)	(0.0000)	(0.0000)

# **Table 4: Multiple Directorships and Firm's Accounting Performance**

This table presents fixed-effects multivariate regressions between firm's accounting performance and busy boards. Dependent variables in this analysis are return on asset and return on sales. The investigation employs three multiple-directorship measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use a dummy variable equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Variables		ROA			ROS	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	-0.7567***	-0.7225***	-0.7227***	3.5651***	3.6408***	3.6465***
	(0.0001)	(0.0001)	(0.0001)	(0.0032)	(0.0030)	(0.0029)
Board Characteristics						
Average directorships held by directors	0.0213**			0.0496***		
	(0.0112)			(0.0062)		
Percentage of busy directors		0.0635			0.0914	
		(0.1191)			(0.1696)	
Busy boards by busy directors			0.0166			0.0465
			(0.2693)			(0.3433)
Executive directors' ownership	0.0006	0.0006	0.0006	0.0028	0.0030	0.0029
	(0.1342)	(0.1096)	(0.1146)	(0.2750)	(0.2614)	(0.2701)
Board size	-0.0040*	-0.0037*	-0.0036*	0.0123**	0.0127**	0.0131**
	(0.0664)	(0.0876)	(0.0966)	(0.0451)	(0.0423)	(0.0328)
Board composition	-0.2004***	-0.2071***	-0.2068***	0.2934**	0.2785*	0.2780*
	(0.0000)	(0.0000)	(0.0000)	(0.0478)	(0.0601)	(0.0641)
Firm Characteristics						
Log (Return on capital)	0.0177***	0.0176***	0.0177***			
	(0.0037)	(0.0038)	(0.0036)			
Log (Return on assets)				0.1278***	0.1273***	0.1272***
				(0.0000)	(0.0000)	(0.0000)
Firm size	0.1486***	0.1474***	0.1490***	-0.5539**	-0.5543**	-0.5537***
	(0.0000)	(0.0000)	(0.0000)	(0.0102)	(0.0101)	(0.0096)
Growth opportunities	0.0591**	0.0596**	0.0604**	0.0934***	0.0949***	0.0954***
	(0.0413)	(0.0396)	(0.0366)	(0.0007)	(0.0007)	(0.0007)
Adjusted R <sup>2</sup>	0.2607	0.2598	0.2593	0.3328	0.3314	0.3315
F-statistic	2.9069	2.8980	2.8931	3.7476	3.7302	3.7311
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

Table 5: Multiple Directorships classified by Types of Directors and Firm's Market Performance

This table presents fixed-effects multivariate regressions between firm's market performance and busy boards categorized by type of directors, executive and non-executive ones. Executive directors are defined as an executive appointed as a member of the board of directors while non-executive directors are perceived as a director who has no any position in the company's management team. Dependent variable in this analysis is market-to-book ratio. The investigation employs three multiple directorships measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use dummy variables equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Variables		MTB	
	(1)	(2)	(3)
Intercept	4.5762*	4.3193*	4.5140**
•	(0.0970)	(0.0523)	(0.0453)
Board Characteristics			
Average directorships held by executive directors	-0.3925**		
	(0.0185)		
Average directorships held by non-executive directors	-0.0649		
	(0.2574)		
Percentage of busy executive directors		-0.4057	
		(0.4747)	
Percentage of busy non-executive directors		-1.0289***	
		(0.0003)	
Busy boards by busy executive directors			0.0773
			(0.6733)
Busy boards by busy non-executive directors			-0.4069**
	0.0022	0.0055	(0.0352)
Executive directors' ownership	0.0022	0.0055	0.0044
D 1.	(0.6922)	(0.3902)	(0.4884)
Board size	-0.0447	-0.0532	-0.0616*
Doord commonition	(0.3633) -1.6884	(0.1083) -2.8507***	(0.0831) -2.9283***
Board composition	(0.1290)	(0.0008)	(0.0016)
Firm Characteristics	(0.1290)	(0.0008)	(0.0010)
Log (Return on assets)	0.4992***	0.5178***	0.5238***
Log (Return on assets)	(0.0000)	(0.0000)	(0.0000)
Firm size	-0.0216	0.0074	-0.0369
Tim size	(0.9479)	(0.9808)	(0.9060)
Growth opportunities	0.4054*	0.3629	0.3693
oro mar opportunities	(0.0981)	(0.1253)	(0.1268)
	(======)	(5)	(**)
Adjusted R <sup>2</sup>	0.3587	0.3666	0.3615
F-statistic	3.9817	4.1850	4.1157
P-value	(0.0000)	(0.0000)	(0.0000)

Table 6: Multiple Directorships classified by Types of Directors and Firm's Accounting Performance

