

# The Effect of Corporate Governance on Market Value of Equity of Thai Listed Companies

## ผลกระทบของการกำกับดูแลกิจการที่มีต่อมูลค่าตลาดของบริษัทจดทะเบียน ในตลาดหลักทรัพย์แห่งประเทศไทย

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### บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาผลกระทบของการกำกับดูแลกิจการด้านความรับผิดชอบของกรรมการที่มีต่อมูลค่าตลาดของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทย โดยเก็บข้อมูลทุติยภูมิในช่วงปี 2010-2014 จากแบบแสดงรายการข้อมูลประจำปี (แบบ 56-1) งบการเงิน และรายงานประจำปีของบริษัทจดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทยของกลุ่มตัวอย่าง ได้แก่ 1) กลุ่มเกษตรและอุตสาหกรรมอาหารเกษตร 2) กลุ่มอสังหาริมทรัพย์และก่อสร้าง และ 3) กลุ่มเทคโนโลยี รวม 161 บริษัท 805 ข้อมูล ตัวแปรในการศึกษานี้ประกอบด้วย ขนาดของคณะกรรมการบริษัท สัดส่วนของกรรมการที่ไม่เป็นผู้บริหาร การควมรวมตำแหน่งผู้จัดการใหญ่กับประธานกรรมการในคนเดียวกัน สัดส่วนของกรรมการที่ได้รับการแต่งตั้งเป็นกรรมการชุดย่อย สัดส่วนการถือหุ้นโดยสถาบัน สัดส่วนการถือหุ้นของกรรมการบริหาร ค่าตอบแทนที่จ่ายให้กับผู้บริหาร และมูลค่าตลาดของกิจการ ผลการศึกษา พบว่า ขนาดของคณะกรรมการบริษัท สัดส่วนของกรรมการที่ไม่เป็นผู้บริหาร สัดส่วนการถือหุ้นโดยสถาบัน และค่าตอบแทนที่จ่ายให้กับผู้บริหารมีผลกระทบในทางบวกต่อมูลค่าตลาดของกิจการอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ในขณะที่สัดส่วนการถือหุ้นของกรรมการบริหาร มีผลกระทบในทางลบต่อมูลค่าตลาดของกิจการอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ส่วนตัวแปรที่เหลือไม่มีผลกระทบต่อมูลค่าตลาดของกิจการ

**คำสำคัญ :** การกำกับดูแลกิจการ มูลค่าตามราคาตลาดของกิจการ

### Abstract

The objective of this study was to examine the effect of corporate governance in the aspect of board responsibilities on market value of equity. Secondary data were collected over the period of 2010-2014 from Form 56-1, financial statements, and annual reports of Thai listed companies in 1) agro & food industry, 2) property and construction, and 3) technology, totalling 161 companies with 805 data entries. The variables under investigation included board size, board composition,

Chief executive director/Chair duality, board committees, institutional shareholding, shareholding of board members, board remuneration, and market value of equity. This study found that board size, board composition, institutional shareholding, and board remuneration had a positive effect on market value of equity at a statistical significance level of 0.05. Meanwhile, shareholding of board members had a negative effect on market value of equity at a statistical significance level of 0.05. The rest of the variables had no effect on market value of equity.

**Keywords:** Corporate Governance (CG), Market Value of Equity (MVE)

## 1. Introduction

Corporate governance (CG) is an important activity of business development, as it helps to protect the country's economic system and promotes integrity and ethical behavior of all concerned people living together in the society. That is, it serves as a balance between profitability or business performance and CG, partly concerning social responsibility. The important activities of CG are to supervise and monitor the functions of executives and to create satisfaction beyond the scope of work for regulatory bodies (Tricker, 1984). According to the Organization for Economic Cooperation and Development (OECD), CG refers to the systematic procedures and processes according to which a company is directed and controlled. That is, the governance structure specifies the distribution of rights and responsibilities of different participants inside the company to set up rules and regulations as well as working and monitoring procedures and processes by taking into account both direct and indirect stakeholders of the business. CG aims at achieving the company's goals and objectives and promoting the company's competitiveness, sustainable growth and long-term added value for shareholders. In sum, CG principles can reflect the efficiency, standards, transparency and accountability of a company's management system, thereby building trust and confidence among all of its stakeholders.

The economic crisis in 1997, Hamburger

Crisis in 2007, and the accounting scandals of WorldCom, Adelphia, etc. have strengthened CG. In Thailand, development of CG system has been an important policy of the Stock Exchange of Thailand (SET). SET has encouraged listed companies to adopt this policy as an effective way to establish trust and confidence among investors. SET started to study the roles of internal audit committee in 1995 before the economic crisis took place in 1997. In 1998, a regulation was enacted to enforce listed companies to appoint an internal audit committee by 1999, and SET then created Code of Best Practice for Directors of Listed Companies as a guideline for company board members to follow. Later in 2001, Good Corporate Governance Committee published a report on CG as a guideline of good practices for organizations in the capital markets. Through this report, the concrete principles of good CG were proposed, requiring listed companies to disclose information on firm performance based on good CG practices as empirical evidence of their effective management system from the accounting year ended December 31, 2002 onwards. Information disclosure could build trust and confidence among shareholders, investors and other stakeholders. Later in 2006, SET amended Code of Best Practice declared in March 2002 to be in accordance with OECD Principles of Corporate Governance 2004 and with the recommendations of the World Bank resulted from its participation in the project

called Corporate Governance – Reports on the Observance of Standards and Codes (CG-ROSC). This amendment required listed companies to follow the 15 amended clauses stipulated in The Principle of Good Corporate Governance for Listed Companies 2006, excluding well established laws concerned. The content was divided into five sections, namely 1) rights of shareholders 2) equitable treatment of shareholders 3) roles of stakeholders 4) information disclosure and transparency, and 5) board responsibilities.

