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มหาวิทยาลัยขอนแก่น

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**A Full Report of**

**An Analysis of Thai Corporate Governance and  
Financial Reporting Practices from 2002 to 2007**

**By**

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# Abstract

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The research aims to investigate the corporate governance (CG) practice among Thai firms and determine to what extent the CG influences on financial reporting practices, specifically disclosure practices, in order to assess to what extent the Thai government effort in promoting good CG practice among Thai companies is accomplished. The research examine the CG and disclosure practices during 2002-2007 and thus the CG data and disclosure indexes are manually gathered from 134 and 236 listed companies in 2002 and 2007 respectively. The research employs the T-test and Mann-Whitney U test to assess the changes in CG and disclosure practices over time and the multiple regression analysis for investigating the relationships between Thai corporate governance and its financial reporting practices during 2002 and 2007.

The research results show that there are significant changes in some CG characteristics of board composition and ownership structure and disclosure practices. The size of the board of directors and the number of family members on the board decrease while the number of independent directors and of board members with cross directorships in other companies increase significantly. The managerial ownership also increases while the institutional ownership decrease significantly, suggesting the convergence of interests between the shareholders and management. The changes tend to move toward the Anglo-Saxon model but some CG characteristics of ownership-concentration business environment still remain. The levels of disclosures also significantly rise, suggesting the good trend of transparency among Thai firms. The regression results reveal that CG increasingly play its role in influencing financial reporting disclosure from 2002 to 2007, implying that good CG written in laws and regulations becomes more effective in practice. Nevertheless, the significantly positive relationship between ownership concentration and disclosure indexes indicate the influence of family-owned businesses in disclosure practice and the presence of agency problems between the majority and minority shareholders. The problems are possibly lessened, as the changes of the associations between disclosure and CG characteristics over time, particularly with the number of family members on the board from a negative to positive relationship, suggest the sign of convergence of interests between the majority and minority shareholders.

The results implies that despite the remaining ownership concentration which potentially obstruct the improvement of good CG and disclosure practices, Thai companies tend to increasingly follow good CG in practice and this is probably caused by the increasing role of capital market, meaning that the market enforcement gradually plays its role in changing CG characteristics and disclosure practices in Thai firms. This also indicates that agency theory tends to increase its relevance to developing countries' environment which is generally dominated by ownership concentration characteristics over time. In addition, the results provide the regulators and practitioners the assessment of CG and disclosure practices of Thai listed companies; therefore, both parties can act on improving these practices.

**Keywords:** Corporate governance, Financial reporting, Disclosure, Thailand

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# Chapter 1

## Introduction

### 1.1 Research Motivation

Corporate governance (CG) has been described by the OECD, one of the large international organizations, as a set of relationships among the three main groups, including a company's management, its board, and its shareholders and other stakeholders (2015). The organization further explains that this relationship indicates the balance of corporate control power and protects the minority shareholders' rights. Rupley et al. (2012) explained this relationship that board of directors, representing the shareholders, is responsible for overseeing management. Also, other stakeholders such as institutional investors, lenders, regulators, governmental agencies, non-governmental organizations, business associations, customers, and suppliers all have an influence over management's decisions (Gillan, 2006; Suchman, 1995). Therefore, CG should provide proper incentives for the board and management to attain objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring (2004). Consequently, the corporate transparency and credibility should be enhanced and this potentially leads to high corporate performance and then improves the economic growth and efficiency. Several studies (Ananchotikul and Eichengreen, 2009; Cabalu, 2005; Claessens and Yertoglu, 2013) confirmed that CG has an association with economic performance.

Prior literature (Gul and Leung, 2004; Cheng and Courtenay, 2006; Haniffa and Hudaib, 2006; Mitton, 2002; Rahman and Haniffa, 2005; Cheung et al., 2005; Ho and Wong, 2001; Haniffa and Cooke, 2002; Eng and Mak, 2003; Arcay and Vázquez, 2005; Barako et al., 2006; Gul and Leung, 2004; Chau and Gray, 2002; Kelton and Yang, 2008; Omar and Simon, 2011; Muttakin et al., 2012; Samaha et al., 2015) has also well documented the role of CG in enhancing corporate transparency and credibility and also firm performance by studying the significant relationships among CG, financial reporting practices (particularly disclosures), and/or firm performance. This empirically confirms the important role of CG in businesses and thus an increasing number of countries, particularly developing countries with emerging markets, have worked on the development of CG to promote confidence in financial reporting and governance mechanisms in a context of increasing globalization of capital markets (Gisbert and Navallas, 2013).

In Thailand, a 'Corporate Governance' concept has been discussed widely after the Thai economic bubble explosion in 1997. The Thai government believes that this concept is one of important mechanisms for Thai economic recovery and the country's credibility. Several guidelines issued by domestic and international organizations have been introduced to Thai companies since 1998 and the most followed guideline, adopted the OECD guideline of CG, is

from the Stock Exchange of Thailand (SET). At present, the government still initiates several seminars and meetings to encourage Thai companies to comply with the guideline of good corporate governance. Several regulations have continually issued and updated in order to ensure that corporate governance in Thai companies get along with the international practices.

Several international and national organizations have surveyed the corporate governance performance in many Asian countries, including Thailand. With the ADB support, Capulong et al. (2000) studied the corporate governance in East Asian countries, including Indonesia, Republic of Korea, Malaysia, Phillipines, and Thailand. They have reported that in these Asian countries, their corporate governance practices contain several weaknesses, such as ineffective board of directors, weak internal controls, lack of adequate disclosure and poor enforcement. These weaknesses are caused by highly-concentrated ownership structure, excessive government intervention, small capital market, and the lack of legal and regulatory framework for investor protection. Following up the CG improvement in these countries, the ADB reports (2013, 2014) indicate considerable progress of CG. Specifically, in Thailand, all areas in the survey have receive the higher scores but the low CG scores were reported in the area of 'role of stakeholders' and 'responsibilities of the board', suggesting the remaining concerns with highly-concentrated ownership structure, as the weakness is mainly related to a lack of disclosure involving the board responsibilities and stakeholders' interest.

The Asian Corporate Governance Association (ACGA), in collaboration with Credit Lyonnais Securities Asia (CLSA), also conducted the survey of corporate governance in 11 Asian countries and published the CG Watch since 2005 to reveal the quality of their governance. The ACGA questionnaire contains five categories: rules and practices, enforcement, political and regulatory environment, accounting and auditing standards, and CG culture. The survey reports were issued in 2005, 2007, 2010, and 2012. Overall, the results show that for Thailand the concern is in the CG enforcement and culture. The report suggests that CG enforcement is enhanced for shareholders rather than regulatory activities, implying that legal enforcement in practices is questionable.

In Thailand, the Institution of Directors Association (IDA), with the support of the Securities Exchange of Thailand (SET) and the Thai Securities Exchange Commission (Thai SEC), has surveyed the quality of corporate governance of Thai listed companies by applying the OECD principles since 2001. The surveys show that Thai listed companies have improved their CG continuously. Recently, the 2015 survey reports that Thai firms have the highest average score of the 'rights of shareholders', followed by the 'disclosure and transparency'. On the other hand, the score of 'responsibilities of the board' is the lowest, followed by the 'role of stakeholders', agreed with the ADB report.

Although Thai rules and regulations of corporate governance have moved toward the Anglo-Saxon model, the governance practiced by Thai companies is still in doubt. From the surveys by

several institutions, CG in Thailand still has not shown the robust CG practices. The CG Watch by ACGA has reported that in Thailand, the areas of enforcement, and CG culture have the low score. This could be caused by that the majority of Thai listed company is still a family-owned business (Wiattanakantang, 1995; Suehiro, 2002). Also, Chuanrommanee and Swierczek (2007) show their concerns that Thai corporate governance could only be acknowledged on paper but not be strictly practiced by Thai companies. This similar concern is also presented in Tengamnuay and Stapleton (2009) and ADB CG report (2013). This weak point suggests that the improvement of CG practices by Thai companies will be time-consuming although the CG rules and regulations are in the good shape, suggested from the high score of accounting-and-auditing-standards section and the moderate score of the rules and practices part. This concern leads to a question on an impact of the GCG on corporate transparency and creditability in Thailand. Many researchers claimed that based on the organizational view, CG produces different impacts in distinct environmental contexts (Ernstberger and Grüning, 2013 and Samaha et al., 2015).

Therefore, it will be interesting to investigate the changes in CG practice by Thai companies and its impact on corporate transparency in Thailand. Specifically, this research aims to investigate 1) to what extent Thai companies have practiced the corporate governance during the period 2002-2007; 2) what the Thai disclosure practice is during the period 2002-2007; and 3) to what extent the corporate governance practice associated with Thai disclosure practice during the period 2002-2007.

To address the first two questions, the research applied the T-test and Mann-Whitney U test to determine the differences in CG and disclosure practices during the period 2002-2007. The multiple regression analysis is then employed to answer the last question by determining the relationships between CG and disclosure practices among Thai firms during the period 2002-2007. The research considers three main aspects of the CG, including board composition and characteristics, ownership structure, and audit committee characteristics. It also analyzes disclosure practices in three views; aggregated, mandatory, and voluntary disclosure.

The results show that there are significant differences in CG structure in terms of board composition and ownership structure. The size of the board of directors is likely to reduce as well as the number of family members on the board, whereas the number of independent directors tends to increase significantly. Also, the number of directors holding a director position in other companies seems to significantly increase. According to the ownership structure, the managerial ownership significantly increases while the institutional ownership decrease significantly, suggesting the convergence of interest between the shareholders and management. The regression result indicates that overall, CG increasingly play its role in affecting financial reporting disclosure, as the explanation powers of the regression models increase over time. Determining influences of particular CG characteristics, some good CG practices emerged and have positive impact on disclosure. For example, despite the ownership concentration still remains among Thai firms and influences on financial reporting disclosure, as the top 5

shareholding variable significantly explains the variance of disclosure levels, a company with many family members on the board tends to disclose much information due to the convergence of interest between the family members and minority shareholders. This implies that Thai firms increasingly realize the importance of outside capital and the CG regulation becomes effective in practice.

## **1.2 Research Objectives**

1. to investigate changes in Thai corporate governance practice during the period 2002-2007;
2. to study changes in disclosure practices of Thai companies during the period 2002-2007;
3. to investigate an association between Thai corporate governance practices and disclosure practices; both mandatory and voluntary disclosure, during the period 2002-2007.

## **1.3 Scope of the Research**

The research will be conducted in Thailand. The samples are Thai companies listed in the Stock Exchange of Thailand (SET) in 2002 and 2007, excluding banks, financial institutions and insurance companies. Thai listed companies are chosen because their financial information is publicly available and the SET committee requires these companies to comply with the CG.

The corporate governance and disclosure data in the year 2002 and 2007 were collected. The data of the year 2002 and 2007 is selected, for Thai companies were positively recovered from the economic crisis and the Sarbane-Oxley Act is effective in 2002. Also, in the year 2007, Thai companies already had 5-year time to understand and adopt good governance practices and put it into shape.

## **1.4 Structure of the Research**

The research is structured as follows. Chapter one introduces the research motivations and objectives. Then, in the second chapter, the agency theory and literature are under review and explained to provide background information of this research area. The third chapter explains the research methodology and analysis that are applied for achieving the research objectives. After that, the research results and discussion, presented in the fourth chapter, are made. Finally, the research conclusion and recommendations are written in order to summarize the research findings and arguments. The research implication is also discussed.

## **Chapter 2**

### **Theories and Literature Review**

In order to attain the research objectives, this research applied two theoretical frameworks. The first framework contains the agency theory explaining the possible association between corporate governance (CG) and financial reporting practices. The second framework discusses the structure of good CG and its relation to financial reporting practices. The framework is mainly based on the CG guidelines suggested by various institutions and studies. Then, the CG structure and financial reporting practices in Thai context is reviewed to see the development of both in Thailand.

#### **2.1. Agency Theory**

Agency theory has been introduced since the 1960s. It has explained the relationships between two groups, principle and agent. Principles are persons who provide their resources to the agent to work on their behalf, which involves the delegation of some decision-making authority to the agent, in order to generate wealth. Agents are persons who gain power by the approval of principles to utilize resources in order to increase the principle's wealth. According to the theory, it is generally impossible to ensure that the agent will make decisions that are in the best interests of the principle, thus agency costs, mainly monitoring and bonding costs, incur. The monitoring costs, such as the presence of audit committee and independent directors, are initiated to limit unwanted activities by agents and the bonding costs refer to resources that management spends to show its accountability to the principle. To reduce these costs, the principle applies monitoring and controlling mechanisms in order to ascertain that the agent will act in the principle's best interests (Jensen and Meckling, 1976).