This table presents fixed-effects multivariate regressions between firm's accounting performance and busy boards categorized by type of directors, executive and non-executive ones. Executive directors are defined as an executive appointed as a member of the board of directors while non-executive directors are perceived as a director who has no any position in the company's management team. Dependent variables in this analysis are return on asset and return on sales. The investigation employs three multiple directorships measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use dummy variables equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Variables		ROA			ROS	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	-0.7814***	-0.7251***	-0.7284***	3.6398***	3.6366***	3.6354***
•	(0.0001)	(0.0001)	(0.0001)	(0.0035)	(0.0030)	(0.0028)
Board Characteristics						
Average directorships held by	0.0162**			0.0173		
executive directors	(0.0242)			(0.3967)		
Average directorships held by	-0.0004			0.0101		
non-executive directors	(0.8537)			(0.2389)		
Percentage of busy		0.0111			-0.0206	
executive directors		(0.6282)			(0.7751)	
Percentage of busy		0.0121			0.0342	
non-executive directors		(0.4124)			(0.3767)	
Busy boards by busy			0.0035			0.0383
executive directors			(0.7958)			(0.2507)
Busy boards by busy			0.0089			0.0347
non-executive directors			(0.3818)			(0.1447)
Executive directors' ownership	0.0007*	0.0006	0.0006	0.0030	0.0029	0.0029
	(0.0884)	(0.1125)	(0.1077)	(0.2586)	(0.2601)	(0.2632)
Board size	-0.0045*	-0.0039*	-0.0038*	0.0137	0.0123**	0.0126**
	(0.0998)	(0.0771)	(0.0812)	(0.1095)	(0.0452)	(0.0409)
Board composition	-0.2268***	-0.2041***	-0.2015***	0.3245	0.2830*	0.2956*
	(0.0001)	(0.0000)	(0.0000)	(0.1632)	(0.0560)	(0.0526)
Firm Characteristics						
Log (Return on capital)	0.0166***	0.0178***	0.0178***			
000	(0.0053)	(0.0034)	(0.0032)			
Log (Return on assets)				0.1286***	0.1278***	0.1276***
01011				(0.0000)	(0.0000)	(0.0000)
Firm size	0.1561***	0.1492***	0.1499***	-0.5640**	-0.5508***	-0.5530***
	(0.0000)	(0.0000)	(0.0000)	(0.0132)	(0.0098)	(0.0097)
Growth opportunities	0.0600**	0.0602**	0.0603**	0.0950***	0.0966***	0.0951***
9	(0.0426)	(0.0377)	(0.0370)	(0.0008)	(0.0006)	(0.0006)
Adjusted R <sup>2</sup>	0.2554	0.2588	0.2589	0.3219	0.3310	0.3318
F-statistic	2.7945	2.8835	2.8843	3.5233	3.7175	3.7277
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

### Table 7: Multiple Directorships and Firm Performance Pre- and Post- 1997 Asian financial Crisis

This table presents fixed-effects multivariate regressions between firm performance and busy boards. Dependent variables in this analysis are market-to-book ratio and return on asset. The investigation employs three multiple directorships measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use dummy variables equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. Panel A shows the regressions before the 1997 crisis using panel data from 1993 to 1997 whereas Panel B presents the regressions after the 1997 crisis employing the panel data from 1998 to 2005. Panel C shows the results of doing chow test to investigate whether there is the structural change in the relationship between the two time periods or not. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*\*, \*\*\*, and \*, respectively.

Panel A: Busy directors and firm performance before the 1997 crisis

Variables	4///	MTB			ROA	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	16.1169***	14.9978***	15.9581***	-0.5925**	-0.5986**	-0.5904**
•	(0.0000)	(0.0000)	(0.0000)	(0.0330)	(0.0287)	(0.0345)
Board Characteristics						
Average directorships held by directors	-1.0751***			0.0008		
	(0.0002)			(0.9460)		
Percentage of busy directors		-4.7340***			-0.0275	
		(0.0000)			(0.4458)	
Busy boards by busy directors			-0.1073			0.0165
			(0.8096)			(0.2856)
Executive directors' ownership	0.0002	0.0003	-0.0038	-0.0002	-0.0001	-0.0002
	(0.9762)	(0.9690)	(0.4638)	(0.5400)	(0.6188)	(0.5696)
Board size	-0.1540***	-0.1715***	-0.1878***	-0.0133*	-0.0132*	-0.0132**
	(0.0000)	(0.0000)	(0.0000)	(0.0583)	(0.0528)	(0.0500)
Board composition	-1.9472**	-1.9879**	-2.8370***	-0.0441	-0.0387	-0.0451
	(0.0223)	(0.0183)	(0.0001)	(0.1789)	(0.2686)	(0.1397)
Firm Characteristics						
Log (Return on assets)	0.7286***	0.7668***	0.8184***			
	(0.0001)	(0.0001)	(0.0001)			
Log (Return on capital)				-0.0142	-0.0146	-0.0143
				(0.4705)	(0.4697)	(0.4825)
Firm size	-1.3642***	-1.3343***	-1.5593***	0.1346***	0.1362***	0.1341***
	(0.0019)	(0.0051)	(0.0010)	(0.0044)	(0.0049)	(0.0063)
Growth opportunities	0.9569	0.9480	0.9194	-0.0350	-0.0348	-0.0349
	(0.2067)	(0.2191)	(0.2480)	(0.1273)	(0.1272)	(0.1274)
Adjusted R <sup>2</sup>	0.4070	0.4074	0.3876	0.1951	0.1952	0.1954
F-statistic	3.1660	3.1698	2.9976	1.7697	1.7704	1.7713
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Total panel observations $(n_1)$	588	588	588	595	595	595