Later in 2012, SET amended The Principle of Good Corporate Governance for Listed Companies again. This time, the amendment was made to all of the five sections to be in line with the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard), which is an instrument used for measuring the level of “corporate governance of listed companies” for ASEAN countries. This amendment could enable listed companies to operate concretely according to survey and evaluation criteria, and it would promote business performance based on good CG principles. Thus, this amendment could contribute to economic efficiency of the business which is an effective measure of accounting profit. Also, investors could receive financial statement information, and financial analysts could explain the instruments which reflect the real profit calculated from the market value of equity (MVE). Finally, the company stakeholders’ satisfaction would increase from following all of the five sections of the Principles of Good Corporate Governance for Listed Companies amended this time.

Due to the importance of the above mentioned CG, SET has made recommendations on the company board and executive responsibilities which are management mechanisms for monitoring firm performance

with transparency, good internal control, accountability, enough information disclosed to investors, and business added value. Some prior researches have investigated CG in many contexts such as Suriya Pannarong (2010) said that the principles of CG should be cultivated as the conscious mind of the organization. That is, all parties of the organization—the board, management and employees should have a deep and clear understanding of the principles of good CG, contributing to their readiness and willingness to perform their duties for implementing continual and sustainable development of the business. Sillapaporn Srichunpetch (2008) studied the relationship between the roles and responsibilities of the board and the shareholder structure and economic value of equity. This study found that the roles of the board significantly correlated with economic value of equity in the same direction whereas the shareholder structure significantly correlated with economic value of equity in the opposite direction. Chiraporn Pongpanpattana (2015) found that the number of the board members and shareholder structure positively correlated with firm performance. Arunee Yodbutr (2010) was motivated to study about the determinants of CG practices in Thailand, which would be the first study about them. Besides, this study included family firms and political connected firm factors, which no prior research had included. This study investigated the effects of firms’ ownership structure, firm characteristics, and firm performance on CG practices of firms listed on SET during 2007-2008 and found that firms with high institutional ownership, government ownership, or family ownership had strong CG practices, as measured by CG index (CGI), whereas firms with high concentration ownership had weak CG practices. As for firm characteristics, it was

found that large firms had strong CG practices while leveraged firms had weak CG practices. Firms with high market performance also had strong CG practices. Nevertheless, five variables were found not significantly associated with CG practices: foreign ownership, political connection, firm growth, firms' intangible assets, and firm accounting performance. Chaweewan Chusanook and Amphol Chusanook (2012) conducted a research to develop and validate a causal relationship model of influence of CG mechanisms on effectiveness of CG and performance of the listed companies on SET. It was found that the model was consistent with empirical data. It was also found that the mechanisms concerning the expertise of board of directors and the compensation of the board and management had a positive and direct influence on the effectiveness of CG. As for the firm performance, it was found that the capital structure had a negative and direct influence on the firm performance and that the effectiveness of CG had a positive and direct influence on firm performance of listed companies on SET. Pornanong Bussaratrakoon, Jananya Sathianchok, Narongrit Assawarungpipop, Sunthree Laopadchun and Sirinut Inlakorn (2016) conducted a research aiming at studying a relationship between CG aspects of board of directors and performance of the firms listed on SET and MAI. This research suggested SET firms in the non-financial industry to pay attention to meeting attendance rate of their boards whereas SET firms in the financial industry were suggested to pay attention to the proportion of their independent directors and not have to worry too much about the cross-directorship of their directors. As for MAI firms, they were suggested to pay attention to the independence of their boards. In addition, SET financial and non-financial firms were sug-

gested not to have large board size. Klapper and Love (2004) conducted a study and found that CG affected business performance and value of equity. Beiner, Drobetz, Schmid and Zimmermann (2004) studied the correlation of the board size with performance by taking 4 mechanisms into account: the board size, the proportion of independent committee, shareholder structure and liability level. This study found that shareholder structure significantly correlated with value of equity. Vafeas (1999) studied the correlation of the board's activities with performance and found that the board's activities significantly correlated with performance in the opposite direction. Bhagat and Black (2002) studied the independence of the committee affecting performance and found that CG positively correlated with Common Stock Return but negatively correlated with firm performance. However, the success of implementing good CG policy depended on the roles and responsibilities of the board and management as leaders bringing deep knowledge and understanding about good CG into organization through communication process and urging its importance (Van den Berghe and Louche, 2005). The good CG helps to promote growth and development of an excellent and moral business. Then the success of implementing good CG policy will in return yield business add value to business organization in addition to profitability alone.

Based on the importance of CG as an activity leading to growth, trust and confidence in organization, shareholders' financial stability and the good image of the company, the researchers were interested in studying the effect of CG on market value of equity of Thai listed company. This study included 5 factors affecting Market value of equity (MVE): Board Size (BZ), Board Composition/ non-executive

directors (NED), Chief executive officer/Chair duality (DUALITY), Board Committee (BCMT), Institutional Shareholding (INSTSH), Shareholding of Board Members (MANGSH) and Board remuneration (BRMRT).

## 2. Objectives of the study

To examine the effect of CG in the aspect of board responsibilities on market value of equity of Thai listed companies.

## 3. Research Questions

How did CG in the aspect of board responsibilities affect the market value of equity of Thai listed company?

## 4. Literature Review and Related Studies

From a review of related literature and researches, it was found that the theoretical framework for this study included Agency Theory and Stakeholder Theory. These theories can be linked to the development of CG concept and have influence on market value of equity.

