BOARD COMPOSITION AND FIRM PERFORMANCE

JITLADA INTARASA-AD

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Jitlada I.
.....
Ms. Jitlada Intarasa-ad
Candidate

Yingyot Chiaravutthi
.....
Asst. Prof. Yingyot Chiaravutthi, Ph.D.
Major advisor

V. Udomkit
.....
Lect. Nuntana Udomkit, Ph.D.
Co-advisor

A. Mutchimwong
.....
Asst. Prof. Auemphorn Mutchimwong, Ph.D.
Acting Dean
Faculty of Graduate Studies
Mahidol University

Yingyot Chiaravutthi
.....
Asst. Prof. Yingyot Chiaravutthi, Ph.D.
Program Director
Master of Business Administration
Program in Business Modeling and Analysis
International College
Mahidol University

Thematic Paper
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on
March 5, 2011

Jitlada I.
.....
Ms. Jitlada Intarasa-ad
Candidate

P. Pholphirul
.....
Assoc. Prof. Piriya Pholphirul, Ph.D.
Chair

N. Udomkit
.....
Lect. Nuntana Udomkit, Ph.D.
Member

Yingyot Chiaravutthi
.....
Asst. Prof. Yingyot Chiaravutthi, Ph.D.
Member

A. Mutchimwong
.....
Asst. Prof. Auemphorn Mutchimwong, Ph.D.
Acting Dean
Faculty of Graduate Studies
Mahidol University

Ram Hoon
.....
Assoc. Prof. Rassmidara Hoonsawat,Ph.D.
Dean
International College
Mahidol University

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Jitlada Intarasa-ad

BOARD COMPOSITION AND FIRM PERFORMANCE

JITLADA INTARASA-AD 5038730 ICMA/M

M.B.A. (BUSINESS MODELING AND ANALYSIS)

THEMATIC PAPER ADVISORY COMMITTEE: YINGYOT CHIARAVUTTHI, Ph.D. (ECONOMICS), NUNTANA UDOMKIT, Ph.D. (ECONOMICS AND INTERNATIONAL DEVELOPMENT)

ABSTRACT

This paper aimed to examine the relationships between the composition and size of the board of directors, and firms' performances. The performance measurements comprised of returns on equity, returns on assets, and dividend yield. The data were collected from 2009 annual reports of SET100 index of listed companies in The Stock Exchange of Thailand and The Stock Exchange of Thailand (SET)'s website. The results showed that board size, proportion of audit committees, proportion of directors who served as civil servants, proportion of directors who passed the director's training course that was held by the Thai Institute of Directors (IOD), and the total percentage of directors' shareholding had a positive relationship with the performance; while the proportion of directors who served as senior military and police officers had a negative relationship. This implied that civil servants could provide a connection to the business whereas senior military and police officers may not contribute to the firm's performance which could be because of their insufficient expertise in business.

KEY WORDS: BOARD COMPOSITION / FIRM PERFORMANCE / CORPORATE GOVERNANCE

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ความสัมพันธ์ขององค์ประกอบคณะกรรมการบริษัทต่อผลประกอบการธุรกิจ
BOARD COMPOSITION AND FIRM PERFORMANCE

จิตรลดา อินทรสอาด 5038730 ICMA/M

บธ.ม. (การวิเคราะห์และการสร้างตัวแบบธุรกิจ)

คณะกรรมการที่ปรึกษาสารนิพนธ์: ยิ่งยศ เจียรวุฑฒิ, Ph.D. (ECONOMICS), นันทนา อุดมกิจ, Ph.D. (ECONOMICS AND INTERNATIONAL DEVELOPMENT)

บทคัดย่อ

งานวิจัยชิ้นนี้จัดทำขึ้นเพื่อศึกษาความสัมพันธ์ระหว่างองค์ประกอบและขนาดของคณะกรรมการบริษัทต่อผลประกอบการของธุรกิจซึ่งวัดจากอัตราผลตอบแทนต่อผู้ถือหุ้น อัตราผลตอบแทนต่อสินทรัพย์ และอัตราเงินปันผลตอบแทน โดยใช้ข้อมูลจากรายงานประจำปี พ.ศ. 2552 ของ100 บริษัทในตลาดหลักทรัพย์และเว็บไซต์ของตลาดหลักทรัพย์ ผลการวิจัยแสดงให้เห็นว่าปัจจัยที่มีผลต่อผลการดำเนินงานเชิงบวกอย่างมีนัยสำคัญทางสถิติได้แก่ จำนวนคณะกรรมการบริษัท สัดส่วนของคณะกรรมการตรวจสอบ สัดส่วนของคณะกรรมการที่เป็นข้าราชการและลูกจ้างของรัฐ สัดส่วนของคณะกรรมการที่ผ่านการอบรมหลักสูตรกรรมการจากสมาคมส่งเสริมสถาบันกรรมการบริษัทไทย และสัดส่วนการถือหุ้นในบริษัทของคณะกรรมการ ในทางตรงข้าม สัดส่วนของกรรมการที่รับราชการทหารและตำรวจมีความสัมพันธ์ในเชิงลบต่อผลประกอบการ ผลการวิจัยชี้ให้เห็นถึงความสำคัญของกรรมการซึ่งเป็นข้าราชการที่อาจเอื้อประโยชน์ต่อการประกอบธุรกิจเนื่องจากความสัมพันธ์ดังกล่าว ในขณะที่กรรมการซึ่งเป็นข้าราชการตำรวจและทหารอาจมีผลในทางตรงกันข้ามเนื่องจากขาดความรู้ความเข้าใจและความเชี่ยวชาญทางด้านธุรกิจ

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INTRODUCTION

1.1 Sarbanes-Oxley Act

In 2002, The Sarbanes-Oxley Act was enacted in response to cases of accounting scandals in The United States such as Enron and WorldCom. As a result, boards of directors must take full responsibility for weak oversight, deficient mechanisms of transparent financial information and weak corporate governance. This legislation was named for Senator Paul Sarbanes and Representative Michael Oxley, the originators of this Act. The act contains 11 sections, starting from additional board responsibilities to penalties, i.e. Section 302 contains “corporate responsibility for financial reports” with regard to statutory financial statements and reports certifications of internal controls and financial information and any fraud of employees who are involved with internal activities (Addison-Hewitt Associates, n.d.).

Like other countries affected by the crisis, The Securities and Exchange Commission of Thailand (SEC) set a mission to encourage best practices for good corporate governance in the capital market and expected to regain public and investor confidence in order to prevent any repetition (The Securities and Exchange Commission of Thailand, 2010). In the beginning, from 1998, the SEC corporate governance working group was set up to propose a strategic plan for corporate governance standards, covering key areas with regard to board of directors in need of improvement, including “checks and balances across the company board for the best interests of stakeholders; market mechanisms such as shareholder activities, corporate governance ratings and educational programs for both company directors and investors” (The Securities and Exchange Commission of Thailand, 2010).

The SEC and the SET also issued the rules and requirements to improve listed companies’ corporate governance, especially in terms of board of directors to comprise at least one-third of independent directors, and at least 3 independent members to sit on audit committees. The reliability of financial statements and the

sufficiency of corporate internal control systems have to be reviewed by the committee which give opinions and suggestions as to whether the disclosure of related transactions is fair and in the best interest (The Securities and Exchange Commission of Thailand, 2010).

Therefore, after the financial crisis, the rising trend of good corporate governance at both the national and corporate levels have increased continuously after weak corporate governance caused economic disturbances in the past. The expanded complexity of the business environment and many rapid changes drive entities to improve their management standards and best practices regularly, in order to be effective until all related parties unanimously accept that the company is operating in "good corporate governance" environment.

Corporate Governance

Corporate governance (CG) can be defined from various perspectives. For instance, it is the relationship between the board of directors, management team, shareholders and stakeholders of the company in monitoring corporate direction and day-to-day operations. From another perspective, it is also the internal structure and process of ensuring that the board of directors assesses the management team performance transparently and effectively, see Figure 1.1 for CG structure (National CG Committee, n.d.).

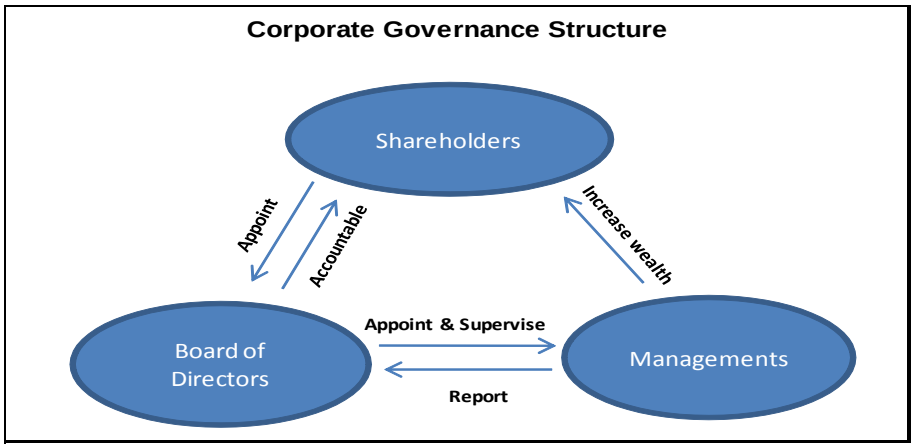

Figure 1.1 Corporate governance structure

Source: The Stock Exchange of Thailand (n.d.)

Participants involved with corporate governance are broader and covered more varied, whether by direct relationships such as directors, managements and employees who receive salaries and other benefits from the company, shareholders who receive dividends in return or indirect stakeholders who can influence and affected from business operations such as the social community (Ahluwalia & Joshi, 2009).

As a result, there is a close relationship between shareholders, board of directors and managements as Figure 1.2 demonstrates. Managers as 'agents' are the organization's representatives who have some information which is unknown to the 'principals' which refers to shareholders. The principal is using the agent to perform in ways that benefit to principal interest in exchange since managers have insight information and expertise that the shareholders do not have (Biz/ed, n.d.).