**Table 7:** – continued

Panel B: Busy directors and firm performance after the 1997 crisis

Variables		MTB			ROA	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	-7.3002***	-7.1865***	-7.1232***	-0.5643***	-0.5058***	-0.4759***
	(0.0001)	(0.0002)	(0.0003)	(0.0001)	(0.0007)	(0.0027)
Board Characteristics						
Average directorships held by directors	0.0658			0.0298***		
	(0.7082)			(0.0000)		
Percentage of busy directors		0.4785			0.1318***	
		(0.5994)			(0.0001)	
Busy boards by busy directors			0.0808			0.0590
			(0.7508)			(0.1459)
Executive directors' ownership	-0.0073**	-0.0074**	-0.0073*	-0.0002	-0.0002	-0.0002
	(0.0484)	(0.0399)	(0.0534)	(0.7723)	(0.8096)	(0.7300)
Board size	0.0880**	0.0889**	0.0878**	0.0004	0.0006	0.0006
	(0.0294)	(0.0327)	(0.0257)	(0.7405)	(0.6737)	(0.6592)
Board composition	0.6309	0.6277	0.5790	0.0002	-0.0069	-0.0215
	(0.3892)	(0.3899)	(0.4219)	(0.9978)	(0.9045)	(0.7339)
Firm Characteristics						
Log (Return on assets)	0.3179***	0.3178***	0.3186***			
	(0.0035)	(0.0036)	(0.0035)			
Log (Return on capital)				0.0286***	0.0288***	0.0293***
				(0.0003)	(0.0002)	(0.0003)
Firm size	1.2967***	1.2825***	1.2903***	0.1032***	0.0989***	0.0983***
	(0.0001)	(0.0002)	(0.0001)	(0.0000)	(0.0000)	(0.0000)
Growth opportunities	0.1263	0.1268	0.1265	0.0715***	0.0710***	0.0722***
	(0.2439)	(0.2413)	(0.2284)	(0.0011)	(0.0009)	(0.0012)
Adjusted R <sup>2</sup>	0.3959	0.3961	0.3959	0.6612	0.6617	0.6617
F-statistic	3.7866	3.7885	3.7862	8.9682	8.9848	8.9870
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Total panel observations (n <sub>1</sub> )	1,438	1,438	1,438	1,483	1,483	1,483

Panel C: Chow test results

	MTB			ROA		
	(1)	(2)	(3)	(1)	(2)	(3)
F-statistic	48.6571	49.6133	48.5385	222.4492	223.4668	223.8883
Probability	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total panel observations (n <sub>1</sub> +n <sub>2</sub> )	2,026	2,026	2,026	2,078	2,078	2,078

### Table 8: Multiple Directorships by Types and Firm Performance Pre- and Post-1997 Asian financial Crisis

This table presents fixed-effects multivariate regressions between firm performance and busy boards categorized by type of directors, executive and non-executive ones. Executive directors are defined as an executive appointed as a member of the board of directors while non-executive directors are perceived as a director who has no any position in the company's management team. Dependent variables in this analysis are market-to-book ratio and return on asset. The investigation employs three multiple directorships measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use dummy variables equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. Panel A shows the regressions before the 1997 crisis using panel data from 1993 to 1997 whereas Panel B presents the regressions after the 1997 crisis employing the panel data from 1998 to 2005. Panel C shows the results of doing chow test to investigate whether there is the structural change in the relationship between the two time periods or not. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Panel A: Busy directors by types and firm performance before the 1997 crisis