### 4.1 Agency Theory

Agency Theory is the concept of separating company ownership from the internal control. It involves two parties who agree on the management of the company. One party is the principals investing in the business or shareholder, and the other is the agents or management managing the business on behalf of the business owners or investors. That is, the agents or management must be responsible for making a good return on investment for the shareholders or principals, who are the business owners and the recipients of investment risk. Thus, Agency Theory is the concept of highest profitability, creating stability and growth of the company. The development of this theory started from Berle and Means

(1932) who wrote “The Modern Corporation and Private Property” to express their opinions on the separation of company ownership from the internal control. Later, as companies were developed and became larger, there was a need for management to meet the demand of large companies. As a result, Agency Theory was initiated to be used in management (Jensen & Mecking, 1976). Separation of ownership from management results in agency problems in terms of relationship between the two concerned parties. That is, the principal cannot closely monitor the performance of their agents, causing conflict of interests and mutual risks (Fama & Jensen, 1983). To reduce the severity of the problems, monitoring, controlling and management mechanisms through CG are needed (Anand, 2008; Clarke, 2004). To do so through CG, business operation will be transparent, verifiable, efficient and effective. Moreover, CG promotes participation of stakeholders (Low & Cowton, 2004) in monitoring the agent’s performance of decision making on behalf of the principals. However, to effectively implement the CG policy, it is very important that the board and executives, as agents, stress high importance of the policy and encourage deep understanding about it before implementing it for the satisfaction of the principals or shareholders.

### 4.2 Stakeholder Theory

Stakeholder Theory is the basic concept of company management by taking all stakeholders of the company and business ethics into account under the demands possibly different between shareholders and other stakeholders. Thus, company management must not focus only on the highest profitability. This theory was developed from the idea of Barnard (1938), who proposed his perspective on promoting social responsibility in the book

entitled “The Functions of the Executive.” Later, Freeman (1984) asserted that executives or managers had to satisfy stakeholders and those influencing the company performance: employees, customers, suppliers, local community organizations. This assertion is in line with the definition given by Post Lawrence and Weber (2002) that stakeholders are individuals or groups affected by decision making to set up company policies and procedures for the organization. Therefore, the organization must take responsibility and have a wider perspective. This theory leads to the understanding that the nature of stakeholders’ expectation of companies is to take more responsibilities and provides more care to stakeholders, particularly by taking local communities and environment into account (Simmons, 2004). This is different from the past when companies mainly focused on their own survival and success. Stakeholder Theory is thus an important foundation for the development of CG. So it is the role of executives or managers to satisfy individuals and groups affecting the company performance (Freeman, 1984). As a result, executives play a significant role in doing the right things for the society as a whole and in creating the balance between the company and its stakeholders through CG. That is, executives must perform business performance with morals, ethics, transparency and verifiability, thereby satisfying all of the stakeholders.

#### **4.3 Corporate governance**

Corporate governance (CG) is the system that sets up the structure and the process of relationship between management and shareholders to enhance competitiveness and sustainable growth and to increase value to the shareholders in the long run by taking other stakeholders into account as well. (The Stock of Exchange of Thailand, 2002) . So CG

has played an important role of being responsible for running the business with transparency, morals and ethics. Besides, CG is also a monitoring device for making the business run smoothly, the investment be maintained and a balance between performance and profitability be ensured. That is, CG leads the business to stability, sustainable growth, and a high return on investment for the investors. In Thailand, CG was developed consistently with that of OECD (2004) to be used by Thai listed companies under the support and promotion of SET. Several researchers have studied the results of CG and have used them to manage the business organization and environment in many dimensions, such as Van den Berghe & Louche (2005), Jamali, Safieddine, & Rabbath (2008) asserted that CG was a factor that enhanced social responsibility because of its two components, namely board participation and transparency, creating firm performance of high responsibility for other groups of stakeholders in the society and environment. Also, the study of Shahin & Zairi (2007) found that CG was an important component for creating good social responsibility and that executives played an important role in the company’s success and satisfactory outcomes. In addition, the study of Yeh, Lee, and Ko (2002); Black, Jang, and Kim (2006) found that companies with good CG tended to have better performance and that the equitability in receiving information helped companies reduce corruption in organization. Thus, the application of CG principles is important for company’s effective performance. Due to the above reasons, this study aimed at studying the following aspects of CG:

##### **4.3.1 Board size (BZ)**

The board plays an important role and serves as the central figure of CG mechanism to protect the shareholders’ interests from



agents or managers' functions (Daily et. al., 2003). Furthermore, the board can also help to reduce the level of expectation between stakeholders and the board (Brennan, 2006). Therefore, the appropriate number of board members is recommended for good practice by the Stock Exchange of Thailand (SET). However, it is difficult in practice to determine the appropriate number of board members. This is consistent with prior research findings that board size, whether great or small, contributed to good performance. For instance, Shaw (1981) found that a small board size contributed to effectiveness of operation as the CEO could more closely monitor the board members' relationship than a large board size. Meanwhile, a large board size tended to have problems in collaboration as there were many members with various ideas and independence from the CEO, causing more difficulty to set up strategies or solve problems than the companies with a small board size. (Changanti, Mahajan, and Sharma, 1985; Jensen, 1993). Also, Yermack (1996) found that companies with a small board size had better turnovers as executives were more motivated by clearer management remuneration. Fich and Stezak (2008) found that small boards had more effective management than big boards as they could avoid the bankruptcy problem during financial crisis. However, Gale and Kesher (1994) found that big boards could cooperate to bring more extensive external resources for solving problems during financial crisis.

#### 4.3.2 Board composition (NED)

A good practice of CG with regard to board structure stipulates that to perform their duties effectively, the board should not assume too many roles. Therefore, assignment of board members' roles should be appropriate for the nature and condition of business. Moreover,

the information on each person's position should be disclosed to shareholders. Thus, board composition indicates the company's potentials to gain high-level acceptance from shareholders, establish trust for raising funds from investors, and promote confidence for all stakeholders. These company's potentials are regarded as important foundations for modern CG. This is in line with the study of Pfeffer and Salancick (1978), which held that board composition played an important role in promoting company's capacity to gain acceptance from external shareholders, leading to an increased potential in fund raising. There were research findings revealing that a higher level of board composition led to a higher level of Debt to Equity ratio. Meanwhile, the research findings of Wen et al. (2002) revealed that there was a statistically negative significant relationship between Debt to Equity ratio and board composition. In addition, Weir and Laing (2001) found that board composition led to a more effective monitoring mechanism, promoting more effective CG.