In businesses, the principle-agent model refers to the relation either between shareholders and management or between debtholders and management. In other words, agency theory deals with conflicts in the association between shareholders/debtholders and management (Jensen and Meckling, 1976). Where there is a separation of ownership and control of a firm, the potential for agency problems exists, incurring then agency costs.

Jensen and Meckling (1976) explained the agency problem, information asymmetry, that when the contractual relationship between shareholders and managers is established, managers can obtain information on the environment and determine which effort level is the most adequate to operate businesses. However, the shareholders have no such information. Under this information asymmetry, it is difficult for the shareholders to observe whether managers' effort is optimal. This provides an opportunity for managers to act in their own best interests, rather than those of

the shareholders. This can cause the problem known as “moral hazard with hidden information” (Machio-Stadler et al., 2001, quoted in Liu, 2015).

Nevertheless, it is argued that an agency problem, characterized by a conflict of interest between shareholders and management, would not be found in family-owned businesses, as there is no separation of ownership and control (Abdullah et al., 2015a). Instead, a conflict between controlling shareholders and minority shareholders may exist. Chau and Gray (2010), based on the finance literature (Morck et al., 1988), view the principle-agent relationship in family-owned business into two aspects: “management entrenchment” and “convergence of interest.”

The ‘management entrenchment’ perspective is based on the traditional agency theory that individuals are rational and maximise their utility. On the one hand, Chau and Gray (2010) explain that in a family-owned business, individuals or families are the main controlling shareholders and consequently, owners and managers are likely to be from the same parties. The insiders then possibly hold information from the outsiders causing the information asymmetry problem and consequently, the insiders will make decisions based on this information for their own benefits. This induces the personal exploitation of corporate wealth at the expense of minority shareholders. The ‘management entrenchment’ incurs. On the other hand, the researchers (Chau and Gray, 2010; Muttakin, Khan and Belal, 2015) argue that the convergence of interests between the controlling shareholders and outsiders occur when family members are really concerned with long-term benefits they will gain from corporate investments and their lasting reputation. This concern causes them to consider more of the consequences of their decisions of non-value added activities (Jensen and Meckling, 1976) and motivates them to maximize all shareholders’ wealth and limit their opportunistic behavior for personal gains (Chau and Gray, 2010). Thus, according to the ‘convergence of interest’ perspective, the agency problems between the majority and minority shareholders in a family-owned business is less likely to happen and the transparency is commonly practiced by its management.

To reduce the agency problems and costs means to reduce the conflicts of interest between related parties. Outside shareholders would need to establish mechanisms to monitor management to ensure that shareholders’ wealth is maximized (Healy and Palepu, 2001; Iatridis, 2013). These mechanisms include, for example, the presence of internal control, the establishment of good CG, the effective external auditing, and the presence of compensation. These potentially limit managers' opportunistic behaviors in transferring wealth if the mechanisms are effectively implemented (Iatridis, 2013).

Many researchers (Foo, 2007; Jones, 2010; Chau and Gray, 2010; Karolyi, 2012; Iatridis, 2013) also indicate that because the monitoring costs are borne by management, management is motivated to reduce such costs. Thus, apart from setting up the monitoring and controlling systems, the communication between managers, shareholders and lenders, by increasing the level of disclosure, would be one of the tools that managers could employ to reduce the costs, as it

reduces information asymmetry between related parties and would result in efficient contracting and more flexible financing. For instance, when there is a contract between management and debtholders, management has incentives to offer an increased level of monitoring such as voluntary disclosure of information in the public annual reports. This is in order to reduce agency costs that may occur when management has a chance to transfer wealth to shareholders with the expenses of debtholders via financing and investment decisions (Sutthachai, 2006). Some researchers (Beyer, et al., 2010; Machio-Stadler, Pérez-Castrillo and Watt, 2001; Liu, 2015) argued that although management who benefit from their private information lack incentives to reveal its insights, there is a demand for corporate information disclosure by shareholders and other information users when the monitoring mechanisms work effectively.

## **2.2. Corporate Governance and the financial reporting practice**

The CG concept has been introduced and accepted widely when the number of modern corporations with a separation of ownership and control considerably increased. Based on the agency theory, the separation has created serious agency problems and costs and to reduce these problems, shareholders are required to set up monitoring mechanisms and the governance is one of the mechanisms designed for this purpose (Fama and Jensen, 1983; Kelton and Yang, 2008; Li, Mangena, and Pike, 2012; Gisbert and Navallas, 2013).

Dahya et al. (1996, p.71 quoted in Haniffa and Cooke, 2005, p.399) defined CG as “the manner in which companies are controlled and in which those responsible for the direction of companies are accountable to the stakeholders of these companies”. Several international organizations (e.g. the Cadbury Reports, IFAC guidance, CalPERS Principles, and OECD principles) have suggested guidelines for good corporate governance. Among these guidelines, the issuance of OECD (Organization for Economic Co-operation and Development) has been the most internationally and widely employed by many parties, whereas others have been mainly published to complement the OECD guideline, such as the IFAC’s International Good Practice Guidance, *Evaluating and Improving Governance in Organizations* (Tophoff, 2013).

The corporate governance guideline of OECD was first developed in 1999 and revised in 2004. Later, in 2010, the OECD set up the action plans to do a major revision for its CG guidelines. The revision aimed to improve the guideline in several areas, such as remuneration, risk management, board practices, and the exercise of shareholder rights, in order to address some deficiencies in corporate governance emerged from the financial crisis. It also further clarifies how the implementation of existing standards can be improved (Tophoff, 2013). Recently, the G20/OECD Principles of Corporate Governance was published in 2015. According to the guideline, the OECD has described corporate governance as a set of relationships among the three main groups, including a company’s management, its board, and its shareholders and other stakeholders (2015). The six principles have been established in the CG framework. The first principle mainly focuses on a country’s characteristics of the regulatory framework to reinforce

the CG practices. These characteristics involve the existence and structure of legislation, regulation, self-regulatory arrangements, voluntary commitments and business practices in relation with stakeholders' and public concerns. The OECD (2015) suggested that this feature is shaped by a country's specific circumstances, history and tradition and thus vary from country by country. Examples of elements of this principle are such as legal and regulatory requirements that affect corporate governance, the stock market regulations that should support effective CG and the authority that should legally gain supervisory, regulatory, and enforcement authorities.

The second principle deals with the rights and equitable treatment of shareholders and other main ownership functions. According to this principle, all shareholders should be provided with protection and facilitation when they exercise their rights on the conditions specified in company law, internal company statutes, and/or other jurisdictions. They also should receive equal treatment from companies. The third principle is concerned with actors in the investment chains, including institutional investors, stock markets and other intermediaries. The principle suggests the information disclosure related to activities of these actors which may decrease their optimal actions for the ultimate owners and what should do, in order to ensure that those actors' interests are not diverse from ultimate owners. For example, financial analysts and brokers should minimize and disclose their conflict of interests (if any) that might compromise the integrity of their advice for the owners.

The fourth principle indicates the role of stakeholders. Their rights of stakeholders, regarding the laws, regulations and mutual agreements, should be realized and activated by companies. Also, the stakeholders' communication with companies should continually be established. The fifth element is related to disclosure and transparency which companies are required to disclose timely and accurate information, including the financial situation, performance, ownership, and governance of the company. In this section, external auditors' role and communication channels for disclosure are also recommended. Finally, the responsibilities of the board are stated. These responsibilities mainly include ensuring strategic guidance of the company, monitoring effectively management performance, and having accountability to the company.

With the guidance, the OECD considers that CG should provide proper incentives for the board and management to attain objectives that are in the interests of the company and its shareholders, as the CG facilitates effective monitoring. It is agreed that corporate governance has been considered an important mechanism to balance corporate control power and protect the minority shareholders' rights and this, in turn, increases the corporate transparency and creditability, which potentially leads to high corporate performance and then enhance the economic growth and efficiency (Ananchotikul and Eichengreen, 2009; Al-Aklla and Ali, 2012; Rupley et al., 2012). The OECD (2015) suggests that a company with good CG should be able to gain its capital with low costs and from stable sources of financing. Several researchers (Gul and Leung, 2004; Cheng and Courtenay, 2006; Chau and Gray, 2010; Gisbert and Navallas, 2013; Rupley et al., 2012; Samaha et al., 2012) further explain this benefit that based on agency theory, corporate

governance will enhance transparency in financial reporting practices. Strong CG arrangements may encourage managers to disclose more information because the adoption of internal control mechanisms enhances the monitoring of managers' disclosure strategies and reduces the benefits of withholding information. The sound CG, consequently, increases investors' confidence and a country's economic performance.

The realization of the significance of corporate governance mechanisms for ensuring high quality financial reporting has brought various external and internal monitoring and bonding mechanisms to be the focus of theoretical discussions and empirical research (Habib and Jiang, 2015; Rajablu, 2016; Reddy, 2009; Millar et al., 2005; Rupley et al., 2012; Ji et al., 2015; Li et al., 2012; ). The roles of corporate governance in enhancing financial reporting practices have been widely researched. One has continually focused on its association with financial reporting measurements, e.g. the impact of CG on earnings management (Shan, 2015; Chi et al., 2015). Another has extensively investigated its relationship with financial reporting disclosure, either mandatory or voluntary disclosures or both (Chau and Gray, 2010; Cong and Freedman, 2011; Gisbert and Navallas, 2013; Ernstberger and Grüning, 2013; Jiang et al., 2011; Ji, Lu and Qu, 2015; Li et al., 2012; Liao, 2011; Liao et al., 2015; Omar and Simon, 2011; Rupley et al., 2012; Samaha et al., 2012; Sharma, 2014; Abdullah et al., 2015a).

Among the research dealing with the association between CG and disclosure, agency theory is the most used to explain such relationship discussed in the previous section. In the research of this area, there are two types of disclosure that have been studied: mandatory and voluntary disclosures. Mandatory disclosure refers to all information which is required to be disclosed according to regulations such as Companies Acts, stock exchange regulations and accounting standards that are applicable (Owusu-Ansah, 1998; Omar and Simon, 2011; Abdullah et al., 2015a) in order to ensure that companies disclose necessary and substantial information for users' decision making. Voluntary disclosure is defined as information, both financial and non-financial, which is useful for a firm to disclose but which is not required by regulations (Omar and Simon, 2011). Generally, companies strategically manage their disclosure, what and how much information should be disclosed, in order to gain benefits, such as enhancing stock liquidity and improving the competitive aspect of the firm in the market (Omar and Simon, 2011). Corporate governance therefore is a mechanism to ensure that this disclosure strategy does not mitigate information usefulness for financial reporting users.

In the governance perspective, academically, Cong and Freedman (2011) reveal that corporate governance concept has generally been viewed based on two perspectives: a stakeholder view and a financial-centric one. The former perspective views CG as a tool to ensure that firms will be accountable to their stakeholders and thus report any related matter to stakeholders' decision making and consequently balance the financial and socio-political performances. Taking the financially-centric perspective, the CG is considered a mechanism to be certain that firms will not maximize profit at the expense of other factors that may impede the maximization.

In addition to the theoretical views of Cong and Freedman (2011), Habib and Jiang (2015) have classified governance mechanism of public corporations at the firm level into two types: internal and external. The primary internal governance includes blockholders and the board of directors, while the external one refers to, for example, external auditing, market for corporate control, product market competition, and managerial labor market.

Regarding Ernstberger and Grüning (2013), the research dealing with an association between disclosure and CG can be categorized into two groups: 1) studies examining the relationship between corporate governance and disclosure in either single-country settings or cross-country settings and assuming that a universal link exists between these two concepts and is unaffected by the institutional structure such as legal environment; and 2) studies investigating the association between disclosure and CG with a consideration of the interactions and contingencies that impact the effectiveness of CG.