Variables		MTB			ROA	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	17.7278***	15.1484***	15.7188***	-0.5494**	-0.5953**	-0.5936**
	(0.0000)	(0.0000)	(0.0000)	(0.0298)	(0.0272)	(0.0316)
Board Characteristics						
Average directorships held by	-1.7968***			0.0062		
executive directors	(0.0000)			(0.7147)		
Average directorships held by	-0.2019			-0.0025		
non-executive directors	(0.2861)			(0.4767)		
Percentage of busy		-3.5624***			-0.0361	
executive directors		(0.0002)			(0.3734)	
Percentage of busy		-0.7746***			0.0130***	
non-executive directors		(0.0059)			(0.0034)	
Busy executive directors			-0.7350***			-0.0289
			(0.0003)			(0.1558)
Busy non-executive directors			-0.4731**			0.0076*
			(0.0237)			(0.0992)
Executive directors' ownership	-0.0107	-0.0028	-0.0026	0.0001	-0.0002	-0.0002
	(0.3416)	(0.6530)	(0.6219)	(0.8591)	(0.4190)	(0.4954)
Board size	-0.2484***	-0.1617***	-0.1690***	-0.0220**	-0.0136**	-0.0135**
	(0.0001)	(0.0000)	(0.0000)	(0.0335)	(0.0461)	(0.0453)
Board composition	-3.2314	-2.1630***	-2.4742***	-0.3791**	-0.0467	-0.0452
	(0.3588)	(0.0052)	(0.0005)	(0.0109)	(0.1645)	(0.2040)
Firm Characteristics						
Log (Return on assets)	0.6205***	0.7789***	0.7980***			
	(0.0000)	(0.0001)	(0.0001)			
Log (Return on capital)				-0.0211	-0.0140	-0.0136
				(0.2041)	(0.4780)	(0.4946)
Firm size	-1.1274**	-1.3770***	-1.5344***	0.1521***	0.1365***	0.1358***
	(0.0322)	(0.0027)	(0.0005)	(0.0056)	(0.0041)	(0.0055)
Growth opportunities	1.0116	0.9685	0.8970	-0.0358	-0.0339	-0.0351
	(0.2056)	(0.2002)	(0.2527)	(0.1071)	(0.1409)	(0.1336)
Adjusted R <sup>2</sup>	0.4085	0.4031	0.3923	0.1635	0.1936	0.1941
F-statistic	2.9349	3.1197	3.0263	1.5521	1.7584	1.7609
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0002)	(0.0000)	(0.0000)
Total panel observations (n <sub>1</sub> )	525	588	588	532	595	595

Table 8: - continued

Panel B: Busy directors by types and firm performance after the 1997 crisis

Variables		MTB			ROA	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	-7.3927***	-6.9327***	-6.7288***	-0.5657***	-0.5149***	-0.4791***
•	(0.0001)	(0.0001)	(0.0004)	(0.0001)	(0.0005)	(0.0021)
Board Characteristics						
Average directorships held by	0.0567			0.0198***		
executive directors	(0.6792)			(0.0008)		
Average directorships held by	0.0323			0.0064***		
non-executive directors	(0.4617)			(0.0023)		
Percentage of busy		1.1947**			0.0426	
executive directors		(0.0402)			(0.1190)	
Percentage of busy		-0.5789***			0.0485***	
non-executive directors		(0.0009)			(0.0001)	
Busy executive directors			0.4930***			0.0439
			(0.0004)			(0.1186)
Busy non-executive directors			-0.1066			0.0188**
			(0.3864)			(0.0103)
Executive directors' ownership	-0.0074**	-0.0060	-0.0069*	-0.0002	-0.0002	-0.0002
	(0.0461)	(0.1147)	(0.0626)	(0.7704)	(0.7756)	(0.7989)
Board size	0.0885**	0.0909**	0.0879**	0.0004	0.0003	0.0005
	(0.0266)	(0.0264)	(0.0348)	(0.7574)	(0.8362)	(0.6789)
Board composition	0.7252	0.5870	0.5260	0.0147	0.0073	-0.0002
	(0.3306)	(0.4309)	(0.5080)	(0.7981)	(0.8955)	(0.9978)
Firm Characteristics						
Log (Return on assets)	0.3179***	0.3168***	0.3185***			
	(0.0036)	(0.0031)	(0.0031)			
Log (Return on capital)				0.0288***	0.0288***	0.0291***
				(0.0003)	(0.0002)	(0.0002)
Firm size	1.2990***	1.2442***	1.2261***	0.1040***	0.1012***	0.0971***
	(0.0001)	(0.0001)	(0.0003)	(0.0000)	(0.0000)	(0.0000)
Growth opportunities	0.1265	0.1180	0.1439	0.0713***	0.0712***	0.0724***
	(0.2399)	(0.2810)	(0.1648)	(0.0012)	(0.0009)	(0.0009)
Adjusted R <sup>2</sup>	0.3955	0.3985	0.3974	0.6605	0.6608	0.6617
F-statistic	3.7731	3.8080	3.7957	8.9197	8.9318	8.9637
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Total panel observations (n <sub>2</sub> )	1,438	1,438	1,438	1,483	1,483	1,483
	1,	1,.50	1, .50	1,.00	1,.00	1,.00