#### 4.3.3 Chair/CEO duality

Chair and CEO have different responsibilities. Thus, assignment of roles must be clear to prevent unclear power of either one, and the two roles should be separated. However, in practice, two roles can be combined in one person, so appointment needs to be based on selection process and approval from the board to facilitate transparent and verifiable function under the good practice of CG according to the set

policies and plans. In the study of Fama and Jensen (1983), it was said that the controlling and management decision making functions should be separated. This was consistent with the work of Abor and Biekpe (2007) whose findings revealed that combining the monitor-

ing and operating works in one person would result in a substantially decreased importance of the monitoring role based on the practice of CG. Meanwhile, Laing and Weir (1999) said that companies with Chair/CEO duality give too much power to the leader and result in ineffective decision making to increase wealth of shareholders. Therefore, the management roles should be separated from the controlling ones in order to create effective mechanism of CG which leads to increased business value.

#### **4.3.4 Board committees (BCMT)**

Board committees are important for company management and help to develop CG of listed companies. The Stock Exchange of Thailand has stipulated Code of Best Practice for Directors of Listed Companies in which one recommendation is that the board should set up committees to enhance the practice based on CG. Therefore, it is the duty of company board to set up criteria and selection process to find people with good qualifications to take the position. In addition, the appointment must be transparent, independent and approved by the board, and it needs to be proposed in the shareholders' meeting to promote truly independent function of the board committees for facilitating company's operation. Each board committee will assume different roles, depending on the type of business. According to Fama (1980), independent directors appointed as board committee members could help to reduce the problems arising from internal board members and conflict of interests between executives and shareholders and to take care of small shareholders' interests equitably. Krivogorsky (2006) also said that board committees served as a link between executive responsibilities and the company environment, leading to better work performance. Meanwhile, Rajendran (2012) explained

that separation of the board members' roles was an important CG mechanism which would result in best practice in management. This was in line with Hermalin and Weisbach (1991) who said that board structure was a very important factor for company performance.

#### **4.3.5 Institutional shareholding (INSTSH)**

Institutional shareholding is an important mechanism for controlling the business, and it is directly related to CG as it is the best tool for monitoring the work of executives. Brickley et al. (1987) said that institutional shareholding of all types played a role to put pressure on sales of securities due to management not conforming to the policy set by shareholders. As investors, institutional shareholders have a role to continuously and appropriately monitor investments because they are independent and also involve in monitoring investment to a reasonable level. As an anti-takeover mechanism, institutional shareholding opposed business acquisition (Bennett et al., 2003). Thus, institutional investors as a group can negotiate or push the market regulator. Besides, they serve as a mechanism to monitor the performance of the company, thereby adding value to the shareholders due to better operating performance, reducing opportunism in management, and building trust and confidence among other investors, general public and creditors. This is good for borrowing from capital markets (Arshad and Safdar, 2009).

#### **4.3.6 Shareholding of board members (MANGSH)**

Shareholding of board members is a mechanism which motivates executives to effectively manage the company, increase wealth of investors and shareholders, and reduce cost incurred from agents. This is due to the fact that shareholding enables executives



to have a sense of business ownership, so they are motivated to manage works in a way to increase value for the benefits of the executives themselves. This adjusts the needs of principals and agents to be in the same direction (Jensen & Meckling, 1979). However, in practice, this may result in making the executives have too much power or the right to vote, leading to the behavior of seeking too much personal interests. Thus, the mechanisms of CG can serve as an important tool in helping to determine the proportion of shareholding and executive power. This is consistent with the work of Morck et al. (1988), which asserted that the interests of the principal and agent would truly be in the same direction when the executives had the sense of ownership and the sense of stakeholder at a level which is high enough for them to focus on the company interests, resulting in effective work and business added value. Meanwhile, Jensen and Murphy (1990) held that low benefits given to executives would lead to ineffective company management and increased conflict between shareholders. Finally, it would result in the agency problem. This problem increases threats and puts the business at risk of bankruptcy caused by management in which personal interests is more important than public interests (Albert and Appiah, 2014).

#### **4.3.7 Board remuneration (BRMRT)**

Appropriate board remuneration is important for reduction of cost from agency problems and can help to solve the problems of ineffective company management. As a result, a remuneration policy needs to be established to ensure consistency between board and shareholders' interests in order to motivate the board to perform their duties at full capacity for the business growth. In practice, the board may set up a board committee

to consider the remuneration matter, thereby promoting independent, transparent and fair functions in organization. This matter needs to be carefully studied as remuneration reflects business performance, accounting profit and share value. Many researchers have examined the relationship between board remuneration and business performance. For example, Tackao et. al. (2003) found that board remuneration had a statistically significant positive relationship with business performance measured by market value of equity. This was consistent with the work of Smith and Watts (1992), which asserted that growing businesses tended to have the remuneration policy which could be measured by business performance and could serve as a good tool for measuring efficiency of board management. This was also in line with Jensen and Meckling (1976) who said that a good management mechanism came from motivating CEO through appropriate and sufficiently high remuneration to perform quality work consistently with their experience, expected outcome and board responsibilities.