In the first group, the studies have been undertaken since the late 1960s. Many researchers (Ho and Wong, 2001; Haniffa and Cooke, 2002; Eng and Mak, 2003; Arcay and Vázquez, 2005; Barako et al., 2006; Gul and Leung, 2004; Chau and Gray, 2002; Cheng and Courtenay, 2006; Kelton and Yang, 2008; Rupley et al., 2012; Samaha et al., 2012; Habib and Jiang, 2015; Muttakin et al., 2015; Sharma, 2014; Abdullah et al., 2015a) have investigated a relationship between CG and financial reporting disclosure in both developed and developing countries. Some have studied only either mandatory or voluntary disclosure while other has determined both. Also, these studies have employed various attributes of corporate governance, including

1. board composition and its characteristics—The board of directors is one of three actors in the corporate governance concept and its main responsibility is to monitor management performance to ensure that management acts on shareholders' best interest. Therefore, its characteristics may influence on reducing agency problems by enhancing financial reporting disclosure. Several characteristics of the board have been identified. For example, several studies identify the proportions of independent directors as one of the characteristics to be investigated. Based on agency theory, outside independent directors are needed for the effective monitoring and guiding role of corporate boards (Gisbert and Navallas, 2013; Rupley et al., 2012) because they are not directly related to a company's routine operations and have no management positions and therefore, management have less power over them, less aligned with them and less incentive to collude with internal directors (Eng and Mak, 2003; Liao et al., 2015). Many studies, thus, empirically investigate that the higher the proportion of independent directors, the more likely the board can question the management performance and the higher the level of effective monitoring by the board (Barako et al., 2006; Arcay and Vázquez, 2005; Gul and Leung, 2004; Eng and Mak, 2003; Haniffa and Cooke, 2002; Ho and Wong, 2001; Chau and Gray, 2010; Liao et al., 2015; Hodgdon and Hughes, 2016). However, their research results were varied. Some found the statistically significant association between these proportions of independent directors and disclosure

levels (Cheung et al., 2006; Chau and Gray, 2010; Liao et al., 2015; Liu, 2015; Muttakin et al., 2015; Rupley et al., 2012; Samaha et al., 2012; Samaha et al., 2015; Iatridis, 2013).

Other researchers (Cheng and Jaggi, 2000; Chau and Gray, 2010; Samaha et al., 2015) discuss that the monitoring role of independent directors may be either enhanced or compromised by certain institutional and firm-specific characteristics. Several research (Cheng and Jaggi, 2000; Cheung et al., 2006; Chau and Gray, 2010; Gisbert and Navallas, 2013; Samaha et al., 2015) propose that the existence of a majority shareholders in family-owned businesses can prevent independent directors from performing their monitoring role properly, as the majority and independent directors may have a close relation. Nevertheless, some (Gisbert and Navallas, 2013) argue that companies with high proportion of either outside ownership or family-member ownership are more likely to appoint highly respected independent directors in order to improve transparency and firm's reputation so that the costs of the agency relationship that exists between majority and minority shareholders can be decreased.

Also, CEO/Chairman duality is specified (Kelton and Yang, 2008; Arcay and Vázquez, 2005; Gul and Leung, 2004; Haniffa and Cooke, 2002; Ho and Wong, 2001; Samaha et al., 2012; Abdullah, Percy and Stewart, 2015; Samaha et al., 2015; Liao et al., 2015). CEO duality refers to situations in which one individual is both the CEO and chairperson of a board. The researchers (Muttakin, et al., 2015; Samaha et al., 2015) explained that in these circumstances, managerial dominance is greatly enhanced, as such individuals are more aligned with management than shareholders. CEO duality may constrain board independence and reduce the ability of boards to execute their oversight and governance roles. Additionally, CEO duality gives CEOs the power to negotiate with boards and may allow CEOs to pursue self-serving interests. Therefore, when the chairman and the CEO functions fall onto the same person, the concentration of too much power in one person may affect the quality and amount of information disclosed. In contrast, Samaha et al. (2015) review literature and argue that when decision control (board chairperson) and decision management (CEO) are not separated, information transferring costs and conflicts of interest between the board chairperson and CEO are reduced and thus, the board chairperson can work more efficiently and tends to disclose more voluntary information.

Another attribute is the size of the board. Some (Cheung et al., 2006; Abdullah, Percy and Stewart, 2015b; Gisbert and Navalass, 2013; Samaha et al., 2015; Liao et al., 2015) suggest that the number of board members indicates the board monitoring capabilities, because each member will possess different experiences, knowledge, expertise, and specialized skill and thus be efficient in monitoring. However, other (Jensen, 1983; Gisbert and Navallas, 2013; Samaha et al., 2015) argued that small boards are more effective in monitoring the CEO, limiting the possibility of taking opportunistic decisions, as large board size may lead to a poor communication between members and then possibly mistaken decision-making.

The proportion of family members on the board (Ho and Wong, 2001; Haniffa and Cooke, 2002; Abdullah et al., 2015a) is also determined. The research views that when many family members on the board, a company tends to disclose less information because management control is held by the same party and thus no effective monitoring system from the board. Several researchers (Ho and Wong, 2001; Haniffa and Cooke, 2002; Abdullah et al., 2015a) found this significant relationship between these two variables.

Other attributes include independent chairperson (Chau and Gray, 2010), cross-directorship by board members (Rupley et al., 2012), a chairperson with cross-directorship (Haniffa and Cooke, 2002; Haniffa and Cooke, 2005), gender diversity on the board (Liao et al., 2015), and the board members being management (Cheung et al., 2006; Liao et al., 2015).

2. ownership structure—The corporate ownership structure is an important monitoring mechanism aimed at curbing managerial opportunistic behavior by requiring high quality financial statements. It indicates the separation between ownership and control. If owners and managers are the same group, there will be the owner-manager structure in managing businesses, suggesting that there is no separation. If ownership consists of various outside groups, owners and management will be separated. Both characteristics provide different impacts on disclosure practices. With no separation of owners and managers, information disclosure is expected to be low as the shareholders, being a company's insiders, can access internal source of information but the disclosure is expected to be high when ownership is dispersed as the outside shareholders' decision making depends on public information disclosed by a company (Abdullah et al., 2015a). However, Gisbert and Navallas (2013) argue that companies with either type of ownership structure may also want disclosure increased due to capital market pressures. That is, companies seeking to maintain their competitive position in the market would prefer to achieve a reputation for being highly transparent and thus disclose information.

The previous research investigated its impact by considering managerial ownership (Arcay and Vázquez, 2005; Eng and Mak, 2003; Liao et al., 2015; Jiang et al., 2011; Samaha et al., 2012), ownership concentration (Ho and Wong, 2001; Eng and Mak, 2003; Kelton and Yang, 2008; Muttakin et al., 2015; Samaha et al., 2012; Cheung et al., 2006; Liao et al., 2015; Abdullah et al., 2015a), family ownership (Muttakin and Khan, 2014), institutional ownership (Omar and Simon, 2011; Liao et al., 2015; Iatridis, 2013), shareholder rights (Kelton and Yang, 2008); and foreign ownership (Sharma, 2014)

3. audit committee characteristics—It is generally agreed that audit committee plays an important role in corporate governance, particularly in enhancing the board of directors' effectiveness in monitoring management (Li, Mangena, and Pike, 2012; Choi, Han and Lee, 2014; Muttakin et al., 2015; Samaha et al., 2015). Its main responsibilities, according to the US model, involve financial audits (Choi Han and Lee, 2014), which include, for example,

recommending the appointment of the external auditor, overseeing the audit, and assuring the credibility of financial reporting (Abdullah, Percy and Stewart, 2015b). As an internal governance mechanism, an effective audit committee should improve internal control, act as a means of decreasing agency costs, and be a powerful monitoring device for improving disclosure (Li, Mangena, and Pike, 2012; Muttakin, et al., 2015). Several researchers (Li, Mangena, and Pike, 2012; Choi, Han and Lee, 2014; Abdullah, Percy and Stewart, 2015; Liu, 2015) suggest that the effectiveness of the audit committee is enhanced when the committee is independent and has members with accounting/financial expertise. These researchers explain that audit committee members with accounting and financial literacy will more effectively monitor the quality of financial reports and efficiently communicate with and support the work of both internal and external auditors as compared with the members without these experiences. They also suggest that audit committee independence allows the members to have no mutual interests with any parties related to companies and consequently, their monitoring function weakens management's incentives to undertake self-interested, opportunistic behavior that reduces shareholder wealth.

Therefore, previous research examined the relationship between various characteristics of audit committee and disclosure practices. For example, in a country with no compulsory requirement of audit committee, the research (Arcay and Vázquez, 2005; Ho and Wong, 2001; Muttakin et al., 2015; Samaha et al., 2015; Samaha et al., 2012) investigated the existence of audit committee.

Several (Kelton and Yang, 2008; Liu, 2015) included the committee members' financial expertise. It is widely accepted that audit committee members who have accounting and finance backgrounds are in a better position to evaluate financial reporting quality and to understand auditors' judgments. As a result, having such members on the committee can enhance its oversight role in the financial reporting process, and lead to improved corporate disclosure (Mangena and Pike, 2005; McDaniel, Martin, and Mines, 2002; Liu, 2015).

Another characteristic determined by other research (Kelton and Yang, 2008; Li et al., 2012) is the frequency of audit committee meeting. Li et al. (2012) found that there is a significant relationship between voluntary disclosure and frequency of audit committee meetings. They explained that as audit committee is set up to monitor management performance in preparing financial reports and establishing internal control, the frequency of audit committee meetings allows its members to have time to discuss and detect irregularities in a company, if any. The good CG guidance suggests that audit committee should hold a minimum of three or four meetings a year (Li et al., 2012).

The above research mostly has measured the disclosure index, representing the financial reporting practices. After obtaining the corporate governance and disclosure data, these studies have used the multiple regression analysis to find an association between the two variables.

The results from these studies have empirically supported the significant association between corporate governance and financial reporting practices. However, they have provided mixed results on what the attributes of corporate governance are associated with the financial reporting practices. Some attributes of corporate governance have been found significantly associated with disclosure practices in one study, but another study revealed no significant relationships. For example, some researchers (Kelton and Yang, 2008; Arcay and Vázquez, 2005; Gul and Leung, 2004; Eng and Mak, 2003) found the significant association between the proportion of independent directors and disclosure practices whereas other studies (Ho and Wong, 2001) revealed the non-significant relationship. Also, several researchers (Gul and Leung, 2004) have empirically supported the relationship between CEO/Chairperson duality and the disclosure index, but there has been research (Kelton and Yang, 2008; Arcay and Vázquez, 2005; Haniffa and Cooke, 2002; Ho and Wong, 2001) that shows no association between the two variables.

The mixed results have brought the latter group of studies recently arise. The researchers (Ernstberger and Grüning, 2013; Gisbert and Navallas, 2013; Rupley et al., 2012; Samaha et al., 2015) in this field have been concerned not only the association between disclosure and CG but also the influence of institutional environment on that association. For instance, Ernstberger and Grüning (2013) have studied influence of the regulatory or institutional environment on the impact of firms' governance on corporate disclosure. They viewed this influence in two aspects: complementary relationship and substitutive relationship. The complementary relationship views that with a strong legal environment, CG implementation will be effectively supported, as a result managers are likely to disclose all necessary information. Regarding the substitutive relationship, the strong CG in corporations may exist to replace the weak regulatory environment. Based on the principal-agent relationship, due to the weak regulatory environment, agency problems and later agency costs are likely to be appeared. Consequently, minority shareholders seek to reserve their interest in corporation and thus play an important governance role in demanding effective CG to increase disclosures and then reduce the agency costs. After investigating the European countries as their sample, Ernstberger and Grüning found that in European companies, CG structure and the legal environment substitute with respect to their effects on corporate disclosure, meaning that if the weak legal environment prevail, CG is likely to be strengthened by the pressure from minority shareholders to increase disclosures.

Also, Gisbert and Navallas (2013) empirically investigated to what extent that the role of independent directors in a strong legal framework that promotes transparency and governance mechanisms has related to management's voluntary disclosure in Spain where concentrated ownership prevail. Their results showed that capital concentration does not outweigh the role of independent directors, whose presence enhances transparency and accountability through reporting information beyond that required by accounting regulations. Also, in spite of the potential agency conflicts that may arise in an institutional setting with high ownership

concentration, the legal environment guarantees the appointment of genuinely independent directors that represent the information interests of minority and majority shareholders alike.