Panel C: Chow test results

	MTB			ROA			
414 104 41	(1)	(2)	(3)	(1)	(2)	(3)	
F-statistic	43.7289	42.6571	42.9870	195.3478	198.3898	199.1404	
Probability	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Total panel observations $(n_1+n_2)$	1,963	2,026	2,026	2,015	2,078	2,078	

# Table 9: Multiple Directorships by Types, Firm Value and Agency Problems

This table presents fixed-effects multivariate regressions between firm performance and busy boards when there is the agency problem. The dependent variables in this analysis are market-to-book ratio and return on asset. The investigation employs three multiple-directorship measures as independent variables. Regressions (1) use the average directorships by board while regressions (2) use the percentage of directors serving three or more directorships as the main independent variables. Regressions (3) use dummy variables equaling to one if 50% or more of the directors in the board hold three or more directorships as the key independent variables. Main independent variable is also agency proxy which is equal to one if the executive director's ownership is less than or equal to the sample's median ownership. Another independent variable is an interaction term between multiple-directorship measures and the agency proxy, also. All p-values are reported in the parenthesis. Statistical significance at the 1%, 5%, 10% levels (two-tailed test) is indicated by \*\*\*, \*\*, and \*, respectively.

Variables		MTB			ROA	
	(1)	(2)	(3)	(1)	(2)	(3)
Intercept	5.0080*	4.6911**	5.0274**	-0.7717***	-0.7126***	-0.7284***
	(0.0612)	(0.0264)	(0.0209)	(0.0000)	(0.0000)	(0.0001)
Board Characteristics						
Agency proxy	-0.6707*	-0.3193	-0.5766***	-0.0174	0.0218	0.0043
	(0.0572)	(0.1413)	(0.0036)	(0.5635)	(0.1391)	(0.6949)
Average directorships	-0.2917**			0.0077		
held by executive directors	(0.0467)			(0.2776)		
Agency proxy * Average directorships	-0.1221			0.0242		
held by executive directors	(0.2084)			(0.1275)		
Average directorships	-0.0676			0.0058*		
held by non-executive directors	(0.2670)			(0.0861)		
Agency proxy * Average directorships	0.0685			-0.0149***		
held by non-executive directors	(0.1771)			(0.0068)		
Percentage of busy executive directors		0.2588			-0.0047	
		(0.6295)			(0.8871)	
Agency proxy * Percentage of busy		-1.5745			0.0467	
executive directors		(0.1245)			(0.4282)	
Percentage of busy non-executive		-0.8354***			0.0561**	
directors		(0.0068)			(0.0201)	
Agency proxy * Percentage of busy		-0.1682			-0.1121**	
non-executive directors		(0.5514)	0.2777		(0.0360)	0.0100
Busy boards by busy executive directors			0.2777			-0.0108
Agency proxy * Busy boards by			(0.1653) -0.3830			(0.3022) 0.0359
busy executive directors			(0.4522)			(0.1563)
Busy boards by busy non-executive			-0.2235			0.0263**
directors			(0.2728)			(0.0498)
Agency proxy * Busy boards by			-0.3113*			-0.0427***
busy non-executive directors			(0.0572)			(0.0047)
Executive directors' ownership	-0.0081**	-0.0036	-0.0063	0.0004	0.0004	0.0005
61 9 L	(0.0454)	(0.5273)	(0.2333)	(0.3741)	(0.3235)	(0.2525)
Board size	-0.0378	-0.0421	-0.0470	-0.0044*	-0.0037*	-0.0036*
	(0.4041)	(0.1603)	(0.1300)	(0.0993)	(0.0883)	(0.0941)
Board composition	-1.6834	-2.8703***	-2.9155***	-0.2311***	-0.2173***	-0.2071***
	(0.1192)	(0.0004)	(0.0007)	(0.0001)	(0.0000)	(0.0000)
Firm Characteristics						
Log (Return on assets)	0.4899***	0.5023***	0.5092***			
	(0.0000)	(0.0000)	(0.0000)			
Log (Return on capitals)				0.0161***	0.0182***	0.0178***
				(0.0074)	(0.0027)	(0.0034)
Firm size	-0.0671	-0.0389	-0.0938	0.1559***	0.1472***	0.1500***
	(0.8349)	(0.8955)	(0.7581)	(0.0000)	(0.0000)	(0.0000)
Growth opportunities	0.3677	0.3275	0.3285	0.0598**	0.0591**	0.0597**
	(0.1210)	(0.1419)	(0.1439)	(0.0424)	(0.0367)	(0.0352)
Adjusted R <sup>2</sup>	0.3662	0.3760	0.3705	0.2574	0.2621	0.2598
F-statistic	4.0561	4.2888	4.2118	2.7988	2.9013	2.8793
P-value	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)

#### CHAPTER V

#### CONCLUSION AND AREAS FOR FUTURE RESEARCH

#### **5.1 Conclusion**

The purpose of this paper is to explore the impact of boards of directors with multiple directorships on firm performance and scrutinize that effect further according to the types of directors as well as those impacts before and after the Asian financial crisis in Thailand. What's more, this paper also examine if the effect of multiple directorships and corporate value is driven by the potential agency costs or not.