#### **4.4 Market value of equity (MVE)**

Market value of equity is the total value of the Company's listed securities/shares of any company. It is calculated from the closing price of the listed securities/shares (The price of any security/share in stock exchange at the closing time reflects the overall buying and selling demands of investors) multiplied by the amount of listed securities/shares (the listed securities/shares used for calculation can increase and decrease in number or cannot be sold) at the closing time of securities/shares trading in the stock exchange at the end of financial year. The mentioned value makes investors see the size of business and wealth of shareholders. This is an economic concept for measuring the short term risk determined in the form of

cash value based on the current market value of sold shares as displayed in financial statements. Market value of equity will fluctuate over time and has been heavily influenced by the business cycle, so it is different from shareholders' book value. Thus, measurement of market value of equity can reflect the capital structure of the market, facilitate investors to measure companies with different sizes at different levels of risks when making an investment decision, serve as a success indicator of a company and is the easiest and widely recognized tool for monitoring share trading in the market. Many scholars have investigated the relationship between CG and market value of equity and have found that good CG leads to higher estimated market value of equity. For instance, Gompers (2003) found that a higher CG indicator yielded long-term returns on share. Meanwhile, Coret et al. (2006) examined the equity structure and market value of equity and found that they were related to each other and led to cost-effective business. Black, Love and Rachinsky (2006) found that the good level of CG was a measure for estimating a higher share price, and Black, Jang and Kim (2006) said that the overall CG indicator was an important tool for explaining the tendency of market value of equity.

#### **4.5 Corporate Governance (CG) and Market value of equity (MVE)**

CG has played an important role in pushing business performance to create added value for the company and its shareholders, thereby reflecting the executives' ability to manage efficiently, transparently and verifiably.

CG mechanisms have objectives and main functions to supervise, monitor, control and care for agents. This is to maximize returns on investment to shareholders fairly and build trust and confidence among investors. (Chiraporn Pongpanpattana, 2015). Thus, CG is important for listed companies on the stock exchange, and it is just a way to help to monitor the asset management by the agents to reach the maximum benefit for the Company (Morck et al., 1988), thereby increasing the market value of the business.

### **5. Research methodology**

#### **5.1 Scope of the study**

##### **5.1.1 Area scope**

This study investigated Thai listed companies in three groups of industries, comprising Agro & Food Industry (AGRO), Property & Construction (PROPCON) and Technology (TECH)

##### **5.1.2 Content scope**

This study examined the effect of CG on market value of equity of Thai listed companies according to the Principle of Good Corporate Governance, Section 5: Board Responsibilities. Seven variables were investigated in this study: board size (BZ), board composition (NED), Chief executive officer/Chair duality (DUALITY), board committees (BCMT), institutional shareholding (INSTSH), shareholding of board members (MANGSH), and board remuneration (BRMRT). Meanwhile, the only one dependent variable was market value of equity (MVE). The definitions of all the studied variables are illustrated in Table 1.

**Table 1: Definition and measurement of variables**

Variable	Definition	Measurement
BZ	Board size	Board size is measured as logarithm of the number of board members.
NED	Board composition	Board Composition/non-executive directors is calculated as the number of non- executive directors divided by total number of directors
DUALITY	Chief executive officer/ Chair duality	Dummy variable is taken as 0 if CEO is chairman; otherwise, it is taken as 1.
BCMT	Board committees	Board Committee is measured as logarithm of the number of board appointed committees.
INSTSH	Institutional shareholding	Institutional Shareholding is measured as percentage of shares held by institutions as disclosed in annual financial reports.
MANGSH members	Shareholding of board	Shareholding of board members is measured as percentage of shares held by members of board disclosed in annual financial reports.
BRMRT	Board remuneration	The average (per capita) cash remuneration, paid to executives, estimated as the ratio of executive compensation to the total number of executives.
MVE	Market value of equity	MVE, it is quantified by using = Price per share X Number of outstanding shares (Year-end)

## 5.2 Population and sample

The researchers studied the analysis of turnovers of Thai listed companies in 2014 and the fourth quarter of the year 2014 (Sirirot and Paktida, 2015) published in SET Note Volume 02/2015. It revealed the business condition of Thai listed companies in 2014 in which there were great impacts from decreased crude oil price, national economic regression, depreciation of Thai baht, and uncertainty of national political situations. According to the analysis of turnovers, it suggested that the net profit of 2014 decreased by 11.2% compared to that of 2013. Only Agro & Food Industry (AGRO), Property & Construction (PROPCON) and Technology (TECH) were the three groups with the highest net profit, with an increase of 5.7% from 2013. Due to these reasons, the researchers decided to use three groups of Thai listed companies

in three groups of industry and business, totalling 267 companies, representing 42.18% of industry and business groups in SET (last updated February 19, 2015), from totally 8 groups of them (last updated October 16, 2015) as population and sample of this study under the set hypotheses.

## 5.3 Data collection

The secondary data used in this study were collected by hand and used Microsoft Excel Program to save them. It was found that Thai listed companies in three groups of industry and business disclosed in Form 56-1, financial statements and annual reports over the period of 2010-2014, as well as the information published by SET, were those listed after the year 2010 or listed as MAI companies, as trust companies and as fund companies, making this study have only 161 companies,

representing 60.30% of totally 267 companies.

#### 5.4 Data analysis

To achieve the research objectives and to test the research hypotheses, this study analyzed regression, the relationships of variables, covariance, the correlations between independent variables and dependent variable, and the consistency of the research hypothesis model created using empirical data. Thus, as a descriptive correlational research, this study used data analysis methods detailed in brief as follows:

5.4.1 Primary analysis of independent variables (sampled data) used in this study was done with descriptive statistics (frequency, percentage, maximum, minimum, mean, standard deviation, skewness and kurtosis) to determine the distribution and dispersion of them by using a software package SPSS for Windows (Statistical Package for Social Science). The relationships between variables were analyzed by using Person's Product-Moment Correlation Coefficient.