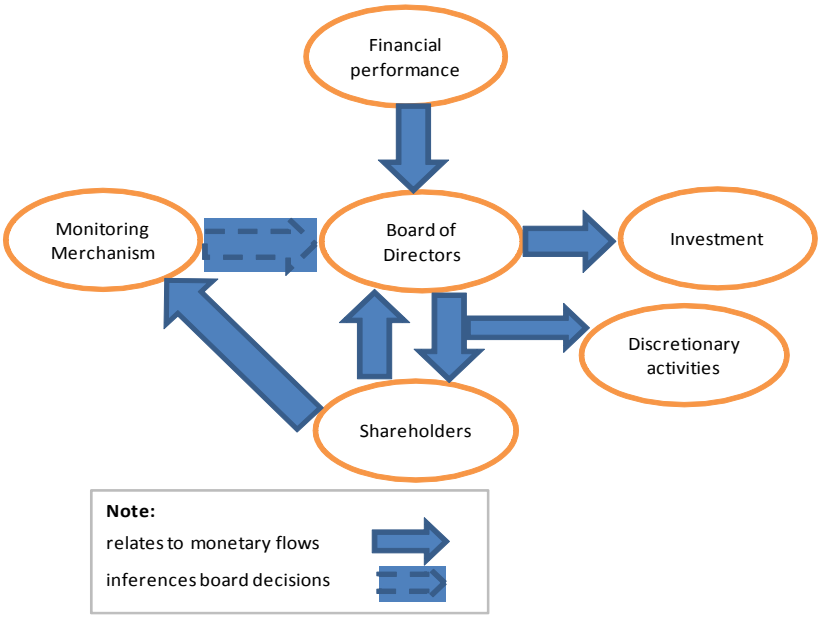

Figure 1.2 A representation of the principal agent

Source: Emeraldinsight (n.d.)

1.2 Board of Directors

The governing board of directors must be appointed to operate the organization as a separate legal entity because of its accountability to the owners i.e. stockholders in listed firms (McNamara, n.d.).

Good corporate governance is the most crucial part in large companies since in most cases the owners of funds or shareholders do not manage and operate the business by themselves while the managers do not own sources of funds. The term “good corporate governance” describes company rules, regulations and mechanisms which ensure the protection of the rights of shareholders who are the owners of funds in both the current and long term (The Securities and Exchange Commission of Thailand, 2010).

As all mentioned earlier, the boards are the apex of the corporate governance structure, therefore, they are the key and the most important part that contributes to good corporate governance within the organization. Transparent and reliable board must possess strong leadership, control and prudently perform their duties and be able to appoint a qualified management team to be their representative in business management. Therefore, the board is the corporate governance center in each firm and its relationship to the other parties is in the public interest (McRitchie, 1999).

However, as directors act as linkage between shareholders and management and take an essential role in establishing good corporate governance, there is a wide concern with regard to the ability to ensure that management acts in the best interest of shareholders and investors. In fact, boards of many listed firms are generally viewed as inactive entities which are often dominated by the managers in charged with monitoring daily transactions of the company (Park & Shin, 2002).

The boards’ legal responsibilities are varying according to the business nature and jurisdiction in each country where the company operates. In Thailand, the SET has set out directors’ roles and responsibilities as follows: “Directors must ensure that company has management with enough competency, knowledge and experience to run the business.” “Independent directors and outside directors should bring an independent judgement to bear on issues of strategy, performance, resources, including key appointments, and standards of conduct. They should oppose any proposal brought by other directors or management, that they consider may lead to effect the equitable treatment of shareholders.” (The Stock Exchange of Thailand, 1999)

In addition, directors should also set out the company guidelines. Most large companies typically define a code of ethics or code of business conduct to rules

and outline the responsibilities for proper practices of an individual or organization. One area that may be of interest is the conflict of interest. Conflict of interest arises from the opposition in decision making from authorities, roles, and perceived values. Concerns for self interest could violate and influence the best decision making for shareholders and lead to the manipulation of authority for personal gain (Pathranarakul, 2004).

There are two types of director, executive and non- executive, however, there is no real distinction in legal terms. In practice, the difference is that non-executive directors do not run the day-to-day business whilst executive directors perform operational and strategic functions. In terms of contribution, non-executive directors use their experience and expertise to provide independent opinions and normally, they possess the governance process role of both executives and managements activities (Department for Business, Innovation & Skills, n.d.).

In the same sense, boards can also be categorized into independent and non- independent directors. From the Code of Best Practice for Directors of Listed Companies, “Independent directors are defined as directors who do not hold any position in the management and are not employees of the company. They must not be an executive director or an authorized director. They must be independent of any major shareholders, management, and any other related persons and they must have the responsibility to determine if there is anything that may affect the equitable treatment of shareholders” (The Stock Exchange of Thailand, 1999).

Independent director positions are perceived to be better than non-independent or inside directors because they have less personal gain and interest to make decisions and to assess management recommendations. An independent director must be qualified as independent according to the company’s corporate governance policy, and the criteria established by the SET. This passage specifies qualifications that ” An Independent Director must: holding shares not exceeding 0.5 per cent of the total number of voting rights of the Company, its parent company, subsidiary, affiliate or juristic person which may have conflicts of interest, including the shares held by related persons of the independent director, neither being nor having been an executive director, employee, staff, or advisor who receives salary, or a controlling person of the Company, its parent company, subsidiary, affiliate, same-level subsidiary or juristic

person who may have conflicts of interest not being a person related by blood or registration under laws, such as in the manner of father, mother, spouse, sibling, and child, including spouse of the children, executives, major shareholders, controlling persons, or persons to be nominated as executive or controlling persons of the Company or its subsidiary" (AIS, n.d.). In order to encourage directors to be able to perform their duties, or express opinions independently and non-independent director, typically, is an executive who is related to the board, i.e. chairman, CEO, CFO and/or any other executives.

The board has its main obligations and responsibilities to governance the organization, that is, to exercise the control and authority over all its affairs. Practically, the board has the power and authorities to engage in activities that can be delegated to another party or sub-committee, such as, an audit committee, nomination committee and compensation committee. The working group duty is mainly dealing with a specific issue and has the objectivity to pursue business activities more flexible and in more efficient way (Council of Social Service of New South Wales, 2009).

Audit Committee

Currently, the audit committee is an active mechanism that facilitates "Good Corporate Governance" to ensure the quality, credibility and objectivity of the corporate financial information, including reporting and disclosure. The audit committee performs a preventive role to control and assist the board in fulfilling its responsibilities more effectively, to maintain the substantial objectivity on financial reporting and internal control systems, and to provide management and external auditors opportunities of managing all risks (The Stock Exchange of Thailand, 1999).

According to The Stock Exchange of Thailand (1999), the board's composition, qualifications, obligations, responsibilities, means of communicating with internal and external auditors must be defined clearly and adequately to productivity achieve the objectives of providing, with the assistance of all related parties in facilitating all required information and resources. For audit committee development in Thailand, the SET on "Best Practice Guidelines for the Audit Committee" defined "The audit committee is a committee of the board, as it assists the board with the board's responsibilities, oversees all relevant issues, and fulfills the

company's corporate governance. The objectives for establishing an audit committee applying these guidelines are established widely in order to reflect its significant role." The main objectives and the potential benefits of an appropriately set-up audit committee that facilitates the board of directors are to assist the board of directors in financial, management, including compliance with the laws and regulations and monitoring and controlling business risk and controls, facilitate the maintenance of the independence and the objectivity of both internal and external auditors and to strengthen the role and influence of non-executive directors.

The committee is comprised of at least three non-executive directors who are independent of the executive directors and major shareholders. The number of members depends on the size of the company and the functions and responsibilities of the audit committee. In general, the number of members ranges from three to five. If the number of committee members falls below the minimum of three, the board of directors or the shareholders' meetings is required to increase the number of the committee members to the minimum of three. Every member is not expected to be an expert in accounting or finance, because the committee has the right to seek advice on these matters from auditors and the management, or additional information from independent professional advisors, when necessary. However, one member must have significant experience in accounting or in financial matters so as to update fellow members with any legislation changes (The Stock Exchange of Thailand, 1999).

Nomination Committee

The nomination committee is in charge of recruiting and examining candidates, before making recommendations to a board of directors or shareholder meeting to ensure that persons who become directors and key executives of the company are sufficiently knowledgeable, capable and experienced; and independent when necessary. The nomination committee is generally appointed on an ad-hoc basis. If no nomination committee is appointed, the whole board of directors should be responsible for the nomination process (The Securities and Exchange Commission of Thailand, 2010).

Compensation Committee

A compensation committee decides the remuneration of directors and key executives in appropriate proportion to their powers, duties, responsibilities, and performance. The person deciding remuneration should not be the same person being evaluated. If no compensation committee is appointed, the whole board of directors should be responsible, regardless of the directors being evaluated from the relevant board meeting. The SET and SEC do not specify any requirements for nomination and remuneration committees in particular, but rather encourage listed companies to practice transparency and good corporate governance. All members of an audit committee, and most of the members of the nomination and the remuneration committees, should be independent from managements influence (The Securities and Exchange Commission of Thailand, 2010).

Although the board of directors sets up the subcommittee to undertake tasks in company accountability, however, this does not release the directors from the responsibilities and obligations associated with the obligations of delegated practices (The Securities and Exchange Commission of Thailand, 2010).

1.3 Board Composition and Diversification

Without a good board of directors to oversee overall operations, managers may sometimes act intentionally for their own benefit regardless of shareholder interests. In addition, a board of directors' business experience can provide the guidance for the optimum of company accomplishment (Volkov, 2010)**.**

Independent directors play an important role in the good corporate governance system. Since the boards must contribute appropriate jugdement to the corporation, boards from individuals with closed relationship to managements tend to exercise their monitoring role inefficiently and also boards that lack of independence are more likely to create conflicts of interest with shareholders when making business decisions i.e. in the election of new executives and audits (Scarabotti, 2009).