## **2.3 Corporate Governance and Financial Reporting Practices in Thai Context**

### **2.3.1. Corporate Governance in Thailand**

With the benefits of the CG stated above, unsurprisingly, an increasing number of countries have worked on the development of CG based on the guideline. Several organizations and/or researchers also use this guideline as a basis to develop their measuring tool to assess the corporate governance of companies in particular countries (ADB, 2013; Cheung et al., 2006).

In Thailand, a ‘Corporate Governance’ (CG) concept has been discussed widely after the Thai economic bubble explosion in 1997. The Thai government believes that this concept is one of important mechanisms for Thai economic recovery and the country’s credibility, for it establishes the corporate control power balance and transparency. Therefore, the concept was first unavoidably introduced to Thai companies listed in the Securities Exchange of Thailand (SET). The Thai Securities Exchange Commission (Thai SEC) and the Securities Exchange of Thailand (SET) are the two main organizations playing significant roles in improving CG practices, particularly in listed companies. They have publicly promoted the CG on their websites and issued many regulations and recommendations for Thai listed companies to comply with.

The Thai SEC (2015) has summarized related laws and regulations to the CG practices of Thai listed companies. The first significant law providing a general basis of CG in Thai companies is Public Limited Company Act B.E. 2535 (1992). It prescribing basic rights of shareholders, i.e., rights to vote, rights to give a proxy, measures for accommodating shareholders in exercising rights, for example, specifying detailed information in letters to shareholders’ meetings, providing a proxy letter that allows proxy holder to vote for shareholders in a significant matter that might affect the company’s operation such as capital increase and acquiring or transferring an entire or part of business. It also states broad duties and responsibilities of the board of directors which should be performed with prudence and integrity. Another important law is Securities and Exchange Act B.E. 2535 (1992) regulating particularly the Thai listed companies. It specifies additional roles of shareholders and measures for investor protection, e.g., rights to propose agenda prior to the shareholders’ meetings, and prescribes further qualifications of the board of directors and executives and their performance of duties from the Public Limited Company Act B.E. 2535 (1992).

Several regulations requiring CG practices in Thai listed companies have been issued by the Thai SEC. For example, the Notification of the Capital Market Supervisory Board No. TorChor. 28/2551 (2008), relating to an approval for issuance and offering for sale of shares, indicates the

qualifications concerning corporate governance for approval of issuance and offering for sale of shares. These qualifications include, for example, the clear and fair shareholding structure with no conflicts of interests among the board of directors, executives and major shareholders, equal treatments and protection of investors' right by management, the qualified board of directors and executives who understand well in their responsibilities toward shareholders, the check and balance system of the board structure, the sufficient and fair information disclosed in support of investment decision-making, and the financial statements prepared in accordance with the generally accepted accounting standards and audited by an SEC-approved auditor.

Another regulation is the Notification of the Capital Market Supervisory Board No. TorChor. 44/2556 (2013), relating to rules, conditions and procedures for disclosure regarding financial and non-financial information of securities issuers. It mainly states that information needed to be disclosed should be accurate and completed and should also be in the specified periods. The company's corporate governance disclosure is required unless the company explains its reasons for not disclosing that information.

Regarding the SET, its role in supporting the CG has started since 1995 and strictly performed since the early 1998 with various promoting mechanisms. The SET regulations, notifications and policies have been issued to complement to the SEC regulations and several working groups have been established to further encourage the compliance of CG. For instance, since 2000, the Thai SEC has required all listed companies to have an audit committee for supervising the financial reporting process (Jaikengkit, 2002) and thus, the SET issued the policy No. Bor.Jor./Phor. 14-00, updated in 2006, strongly requiring an appointment of audit committee and other regulations and recommendations of the committee best practices, such as the SET policy No. Bor.Jor./Ror. 25-00 of the best practice guidelines for audit committee suggesting basis practices about audit committee (e.g., objectives, qualifications, composition, independence, duties and responsibilities, and others) and the Notification of SET No. Bor.Jor./Ror. 01-04 (2015), replaced the Notification of 1999 and 2008, specified the qualifications and scope of work of the audit committee, have been issued, following the policy. The SET also specified 15 principles of CG to be disclosed in corporate annual report as the supplement to the Notification of the Capital Market Supervisory Board No. TorChor. 44/2556 (2013), relating to rules, conditions and procedures for disclosure regarding financial and non-financial information of securities issuers. The SET has also issued the policy statement of the code of best practices for directors of listed Companies, indicating roles and responsibilities of directors in a listed company.

For the working groups, in 2000, the SET has set up the 'Good Corporate Governance Committee (GCGC)', comprised of professionals from various organizations. The GCGC had delivered a guideline for reporting on corporate governance, which the SET considered one of starting points for the development of transparency and CG recognition in Thai capital market. Later, in 2002, the SET has established the Corporate Governance Center to help listed

companies develop their corporate governance system. The Center provides consulting services to and exchanges ideas about corporate governance practices with directors and executives of listed companies, as well as those of firms preparing to be listed companies (SET, 2016).

Apart from shaping laws and regulations to promote the CG practice, the Thai government has also employed other campaigns. It had announced the year of 2002 as the ‘Compass to good corporate governance’ year and established the National Corporate Governance Committee (NCGC). The NCGC, consisting of representatives from government and private sectors, is responsible for promoting the principles of good corporate governance and ensuring delivery of concrete outcomes. The six subcommittees have been created, including (1) Law Amendment and Enforcement; (2) Accounting Standard; (3) Corporate Governance of Listed Companies; (4) Corporate Governance of Financial Institutions; (5) Corporate Governance of Securities Companies and (6) Education and Public Relation. These subcommittees have been successful of their actions in delivering the good CG, such as the amendment of SEA B.E. 2535 (1992) in 2008 for the matters, for example investors’ interests protection, scope of duties and liabilities of directors and management, additional supportive mechanism for effective enforcement, and the SEC’s organization for flexibility and independency (SEC, 2010).

Another campaign is that the government has supported the SEC to cooperate with industry organizations in presenting awards for the companies with good corporate governance, and in performing related activities in order to encourage others to adopt similar practices into their operations. Several awards and CG assessments by various parties, such as the SET Award, the Board of the Year Award, and CG Report by the Thai Institute of Directors, have been initiated (SEC, 2010).

Several guidelines issued by domestic and international organizations have also been introduced to Thai listed companies since 1998 and the most followed guideline is from the Securities Exchange of Thailand (SET). The guideline, followed the OECD guideline (2004), was first introduced in 2006 and minor modified in 2012, based on the ASEAN CG Scorecard, used to assess CG of listed companies in ASEAN countries.

The guideline consists of five principles and suggests the best practices of how to carry out for each one. First, it indicates the rights of shareholders. In this section, the basic rights of shareholders are specified, including the right to buy, sell, or transfer shares, share in the company’s earnings, timely and regularly obtain relevant and sufficient corporate information, participate and vote in shareholders meeting in the basic matters, such as removal of board members, external auditors appointment, and any transactions required by laws and regulations for shareholders’ consent, e.g. dividend payment and capital increases or decreases. Also, the shareholders should be fully informed relevant information regarding their rights, such as the agenda and procedures of the meeting. Furthermore, their rights should not be violated by management. To achieve this principle, the guideline recommends the duties of board of

directors in the shareholders meeting, procedures on the meeting date and how to write the minutes. For example, in practice, the board should disclose the corporate policies of the meeting and facilitate shareholders' participation and voting by avoiding any actions that hinder shareholders from conveniently exercising their rights. Also, all directors should attend the meetings and high technology should be applied on the meeting date to prevent the delay in the registration, ballots and the process of voting results.

Second, the guideline suggests the equitable treatment of any types of shareholders, including those with management positions, non-executive shareholders, and foreign shareholders, from the board of directors and management in both shareholders meetings and their performance in operation. The board should also set procedures to prevent the use of inside information for abusive self-dealing and be reported by all directors and executives whether they and their related parties have any interest in any transaction or matter directly affecting the company. When the minority shareholders' rights are violated, they should be redressed. In practice, the guideline recommends, for example, the release of all related information, such as annual general meeting notice and meeting procedures and voting criteria, before the shareholders' meetings, the establishment of procedures for the nomination of candidates by minority shareholders, and the submission of all directors' and executives' ownership report to the board and disclosure of such information in annual report.

Third, the guideline suggests the role of stakeholders with the principle that the board of directors should treat them fairly in accordance with the legal rights and facilitate corporation between the company and its stakeholders in order to create wealth, financial stability and sustainability of the firm. Stakeholders refer to customers, employees, suppliers, shareholders, investors, creditors, community the company operates in, society as a whole, the government, competitors, and external auditors. The guideline indicates that the board should provide mechanism that facilitates the involvement of stakeholders, such as communication channels to report irregular matters to the board. In practice, it suggests several ways to complete this CG component. For example, the board should have an explanation of suppliers selection, efforts to interact with the communities in which the company operates, anti-corruption programs and procedures, and efforts to address customer health, safety (including security), and indemnification across the life cycle of a product or service.

Fourth, the guideline recommends the principle of disclosure and transparency. The principle is concerned what and how information is presented to interested parties. It identifies that the board of directors should certain that all relevant and important information, both financial and non-financial, is disclosed correctly, sufficiently, and on a timely basis and is transparent with available channels to communicate fairly and trustworthy. In practice, the guideline suggests particular information to be disclosed, such as a summary of the firm's CG policy, code of ethics or conduct, risk management policy, and corporate social responsibility policy as approved by the board, together with steps taken to implement such policies and identification of and reasons

for each case of non-compliance, the board responsibilities concerning the company's financial reports alongside the auditor's report and audit and non-audit fees. The guideline also recommends minimum information disclosed on a company's website.

Finally, the guideline indicates the responsibilities of the board of directors who plays the significant role in corporate governance in ensuring an achievement of the company's best interests and is accountable to shareholders and independent of management. The guideline suggests that the board should have leadership, vision, and independence in making decisions for the best interests of the company and all shareholders. This should be done on the condition that the board has obtained sufficient, relevant, and accurate information. The guideline also recommends the structure of the board that should consist of directors with various qualifications, which are skills, experience, and expertise being useful for the company. It specifies that at least one non-executive director having prior working experience in the major industry the company is operating in and an appropriate number of its members should be at least 5 and no more than 12 directors.

The guideline explains, in detail, for independent directors that the number of independent directors should meet or exceed SEC requirements. The remaining directors should be representatives of each group of shareholders; the number of directors should be proportionate to the ownership of each group. The independent directors should make up more than 50% of the Board where: (a) the chairman of the board (the "Chairman") and the chief executive officer (or equivalent) (the "CEO") is the same person; (b) the chairman and the CEO are immediate family members; (c) the chairman is part of the management team; or (d) the chairman is not an independent director.

It also further describes the qualification of directors that each board member should hold the maximum of five board seats in listed companies simultaneously because directors with multiple board memberships could have no sufficient time to perform their duties and consequently lessen their effectiveness. The information about board memberships of individual directors should also be disclosed publicly. Furthermore, in selecting the board members, the transparent procedures should be established. In case that there are special topics to be addressed, the board should set up specific task groups to work on it for the board's efficiency and effectiveness.

Apart from audit committee required by the SET listing rules, the guideline recommends two other committees to be established. The remuneration committee is responsible for setting the criteria and the form of payment to directors and top executives and thus, its members should be independent, especially the chairman. Another committee is the nomination committee, which is responsible for setting the criteria and process of nominating board members and top executives, selecting qualified candidates according to the predetermined criteria and process, and presenting the results to the board and thus, the members should be entirely independent. These two

committees should have at least two meetings a year for consideration of any matters to achieve their responsibilities assigned by the board.

In addition, the guideline suggests the roles and responsibilities of the board in detail. They cover reviewing, monitoring, following up, governing, writing, approving, setting up, and considering all key business matters, such as the mission and vision of the company, the compliance of management on corporate policies and plans, internal control and risk management, and corporate governance policies. Also, the guideline recommends that the board meetings should be scheduled regularly. Although the guideline suggests the board meetings to be organized according to appropriateness to the nature of company and the board obligations and responsibilities, it indicates that the board should meet six times a year. The board should act to ensure that all involving positions, such as executives and management team, attend the meetings and relevant information is provided to all participants in the meeting.