5.4.2 Data analysis of hypothesis testing was done by using inferential statistics in the aspect of Structural Equation Modeling (SEM). SEM studies linear relationship structure by using the technique of causal relationships between direct and indirect influences (Marcouider and Hershberges, 1977). Thus, this study used a SEM modeling technique called path analysis, which is based on statistical regression analysis, to explain both the size and direction of each line in the model at a time. Unlike regression analysis, which can analyze one line at a time. Besides, path analysis is conducted by using AMOS (Analysis of Moment Structures), which is an instrument to test the research hypothesis model and the research hypotheses as well as the convergence/ consistency of research hypothesis model with the empirical data, including the analysis of the

direct, indirect and total effects/ influences of variables that is conducted to see whether the research hypothesis model converges or is consistent with the empirical data. The convergence/ consistency showing the correlations in the same direction has positive values whereas the convergence/ consistency showing the correlations in the opposite direction has negative values. That is, theoretical and empirical data are based on the specific criteria. The blend of causal models and results (causal relationships) are tested by using four indexes: the index conversing the variables with the empirical data as a whole (called CMIN/DF in AMOS) with the value of not exceeding 2, the index comparing convergence or consistency of the variables with the empirical data (called CFI, NFI in AMOS) with the value of more than 0.95, the index measuring the error in estimation parameters with the value of less than 0.08, and the index measuring the variance relationships (called GFI, AGFI in AMOS) with the value of more than 0.95.

#### 6. Results

6.1 Primary analysis of variables using descriptive statistics

Data were collected as sample for this study from 161 companies with 805 data entries (as shown in Table 2). They are quantitative data, so they were checked to prevent analysis problems by considering whether their distribution was normal or not or whether or not there were outliers needed to be adjusted or solved. These data, which were collected from Thai listed companies in three groups of industries, comprising 43 companies (26.71%) from Agro & Food Industry (AGRO), 79 companies (49.07%) from Property & Construction (PROP CON) and 39 companies (24.22%) from Technology (TECH). The primary data analysis results are shown in table 2.

Table 2: The data used in the study

Industry Group Name	Sector Name	Sector Index	Sample	%
Agro & Food Industry [AGRO]	Agribusiness	AGRI	15	9.32
	Food & Beverage	FOOD	28	17.39
	Total		43	26.71
Property & Construction [PROP CON]	Construction Materials	CONMAT	17	10.56
	Construction Services	CONS	24	14.91
	Property Development	PROP	38	23.60
	Total		79	49.07
Technology [TECH]	Electronic Components	ETRON	11	6.83
	Information & Communication Technology	ICT	28	17.39
	Total		39	24.22
	Total sample		161	100

Table 3: Descriptive statistics of variables

Variables	Observation	Mean	Minimum	Maximum	Std. Deviation	skewness	kurtosis
BZ	805	9.93	5	21	2.45	1.04	2.03
NED	805	64.07	0	100	18.37	-.57	1.34
DUALITY	805	0.83	0	1	0.38	-1.72	.97
logBCMT	805	1.81	0	2	.20	-5.12	43.43
INSTSH	805	6.38	0	74.22	12.41	3.09	10.52
MANGSH	805	18.16	0	95	20.19	1.22	.95
logBRMRT	805	.50	-.72	1.80	.36	.33	.86
logMVE	805	3.47	1.22	5.87	.80	.27	.30

Table 3 illustrated an overview of primary data analysis of each variable done by using mean, standard deviation, skewness and kurtosis, indicating the distribution of data, the difference of variables and the character

of data. Non-normal distribution was found, so the problem was solved by using log 10 with the BCMT, BRMRT and MVE to facilitate normal distribution and close-to-normal distribution.

Table 4: Correlation matrix of corporate governance and market value of equity

	BZ	NED	DUALITY	BCMT	INSTSH	MANGSH	BRMRT	MVE
BZ	1.000							
NED	.172**	1.000						
DUALITY	-.037	-.247**	1.000					
logBCMT	-.201**	-.250**	.308**	1.000				
INSTSH	.039	-.055	-.011	-.003	1.000			
MANGSH	-.100**	-.084*	.107**	.186**	-.213**	1.000		
logBRMRT	.252**	.095**	-.022	-.159**	.201**	-.182**	1.000	
logMVE	.298**	.139**	-.032	-.103**	.224**	-.232**	.595**	1.000

Table 4 illustrated the correlation coefficient indicating the size and direction of the relationship between independent variables and the dependent variable of each pair with the value of -0.03-0.595. That is, the variables having the relationship in the same direction were those with the positive value of correlation coefficient whereas the variables having the relationship in the opposite direction were those with the negative value of correlation coefficient. As for the variables with the value of correlation coefficient of zero or nearly zero, there were no relationship between them. According to this table, board remuneration (BRMRT) and market value of equity (MVE) had the highest value of correlation coefficient of 0.595 at a statistically significant confidence level of 99%, meaning that they had the positive relationship with each other in the same direction. That is, if the board remuneration (BRMRT) increases, the market value of equity (MVE) will also increase. Board size (BZ) and market value of equity (MVE) had the moderate value of correlation coefficient of 0.298 at a statistically significant confidence level of 99%, meaning that they had a positive relationship with each other in the same direction. That is, if the board size (BZ) increases, the market value of equity (MVE) will also increase. As for chief executive

officer/chair duality (DUALITY) and market value of equity (MVE), they had the low value of correlation coefficient of -0.032 at a statistically significant confidence level of 99%, meaning that they had negative relationship with each other in the opposite direction. That is, if the chief executive officer/chair duality (DUALITY) decreases, the market value of equity (MVE) will increase. In sum, the correlation matrix analysis results of variables used in this study independently had overall relationship closely to zero, and then they could be analyzed under the conditions of inferential statistics.