Apparently, the board of directors should consist of members with a variety of knowledge and experience to ensure that together, they can formulate the right policy for the development of the business, while having specialized skills,

abilities, and especially sufficient independence to audit the management. Since the board has two significant roles; to support the management according to corporate governance practice and to set a strategic plan to achieve the business goals. In principle, the board of directors of a listed company should consist of independent directors or outside directors to carry sufficient weight on the board when making decisions (Erawan Listed Company, n.d.). Also, from the Public Limited Company Act B.E.2535, in Chapter 6, Section 67, given the rules regarding the board of directors that "The company shall have a board of directors to operate the business of the company, comprising at least five directors of which not less than one half shall reside in the Kingdom." (Law Reform Commission, 1992)

For the SET, in August 2001, the SET released its report on corporate governance to reform and enhance Thailand's corporate governance. The report defined the principles, recommendations, and best practice guidelines for directors of listed companies, including board composition (Thai Institute of Directors Association, 2004). "The board of directors should consist of: executive directors who are involved in day-to-day operations or are authorized directors, non-executive directors who are independent directors are defined as directors who do not hold any position in the management and are not employees of the company. They must not be an executive director or an authorized director." "The chairman should be an independent director and should not be the same person as the managing director. The reason for this is that there should be a separation of duties in directing the company's policies and management." (The Stock Exchange of Thailand, 1999)

Figure 1.3 presents the relationships of shareholders, executives/ managers and directors. Whenever external funds are raised from the public or investors, a change of business management will inevitably take place. In large companies, especially in listed firms, investors and managers have different roles that must be separated and distinguished from the company. The investors or shareholders do not manage the business directly, but appoint "directors" as their representatives to supervise and oversee the company as a "board". At the same time, the board of directors does not engage in the company's day-to-day operations, but appoints managers and professionals to perform those duties for them (The Securities and Exchange Commission of Thailand, 2010).

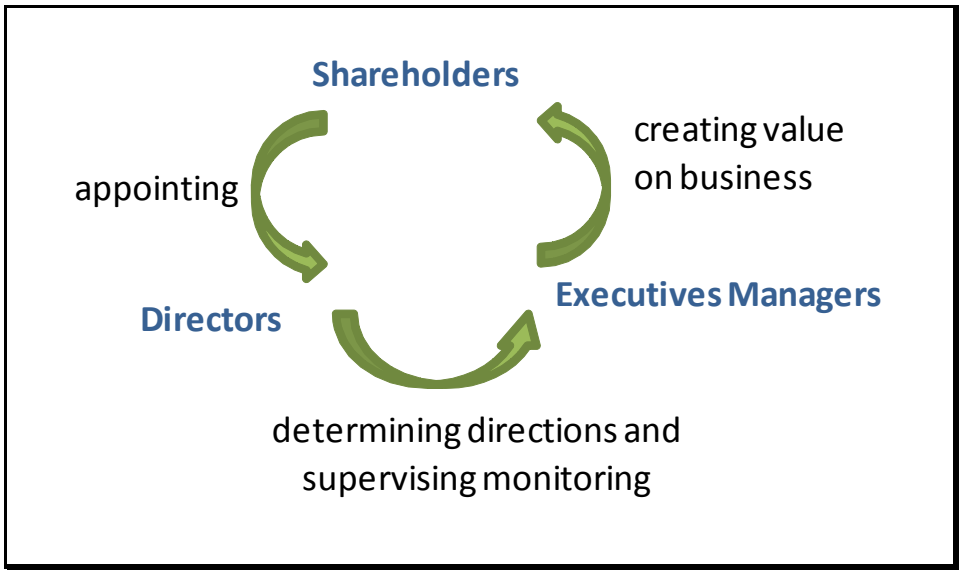

Figure 1.3 Relationships of shareholders, executives/managers and directors

Source: The Securities and Exchange Commission of Thailand (n.d.)

1.4 Objective

This paper aims to examine the relationship between the composition of a board of directors (members on board, shareholdings, education background and training, government experience and audit committees proportion) and a firm's performances as valuated by returns on equity (ROE), returns on assets (ROA) and dividend yield of Thailand listed firms of the SET index 100, which represents 100 leading companies in all industries. "These indices are calculated, respectively, from the stock prices of the top 100 listed companies on SET in terms of large market capitalization, high liquidity and compliance with requirements regarding the distribution of shares to minor shareholders." (The Stock Exchange of Thailand, n.d).

1.5 Scope of Study

The sample of listed companies is comprised of 100 companies in the SET Index 100 in 2010. The data source of the characteristics of the board of directors is from the 2009 annual report of the SET100 of Thailand listed companies from the Stock Exchange of Thailand database and company websites. Data on key financial

information comes from the dividend yield, return on equity (ROE) ratio and return on assets (ROA) ratio of year ended 2009 and 3rd quarter of 2010 that was published on The Stock exchange of Thailand's website.

1.6 Limitations

This paper recognizes limitations in selecting the sample size of the SET Index 100 representing the top 100 companies from all industry groups in The Stock Exchange of Thailand in terms of large market capitalization and liquidity from a total of 505 listed companies in 2010, which by nature, may yield different level of financial performances. The industry groups are Resources, Financials, Property & Construction, Technology, Services, Agro & Food Industry, Industrials and Consumer Products (The Stock Exchange of Thailand, 2010) and the samples used herein also do not cover across different time period (panel data) and some variables are omitted i.e. firm size, which represents area for future study.

CHAPTER II
LITERATURE REVIEW

Most organizations involve the creation of an entire organization where the differences of people are valued and utilized to achieve a business goal. Various human resources with different ideas and personal backgrounds contribute to the synergy of the work environment. The board of directors shares the same sense in terms of a variety of knowledge, expertise and experience with specialized skills and abilities, and especially sufficient independence is recommended to affirm cooperation to maximize the firm values and shareholder interests. Former studies can be arranged into 3 major attributes; which are dependency attributes by independent and outside directors in board composition, quantitative attributes in terms of board size and demographic and experiential attributes that include gender, ethnicity, education, industry experience and political connections outlined in later paragraphs.

2.1 Independent Directors in Board Composition and a Firm's Performance

Board composition has been counted on as a diminution of the agency problem, since generally managers will pursue their own interests at shareholders or company expense. Fama and Jensen (1983) viewed that boards of directors could reduce agency costs by segregation of power and duty of the management and control of decision making. Further, the ability to control and monitor also considered to be critical (Byrd and Hickman, 1992) and many others predict that inside directors contribute knowledge and experience gained to operate policies and the day-to-day business. The outside directors contribute in terms of objectivity and expertise collected through their experience in other business matters. While outsiders also render their opinions and judgment on a firm performance, independently, whereas

insiders may lack acumen in this area, therefore their monitoring role is restricted and ineffective.

Hossain, Prevost and Rao (2001) examined the board of director effectiveness, particularly for independent outside directors, by measuring their impact on the performance of 633 firms listed in the New Zealand Stock Exchange (NZSE). The interesting part of the study was to focus on the impact of the Companies Act of 1993, the Financial Reporting Act of 1993 and related legislation of board composition on corporate firms' performance that all were enforced in July, 1994. With the main purpose was to organize and expand the boards of director's duties and obligations to investors. For New Zealand, they documented positive relationships of independent outside directors to the firms' performance. This paper contributes to Lawrence and Stapledon (1999) who view that for listed firms, the corporate board should be composed of a minority of non- independent directors and Baysinger and Butler (1985) who found a direct linkage between outside directors and returns on equity (ROE). However, Yermack (1999) opposed a negative relationship between outsider members on board and Tobin's q.

Therefore, many questions are still open for researchers with regards to the ability of independent and outside directors to exercise their role in oversight business transactions effectively. For example, Byrd and Hickman (1992) question whether outside directors are able to add the economic moderation that compels directors by factor markets, corporate control, and alternative internal governance controls. Similarly, Fama and Jensen (Fama & Jensen, 1983) are concerned that an outside director's reputation may sometimes affect the monitoring role. However, in conclusion, an optimal percentage, or numbers, of outside directors, or an optimal board composition remains an open question so far.

2.2 The Link between Board Size and a Firm's Performance

Shijun Cheng (2008) conducted a study of board size and the variability of corporate performance and summarized that a firm's value becomes more stable as a firm's board of directors grows larger. The bigger the board size, the lower variability of monthly stock returns, ROA, Tobin's Q as the corporate performance, results from

1,252 firms in the Investor Responsibility Research Center's (IRRC) data over the period 1996–2004. This finding is supported the reasons being that more compromises are required to meet approval when dealing with larger boards, consequently, leading to less variable corporate performance. This is consistent with Adam and Mehran (2004) found that larger boards will have better performance valuated by Tobin's Q for the banking business.

Additionally, Ann B. Gillette, Thomas H. Noe and Michael J. Rebello (2003) in their study of Corporate Board Composition, Protocols, and Voting Behavior concluded that their model shows that boards with a majority of trustworthy, but uninformed "watchdogs" can induce a favorable plan and policies, moreover, a board size of seven, as suggested by Jensen in 1993, is sufficient for decision making. Jensen (1993) also recommended a board size of less than 7 or 8 directors, as the marginal profit of additional members will exceed the marginal cost of coordination.

2.3 Board Diversity, Composition and Share Proportion on a Firm's Performance

The demand for corporate governance reform emphasized the need for greater diversity in board composition for efficiency in order to address the issues and enhance corporate performance. To a great extent, fully utilized board diversity will bring out broader perspective and experience for better business decisions (Ingley & Walt, 2003). They also viewed that directors would contribute particular perspectives from their various professionals, ethnic and gender backgrounds to the board.

In 1996, Milliken and Martin studied management research on diversity in the boards of director composition. They found positive outcomes for diversity effects, such as a greater variety of perspective leading to better decision making and increasing opportunities for creative and innovative business solutions. However, later in 1999, Forbes and Miliken (1999) studied further in depth and argued that each aspect of board demography tends to have complex, multiple, and inverse effects. The group with contrasting backgrounds is likely to cause a higher level of conflict since they have greater access to a variety of information from outside and will attempt to integrate and combine this benefit into the group.