This paper has pursued the investigations by employing firm fixed-effects regressions with the independent variables of multiple-directorship measures during 1993 to 2005. This paper finds that boards in which directors serving numerous seats penalize firm's market performance; however, such boards are beneficial to company accounting performance. This is also corroborated by the findings from subsequent examinations with the classification by director types.

In addition, examining those relationships before and after the Asian financial crisis, this paper finds that, for executive directors, the detrimental impacts of boards with multiple-seat executive directors on firm's market performance before the crisis have been altered to significantly positive relations after the crisis. The changes could result from the successful and effective amelioration of Thai corporate governance. For independent directors, there is no change in the direction of the associations between before and after the crisis; that is, the relations between multiple-directorship measures for outside directors and market value are significantly negative whilst those measures are positively related to the accounting value, no matter which either period. This suggests that even if there has been an substantial improvement of Thai firm

governance after the crisis, in the market's view, firms in which non-executive directors serving several seats still do harms to company value since the major role of independent directors is to monitor firm's management indeed.

Furthermore, this paper also investigates whether the effect of multiple directorships on firm performance depends on the probable agency costs or not. Confirming the findings in preliminary hypotheses, when the potential agency costs in the firms are less likely, it is found that the boards with directors, both types, serving numerous seats affect firm's market value negatively; however, boards with non-executive directors holding several seats enhance company's accounting value. In addition, it is found that the relations between boards in which executives serving multiple-directorship and firm performance, both market and accounting ones, are independent to the agency costs. Meantime, every significant effect of multiple directorships by non-executive directors on firm's operating value is actually driven by the potential agency problems.

In a nutshell, the multiple directorships in Thailand are harmful only to firm's market value, in line with the Busyness Hypothesis as well as this paper's expected hypothesis. On the contrary, the multiple directorships also conduct advantage to company's accounting value, supporting the Reputation Hypothesis. Furthermore, when scrutinizing those relations by each director's type, it is found that the directions of the relationships between the multiple-directorship and firm value are unchanged. However, the types of director turn out to matter over the pre- and post-crisis periods. Additionally, as hypothesized, there is the structural change of the associations occurred between the before and after the Asian financial crisis; this is likely due to the evolution of Thai firm governance. Besides, the relations between the multiple-directorship for independent directors and firm value seem to be dependent on the

potential agency problems. The implication of this paper is that these results could be employed by corporate governance policy makers as the guidance if it is suitable for launching the restricted number of directorships in Thai surroundings.

#### **5.2** Areas for Future Research

This thesis generates the investigation on Thai corporate governance around the effectiveness of boards of directors in terms of the number of directorships on which the director serves in a board according to the types of directors with concerning the separation of different relations' structure due to the Asian financial crisis as well as the interaction to the agency problem. Nevertheless, similar to any other studies, this paper has the limitation. This paper has found the inverse relations' signs among market and accounting values in some cases mentioned earlier. Thus, the future investigation may explore further if there is an earning management in the company in which directors holding multiple directorships or not. Also, this paper employs the dichotomous variable for agency costs from the executive's ownership. In the near future, there might be governance indices more properly representing the agency problems in Thailand. Further examinations may use those other variables as the agency cost proxy to revisit the exploration of these hypotheses. Their results could either come up with corroborating this paper's findings or unfold some novel information as well.

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Appendices

Appendix A

# The Distributions of Directorships served by Each Director during 1993 to 2005 sorted by the Number of Directorships

Panel A: The Distribution of Directorships served by Each Director in 1993

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1317	81.75	1317	81.75
2	195	12.10	1512	93.85
3	50	3.10	1562	96.96
4	23	1.43	1585	98.39
5	13	0.81	1598	99.19
6	5	0.31	1603	99.50
7	3	0.19	1606	99.69
8	2	0.12	1608	99.81
9	1	0.06	1609	99.88
10	2	0.12	1611	100.00
Total	1611	100.00	1611	100.00