The guideline further suggests the self-assessment of the board of directors. The assessment should be done regularly, at least once a year and both as a whole and on an individual basis. The assessment by the external profession should also be undertaken at least once every three year. For the benefits of the board, remuneration and training, the guideline indicates that the remunerations for both the board and management should be reasonable and appropriate for their responsibilities and performance. Also, the board should organize necessary training courses for internal parties in order to ensure that their skills and knowledge be adequate for work efficiently and effectively.

According to other related CG practices, the SET has published the best practices of good corporate governance to guide listed companies, in forms such as the Best Practice Guidelines for the Audit Committee (1999) and the SET Code of Best Practice for Directors of Listed Companies (1998). The first set of guidelines further improved by the Thai SEC in 2010 (SEC, 2010a). It indicates an audit committee's functions and responsibilities, its composition, qualifications, mandate, and methods of communication with internal and external auditors. The main suggestions are that the committee should consist of at least three members who are all independent and at least one member should have accounting/financial expertise. The committee should also set up the meetings quarterly. The second set of guidelines on best practice suggests the composition of a board of directors, their roles and responsibilities, meetings, directors' remuneration, and their appointment. These guidelines are recommendations for listed companies and as such the companies may or may not comply with them.

Several surveys have been conducted to review Thai CG. The continual improvement of CG in Thailand has been evaluated by several organizations since its dramatic development started. With the ADB support, Capulong et al. (2000) studied the corporate governance in East Asian countries, including Indonesia, Republic of Korea, Malaysia, Phillipines, and Thailand. They have reported that in these Asian countries, their corporate governance practices contain several

weaknesses, such as ineffective board of directors, weak internal controls, lack of adequate disclosure and poor enforcement. These weaknesses are caused by highly-concentrated ownership structure, excessive government intervention, small capital market, and the lack of legal and regulatory framework for investor protection. The Asian Development Bank (ADB) survey suggests that Thai listed companies have not followed the SET guidelines. The survey reveals that in Thailand, the chairman of the board of directors in about 71 percent of 43 listed non-financial companies was a member of the top management team (Capulong et al., 2000). In 2011, ADB followed the improvement of CG in Asian countries by incorporating with the ASEAN Capital Markets Forum to assess the CG according to self-constructed balance scorecard based on OECD concept and the first report was issued in 2013. CG in six countries; Indonesia, Malaysia, Philippines, Singapore, Vietnam, and Thailand, were assessed. For Thailand, 100 listed companies were in the survey and the report indicates that the scores of 'role of stakeholders' and 'responsibilities of the board' are lower than other parts and thus need to improve. Continuing the assessment, in 2014, ADB published the second report on CG assessment among six Asian countries. Thailand received higher scores and the score of 'role of stakeholders' is still the lowest. The 'responsibilities of the board' has slightly improved and thus together with 'role of stakeholders, there are areas for improvement involving, for example, the disclosure of board activities and the information related to stakeholders. The ADB concluded in its 2013 and 2014 report that a company should not only set effective corporate governance policy, but also apply consistent procedures in disclosing its existing corporate governance policy and practices.

The Asian Corporate Governance Association (ACGA), in collaboration with Credit Lyonnais Securities Asia (CLSA), conducted the survey of corporate governance in 582 listed companies in 11 Asian countries and published the CG Watch 2007 to reveal the quality of their governance. The ACGA questionnaire contains 87 questions grouped into five categories: rules and practices, enforcement, political and regulatory environment, accounting and auditing standards, and CG culture. The results show that only Taiwan and China have increased their overall score of CG quality from 2005 to 2007 while the score of other countries, including Thailand, have decreased. Thailand has been ranked eight of total 11 countries with the score 47% in 2007 (50% in 2005), lower than Hong Kong, Singapore, India, Taiwan, Japan, Korea, and Malaysia. Continuing the survey in 2010, ACGA reports the increasing overall CG scores of Thai firms. Although the CG enforcement gains the higher score than that in 2007 but its score is the lowest, followed by the CG culture. The report indicates that the enforcement is improved due to enhanced shareholders rather than regulatory activities, implying a lack of strict enforcement in practices. Furthermore, the report suggests that although companies and investment community are active in structuring good CG, other actors in business have not shown much attention. In 2012, another CG report is published and Thailand received higher score than the 2010 report. However, the CG enforcement is still in a concern and CG culture is required to improve, particularly in public corruption.

In Thailand, the Institution of Directors Association (IDA), with the support of the Securities Exchange of Thailand (SET) and the Thai Securities Exchange Commission (Thai SEC), has surveyed the quality of corporate governance of Thai listed companies by applying the OECD principles since 2001. Its results have ranked Thai listed companies into five groups according to the score: Pass (50-59%), Satisfactory (60-69%), Good (70-79%), Very good (80-89%), and Excellent (90-100%). The survey has not covered all listed companies but from its start, the number of listed companies joining the survey increase continually. In 2015, there are 526 listed companies participating in the survey. The surveys show that Thai listed companies have improved their CG continuously. Recently, the 2015 survey reports that Thai firms have the highest average score of the 'rights of shareholders', followed by the 'disclosure and transparency'. On the other hand, the core of 'responsibilities of the board' is the lowest, followed by the 'role of stakeholders. This result is agreeable with the ADB report published in 2014.

From the surveys by several institutions, CG in Thailand still has not shown the robust CG practices. The CG Watch by ACGA has reported that in Thailand, the areas of enforcement, and CG culture have the low score. These weaknesses suggest that the improvement of CG practices by Thai companies will be time-consuming although the CG rules and regulations are in the good shape, suggested from the high score of accounting-and-auditing-standards section and the moderate score of the rules and practices part.

At present, the government still initiates several seminars and meetings to encourage Thai companies to comply with the guideline of good corporate governance. Therefore, it will be interesting to investigate the changes in CG practice by Thai companies and to what extent the governance is an important mechanism in improving Thai financial reporting practices.

### **2.3.2. Financial Reporting disclosure in Thailand**

Thai history suggests that financial reporting practices slowly improved along with the development in governmental accounting, taxation and business. Laws and regulations are the main mechanism to improve the practices. There are three main laws and regulations involving financial reporting practices; the Public Limited Companies Act, the Securities and Exchange Act, and the Civil and Commercial Code. The SEC and SET regulations and announcements are on the secondary level of regulatory requirements. The Thai Accounting Standards (TASs) and Thai Financial Reporting Standards (TFRSs) are another main source to require minimum financial disclosure.

#### *2.3.2.1. Financial Reporting disclosure in Thai Regulations*

The first legislation connected with financial reporting is contained in the provisions of Book III (specific contracts) of the Civil and Commercial Code. The legislation specifies the main criteria

for preparing a financial report and indicates minimum accounting requirements for business entities. The law requires that limited companies must keep accurate and orderly accounts to protect the interests of relevant parties and facilitate fair tax collection. All limited companies must annually prepare and hand in financial statements audited by certified auditors to the Department of Business Development (DBD) of the Ministry of Commerce, and to shareholders.

When the capital market rapidly grew, the Securities Exchange of Thailand Act and the Public Companies Act were issued to regulate listed companies. The two Acts were revised periodically. The main ones are the revision in 1992, the Securities Exchange of Thailand Act (SEA) B.E. 2535 and the Public Companies Act (PCA) B.E. 2535. In the PCA, public companies are required to prepare not only financial statements, according to the legislation, but also their annual report. Additionally, under the SEA, section 56, a listed company is required to prepare and submit periodic reports presented in Table 2-1.

**Table 2-1** A summary of the periodic reports requirement

Information required	Filing period after the accounting period ends
1. Audited annual financial statements (submission of Q4)	3 months
Audited annual financial statements ( no submission of Q4)	60 days
2. Reviewed quarterly financial statements	45 days
3. Annual report	110 days
4. Disclosure report on additional information (Form 56-1)	3 months

**Source:** The Stock Exchange of Thailand (2007), Disclosure Manual, [online], available: [https://www.set.or.th/en/regulations/supervision/files/disclosure\\_manual\\_en\\_07.pdf](https://www.set.or.th/en/regulations/supervision/files/disclosure_manual_en_07.pdf) [webpage], access: July 2016

Moreover, in section 57, the Act requires non-periodic reports from the listed companies. The non-periodic reports are produced when they have any transactions that affect or are likely to affect the rights of securities holders or the decision-making on investment or the changes in their securities' prices.

Despite the legal requirements of financial reports preparation, before 2000, no laws define items or specify accounting methods by which these items are to be measured but there were Thai accounting standards (TASs) issued by the Institute of Certified Accountants and Auditors of Thailand (ICAAT, presently changed to the Federation of Accounting Profession: FAP) available for companies to voluntarily apply for financial reports preparation. Later, the Accounting Act B.E. 2543 (2000) was issued, replacing Accounting Act B.E. 2515 (1972) in order to enforce compliance with the TASs issued by the FAP. The Act also states the mutual responsibilities of financial reporting preparers and accountants and the penalties for non-compliance.

In addition to the SEA and PCA, listed companies are also subject to financial reporting requirements in the capital market regulations issued by the SEC of Thailand and SET. The regulations, generally, require listed companies to disclose information that has not been indicated or clarified in the Public Companies Act and SEA. For instance, the SET notification (Bor.Jor./Por. 11-03) requires listed companies to disclose additional information about capital structure in the capital-increase report form. Furthermore, the SET notification (Bor.Jor./Por. 21-00) was published to clarify the disclosure requirements of any events which have an impact on the rights of shareholders or their decision-making (section 57 in the SEA), regarding the issue of listed companies' assets.

There are also several enforcement mechanisms that the SEC and SET apply to prevent non-compliance. All listed companies are required to have authorised auditors to verify their financial statements and the auditors must be approved by the SEC. Furthermore, since January 2000 the SEC has required all listed companies to have an audit committee for supervising the financial reporting process (Jaikengkit, 2002). In addition, when listed companies fail to comply with the regulations, they can be suspended or delisted from securities markets.

Thai accounting standards (TAS) and Thai financial reporting standards (TFRS) are also the two main mechanisms in shaping financial reporting disclosure in Thai listed companies. Similar to other developing countries, Thai accounting standards have been developed using western accounting standards as a model. In the early stage of the TASs development, the ICAAT examined the IASs, the UK standards, and the US pronouncements in formulating the TASs (Angus-Leppen, 1997). Consequently, Thai standards had a combination of accounting practices from western accountancy bodies. The early standards were more influenced by US standards, but since the IASC was established in 1973, its standards have had the most pronounced impact on the TASs (Saudagaran and Diga, 2000).

From 1972 when the first Recommended Accounting Concepts and Principles were issued to 1997, Thai accounting standards were issued erratically. After the crisis, the government actively involves in the development of accounting standards and required the ICAAT to fully adopt IASs in order to facilitate the inflow of foreign capital from both international financial institutions and foreign private investment. However, the ICAAT decided to issue its TASs based on the IASs but retaining the ability to alter or adapt the standards, meaning that the ICAAT adopts the IASs as the TASs but it may also adapt the standards if necessary. The adoption of the IASs refers to the use of the standards without significant changes in their content whereas adaptation means substantial changes in content of the standards.

In the same period of the late 1990s, the structure of accounting profession bodies was also dramatically changed. The Accounting Professions Act B.E. 2547 (2004) was issued and aims to restructure the two accountancy bodies—the Board of Supervision of Auditing Practices (BSAP) and the Institute of Certified Accountants and Auditors of Thailand (ICAAT)—in order to

govern all areas of the accounting profession effectively, and provide legal back up for the accountancy bodies.

The Act set up two new accountancy bodies: the Board of Supervision of Accounting Professions (BSAccP) and the Federation of Accounting Professions of Thailand (FAP). The BSAccP replaces the BSAP and works under the Department of Business Development (DBD)—the Ministry of Commerce. It is mainly responsible for supervising and approving the FAP tasks. The FAP replaces the ICAAT and is responsible for checking and controlling accounting professionals with the authority for giving or revoking auditors' and accountants' licenses, publishing the ethical guidelines for auditors and accountants, and issuing accounting and auditing standards. Under the FAP, the Thai Accounting Standard Board (TASB) and the Committee of Accounting Ethics Supervision (CAES) were set up. Other committees, such as the Corporate Governance Committee and Auditing Standards Board, can also be established if the FAP considers them necessary. Sutthachai (2001) considered that this restructuring would strengthen the power and the status of professional accountancy bodies, as the accountancy bodies work under government power. The Thai accounting professions expect that this could result in raising the standard of Thai financial reporting.