Further, many researchers have focused on demographic diversity effects of a board, like Toyah Miller and María del Carmen Triana (2009). They examined a sample of 500 Fortune firms in 2003- 2004 which represented all groups of industry leaders and used several external reports listing the board members by race to analyze their compromising roles regarding a firm's innovation and reputation from the diversity of the directors' gender and race. Empirical results indicate both gender and racial diversity of a board has a direct association to innovation i.e. in the form of R&D expenditures. They also documented a positive correlation between a board's racial diversity and a firm's reputation, as consistent with a signaling theory to the public and investors of a firm's ability and understanding of business globalization in a diverse environment that firms currently face (Fombrun and Shanley, 1990).

Later in 2007, Helen Kang, Mandy Cheng and Sidney J. Gray pursued a study of Corporate Governance and Board Composition - diversity and independence of Australian boards to investigate the extent of board diversity and independence in 100 top Australian corporations in 2003. This research reported the significance of board diversity and independence to issues faced in the current business climate. The major finding is with regard to gender, age, and independence of the directors in 100 largest listed companies in Australia. For gender diversity, only 10.37 percent of the total of Australian companies' boards is female. The favorable range of directors' age is above 50 years as more than 80 percent of the total and age diversity is straight forward towards the board's size. More interestingly, they find a positive relationship between age diversity and industry type, which is consumer services and the product sector, would appoint directors with greater diversity range. In summary, the traditional diversity profile of boards of Australian' top 100 companies is that a greater proportion are independent male directors, comprising of 8 to 9 members with an age between 51 and 70 years old.

A study of the effects of top management teams and board nationality diversity and compensation systems on a firm's performance by Sabina Nielsen and Bernhard Nielsen (n.d.) used a sample of 165 Swiss listed firms in 2000-2004. They found evidence supporting the initial internationalization degree of the firm will have a positive correlation to the nationality diversity growth of top management team (TMT) and the board of directors (BOD). This positively correlates to TMT and board

compensation which, in turn, positively relates to a firm's performance. Their results were evaluated by two measurements of both operational and stock market performance, that is, returns on sales (ROS) and return index. Their findings stated that firms which are growing internationally will hire more foreigners in upper positions and will attract more international investments to the firm in exchange. Thus firm performance is positively affected accordingly.

A study of gender and ethnic diversity among UK Corporate Boards by Stephen Brammer, Andrew Millington and Stephen Pavelin (2007) of 463 UK firms suggests the degree of diversity is relatively low, with the mean of 8.7 whites and 0.2 non- whites in board of directors, and 3.9 male and 0.1 female directors in case of gender. Significantly, only 61 firms out of total (13%) have non-white directors. These composition statistics of the UK's labor force provide informative data to the board diversity challenge.

Later, Kim & Lim (2010) researched 593 Korean companies by focusing on the effects of independent directors' diversity. It produced evidence that most Korean companies have independent directors of a diverse age, education, and experience on boards after corporate governance reforms in 1998. The empirical evidence suggests; firstly the direct effect of independent boards' educational degrees on a firm's values, secondly, a positive relationship between independent directors with government experience and a firm's values, but negative associations with directors, who are accountants and finally, a direct link between diversification of independent directors' education fields and a firm's values. Furthermore, Tim Duffy (n.d.) suggested that CEO with a military background will perform better as witnessed by higher average return of the companies led by military background CEOs than the 2005 S&P 500 index. He viewed the leadership skills from military training enhance strong leadership role and responsibility in the boardroom.

Clearly, knowledge and expertise in business, economics, or law are beneficial resources to a firm. Kor and Sundaramurthy (2009) suggested that outside members' knowledge and experience is significantly linked to a firm's growth, the greater diversification of outside board expertise, the greater degree of sales growth. While diverse independent boards increase a firm's values, diverse ages of independent boards comprising younger members, who can create productivity and

older members contributing their experience, together they can have a synergetic effect on a firm. However Leibenstein (1958) predicted a diminution of productivity, after certain age is reached of independent directors.

Again, in the summary of a study of 593 Korean companies by Kim & Lim (2010) focusing on the effects of independent directors diversity, they found positive relationships between independent directors with government experienced and a firm's values corroborated the opinion by Faccio (2006) which affirms the benefit of political connections in a board through the financial assistance.

A company's board of directors ideally includes specific ties to the business environment. The ties political directors create should be positively associated with a firm's performance given the critical degree of government involvement in business. A record of Politicians on the board of directors: Do connections affect the bottom line by Hilman (2005) supports this assumption. In the study, he measured a firm's performance by market-based; market capitalization and market-to-book ratio (Tobin's Q) and accounting-based; return on sales (ROS) and return on assets (ROA) as the market perspective is more a short term outlook, while accounting represents past performance. He documented a direct linkage between the board with political connections responded to the market performances as firms can reduce uncertainty and extend broaden access to information and valuable resources intimately. His results also pointed out boards of more heavily regulated industries i.e. telecommunications, biotechnology typically have more politicians than less regulated industries i.e. retail and electronics. This is supported by the resource dependence theory in way that boards should reflect the environment where firms are currently facing.

In terms of ownership, Jensen and Meckling (1976) in pioneer studies of outside blockholders, which represents outside shareholders who beneficially own at least 5 percent of a firm's outstanding common stocks without serving as executives or directors (US Securities and Exchange Commission Rulel3d-3) can be an efficient way to reduce agency costs, since outside shareholders could play a monitoring role in managing a firm's performances. Subsequent documentation suggested this to be an important mechanism to govern managers externally, especially in firms without significant management ownership (Shleifer and Vishny 1986). In accordance with

this, Byrd and Hickman (1992) found that greater outsider deputation increases shareholder wealth as evidenced by a linkage between the percentage of outside shareholdings and a firm's performance. However, Rosenstein& Wyatt (1997) document their findings that an average stock-price reaction is positive correlated with the subgroup of high director ownership (5-25%) as the idea that executives ownership is the aligning tool for managements and shareholder interests.

Although, theoretically, the board composition and diversity is the best idea to ensure that the board can gather and formulate a right policy for the development of the business. Jensen and Meckling (1976) pointed out that board diversity may create complexities and incapability in decision making among board members because of conflicts of interest. A diverse group of board members can be an obstacle to optimum goals. From an overall majority of previous studies, a lack of consistent and clear evidence of the effectiveness of outside independent directors and proper proportions of the board has stimulated a continuing debate and open discussion on the productivity and capability of directors on a board in exercising their role effectively.

CHAPTER III
METHODOLOGY

3.1 Data and Hypothesis

Dataset comprises SET100 index listed companies in The Stock Exchange of Thailand on December 2010. Data on board of director composition was obtained from the 2009 annual reports of listed companies and the SET's website. Data on financial ratios to evaluate firms' performances composed of the return on equity and return on asset for the year ended 2009 and 3rd quarter of 2010 (annualized), respectively. The researcher also used dividend yield as of December 30, 2009 and December 13, 2010, the date of data collection, calculated by using latest dividend paid divided by prior date of closing price multiplied by total common stock outstanding. All financial information was published on the SET's website. The dataset information describes the composition of boards regarding key characteristics such as director's gender, education and training, background and experience, ethnicity and role of directors; independent/ non-independent and audit committees as qualified by The SET.

Basic methodology consists of estimating a series of ordinary least squares (OLS) multiple regression models. The dependent variable is a measure of a firm's performance (ROA, ROE and dividend yield). The independent variables are measures of board composition including proportion of audit committee (ac_ppt), proportion of directors who serve as civil servants (civ_serv_ppt), proportion of directors who have passed the director related training course held by Thai Institute of Directors (IOD) (tr_ppt), proportion of senior military and police officer directors (mil_pol_ppt), total percentage of directors' shareholding (dirshare) and a measure of firm size which are total members of board (noofbod) including ε which is the residual of the multiple regression model.

The models we estimate are as follows:

roa_ye09 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

roa_3q10 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

roe_ye09 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

roe_3q10 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

div_ye09 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

div_3q10 = a_0+ a_1**noofbod**+ a_2**ac_ppt**+ a_3**civ_serv_ppt**+ a_4**tr_ppt** + a_5**mil_pol_ppt**+ a_6**dirshare**+ ε

3.2 Measures

Proportion of Audit committee (ac_ppt), directors who passed the director related training course held by Thai Institute of Directors (IOD) (tr_ppt), total percentage of directors share holding (dirshare), proportion of senior military and police officer' directors (mil_pol_ppt) and a measure of a firm's size defined by total members of board (noofbod) relies on published 2009 company annual reports. Proportion of directors serve as civil servants (civ_serv_ppt) captured from the work experience section of listed company's annual reports as of year ended 2009. The researcher also specifies the business industry of the company either a regulated or non-regulated business to test statistic to determine whether the magnitude of the effect varies significantly across groups. Two groups of subsample based on whether industries are regulated; regulated by government to a significant level, i.e. utilities and resources business which are required to be more capital intense but must also

have concession rights from government agencies. In the former subgroup, the researcher included industries: Industrials- Petrochemicals & Chemicals, Resources- energy& utilities and mining, Services- transportation& logistics and media and Technology- communication and information as regulated business. The latter subgroup of the remaining businesses is, therefore, non-regulated.

3.3 Data Analysis

Samples of the study comprising of Thailand's 100 listed companies in The Stock Exchange of Thailand reveal that most of the Board of theSET100 tends to comprise of 9 to 13 directors (62%), with maximum total of 19 members on the board of PTT Aromatics and Refining Public Company Limited (PTTAR) and a minimum of 6 members in board of Hana Microelectronics Public Company Limited (HANA). Furthermore, for independent directors and audit committees on a board, this data group is likely to have 3 to 6 and 3 to 4 members, respectively. A company that comprising of a maximum of 12 independent directors on board and 5 audit committees is the MCOT Public Company Limited (MCOT) in the media & publishing sectors. The typical (mean) of female directors on the boards for all industries is only 1 with a maximum of 6 female directors in the MILL Construction Steel Industries Public Company Limited (MILL) board in property & construction industry.