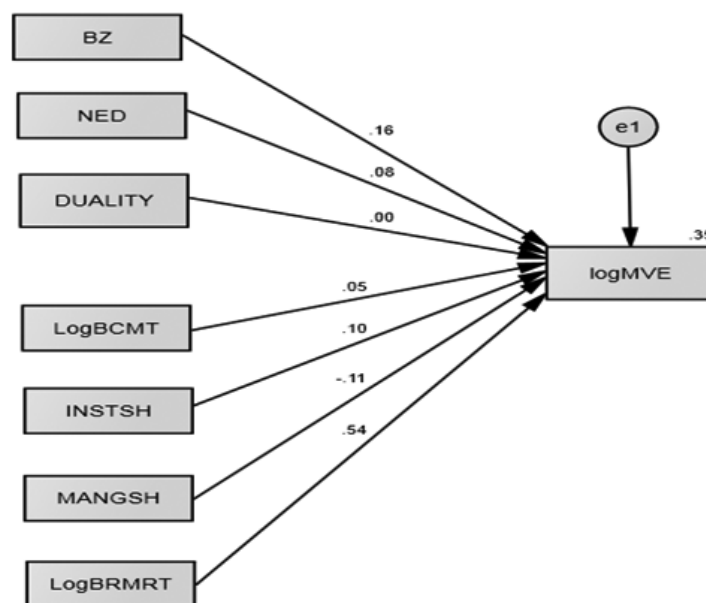
## 6.2 Results of data analysis for hypothesis testing using inferential statistics

The results of path analysis indicating the influence/effect of CG on market value of equity by using AMOS software to test the set research hypotheses. The research findings of checking the overall model convergence or consistency (Figure 1) showed the statistical results: Chi-square = 394.233 (called CMIN in AMOS software) Degrees of Freedom = 21, Probability level = p-value = 0.000 (which is below than 0.05), meaning non-convergence of the model. Moreover, other convergence or consistency value was also measured: CMIN/DF = 18.773, the value of which should usually not exceed 2, meaning that the model did not converge or was not consistent with the



empirical data. Besides, when considering RMSEA value, which was used to measure expected errors or difference value against empirical data with the value should not exceed 0.05, the result was RMSEA = .149 (which was more than 0.05), meaning that the model did not converse or was not consistent with empirical data because the value deviated from the expected model. Furthermore, when the comparative fit index was measured where CFI = .523 and NFI = .514, the result was below than 0.95, and when variation correlation was measured where GFI = .874 and AGFI = .785,

the result was below than 0.95. Since the normal value should be more than 0.95, this suggested that the model did not converge with the empirical data. In sum, the path analysis results with the mentioned statistical values showed that the model did not converse or was not consistent with the empirical data with the estimated coefficient of market value on equity (the only one dependent variable) at 0.35, meaning that the model variables could explain the variance of the market value of equity (MVE) by 35%.



Chi-square = 394.233, df = 21, p-value = 0.000, CMIN/DF = 18.773

GFI = .874, AGFI = .785, CFI = .523, NFI = .514, RMSEA = .149

Figure 1 Measurement model of the order corporate governance and market value of equity

Table 5 Regression Weights (Measurement model of the order Corporate Governance and Market Value of Equity)

Variable	STD Estimate	S.E.	C.R.	P-value
logMVE <--- BZ	.157	.009	5.535	***
logMVE <--- NED	.076	.001	2.672	.008
logMVE <--- DUALITY	.000	.058	.012	.990
logMVE <--- logBCMT	.050	.112	1.765	.078
logMVE <--- INSTSH	.099	.002	3.485	***
logMVE <--- MANGSH	-.110	.001	-3.880	***
logMVE <--- logBRMRT	.543	.060	19.083	***

Table 5 illustrated the path analysis of influence/effect of the variables. It was found that CG having directly effect on the market value of equity (MVE) in the positive direction at a statistical significance of 0.05 comprised of the independent variables, namely BZ, INSTSH and logBRMRT, having p-value = \*\*\* (the value less than 0.05--very low value closely to zero) and NED, having p-value = 0.008. These mentioned independent variables had a regression coefficient of 5.535, 3.485, 19.083 and 2.672 respectively. Meanwhile, MANGHS had direct effect on market value of equity (MVE) in the negative direction at a statistical significance

level of 0.05 with p-value of less than 0.05 and with a regression coefficient of -3.880. As for DUALITY and logBCMT, they had no effect on market value of equity (MVE) with p-value = 0.990, which was more than 0.05.

## 7. Conclusion and Discussion

From the study of the effect of CG on market value of equity of Thai listed companies to achieve the objective of the study under the framework of Agency Theory and Stakeholder Theory, the research findings based on hypotheses can be summarized as in Table 6 below:

**Table 6: Hypothesis testing**

Hypothesis Testing	Direct Effects	P-value	Relationship	Details
H1: the effect of BZ on MVE	.049	***	Positive	Significant
H2: the effect of NED on MVE	.003	.008	Positive	Significant
H3: the effect of DUALITY on MVE	.001	.990	Positive	Insignificant
H4: the effect of BCMT on MVE	.197	.078	Positive	Insignificant
H5: the effect of INSTSH on MVE	.006	***	Positive	Significant
H6: the effect of MANGSH on MVE	-.004	***	Negative	Significant
H7: the effect of BRMRT on MVE	1.148	***	Positive	Significant

Based on Table 6, from the study of the effect of CG on market value of equity (MVE) by collecting secondary accounting data disclosed by SET as mentioned in Table 2 above, the analysis of CG variables could be summarized as follows:

1) Board size (BZ) had a positive influence/effect on market value of equity (MVE) at a statistical significance level of 0.05 with p-value = \*\*\* (the value less than 0.05--very low value closely to zero), meaning increased board size (BZ) would also result in increased market value of equity (MVE); on the contrary, decreased board size (BZ) would also result in decreased market value of equity (MVE). This indicated that board size (BZ) played an

important role as the central mechanism of CG and served to protect the benefits of all stakeholders. Large board size would integrate collaboration and provide external resources necessary for problem solving of the company, resulting in the good performance of the company as a whole (Daily et al., 2003; Brennan, 2003; Gal and Kasher, 1994). This was consistent with prior research findings as mentioned earlier that board size, whether great or small, contributed to good performance (Shaw, 1981; Changanti, Mahajan, and Sharma, 1985; Jensen, 1993; Yermack, 1996; Fich and Stezak, 2008; Gale and Kasher, 1994). This study found that the board size of at least 5 persons and at most 21 persons with the average of 10 board

members affected the market value of equity (MVE).