Since the change in structure of accounting profession bodies, the FAP has decided to alter the policy of ICAAT in adapting IFRSs. It decided to fully adopt IFRSs rather than adapt the standards and consequently, since 2009, the FAP issued new standards based on IFRSs. The first set of Thai accounting standards followed the IFRSs bound volume 2009. After the first set, the standards have been revised in accordance with the IFRSs bound volume 2012, 2013, and 2015. Currently, the TASB has revised TASs and TFRSs adopted the IFRSs bound volume 2016. One of the main standards related to disclosure is the standard for the presentation of financial statements (TAS 1). The standard explains accounting principles and assumptions and the components of financial statements. It indicates that the financial statements consists of (1) a statement of financial position as at the end of the period; (2) a statement of comprehensive income for a period; (3) a statement of changes in equity for the period; (4) a statement of cash flows for the period; (5) notes to financial statements; and (6) a statement of financial position as at the beginning of the earliest comparative period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements. The standard also presents the minimum accounting items that should be in the components of financial statements. Other information needed to be disclosed if those items show the materiality to users of financial statements.

Apart from the disclosure of financial statements required by TAS 1, other standards which address each accounting issue also require a company to disclose particular information related to that accounting issue. For example, TAS 16, dealing with accounting for the property, plant and equipment (PPE), requires the company to disclose the measurement bases used for determining the gross carrying amount, the depreciation rates, the gross carrying amount and

accumulated depreciation, a reconciliation of the beginning gross carrying amount and ending one, and the existence and amounts of restrictions on title, and property, plant and equipment pledged as security for liabilities.

### *2.3.3. Studies of Corporate Governance and Disclosure in Thailand*

CG in Thailand has received much attention from researchers after the economic crisis in 1997, for many studies (Phan, 2001; Cabalu, 2005; Claessens et al., 2000; Khan, 1999; Fox, 2002; Persons, 2006; Johnson et al., 2000) pointed out that its weakness is one of the main reasons of the crisis. Therefore, some researchers (Aronson, 2013; Claessens and Fan, 2002; Fox, 2002; Khan, 1999; Khan, 2003; Rajablu, 2016; Reddy, 2009; Millar et al., 2005; Khongmalai, et al., 2010) continually and rationally discussed either the Asian (including Thailand) CG model or particularly Thai model and made a suggestion for the improvement. For example, Khan (1999, 2003) discussed existing CG framework and reviewed the family-based corporate governance structure of Asian firms. Aronson (2013) reported the penal discussion relating to the Asian CG model which seems to be a mixed system. Recently, Rajablu (2016) reviewed the CG models based on Western concepts and proposed the appropriate CG framework for Asian context. Overall, these studies agreed that Asian CG structure needed to be improved in monitoring mechanisms for the board activities by deteriorating the power of family-controlling shareholders.

Also, because of the weaknesses of CG structure, in financial recovery plan, the CG reformations in Thailand as well as in other Asian countries were strictly required and observed closely by several international parties (e.g. ACGA reports and ADB reports) and by many researchers. Several researchers (Claessens and Fan, 2002; Krishnamurti et al., 2005; Cabalu, 2005; Cheung and Jang, 2008; Persons, 2006) reviewed the development of Thai CG either individually or together with other Asian or ASEAN countries. Claessens and Fan (2002) reviewed the Asian CG literature and reported that typical ownership characteristic in Asian corporations was family-owned, causing the agency problems between managers and outside shareholders and among shareholders and consequently raise the risk of expropriation of minority rights. They further reviewed other CG mechanisms that might decrease such problems, such as board of directors, external auditors and dividend policy and revealed that these CG characteristics might not also be able to lessen the problems. They concluded at the time of their review that Asian countries, including Thailand, needed to be concerned of the lack of protection of minority rights. Mitton (2002) and Krishnamurti et al. (2005) also agreed with this view.

Chuanrommanee and Swierczek (2007) reported the improvement of CG in 2002, after the 1997 economic crisis, in financial institutions among three countries: Thailand, Malaysia and Singapore, by considering their disclosed information. Their results showed that regarding Thailand, the strong aspects of CG were the right of shareholders and the creditor protections which were well indicated similar to the international requirements, on the other hand,

transparency and information disclosure and board governance structure were weak and not compatible with international practices. Their research results suggested that after 5 years of CG improvement, Thai CG structure had not been much developed.

Contradictorily, Persons (2006) reviewed only the improvement of Thai CG in general and reported that Thai CG has taken much progress by using both voluntary and mandatory approaches. The voluntary approaches include best practice guidelines for boards of directors and audit committees, and corporate governance rating. The mandatory approaches include revising laws and regulations to enhance the rights of minority shareholders and creditors, to increase the accountability of the board of directors, and to make accounting and auditing standards consistent with the international accounting standards and international standards of auditing. However, further improvement is needed with respect to minority shareholder protection and education, the responsibilities of the BOD versus top management, the BOD structure of financial institutions, further amendments to the new Bankruptcy Act, the need for whistleblower law, the valuation of certain assets, and the compliance with the Buddhist precepts.

Cheung and Jang (2008) later reported overall CG performance of corporations, according to information disclosure in 2005, in 9 East-Asian countries: China, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, South Korea, Taiwan, by using a scorecard based on five OECD principles and a questionnaire surveying perception of fund managers and analysts about implementation and enforcement of corporate governance rules. Based on the scorecard, they found that regarding Thailand, the score of 'role of stakeholders' part was the highest, compared with other eight countries, and of 'rights of shareholders' was low. The low score was due to the limited roles of shareholders in various aspects, such as a limitation of the ability of minority shareholders to be represented on the board and the inability to obtain board meeting minutes and disclosure of board attendances to monitor board activities. Overall, Thailand was ranked either the fourth or the sixth (depended on the weighting methods) among nine countries. According to the survey results of the perception of fund managers and analysts toward CG practices in these nine countries, Thailand was ranked the fifth. The CG score and survey rankings of Cheung and Jang (2008) suggest that in Thailand the new CG rules and regulations was developed together with the enforcement of CG practice, however, with the low ranking, Thai CG has moved slowly to get along with the international principles.

Whereas several researchers had concentrated on overall CG performance, other researchers determined particular aspects of CG framework. Some studies (Cabalu, 2005; Suehiro and Wailerdsak, 2001; Wiwattanakantang, 2001) reported the changes in ownership structure, one of various aspects of CG, after the 1997 crisis. These changes include the ownership concentration and composition. Before the crisis, Suehiro and Wailerdsak (2001) and Cabalu (2005) indicated that ownership of Thai corporations is concentrated. Suehiro and Wailerdsak (2001) found that 26% of Thai family-owned listed companies were forced to change their ownership patterns into

other types, such as widely-held groups, foreign-owned, and Thai corporations during the crisis period, while Cabalu (2005) showed that the average size of equity share of the top five largest shareholders was 56% and about 62% of all publicly listed companies in Thailand were family controlled, but after the crisis, family-owned businesses were lessened and more government and foreign ownership appeared. Despite the evidence of changes in ownership structure in many Thai listed companies after the crisis, other researchers (Suehiro and Wailerdsak, 2004; Tantivanichanon et al., 2015) claimed that the majority of these companies were still family-owned. Suehiro and Wailerdsak (2004) showed that in 2000, 42.3% of total listed companies were owned by family members and/or their relatives and in fact, later Tantivanichanon et al. (2015) reviewed Wailerdsak's (2008) work revealing that in 2006, the proportion of family-owned businesses has increased to 50.4 percent.

The shareholders' participation and protection is another aspect of CG among Asian countries that receive much attention to determine its improvement. Before the crisis, in Thailand, research (Cabalu, 2005) reviewed that minority shareholders' participation and protection were limited and not be facilitated for exercising due to inadequate laws and regulations and management ignorance as a result there was a lack of monitoring management from minority shareholders. However, Suehiro and Wailerdsak (2001) argued that the limitation was caused by minority group itself, meaning that the group contained friends and/or relatives of family owners and so it has no intention of strictly supervising corporate activity. Cabalu (2005) also criticized the effectiveness of independent directors, who were likely to be friends or relatives of controlling shareholders in practice, and the creditability of accounting and auditing standards that were not compatible with international standards.

However, after the crisis, the research (Cabalu, 2005; Limpaphayom and Connelly, 2004) determined that these weaknesses had been addressed. The Thai government has implemented new measures to protect shareholders' rights and interests, including the improvement of accounting and auditing standards and SET regulations requiring listed companies to establish audit committees and to appoint independent directors to company boards. The survey results of Limpaphayom and Connelly (2004) confirmed that most of Thai firms actively facilitated the shareholders to exercise their legal rights in corporate decision-making, but there were the main areas for further improvement, such as proxy voting and timely receipt of materials before shareholders' meetings. Also, the survey results showed that independent directors were active, involved, and contributing in board discussion during their tenure, but in practice, their roles were likely to be still limited by such factors as cultural norms, acceptance of responsibility/blame, and the role of the CEO in continuing the relationship with independent directors.

The other perspective of Thai CG that has been individually determined by several researchers is audit committee. After the SET requirement of setting audit committee and the issuance of its best practices followed international guidelines, Tengamnuay and Stapleton (2009) investigated

the development stage of audit committee roles and responsibilities and suggested that in Thailand, several aspects of audit committee practices are at the early stage, as its effective practices of functions and responsibilities are questioned although audit committee performs its role according to international guidelines. For instance, the committee members are required to be independent so that their monitoring responsibility is efficiently performed, but Tengamnuay and Stapleton (2009) argued that although the appointed members are not visibly related to some corporations, they tended to have a close connection to management and so might impair their independence. They thus considered that audit committee has taken only a 'passive' role in monitoring corporate activities and assisting the board to make decisions.

Furthermore, Fan and Wong (2005) consider the role of external auditor in CG framework. With high ownership concentration, external auditors are expected to play its role as monitoring mechanism to reduce agency problems in Thailand. They investigated this role among East Asian countries, including Thailand, and found that firms with agency problems embedded in the ownership structures are more likely to employ Big 5 auditors, suggesting that external auditors do have a corporate governance role in emerging market, including Thailand.

While the CG development in Thailand has been observed by many studies, its benefits of implementation have also been increasingly investigated, for example its impact on firm performance and then economic growth (see Claessens and Yertoglu (2013) for the recent literature review). These studies have investigated either Thai CG influence individually or together with other Asian countries. Among the studies, Ananchotikul and Eichengreen (2009) investigated how well countries over the world are doing in strengthening CG and the CG impact on its economic performance. They used three indicators, including accounting information disclosure, earnings smoothing, and stock prices, to measure CG practices in countries. They found that, regarding Thailand, CG practices tended to dramatically increase during 1995-2005. They further explain that in Asia, the improvement appears to be driven mainly by increases in accounting transparency and an increasing correlation between the accruals and cash-flow proxies. They also found that the countries with stable political system, prominent foreign investors, and a common law tradition, tend to have the noticeable development of strong CG practices. In Asia, however, their results pointed out that dominance of bank finance and the number of family-owned businesses might be the factors deteriorate CG quality. Their research results also revealed that CG practices seem to be significantly related to economic performance in term of financial markets. Particularly in Asian countries, the research found the strong positive effects of CG on stock market capitalization and the number of listed companies, especially in the period after the crisis.

Many studies investigate the CG influence at the firm level. Some of them examined the CG influence on firm performance either among Asian countries (Chuanrommanee and Swierczek, 2008) or in particularly Thailand (Suehiro and Wailerssak, 2001; Dhnadirek and Tang, 2003; Limpaphayom and Connelly, 2004; Hodgson et al., 2011; Hsu and Petchsakulwong, 2010;

Jinarat and Quang, 2003; Pathan et al., 2008; Connelly et al., 2012). Various CG perspectives investigated include ownership structure (Suehiro and Wailerdsak, 2001; Dhnadirek and Tang, 2003; Wiwattanakantang, 2001; Connelly et al., 2012; Thanatawee, 2014), shareholders' right (Limpaphayom and Connelly, 2004), board effectiveness (Limpaphayom and Connelly, 2004), and board composition (Yammeesri and Herath, 2009). The mixed results have been found. Several studies (Chuanrommanee and Swierczek, 2008; Suehiro and Wailerdsak, 2001; Limpaphayom and Connelly, 2004) found no relationship between firm performance and CG whereas other (Wiwattanakantang, 2001; Dhnadirek and Tang, 2003; Hodgson et al., 2011; Tantivanichanon et al., 2015; Hsu and Petchsakulwong, 2010; Pathan et al., 2008; Yammeesri and Herath, 2009; Thanatawee, 2014) found the significant relationship.