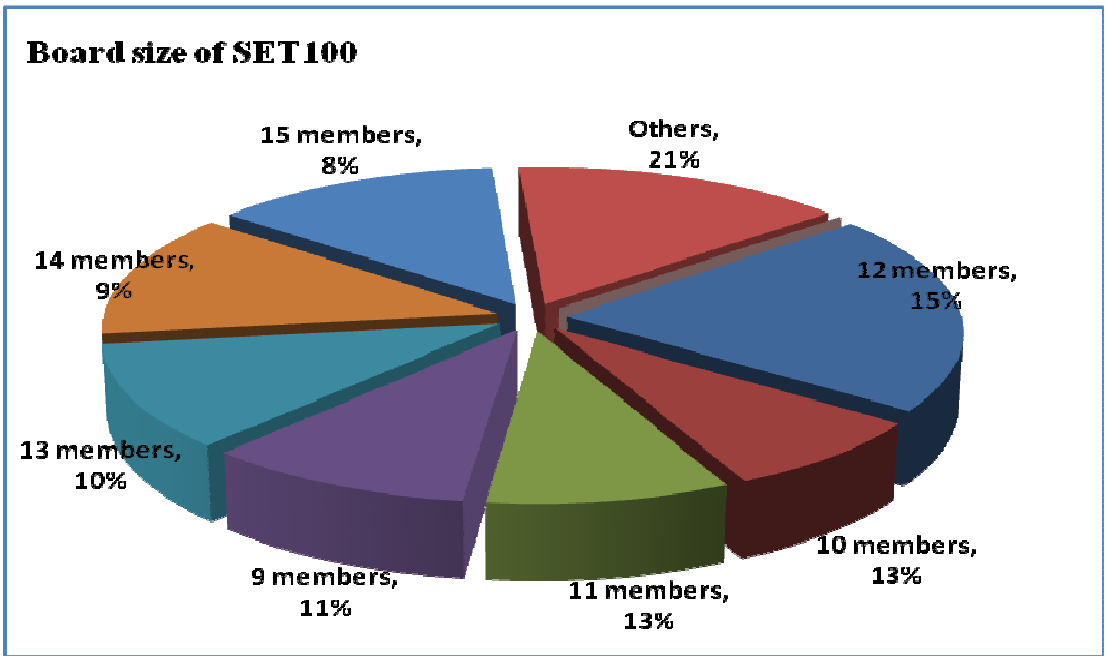

Figure 3.1 Board size of SET100

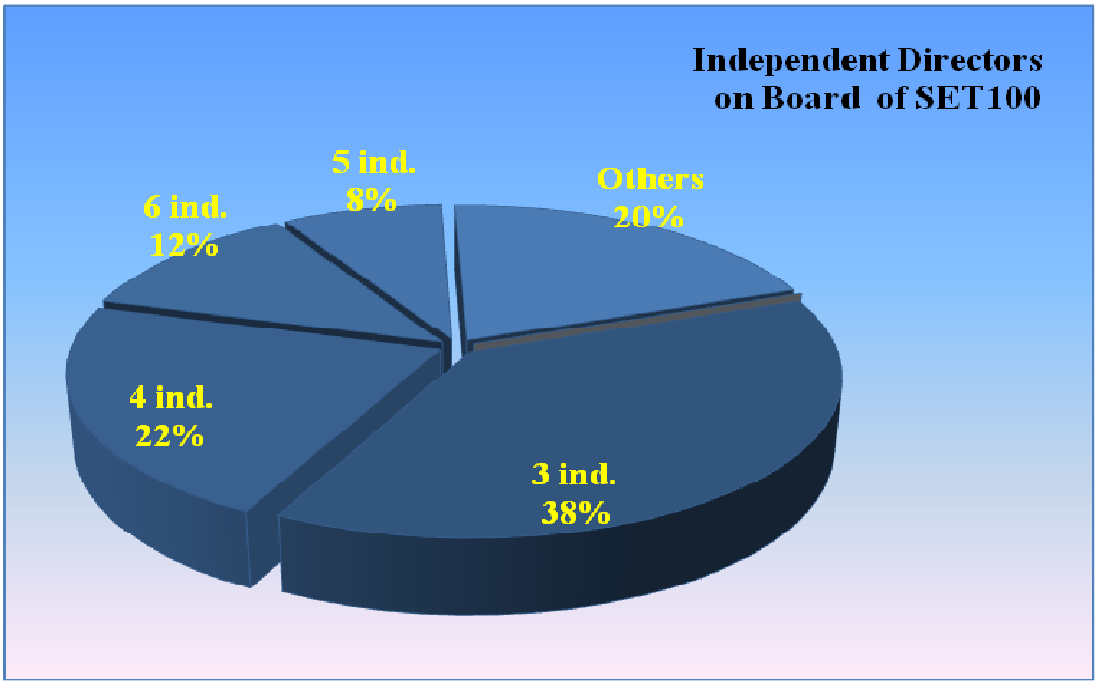

Figure 3.2 Independent directors on board of SET100

Table 3.1 Descriptive statistics of variables of SET100 for all industries *(N = 100)*

Variable	Mean	Std. Dev.	Min	Max	Explanation
roa_ye09	10.3	9.8	-21.5	44.5	Return on asset for period of year ended 2009
roa_3q10	11.0	10.0	-19.7	50.8	Return on asset from 4th quarter of 2009 to 3th quarter of 2010 (annualized)
roe_ye09	14.3	14.5	-42.6	60.2	Return on equity for period of year ended 2009
roe_3q10	15.7	15.9	-65.4	69.4	Return on equity from 4th quarter of 2009 to 3th quarter of 2010 (annualized)
div_2009	4.7	2.8	1.1	17.0	Dividend yield as of Dec. 30, 2009
div_2010	4.2	3.6	0.5	25.3	Dividend yield as of Dec. 13, 2010
noofbod	12.1	2.8	6.0	19.0	Total members on board of directors
ac_ppt	0.3	0.1	0.1	0.6	Proportion of audit committees on board
civ_serv_ppt	0.2	0.2	0.0	0.9	Proportion of directors served as civil servants
tr_ppt	0.8	0.2	0.2	1.1	Proportion of directors passed the training held by IOD
mil_pol_ppt	0.1	0.1	0.0	0.4	proportion of directors served as senior military and police officer
dirshare	10.2	16.1	0.0	65.1	Total percentage of directors' shareholding

Table 3.1 presents the key descriptive statistics data of board characteristics and size of sample and the firms performances. Maximum dividend yield going to investors was from Precious Shipping Public Company Limited (PSL) in 2009 at 17% and from SVI Public Company Limited (SVI) in 2010 at 25.3%. In terms of efficiency of asset generation, G J Steel Public Company Limited (GJS) and G Steel Public Company Limited (GSTEEL), both in the industrial materials & machinery sector, possess the lowest ROA in 2009 and Q3'2010 at -21.5 and -19.7, respectively, with the highest 44.5 and 50.8 in 2009 and Q3'2010 of BEC World Public Company Limited (BEC). Same as ROA, lowest returns to equity in both periods at -42.6 and -65.4 was from GSTEEL.

Total members on board (noofbod), audit committees proportion (ac_ppt), proportion of directors passed the training course held by IOD (tr_ppt) and proportion of directors served as senior military and police officer (mil_pol_ppt), all provide the

mean with only slight differences among the three sets of sample data (all industries, regulated and non- regulated industries) not reported herein, with a mean of 12.1, 0.3, 0.8 and 0.1 for each characteristics respectively, in all industries (n= 100). However, some characteristics demonstrated the noticeable differences among three sets of data, which are members of the board who serve as civil servants (civ_serv_ppt) and total percentage of directors' shareholding (dirshare). The mean of the first group of data representing SET100 of all industries are 0.2 and 10.2% in order, while the regulated group (n= 55) provides 0.3 and 7.1% followed by the last group of non- regulated (n= 45) that has the mean equal to 0.1 and 14%. Differences in statistical estimates between the two subsamples are highlighted firms in specific types of industry with different generic profile of board characteristics after divided into two subgroups to see if the nature of government experience holds any distinguishable pattern between the two groups.

In particular, for members of boards with civil servants and government experience, this aligns with Hilman (2005) who noted as boards should conform to the firm's environment; the more firms rely on the government, the greater number of directors with government experience required on the board. As a result, boards of more heavily regulated industries typically have more politicians than less regulated industries. As reflected on the mean of civ_serv_ppt for the regulated industries' boards to 0.3 with the maximum proportion of 0.9 in Airports of Thailand Public Company Limited (AOT), almost three times more than in the non- regulated industries' boards which exhibit a mean of 0.1 with the maximum of only 0.5 in The Siam Cement Public Company Limited (SCC) board. The bigger size board of directors is more likely to correlate and respond to the higher proportion of civil servant directors on boards for regulated industries than non- regulated, as demonstrated in Figure 3.3. This is not surprising given that for firms in the regulated business, to have directors with government experience may be ultimately valuable and reflect the business nature of their regulatory environment.

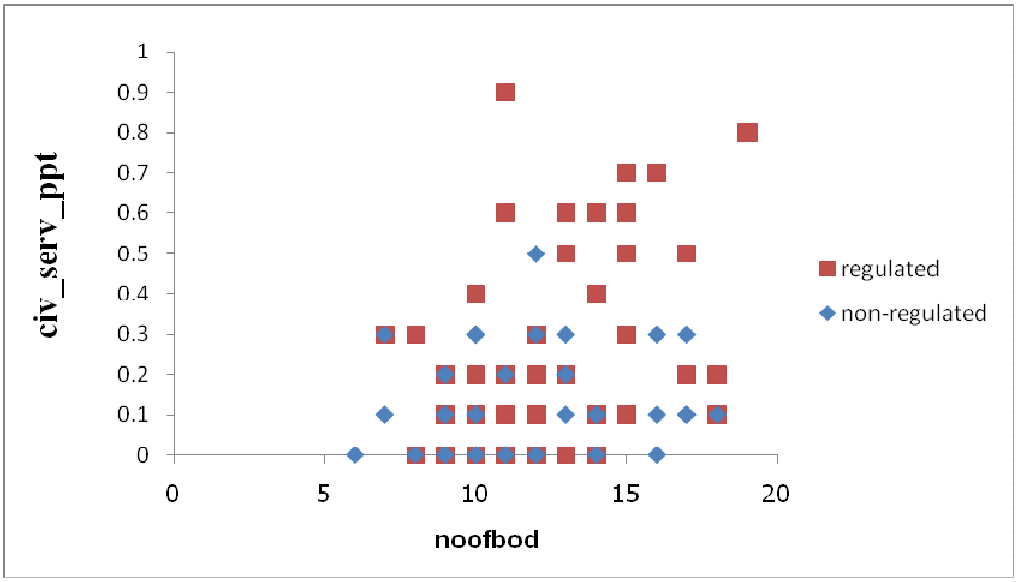

Figure 3.3 Number of total directors on board (noofbod) and directors served as civil servants (civ_serv_ppt) in regulated vs. non- regulated business

Another interesting part is the percentage of directors' shareholding (dirshare). The mean of non- regulated business that is relatively higher than regulated business is almost double (14% vs. 7.1%). The maximum proportion of director ownership is 65.2% in Prueksa Real Estate Public Company Limited (PS). However, for all businesses in SET100, the mean is only 10.2%. This may imply the relatively low degree of director ownership concentration in Thailand.