2) Board composition/non-executive director (NED) had a positive influence/effect on market value of equity (MVE) at a statistical significance level of 0.05 with p-value = 0.008 (less than 0.05), meaning a high ratio of board composition (NED) would be also a high market value of equity (MVE). This indicated that board composition (NED) could make the monitoring system efficient and effective due to the transparency of CG that made the company be highly accepted by the shareholders. This was supported by the research findings that board composition affected the efficiency and effectiveness of company in the same direction and played an important role in enhancing the competency of the company to be accepted by the external shareholders and to raise capital (Weir and Laing, 2002; Pfeffer and Salancik, 1978.) However, it was found that there was a statistically negative significant relationship between Debt to Equity ratio and board composition (Wen et al., 2002)

3) Chief executive officer/Chair duality (DUALITY) had no influence/effect on market value of equity (MVE) at a statistical insignificance level of 0.05 with p-value = 0.78 (more than 0.05), meaning Chief executive officer/Chair duality (DUALITY) could make decisions that could not increase the wealth for shareholders, and they could probably make CG decrease in value, adversely affecting the company performance. Thus, the separation of the functions of chair from those of the CEO should be a positive effect for good management, and it is a factor estimated to affect the company performance as a whole. In other words, the company can function completely than acquisition of positions (Fama and Jensen, 1983; Laing and Weir, 1999; Abor and Biekpe, 2007; Hermalin and Weisbach, 1991; Rajendran, 2012).

4) Board committee (LogBCMT) had no influence/effect on market value of equity (MVE) at a statistical insignificance level of 0.05 with p-value = 0.990 (more than 0.05). Thus, although board committee (BCMT) helped scrutinize work to be efficient and effective according to the CG (Suriya Pannarong, 2010), this study found that they had no influence/effect on market value of equity, conflicting with the management's function of linkages responsibilities that affected operating performance (Krivogorsky, 2006).

5) Institutional shareholding (INSTSH) had a positive influence/effect on market value of equity (MVE) at a statistical significance level of 0.05 with p-value = \*\*\* (the value less than 0.05--very low value closely to zero), meaning increased institutional shareholding ratio (INSTSH) would also result in increased market value of equity (MVE); on the contrary, decreased institutional shareholding (INSTSH) would result in decreased market value of equity (MVE). This was because institutional shareholding (INSTSH) got pressure from their function to monitor the behavior of management, enabling management to perform to its full potential to generate good returns for shareholders and to monitor the behavior of the management, to build confidence among other investors and to reflect the practice of good CG (Arshad and Safdar, 2009).

6) Shareholding of board members (MANGSH) had a positive influence/effect on market value of equity (MVE) at a statistical significance level of 0.05 with p-value = \*\*\* (the value less than 0.05--very low value closely to zero), meaning decreased shareholding of board member ratio (MANGSH) would result in increased market value of equity (MVE) whereas increased shareholding of board member ratio (MANGSH) would result in decreased market value of equity (MVE) as

well. This conflicted with Agency Theory, which holds that shareholding of board members is an incentive mechanism to effectiveness and wealth of the company. This probably resulted from the conflicts between shareholders and management who tried to find tools for gaining personal benefits using their own experience and expertise, probably resulting in the ineffective management of the company (Albert and Appiah, 2014; Jensen and Murphy, 1990; Morck et al., 1988). However, the company's focusing on its shareholding of board member (MANGSH) can make the monitoring of operations and management's duties fair and push the company's CG into practice. (Silapaporn Srichunpetch, 2009)

7) Board remuneration (LogBRMRT) had a positive influence/effect on market value of equity (MVE) at a statistical significance level of 0.05 with p-value = \*\*\* (the value less than 0.05--very low value closely to zero), meaning that increased board remuneration (Log BRMRT) would result in increased market value of equity (MVE) and that decreased board remuneration (LogBRMRT) would result in decreased market value of equity (MVE) as well. This was because reasonable compensation would make management work effectively, reflecting the growth of the company (Jensen and Meckling, 1976; Smith and Watts, 1992; Tackao et al., 2003)

## **8. Recommendations from the study**

### **8.1 Recommendations from the study**

The overall findings of this study showed the positive effect of CG on the market value of the Company (MVE). This study found that the variables comprising board size (BZ), board composition/non-executive director (NED), Institutional shareholding (INSTSH), board remuneration (BRMRT) and shareholding of board members (MANGSH) had a negative

influence/effect on market value of equity (MVE) whereas chief executive officer/Chair duality (DUALITY) and board committee (Log BCMT) had a negative influence/effect on market value of equity (MVE). Thus, the research findings can be used to promote the importance of CG. Besides, the research findings can be effectively applied to management, board responsibilities and policy decision making and any other dimension of development in order that the company will gain trust and confidence from all groups of stakeholders. Besides, investors can use the findings to decide on investing in a Thai listed companies in the Stock Exchange of Thailand.

## **8.2 Recommendations for further studies**

8.2.1 Other groups of industries listed in the Stock Exchange of Thailand or in other countries should be studied.

8.2.2 Future researches may change data collection from secondary data to primary data, as they may increase potential of studies which yield extensive outcomes from truly practical CG.

8.2.3 Modern variables involved in CG should be studied to promote CG system such as family ownership, political connections, (Arunee Yodbutr, 2010), government policy promoting good CG practices for Thai listed companies, law enforcement, and any other GG issues which may vary according to present situations and trends of the future, particularly concerning ASEAN countries and east Asia.

8.2.4 Future studies may measure the effectiveness of financial markets and market values through other instruments, such as Economic Value Added (EVA), increased expenses of market value, etc.

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