Other studies revealed the relationship between CG and cost of equity and/or investment by using either Asian countries' data (Tantivanichanon et al., 2015; Hanazaki and Liu, 2007; Sawicki, 2009) or that of Thai listed companies (Hodgson et al., 2011; Prommin et al., 2016). Another group of research determined an association between CG and firm value either among Asian countries (Tantivanichanon et al., 2015; Attig et al., 2009; Lemmon and Lins, 2003; Mitton, 2002) or in specifically Thailand (Jaikengkit, 2004; Connelly et al., 2012; Nittayagasetwat and Nittayagaketwat, 2006).

Nevertheless, a few studies aim to determine an influence of CG on financial reporting disclosure. Sutthachai and Cooke (2009) investigated the impact of 1997 economic crisis and financial reporting practices and the relationship financial reporting practices over time and they found that the disclosure had been changed significantly partly due to the crisis and there were significant relationships between disclosure levels and firm characteristics, including firm size, leverage, ownership concentration, managerial ownership, industry type, and auditor type, but the profitability had been found no relation with the disclosure. Suttipun and Stanton (2012) studied the determinants of environmental disclosure in Thai companies and revealed that only firm size has a significant relationship with the disclosure. The result also indicates that firms with business activities involving heavily in environment seem to disclose more information than those with a few activities' involvement. The Suttipun and Stanton results are agreeable with Ratanajongkol et al. (2006) studying the corporate social reporting (CSR) among Thai companies. Ratanajongkol et al. (2006) found that firms in different sectors tend to voluntarily disclose CSR differently but the trend of disclosure is rising over time.

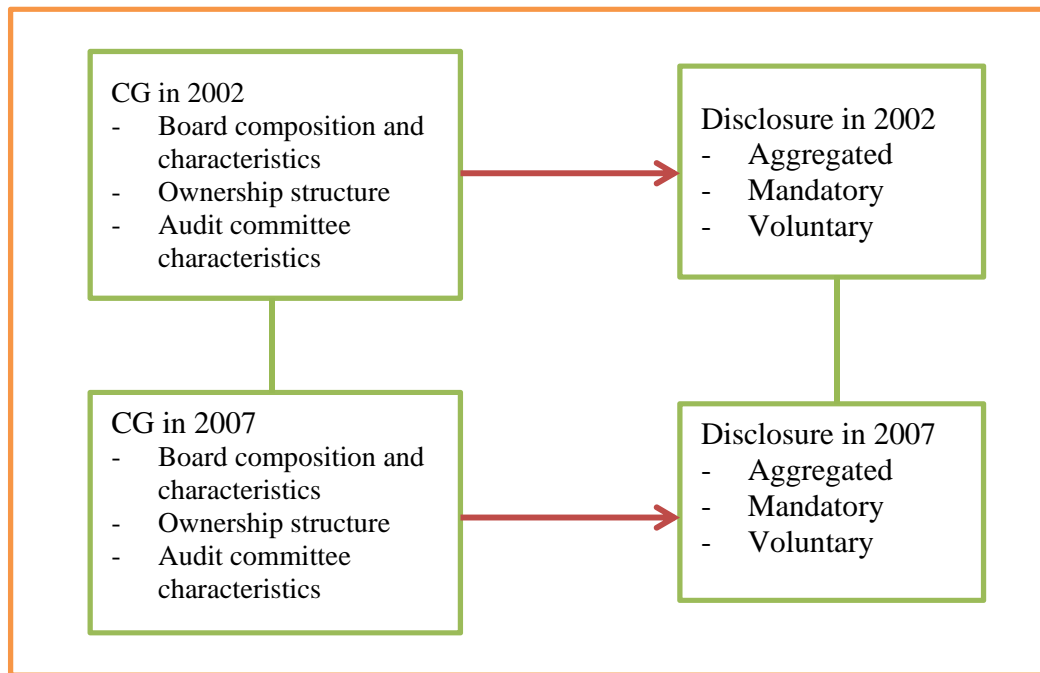
Cheung et al. (2006) investigate determinants of corporate disclosure in Thailand and Hong Kong. Regarding Thailand, they found some CG characteristics have significant association with corporate disclosure whereas the firm characteristics had no such relationships. The board members being management has a significantly negative association with the disclosure whereas board size and the percentage of independent directors are positively related to the disclosure. However, the ownership concentration has no significant relationship. Recently, Chongruksut (2015) investigated CSR disclosure in 2011 annual reports of Thai listed companies and found

that government ownership is significantly related to CSR disclosure whereas other variables, ownership concentration, foreign ownership and firm size had no such relationship.

## 2.4 Summary

The literature suggests that agency theory is the most employed in explaining the influence of CG on disclosure practices. The theory considers that there is an agency problem between owners and managers when the former give the authority to the latter to manage their resources for their wealth but managers manage such resources for their own interests. Thus, monitoring mechanisms are required to oversee management performance and CG is one of those mechanisms. It is suggested that good CG leads to high firm performance, including the disclosure practices. Many studies show the significant relationships between CG characteristics and disclosure in various countries but due to the diversity of business characteristics, the relationships are not consistent across countries (Ernstberger and Grüning, 2013). From the literature, CG characteristics found having a statistically significant association are the board composition and characteristics, ownership structure, and audit committee characteristics.

In Thailand, as CG has been improved considerably since 2000, its concept is evidently stated in corporate policy in accordance with legal and regulatory requirements but the real practices are questioned, as several international organizations reported low scores of some CG elements of Thai firms (ADB 2013, 2014; ACGA, 2012). The CG influence on firm performance, in this regard, on disclosure practice is also doubtful. Several researchers (Hodgson et al., 2011; Prommin et al., 2016; Jaikengkit, 2004; Connelly et al., 2012; Nittayagasetwat and Nittayagaketwat, 2006) investigate Thai CG and its impact mainly on financial aspects (e.g. firm value, liquidity, and cost of capital) of firms but there is a few (Cheung et al., 2006) has a spotlight on CG and disclosure practices and their results seem to be implicise. The research thus proposes the following conceptual framework.



**Figure 2-1** A conceptual framework

## **Chapter 3**

### **Research Methodology**

This chapter aims to present the research methodology applied in this research in order to achieve the research objectives that is to investigate Thai CG structure and its impact on disclosure practices. The chapter is structured as follow. First, the sample selection is explained and then the hypothesis development is presented. After that, the data collection is described, followed by the data analysis approaches.

#### **3.1 Sample Selection**

The sample is selected from the list of Thai companies listed in SET. The research obtained this list at Feb 1, 2016 containing 705 company names. To determine CG and disclosure practices in Thai companies, the sample is required to satisfy the following criteria.

First, the companies should be listed in the SET market in either 2002 or 2007 so they could be a representative of the data at that time.

Secondly, the companies should not be listed in the Market for Alternative Investment (MAI). The MAI is another capital market that SET has established to allow small and medium-sized enterprises (SMEs) to gain their capital from the public and their qualification requirements to be listed in this market are different from those listed in the main capital market of SET (later named SET market). Thus, they are probably not strictly required to disclose as full information as the listed companies in the SET market and some of their motivations to disclose could be different from the companies listed in the main market.

Thirdly, the companies should not be listed in the financial or insurance sectors because the financial transactions of these businesses are not comparable with other sectors. Furthermore, their financial reports are in compliance with additional regulations apart from general ones. Many studies (Owusu-Ansah, 1998; Sutthachai, 2006; Chau and Gray, 2010; Omar and Simon, 2011; Ernstberger and Grüning, 2013; Abdullah et al., 2015a) also followed this criterion.

Fourthly, the companies should not be under a rehabilitation plan because they are potentially involved suspension from trading in the SET and their shares are not actively traded during the plan and this may cause a distortion of CG structure and disclosure practices (Sutthachai, 2006).

The criteria scope the number of Thai listed companies that were eligible for the research to companies. Also, as the years studied are 14 and 9 years back, to obtain a full annual report of many companies is difficult. Many companies keep their annual reports for 5 years back. Therefore, the sample is excluded the companies that the research cannot obtain their 2002

and/or 2007 annual reports. Furthermore, some companies have been listed after 2007 and so no annual reports in 2002 and 2007. As a result, they are excluded from the sample. Thus, the number of sample companies in each year is reduced. Table 3-1 shows how the number of sample Thai listed companies is derived.

**Table 3-1** The number of listed companies in the sample.

	<u>2002</u>	<u>2007</u>
Total number of companies as at 1 Feb 2016	705	705
<u>Less</u> Companies listed in MAI	122	122
Companies under a rehabilitation plan	12	12
Financial and insurance institutions	119	119
Companies listed after 2002 and/or 2007	167	70
Total eligible companies	<u>285</u>	<u>382</u>
<u>Less</u> Companies with difficulty to obtain annual report	<u>151</u>	<u>146</u>
Total	<u>134</u>	<u>236</u>

Table 3-2 reports the number of sample companies by industry types in order to determine the sample concentration.

**Table 3-2** The number of sample companies by industry type.

Industry	2002		2007	
	Number of companies	Percent	Number of companies	Percent
Agribusiness	16	11.94	26	11.02
Consumer products	15	11.19	20	8.47
Industrial	22	16.42	44	18.64
Construction and real estate	25	18.66	49	20.76
Natural resources	10	7.46	22	9.32
Services	33	24.63	48	20.34
Technology	13	9.70	27	11.44
Total	<b>134</b>	100.00	<b>236</b>	100.00

From the table, in 2002, the majority of the sample is from services sector with 24.63 percent of total sample and the minority is from natural resource business. Few natural resources companies in the sample may be resulted from a few proportion of such type of companies listed in the SET. The list of SET companies reveals that there are only 39 listed companies operated in the natural resources sector which is only 5 percent of total listed companies. In 2007, the construction and real estate and services sectors are the main component of the sample with around 20 percent of total sample, whereas the consumer products sector has the lowest percentage of sample, only 8.47 percent. The reason of low percentage is that a proportion of number of companies in this sector is low and thus the sample size is small. Out of 705 listed companies as at Feb 1, 2016,

there are only 38 companies belong to this sector. It is also noticeable that only 9 percent of the sample comes from the natural resources sector. Nevertheless, the sample in both years seems to be properly scattered as the proportion of the number of companies is not much different.

## **3.2 Hypotheses Development**

### **3.2.1 Hypotheses for the changes in CG and disclosure**

Based on the review of Thai CG regulations and the support to comply with good CG by the government, the regulations have been transformed considerably. The main changes are for example the requirement of audit committee and the requirement of 15 CG principles to be disclose in an annual report. Also, the encouragement of CG compliance using reward and penalties, such as the survey of ACGA and IDA, has been conducted continually. Furthermore, the CG guidance based on the OECD principles is published and required by the SET. The pressure from international parties put on Thai companies. All of these suggest that Thai CG has moved toward the Anglo-Saxon CG model. Thus, this research hypothesizes that:

**H1: Thai CG structure, in practice, has significantly changed from 2002 to 2007.**

Based on the agency theory, when CG in a company is strong, its monitoring system is likely to work effectively to reduce the chance of agency problem occurrence, including the information asymmetry problem between management and shareholders and between the majority and minority shareholders. Several CG characteristics can stimulate management to disclose information. Also, several studies (Omar and Simon, 2011; Rupley et al., 2012) found that in a particular country, disclosure levels are likely to increase over time when financial reporting environment changes.