Figure 3.4 attests to the correlation matrix for the independent variables with dependent variables measured by ROA and ROE. For the period of year ended 2009, the highest correlation of ROA, ROE is positive to directors' shareholding (dirshare) at 0.384 and 0.307, respectively. The highest positive correlation of ROA, ROE for the 3rd quarter of 2010 is again with dirshare at 0.393 and with audit committee proportion on board (ac_ppt) at 0.328, respectively. The results repeatedly oppose the evidence from Byrd and Hickman (1992) that found a positive relationship between the percentage of outsider ownership and firm performance.

Figure 3.4 The correlation matrix for the independent variables with ROA and ROE for the period of year ended 2009 and 3rd quarter of 2010 (annualized)

	roa_ye09	roa_3q10	roe_ye09	roe_3q10	noofbod	ac_ppt	civ_serv_ppt	tr_ppt	mil_pol_ppt	dirshare
roa_ye09	1.000									
roa_3q10	0.920	1.000								
roe_ye09	0.833	0.786	1.000							
roe_3q10	0.699	0.795	0.907	1.000						
noofbod	-0.049	-0.121	-0.076	-0.132	1.000					
ac_ppt	0.241	0.367	0.284	0.328	-0.638	1.000				
civ_serv_ppt	-0.036	-0.078	-0.030	-0.076	0.325	-0.221	1.000			
tr_ppt	0.241	0.215	0.242	0.178	-0.103	0.138	0.136	1.000		
mil_pol_ppt	-0.216	-0.219	-0.311	-0.319	0.345	-0.159	0.632	0.046	1.000	
dirshare	0.384	0.393	0.307	0.284	-0.149	0.168	-0.196	0.041	-0.071	1.000

One final characteristic finding that may be of interest is the variety of the board of director highest education major. The typical board tends to have variety of highest education in 3 majors (37%); business and accounting, engineering and sciences and law, with maximum to 5 fields; business and accounting, engineering and sciences, law, political sciences and arts in resources industry which also occupied the highest firm performances among other businesses (mean =14.8 and 19.4 for ROA and ROE of YE2009, respectively). This added further support to hypothesis of Milliken and Martin (1996) in assessment and review management research on the effect of different types of diversity in director composition that highlights the positive outcomes of diversity effects as a greater variety of perspective leads to better decision making and increasing creativity of business solutions.

CHAPTER IV
RESULTS AND ANALYSIS

Table 4.1 and 4.2 display estimate regressions of SET100 companies in; all businesses and regulated business vs. non- regulated business. Each column reports coefficient estimates from multiple regression, with t-statistic and p-value in parentheses. The dependent variable is a measure of performance of the year ended 2009 (YE2009) and 3th quarter of 2010 (3Q2010), as indicated at the top left. A constant term is included, but not reported. The other variables are self-explanatory.

Table 4.1 Regression estimates of firm performance on board characteristics and board size (Data set of SET100 in all industries)

	ROA			ROE		
	coef.	**t-stat**	**p value**	**coef.**	**t-stat**	**p value**
YE2009						
noofbod	0.981	2.330	[0.022]**	1.556	2.700	[0.009]***
ac_ppt	40.445	2.740	[0.008]**	71.277	3.520	[0.001]***
gvt_ppt	11.306	1.980	[0.051]*	23.633	3.010	[0.003]***
tr_ppt	10.023	2.130	[0.036]**	13.850	2.140	[0.035]**
pol_grad_ppt	-47.705	-3.310	[0.001]***	-98.848	-4.990	[0.000]***
dirshare	0.220	4.120	[0.000]***	0.257	3.490	[0.001]***
R-squared	0.336			0.399		
Q3'2010						
noofbod	1.052	2.430	[0.017]**	1.440	2.050	[0.043]**
ac_ppt	61.528	4.070	[0.000]***	89.529	3.660	[0.000]***
gvt_ppt	9.722	1.650	[0.100]*	22.201	2.330	[0.022]**
tr_ppt	8.187	1.710	[0.091]*	9.092	1.170	[0.244]
pol_grad_ppt	-43.908	-2.950	[0.004]***	-101.864	-4.230	[0.000]***
dirshare	0.223	4.050	[0.000]***	0.250	2.810	[0.006]***
R-squared	0.369			0.288		

Note: P-values are presented in the brackets beside the t- stat and estimates, with *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

Table 4.1 presents four regression models, which include independent variables of board composition. In regression model 1 and 2, the coefficient of noofbod (0.981, t = 2.33 vs. 1.052, t= 2.43), ac_ppt (40.445, t = 2.74 vs. 61.428, t= 4.07), civ_serv_ppt (11.306, t = 1.98 vs. 9.722, t= 1.65), tr_ppt (10.023, t = 2.13 vs. 8.187, t= 1.71) and dirshare (0.22, t = 4.12 vs. 0.223, t= 4.05) are significantly positive associated with ROA of YE2009 and Q3'2010, while the coefficient of mil_pol_ppt (-47.705, t= -3.31 vs. -43.908, t= -2.95) has a negative effect. In line with ROA, results from Regression 3 and 4 for the ROE of YE2009 and Q3'2010 are positively related to noofbod, ac_ppt, gvt_ppt, tr_ppt and dirshare, but negatively related to mil_pol_ppt with a greatly significant level at 1% (t = -4.99, p-value = 0.000). R-squares for all first 4 models are approximately 30- 40% as indicated in Table 4.1.

The finding with regards to board size is in line with prior documentation of Cheng (2008) that a firm's value become more stable as a firm's board grows larger, and Adam and Mehran (2004) in way that larger boards perform better in the banking business. For the audit committee proportion, this appears to align with Hossain, Prevost and Rao (2001) that report a firm's performance is positively impacted by the proportion of outside independent directors on the board as evidenced by The New Zealand Stock Exchange (NZSE). Kim & Lim's (2010) outcomes also support the civil servants' board proportion viewpoint that directors with government experience have positive effects on firm valuation. The proportion of directors passed training from IOD suggested positive correlation with firm performance is expected as recommended by The Securities and Exchange Commission of Thailand (SEC), World Bank and Directors Associations in many countries in developing professional standards of directorship to perform duties more effectively and result in increasing shareholders value (Institute of Directors, n.d.). Nevertheless, regression results in the case of directors' shareholding is counter to Byrd and Hickman's (1992) findings of a positive correlation to outside shareholding proportions to greater shareholder wealth and stronger firm performance as the greater of outside ownership plays an important role in monitoring firms management; however, the result is aligned with Rosenstein and Wyatt (1997) who suggest that executives ownership would be an aligning tool for managements and shareholder interests and will reduce agency problems. This is

presumably because the inside ownership could be an incentive in improving a firm's performance and corporate earnings.

On the other hand, negative coefficient of mil_pol_ppt emphasized the need for corporate governance practice in terms of greater diversity in board composition to address the issues and improve board efficiency and corporate performance. This is contrasting to Duffy (n.d.) who viewed that CEO with military service background are likely to perform better from strong leadership skills. Even though directors from The Royal Thai Police Cadets, Royal Military/ Royal Thai Naval/ Royal Thai Air Force Academy backgrounds provide negative linkage, directors graduating with business administration, engineering and sciences and law suggest positive coefficients to the firm performances although with significant level, which are not reported in this table. Adding to Kim & Lim (2010) findings of the diversity of director education majors has consistently positive effects on firm valuation. Alternatively, the negative impact of mil_pol_ppt may imply that this field of education may have a weakening role on board monitoring through a lack of business expertise and comprehensive background.

The regression results of hypotheses 5 and 6 which are not reported here indicate the board composition coefficient is not significantly different from zero in any regression with a dividend yield of 2009 and 2010. Thus, in only the models using accounting-based measures (ROA and ROE) of firm performance are significant, these results do not hold in the models of market- based performance (dividend yield). To explain, it could be indicated the two different aspects of performance as predicted by Watts & Zimmerman (1990) that accounting reflects past performance and is more likely subject to managerial manipulation. On the other hand, market-based measurement represents the firm's future expectation. Alternatively, the limitation due to the smaller sample size of dividend yield available since some firms did not pay in consecutive years (N= 81 and 82 for div_2009 and div_2010, respectively), thus, the researcher was unable to find any significant statistical inferences about their effect on a market firm's performance and represent areas for future research.

Additionally, other dependent variables have been taken into the tests which are the proportion of females on board, the proportion of directors from the same family, the proportion of directors who have doctorate degrees, the proportion of

directors who graduated from abroad and the proportion of directors who are non-Thai. The researcher also includes variables of independent director backgrounds; the proportion of independent directors in business administration, engineering and sciences and law backgrounds. As Kor and Sundaramurthy (n.d.) suggested outsider members' knowledge and experience is linked significantly to a firm's growth, the greater diversification of outside board's expertise, the greater degree of the sales growth. Lastly, dummy variables; a chairman who is an independent director, a chairman who is an audit committee and a chairman who is a CEO of the company were also included in the experiment. As literature on board structure suggests, a CEO who assumes the dual role of chairman may make the board less independent in terms of the authority of the chairman (Shivdasani and Yermack, 1998). Nevertheless, all of them are statistically insignificant to the firm's performance as both the accounting and market outlook signals a diminutive effect.