Panel B: The Distribution of Directorships served by Each Director in 1994

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1969	78.98	1969	78.98
2	316	12.68	2285	91.66
3	89	3.57	2374	95.23
4	56	2.25	2430	97.47
5	25	1.00	2455	98.48
6	13	0.52	2468	99.00
7	8	0.32	2476	99.32
8	7	0.28	2483	99.60
9	3	0.12	2486	99.72
10	4	0.16	2490	99.88
11	1	0.04	2491	99.92
12	1	0.04	2492	99.96
13	1	0.04	2493	100.00
Total	2493	100.00	2493	100.00

Panel C: The Distribution of Directorships served by Each Director in 1995

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2382	77.59	2382	77.59
2	414	13.49	2796	91.07
3	116	3.78	2912	94.85
4	67	2.18	2979	97.04
5	43	1.40	3022	98.44
6	16	0.52	3038	98.96
7	8	0.26	3046	99.22
8	9	0.29	3055	99.51
9	3	0.10	3058	99.61
10	5	0.16	3063	99.77
11	3	0.10	3066	99.87
12	3	0.10	3069	99.97
14	1	0.03	3070	100.00
Total	3070	100.00	3070	100.00

Panel D actually belongs to the distribution of directorships served by each director in 1996 which is selected to present in the main body of this paper.

Panel E: The Distribution of Directorships served by Each Director in 1997

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2879	77.16	2879	77.16
2	499	13.37	3378	90.54
3	160	4.29	3538	94.83
4	83	2.22	3621	97.05
5	38	1.02	3659	98.07
6	29	0.78	3688	98.85
7	14	0.38	3702	99.22
8	9	0.24	3711	99.46
9	4	0.11	3715	99.57
10	4	0.11	3719	99.68
11	5	0.13	3724	99.81
12	4	0.11	3728	99.92
13	2	0.05	3730	99.97
14	1	0.03	3731	100.00
Total	3731	100.00	3731	100.00

Panel F: The Distribution of Directorships served by Each Director in 1998

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	2945	77.85	2945	77.85
2	489	12.93	3434	90.77
3	158	4.18	3592	94.95
4	87	2.30	3679	97.25
5	41	1.08	3720	98.33
6	22	0.58	3742	98.92
7	17	0.45	3759	99.37
8	5	0.13	3764	99.50
9	6	0.16	3770	99.66
10	3	0.08	3773	99.74
11	6	0.16	3779	99.89
12	1	0.03	3780	99.92
13	1	0.03	3781	99.95
14	2	0.05	3783	100.00
Total	3783	100.00	3783	100.00

Panel G: The Distribution of Directorships served by Each Director in 1999

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
7019/17/2019	3136	79.05	3136	79.05
2	495	12.48	3631	91.53
3	162	4.08	3793	95.61
4	79	1.99	3872	97.61
5	38	0.96	3910	98.56
6	27	0.68	3937	99.24
7	11	0.28	3948	99.52
8	2	0.05	3950	99.57
9	10	0.25	3960	99.82
10	2	0.05	3962	99.87
12	3	0.08	3965	99.95
13	2	0.05	3967	100.00
Total	3967	100.00	3967	100.00

Panel H: The Distribution of Directorships served by Each Director in 2000

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3192	79.88	3192	79.88
2	498	12.46	3690	92.34
3	160	4.00	3850	96.35
4	72	1.80	3922	98.15
5	35	0.88	3957	99.02
6	14	0.35	3971	99.37
7	10	0.25	3981	99.62
8	6	0.15	3987	99.77
9	4	0.10	3991	99.87
10	2	0.05	3993	99.92
11	1	0.03	3994	99.95
12	1	0.03	3995	99.97
14	1	0.03	3996	100.00
Total	3996	100.00	3996	100.00

Panel I: The Distribution of Directorships served by Each Director in 2001

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3146	79.89	3146	79.89
2	502	12.75	3648	92.64
3	156	3.96	3804	96.60
4	61	1.55	3865	98.15
5	43	1.09	3908	99.24
6	13	0.33	3921	99.57
7	4	0.10	3925	99.67
8	7	0.18	3932	99.85
9	4	0.10	3936	99.95
11	1	0.03	3937	99.97
14	1	0.03	3938	100.00
Total	3938	100.00	3938	100.00

Panel J: The Distribution of Directorships served by Each Director in 2002

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
001/000	3218	79.89	3218	79.89
2	505	12.54	3723	92.43
3	163	4.05	3886	96.47
4	73	1.81	3959	98.29
5	34	0.84	3993	99.13
6	18	0.45	4011	99.58
7	6	0.15	4017	99.73
8	7	0.17	4024	99.90
9	1	0.02	4025	99.93
10	1	0.02	4026	99.95
13	1	0.02	4027	99.98
14	1	0.02	4028	100.00
Total	4028	100.00	4028	100.00