Table 4.2 Regression estimates of firm performances on board characteristics and board sizes (Subgroups of regulated vs. non- regulated industries)

	Regulated Industries						Non- regulated Industries					
	ROA			ROE			ROA			ROE		
	coef.	t-stat	p value	coef.	t-stat	p value	coef.	t-stat	p value	coef.	t-stat	p value
YE2009												
noofbod	1.250	1.720	[0.093]*	1.490	1.58	[0.122]	0.439	0.980	[0.336]	1.076	1.47	[0.151]
ac_ppt	26.397	0.810	[0.422]	35.701	0.84	[0.403]	34.772	2.480	[0.019]**	71.119	3.12	[0.004]***
civ_serv_ppt	8.966	0.990	[0.328]	20.761	1.76	[0.085]*	14.842	1.620	[0.116]	30.644	2.06	[0.049]**
tr_ppt	10.552	1.390	[0.171]	12.452	1.27	[0.212]	15.840	2.770	[0.009]***	21.140	2.27	[0.030]**
mil_pol_ppt	-49.794	-2.230	[0.031]**	-100.414	-3.46	[0.001]***	-35.305	-2.100	[0.044]**	-79.508	-2.91	[0.007]***
dirshare	0.279	2.800	[0.008]***	0.219	1.69	[0.098]*	0.177	3.440	[0.002]***	0.271	3.24	[0.003]***
R-squared	0.255			0.269			0.509			0.540		
Q3'2010												
noofbod	1.212	1.7	[0.096]*	1.291	1.18	[0.245]	0.516	0.94	[0.353]	1.065	1.08	[0.291]
ac_ppt	40.821	1.33	[0.191]	79.084	1.67	[0.102]	58.520	3.43	[0.002]***	87.341	2.83	[0.008]***
civ_serv_ppt	6.900	0.78	[0.442]	25.556	1.87	[0.068]*	14.159	1.27	[0.214]	21.182	1.05	[0.302]
tr_ppt	7.771	1.08	[0.285]	6.313	0.57	[0.571]	14.408	2.07	[0.047]**	14.172	1.13	[0.269]
mil_pol_ppt	-45.453	-2.07	[0.044]**	-117.477	-3.48	[0.001]***	-29.558	-1.44	[0.159]	-65.796	-1.78	[0.086]*
dirshare	0.253	2.64	[0.011]**	0.124	0.84	[0.405]	0.194	3.1	[0.004]***	0.319	2.81	[0.009]***
R-squared	0.239			0.240			0.508			0.377		

Note: P-values are presented in the brackets beside the t- stat and estimates, with *, ** and *** denote significance at the 10%, 5% and 1% levels, respectively.

Tables 4.2 exhibits the estimates of the regression model using only firms in regulated vs. non- regulated industries. It contains four models with the following distinctions: ROA and ROE of YE2009 and Q3'2010, but with the sample size of 55 and 45 for each subgroup, respectively. From the results displayed, although the researcher is unable to make credible inferences as insignificant statistical data was obtained, given the small sample size of this subgroup (N= 55 and 45), it is apparent that mil_pol_ppt is negatively and significantly related to ROA and ROE for all four regression models in both subgroups at the 1%, 5% and 10% level, except to ROA of 3Q2010 in non- regulated business. In the regression model 5 and 6, no any independent variables have significant relationship with dividend yield which are not reported here. The R-squares are approximately up to 54%. In addition, dirshare is positively associated with firm's performance of ROA and ROE at p- value 0.002 to 0.098. Findings of these characteristics relationship with firm performances are compatible with table 4.1 of all industries dataset.

Discriminative function features between two subgroups are the proportion of audit committees (ac_ppt) and directors passed the training courses held by IOD (tr_ppt). For regulated subgroup, ac_ppt and tr_ppt are not statistically significant to either form of performances; while these two characteristics are positively significant to both measurements of firm's performances in non- regulated business, at 1% and 5% level. In addition, civ_serv_ppt in non-regulated industries indicates greater coefficient with more significantly degree related to firm's performances than in regulated industries (p-value = 0.085 in regulated firms vs. 0.049 in non- regulated firms). This implies that firms in non-regulated business prefer to have intensive relationships with government intimately by selecting more civil servants to the board for more convenience in dealing with business.

In addition, in estimates of correlations between board size (noofbod) and proportion of directors serve as civil servants (civ_serv_ppt) across two subsamples results in a correlation of the first group is 37.05 while the later group is 10.71. This is again underlines Hilman's (2005) view that firms in the more regulated industries will have more politicians and government experiences members on their boards for privileged connections, adding to the resource dependence theory that boards should respond to the environment they are facing as reflects in Figure 4.1 which the higher

percentage of directors serve as civil servants in regulated business than non- regulated business.

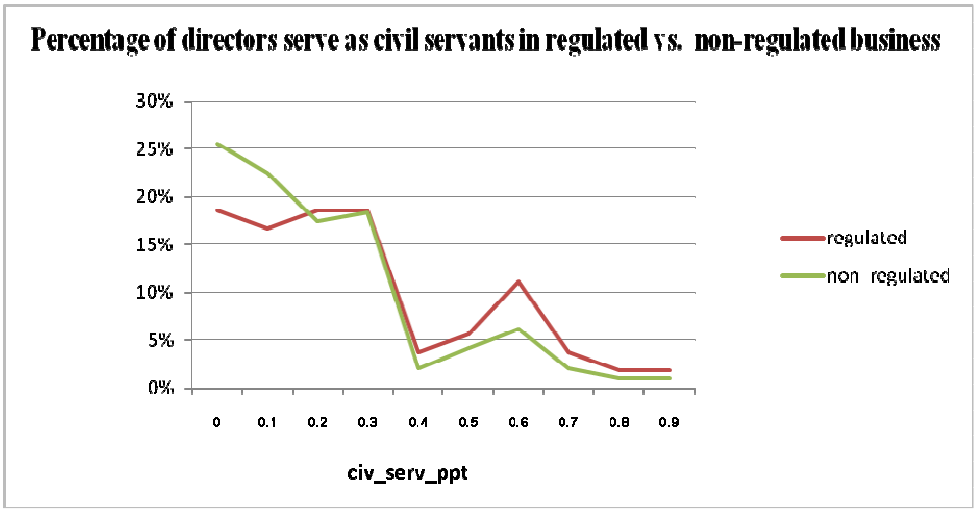

Figure 4.1 Percentage of directors serve as civil servants in regulated vs. non-regulated business.

CHAPTER V
CONCLUSION

Overall results indicate mixed support for the prediction of whether board composition and size of the board of directors are associated with firm performances. The number of directors on boards, proportion of audit committee, proportion of directors serve as civil servants, proportion of directors who passed director related training courses held by IOD and total percentage of directors' shareholding are significantly and positively related to the accounting-based performance, but not to the market-based outlook. On the contrary, the proportion of directors who are senior military and police officers has a negative relationship to both forms of measurement but only significant with accounting measurements.

The results also suggested that typically civil servant proportion of directors in regulated boards is greater than in non- regulated business (mean= 0.3 vs. 0.2 in regulated and non- regulated, respectively). This is emphasized by Hilman's (2005) view that firms in the more regulated industries will have greater members with politicians and government connections on their boards depending on the degree of government dependency. This also adds to the resource dependence theory that boards should respond to the environment facing them and in order to facilitate the business conformity more efficiently, the need for environmental linkage directors related to levels and types of situation the organization encounters.

The limitation of this study is that it is only able answer the question "Do board compositions and their size affect firm performance?" Since the methodology cannot test the hypotheses of "How board compositions and their size affect firm performance?" directly and future research, particularly in area of qualitative research for insight into these characteristics should be explored.

In conclusion, this study implies adverse effects on a firm's performance as the demand for a reduction of director members on board. Empirical evidence also suggests the desirable roles of boards when acquiring candidates for a strategic board.

In terms of preferences for field of expertise and dependency, it at least suggests the idea of benefits gained by firms with more audit committees, civil servants directors who passed the training course from IOD on their boards and also holding shares; while directors from military and police backgrounds may have an inverse effect. Although my study is unable to capture the specific nature and impact of these benefits and disadvantages. Finally, the paper recognizes limitations and implications that a number of factors that are not controlled in this study might be behind the empirical associations between the board size and composition and the performance measurements used herein.

REFERENCES

A presentation of Principal Agent [Image].(n.d.),Retrieved November 2, 2010, from http://www.emeraldinsight.com/content_images/fig/0010350210001.png

Adams, R.B. & Mehran H.(2004).Board Structure, Banking Firm Performance and the Bank Holding Company Organizational Form. *Reserve Bank of Chicago Proceedings,* 408-422

Addison- Hewitt Associates.(n.d.).The Sarbanes-Oxley Act. Retrieved January 29, 2011, from http://www.soxlaw.com/index.htm

Ahluwalia, S. & Joshi, V.(2009).Corporate Governance - An essential of socio-economic discipline. Retrieved January 29, 2011, from http://www.indian mba.com/ Faculty_Column/FC964/fc964.html

AIS. (n.d.). Definition of Independent Director of Advanced Info Service Plc. Retrieved October 24, 2010, from http://investor.ais.co.th/.../7.%20 Attachment%206%20Independent%20Director.pdf

Baysinger, B.D. & Butler, H.D.(1985), Corporate Governance and the. Boards of Directors: Performance Effects of Changes in Board. *Journal of Law, Economics,* 1

Biz/ed.(n.d).The Principal- Agent Problem. Retrieved September 4, 2010, from http://www.bized.co.uk/educators/16-19/economics/marketfail/activity/ principal11.htm

Brammer, S., Millington, A. & Pavelin, S. (2007). Gender and Ethnic Diversity Among UK Corporate Boards. *Corporate Governance: An International Review*, 15, 393-403

Byrd, J. W. & Hickman, K. A.(1992). Do outside directors monitor managers?: Evidence from tender offer bids. *Journal of Financial Economics,* 32, 195-221