Panel K: The Distribution of Directorships served by Each Director in 2003

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3371	79.47	3371	79.47
2	549	12.94	3920	92.41
3	180	4.24	4100	96.65
4	65	1.53	4165	98.18
5	36	0.85	4201	99.03
6	17	0.40	4218	99.43
7	11	0.26	4229	99.69
8	9	0.21	4238	99.91
9	2	0.05	4240	99.95
12	1	0.02	4241	99.98
15	1	0.02	4242	100.00
Total	4242	100.00	4242	100.00

Panel L: The Distribution of Directorships served by Each Director in 2004

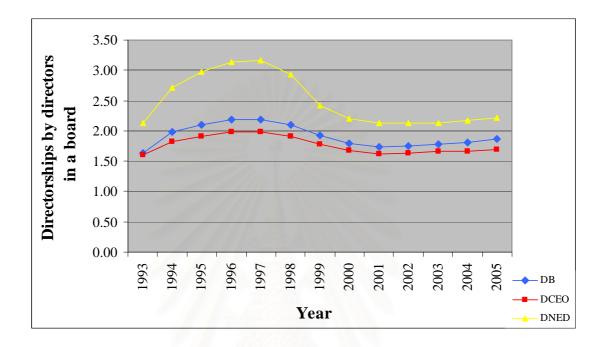
Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3624	79.67	3624	79.67
2	570	12.53	4194	92.20
3	192	4.22	4386	96.42
4	75	1.65	4461	98.07
5	43	0.95	4504	99.01
6	21	0.46	4525	99.47
7	9	0.20	4534	99.67
8	10	0.22	4544	99.89
9	3	0.07	4547	99.96
10	1	0.02	4548	99.98
14	1	0.02	4549	100.00
Total	4549	100.00	4549	100.00

Panel M: The Distribution of Directorships served by Each Director in 2005

Number of Directorships	Frequency	Percent	Cumulative Frequency	Cumulative Percent
	3730	79.87	3730	79.87
2	572	12.25	4302	92.12
3	195	4.18	4497	96.30
4	80	1.71	4577	98.01
5	43	0.92	4620	98.93
6	21	0.45	4641	99.38
7	14	0.30	4655	99.68
8	5	0.11	4660	99.79
9	7	0.15	4667	99.94
10	1	0.02	4668	99.96
11	1	0.02	4669	99.98
13	1	0.02	4670	100.00
Total	4670	100.00	4670	100.00

### Appendix B

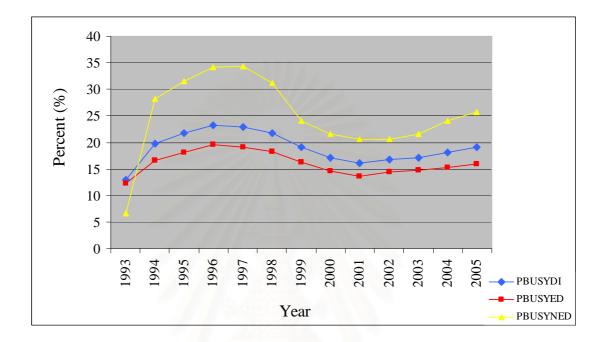
The Comparison of Average Directorships held by Directors of Each Type in a Board of Directors by Year (DB, DCEO and DNED)



According to the distributions for the average directorships per each type of directors in a board by year presented in Panel C of Table 2 in the body part, this paper provides the illustration for the comparison of those figures as the line chart. Consequently, it can be seen the explicit trends over the whole period from 1993 to 2005 of those variables. That is, the average directorships served by directors of each type in a board are likely to climb up steadily and then stand at the peak around the year of Tom-yum-kung crisis. Subsequently, they regularly decline and stabilize after the time of crisis.

#### **Appendix C**

The Comparisons of the Percentages of Directors' Busyness According to their Types in a Board by Year (PBUSYDI, PBUSYED and PBUSYNED)



As the distributions for the percentages of busy directors in each type on a board of directors by year mentioned in Panel D of Table 2, this paper also illustrates the tendency of those multiple-directorship measures which is similar to the trends of the average directorships served by any types of directors in a board shown in Appendix B. In other words, the figures start rising consistently and reach the highest around the crisis time, then plummeting and rising trivially afterward.

Nevertheless, there are some different characteristics in detail between the average number of directorships and the percentage of board directors' busyness that should be remarked. According to Fich and Shivdasani (2006), they posit that, in fact, the average-directorship method reporting large number does not translate as the fact that the majority of directors are busy.

# **Biography**

Miss Wipanuch Ardrugsa was born on July 5, 1983 in Bangkok, Thailand. At the upper secondary level, she graduated from Triam Udom Suksa School whilst at the undergraduate level, she graduated from the Faculty of Economics, Chulalongkorn University in April 2005 with a Bachelor Degree in Economics (First Class Honors), majoring in Monetary Economics. She joined the Master of Science in Finance program, Chulalongkorn University in June 2005.