Cheng, S.(2008).Board size and the variability of corporate performance. *Journal of Financial Economics*, 87, 175

Council of Social Service of New South Wales.(2009).Board /Management Committee Financial Delegations. Retrieved November 6, 2010 from http://ncoss.org.au/projects/msu/downloads/resources/information%20sheets/23-Board-Financial-Delegations.pdf

Department for Business, Innovation & Skills.(n.d.).The different types of director. Retrieved November 6, 2010 from http://www.businesslink.gov.uk/bdotg/action/detail?itemId=1074429133&type=RESOURCES

Duffy, T.(n.d.). Military Experience & CEOs: Is There a Link? *The Economist Intelligence Unit*

Erawan Listed Company, (n.d.).Qualification of Directors. Retrieved November 1, 2010 from http://erawan.listedcompany.com/misc/Qualification%20of%20Directors.pdf

Faccio, M.(2006).Political Connections and Corporate Bailouts. *The Journal of Finance,* 61, 2597-2635

Fama, E.F. & Jensen, M.C.(1983).Separation of Ownership and Control. *Journal of Law and Economics*, 26

Fombrun, C.J., & Shanley, M.(1990).What's in a name?Reputation building and corporate strategy. *Academy of Management Journal,* 33, 235-258

Forbes, D.P. & Millien, F.J.(1996).Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review,* 24, 485- 505

Gilllette, A.B., Noe, T.H. & Rebello, M.J.(2003).Corporate Board Composition, Protocols, and Voting Behavior: Experimental Evidence. *The Journal of Finance*, 5, 2021

Hilman, A.J. (2005). Politicians on the Board of Directors: Do Connections Affect the Bottom Line? *Journal of Management,* 31, 468-474

Hossain, M., Prevost, A.K. & Rao, R.P.(2001). Corporate governance in New Zealand: The effect of the 1993 Companies Act on the relation between board composition and firm performance. *Pacific-Basin Finance Journal*, 9, 120,143

Ingley, C.B. & Walt, N.T.(2003).Board configuration : building better boards. *Corporate Governance*, 3, 6-10

Institute of Directors.(n.d.).Thai Institute of Directors Association. Retrieved January 18, 2011 from http://www.thai-iod.com/en/aboutIOD.asp

Jensen,M.C. (1993).A Theory of the firm: Governance, Residual Claims and Organizational Forms.*Journal of Finance*.

Jensen, M.C. & Meckling, W.H.(1976).Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3

Kang, H., Cheng, M. & Gray, S.J. (2007).Corporate Governance and Board Composition: diversity and independence of Australian boards. *Journal compilation*, 15, 194-198

Kim, H. & Lim, C.(2010). Diversity, outside directors and firm valuation: Korean evidence. *Journal of Business Research*, 63, 284-285.

Kor, Y. & Sundaramurthy, C.(2009).Experience-based human capital and social capital of outside directors. *Journal of Management*, 35: 981- 1006

Law Reform Commission.(1992). Public Limited Companies Act, B.E. 2535 (1992). Retrieved October 24, 2010, from www.lawreform.go.th/lawreform/images/th/legis/en/act/1992/12878.pdf

Lawrence, J. J. & Stapledon, G. P.(1999) Is Board Composition Important? A Study of Listed Australian Companies

Leibenstein, H.(1958).Underemployment in Backward Economies: Some Additional Notes. *Journal of Political Economy*, 66, 256

McNamara, C. (n.d.) All About Boards of Directors (For-Profit and Nonprofit). Retrieved September 4, 2010, from http://managementhelp.org/boards/boards.htm#anchor97797

McRitchie, J. (1999). Corporate Governance Defined. Retrieved October 19, 2010, form http://www.corpgov.net/library/definitions.html

Miller, T. & Trina, M. C.(2009). Demographic Diversity in the Boardroom: Mediators of the Board Diversity–Firm Performance Relationship. *Journal of Management Studies*, 46, 756- 765

Milliken, F.J. & Martin, L.L.(1996).Searching For Common Threads: Understanding The Multiple effects of Diversity in Organizational Groups. *Academy of Management Review*, 21, 402- 433

National CG Committee.(n.d.).Appointment of Thailand National Corporate Governance Committee. Retrieved September 25, 2010, from http://www .cgthailand.org/SetCG/about/ncgc_en.html

National CG Committee.(n.d.).Corporate governance. Retrieved September 25, 2010, from http://www.cgthailand.org/SetCG/about/about_en.html

Neilsen, S. & Neisen B. (n.d.).The effects of Top Management Team and Board nationality diversity and compensation systems on firm performance. Department of International Economics and Management Copenhagen Business School

Park, Y.W. & Shin, H.H.(2002).Board composition and earnings management in Canada. *Journal of Corporate Finance*, 10, 431-457

Pathranarakul, P. (2004). Conflict of Interest: An Ethical Issue in Public and Private Management. *Thai Journal of Public Administration*, 1, 11-22

Relationships of Shareholders, Executives/Managers and Directors [Image].(n.d.). Retrieved October 24, 2010, from http://www.sec.or.th

Rosenstein, S. &Wyatt, J.G.(1997).Inside directors, board effectiveness, and shareholder wealth. *Journal of Financial Economics*, 44, 229- 250

Scarabotti, S.(2009).The important of independent directors. *cjel*, Retrieved November 2, 2010, from http://www.cjel.net/online/15_2-scarabotti

Shivdasani A. &Yermack, D.(1999).CEO involvement in the selection of new board members: an empirical analysis. *Journal of Finance*, 54, 1829-1853

Shleifer, A. & Vishny, R.W.(1986).Large Shareholders and Corporate Control. *The Journal of Political Economy*, 94, 461-488

The Securities and Exchange Commission of Thailand.(2003). Corporate Governance in Thailand: More done than talked. Retrieved September 21, 2010, from http://www.sec.or.th/infocenter/th/pub/article/roadshow.pps#303,2,Current Status

The Securities and Exchange Commission of Thailand.(2010).Corporate Governance Development in the Thai Capital Market. Retrieved September 21, 2010, from http://www.sec.or.th/CG/Content_0000000858.jsp?categoryID= CAT0000013&lang=th

The Securities and Exchange Commission of Thailand.(n.d.).Directors' handbooks. Retrieved September 25, 2010, from http://capital.sec.or.th/webapp/nrs/data/499a8.pdf

The Stock Exchange of Thailand.(1999).Best Practice Guidelines for the Audit Committee. Retrieved October 24, 2010, from http://www.set.or.th/en/regulations/cg/files/bestace_upd.doc

The Stock Exchange of Thailand.(n.d.).Best Practices for Shareholders. Retrieved November 1, 2010, from http://www.set.or.th/en/regulations/cg/files/best_practice.pdf

The Stock Exchange of Thailand.(2009).Code of Best Practice for Directors of Listed Companies. Retrieved November 1, 2010, from www.ecgi.org/codes/documents/thailand_code_oct1999.pdf

The Stock Exchange of Thailand.(n.d.).SET Index Series. Retrieved September 4, 2010, from http://www.set.or.th/en/products/index/setindex_p3.html

Volkov, A.(2010).Importance of Board of Directors with company performance. Retrieved October 19, 2010, from http://www.ehow.com/facts_6136875_importance-board-directors-company-performance.html

Watts, R.L.& Zimmerman, J.L.(1990). Positive accounting theory: a ten year perspective. *The Accounting Review, 65, 131-156*

Yermack, D.(1999).Higher market valuation of companies with a small board of directors. *Journal of Financial Economics*, 40, 185-211

APPENDIX

List of SET100 index in 2010

No.	List of Companies	No.	List of Companies	No.	List of Companies
1	ADVANC	**34**	HANA	**67**	RCL
2	AMATA	**35**	HEMRAJ	**68**	ROBINS
3	AOT	**36**	HMPRO	**69**	ROJNA
4	AP	**37**	IRPC	**70**	SAMART
5	ASP	**38**	ITD	**71**	SAMTEL
6	BANPU	**39**	IVL	**72**	SAT
7	BAY	**40**	JAS	**73**	SC
8	BBL	**41**	KBANK	**74**	SCB
9	BCP	**42**	KEST	**75**	SCC
10	BEC	**43**	KH	**76**	SCCC
11	BECL	**44**	KK	**77**	SGP
12	BGH	**45**	KSL	**78**	SIRI
13	BH	**46**	KTB	**79**	SPALI
14	BIGC	**47**	KYE	**80**	SSI
15	BLA	**48**	LANNA	**81**	STA
16	BLAND	**49**	LH	**82**	STEC
17	BMCL	**50**	LOXLEY	**83**	SPTI
18	BTS	**51**	LPN	**84**	SVI
19	CCET	**52**	MAJOR	**85**	TASCO
20	CENTEL	**53**	MAKRO	**86**	TCAP
21	CK	**54**	MCOT	**87**	THAI
22	CPALL	**55**	MILL	**88**	THCOM
23	CPF	**56**	MINT	**89**	TICON
24	CPN	**57**	PDI	**90**	TISCO
25	DCC	**58**	PHATRA	**91**	TMB
26	DELTA	**59**	PS	**92**	TOP
27	DTAC	**60**	PSL	**93**	TPIPL
28	EGCO	**61**	PTT	**94**	TRUE
29	ESSO	**62**	PTTAR	**95**	TSTH
30	GFPT	**63**	PTTCH	**96**	TTA
31	GJS	**64**	PTTEP	**97**	TTW
32	GLOW	**65**	QH	**98**	TUF
33	GSTEEL	**66**	RATCH	**99**	TVO
				100	VNG

BIOGRAPHY

NAME	Miss Jitlada Intarasa-ad
DATE OF BIRTH	1 September 1982
PLACE OF BIRTH	Udonthani, Thailand**.**
INSTITUTIONS ATTENDED	Thammasat University, 2000-2003 Commerce and Accountancy Mahidol University, 2008-2010 Master of Business Administration (M.B.A.)
HOME ADDRESS	51 Soi Sukhumvit 91 Sukhumvit Road, Bangjak, Prakanong, Bangkok 10260 Tel. 085-801-7927 E-mail b_baew@yahoo.com