In Thailand, although CG concept has widely been recognized and rapidly encouraged Thai firms to implement after the 1997 economic crisis, the systematic transformation is effective in 2002 when the government marked the year of 2002 as the ‘Compass to good corporate governance’ year and many CG regulations and requirements have been introduced. As a result, the effectiveness of CG in Thai companies is likely to appear during 2002 to 2007 and this is then resulted in an increase of disclosure levels practiced by the companies. Therefore, the research hypothesizes that:

**H2: Thai financial reporting disclosure has positively and significantly changed from 2002 to 2007.**

### **3.2.2 Hypotheses for the relationship between CG and Disclosure**

Based on the agency theory, CG is one of monitoring mechanisms to help shareholders supervise management performance, including the production of financial reports. The CG characteristics

are determined in various aspects and the current research determines into three main aspects: ownership structure, board composition and characteristics, and audit committee characteristics. Several researchers (Iatridis, 2013; Cheung et al., 2006; Muttakin et al., 2012; Chau and Gray, 2010; Cong and Freedman, 2011; Gisbert and Navallas, 2013; Ernstberger and Grüning, 2013; Jiang et al., 2011; Ji, Lu and Qu, 2015; Li et al., 2012; Liao, 2011; Liao et al., 2015; Omar and Simon, 2011; Rupley et al., 2012; Samaha et al., 2012; Sharma, 2014) investigate the relationships between these aspects and disclosure practices and show that there are significant relationships between CG and disclosures. To determine to what extent CG associated with Thai disclosure practice during the period 2002-2007, the current research considers each aspect of CG as follow.

### *3.2.2.1 Ownership structure and disclosure*

Agency theory considers that when ownership and control are separated in a company, shareholders and management may have conflict of interests and thus management performs its roles for its own benefits (Jensen and Meckling, 1976). The conflicts may be reduced if there is no separation of ownership and control (i.e. management and owners are the same party), but the agency problems appear between the majority and minority shareholders (Chau and Gray, 2010) instead. Furthermore, Omar and Simon (2010) suggest that with the institutional shareholders dominated in a company, management tends to be closely monitored by institutions to ensure that management acts for a company's benefits and thus the agency problems are reduced. Therefore, the ownership structure, as a part of CG, indicate the extent of agency problems and monitoring mechanisms and this then affect disclosure practices.

#### 3.2.2.1.1 Ownership concentration and disclosure

A company with dispersed ownership structure is likely to have a separation of owners and control and thus there is a high risk of incongruent interests between the contracting parties. Agency costs incur to ensure that management will act according to the owners' interests. These costs will be absorbed by management as they will be presented in financial reports showing management performance and as a result, threaten management's remuneration (Jensen and Meckling, 1976). To reduce the costs, management is likely to disclose much information in order to communicate its accountability; consequently, lessen possibility of the agency problems between owners and management. On the other hand, a company with concentrated ownership structure tends to have no separation of owners and control and thus there is no concern about the incongruence of owners' and management's interests. Consequently, management may not need to disclose much information to relieve its accountability to the main shareholders (Abdullah et al., 2015a).

Several researchers (Liu, 2015; Muttakin et al., 2015; Samaha et al., 2012) confirmed the effect of concentrated ownership structure to disclosure practice by empirically finding the

significantly negative relationship between the two variables. That is, a company with high ownership concentration tends to disclose less information than that with low concentration. However, some (Cheung et al., 2006; Kang and Gray, 2011) found no significant association.

In Thailand, the government attempts to encourage a structure of disperse ownership among Thai listed companies by issuing regulation requiring the percentage of shares held by individuals. However, Thai firms have satisfied only the minimum requirements of the regulations. The ownership structure of more than 50 percent of listed companies is still concentrated (Wiwattanakantang, 2001, Suehiro and Wailerdsak, 2001; Suehiro and Wailerdsak, 2004). Several researchers (Suehiro and Wailerdsak, 2004; Tantivanichanon et al., 2015) agree that this ownership concentration is a common trait among Thai firms. Therefore, this research hypothesizes that:

**H3: the ownership concentration has a significantly negative relationship with disclosure practices between 2002 and 2007.**

#### 3.2.2.1.2 Managerial ownership and disclosure

Based on agency theory, if management has the same interest as owners, agency costs will reduce, because he/she is less likely to consume corporate wealth personally and will act for shareholder's benefits. Increasing managerial ownership is one of many ways to align management interests with shareholders' interests. The high percentage of managerial ownership may cause management to disclose differently in different circumstances of ownership concentration. Several studies (Liu 2015; Iatridis, 2013) consider that high percentage of managerial ownership in corporate shareholding structure is associated with much information disclosed, as such disclosure will serve shareholders' interests. This positive relationship is found among the companies with dispersed ownership structure. However, some researchers (Liao et al., 2015) reveal a negative relationship when the ownership is concentrated because management considers him/herself as a part of shareholders who protect their benefits for their own interests.

In Thailand, the ownership concentration prevails even after the 1997 economic crisis and continues constantly, as a result there is high possibility to have management from the same party as shareholders and consequently a company with high managerial ownership tends to disclose less information. The current research hypothesizes that:

**H4: Managerial ownership has a significantly negative relationship with disclosure practices between 2002 and 2007.**

#### 3.2.2.1.3 Institutional ownership and disclosure

The institutional ownership refers to the percentage of shares held by institutions in the top 10 shareholding structure. Several studies (Omar and Simon, 2011; Iatridis, 2013) suggest that a high percentage of institutional ownership implies that there is another party to perform monitoring function. Institutional owners will have a significant impact on monitoring disclosure practices in a company. Therefore, a company with high institutional ownership tends to disclose much information. Some studies (Iatridis, 2013) confirm this significant relationship whereas several researchers (Omar and Simon, 2011; Wan-Hussin, 2009) found no confirmation for this association.

In Thailand, the institutional ownership characteristic is evidently appeared after the 1997 crisis. Suehiro and Wailerdsak (2004) reveals that about 20 percent had changed their ownership structure from being dominated by family members and institutional owners had increasingly played their part. Thus, the research hypothesizes that:

**H5: Institutional ownership has a significantly positive relationship with disclosure practices between 2002 and 2007.**

#### 3.2.2.1.4 Board shareholding and disclosure

Generally, shareholders of a company set up a board of directors to monitor and supervise management performance to ensure their interests are in management concern. If there is a majority shareholder, the shareholders will select their representatives working in the board of directors from the majority and so owners and control are possibly not separated. Thus, the board is less likely to require high level of disclosure from management. Several researchers (...) confirm that a company with a high percentage of shares held by the board of directors is likely to disclose less information than that with a low percentage. Nevertheless, some (Gul and Leung, 2004) found no significance of such relationship.

In Thailand, among Thai listed, ownership concentration is commonly acknowledged and this indicates no separation of owners and control and thus, high percentage of shares held by board members may present. Thus, the research hypothesizes that:

**H6: The board shareholding has a significantly negative relationship with disclosure practices between 2002 and 2007.**

#### 3.2.2.2 *Board size and disclosure*

Board size refers to the number of members sitting in the board of directors. The good CG guidance (OECD, 2015) suggests that the board of directors is one of mechanisms that are very important in CG structure. It is directly appointed by shareholders and thus, its main responsibility is to directly monitor and supervise management performance to ensure that management work for shareholders' interests. Gisbert and Navallas (2013) suggests that too

many people on the board may make the board work being sluggish due to poor communication and decision making but too few may not have sufficient knowledge and skills in supervising management performance. The guidance has not suggested the exact number of members but indicated that the number will depend on a nature of organization.

Some researchers (Sahama et al., 2015; Gisbert and Navallas, 2013; Samaha et al., 2012) empirically found that the more number of members is in the board, the more information is disclosed by management. They explain that many members on the board of directors mean that much knowledge, skills and experiences share in monitoring management and thus much information is required to disclose for the benefits of firms. On the other hand, several researchers (Samaha et al., 2012) suggest that many number of members is in the board are less likely to motivate their participation in meetings and thus cause a poor decision making in strategic activities, including voluntary disclosure, Nevertheless, there are several researchers (Cheng and Courtenay, 2006; Liu, 2015; Cheung et al., 2006; Samaha et al., 2012) found no significant relationship between disclosure and board size.

In Thailand, the CG guidance of SET (2012) suggests the number of board members with 5-12 persons. The exact number is subject to a judgment of a company's shareholders. With the empirical results finding either significantly positive or negative associations between the size of the board of directors and disclosure practices, the research hypothesizes that:

**H7: The number of directors in the board has a significant relationship with disclosure practices between 2002 and 2007.**

### *3.2.2.3 CEO duality and disclosure*

CEO duality refers to a chairperson of the board of directors holding a Chief Executive Officers (CEO) position in a company. Gisbert and Navallas (2013) suggest that a chairperson should not work as a chairman of managing directors at the same time because the conflicts of interest may arise and thus, a chairperson of the board of directors may function ineffectively in monitoring management performance and consequently, allows management to withhold information. This has an impact on disclosure practices, that is, CEO duality may reduce information disclosed by management. Several researchers (Gul and Leung, 2004; Samaha et al., 2012; Sahama et al., 2015; Gisbert and Navallas, 2013) investigated this condition and found significant relationship between CEO duality and disclosure whereas several studies (Cheng and Courtenay, 2006; Liu, 2015; Muttakin et al., 2015; Rupley et al., 2012) reveal no significant association between these two.

In Thailand, the SET guidance indicates a similar advice to the OECD guidance and with a high ownership concentration along the period 2002-2007, a chairperson of board of directors is likely to hold a CEO position also. Thus, the research hypothesizes that:

**H8: the CEO duality has a significantly negative relationship with disclosure practices.**

#### *3.2.2.4 Family-member directors and independent directors and disclosure*

A family-owned company generally operates its own business by family members and thus the owners and control are the same party. The family members usually are the board of directors and management. Therefore, the company is not required to disclose much information to ease its agency problems (Abdullah et al., 2015a). However, for family-owned companies listed in a stock market, the minority group of shareholders exists and their rights need to be protected and thus outside/independent directors should be appointed. These directors will monitor management and ensure that the minority's benefits are not exploited by the majority and/or management. They also will require substantial information to be disclosed in order to lessen information asymmetry between the majority and minority shareholders. Several researchers (Abdullah et al., 2015a) found that the number of family members sitting on the board significantly and negatively associated with disclosure practices whereas Wan-Hussin (2009) found the positive association. Also, many studies (Iatridis, 2013; Liu, 2015; Muttakin et al., 2015; Rupley et al., 2012; Samaha et al., 2012; Sahama et al., 2015) confirm that the more number of independent directors is in the board, the more information is disclosed by management. However, Wan-Hussin (2009) found no such significance in Malaysia for segment reporting.

In Thailand, many family-owned businesses become the listed companies and their ownership structure is required to be changed. The minority shareholders appear and their rights are protected by regulations. However, it is considered that family members are still dominated in the board of directors and so in management team. Also, there is an appointment of independent directors. The SET guidance (2012) suggests that a company should have at least 30 percent of total board members being independent directors. However, if there seem to have a dominant managing power in CG structure, such as the CEO/Chairman duality or the board chairman being management, the independent directors should make up more than 50% of the board. Nevertheless, as independent directors are appointed by the main shareholders, a question of their independence remains (Cheng and Jaggi, 2000; Chau and Gray, 2010; Gisbert and Navallas, 2013; Samaha et al., 2015). Thus, this research hypothesizes that:

**H9: The number of family members in the board of directors has a significantly negative relationship with disclosure practices between 2002 and 2007.**

**H10: The number of independent directors in the board of directors has a significant positive relationship with disclosure practices between 2002 and 2007.**

#### *3.2.2.5 Board members being managing directors*

Based on agency theory, when owners and management are separated, agency problems rise and thus the board of directors is established by the owners to monitor management work. However, if the directors are also appointed as management, they will have conflicts of interests and consequently, the directors cannot effectively perform their monitoring function. Thus, for disclosure practices, a company with many board members being management is likely to disclose less information than that with no member.

In Thailand, there is a high possibility that many board members work as management in a company due to the presence of high ownership concentration. Therefore, the research hypothesizes that:

**H11: The number of board members being management has a significantly positive relationship with disclosure practices between 2002 and 2007.**

#### *3.2.2.6 Multi-position of a chairperson of board and cross directorship of board members to other companies and disclosure.*

Haniffa and Cooke (2005) suggest that a chairperson with a director position in other companies possibly influences disclosure practice, as he/she will be able to indicate issues of concerns and well aware of the others' practices. Thus, the chair can apply disclosure practice to be tune with others to maintain its management reputation and legitimacy. Haniffa and Cooke (2005) found this significant relationship among Malaysian companies. Also, research (Rupley et al., 2012) recommends that board members should have knowledge and experiences related to the industry that the company is in but they should not be a board member in many companies because they may not be able to effectively work for a particular company and thus this can be resulted in less pressure to disclose much information and thus low level of disclosure in financial reports. However, another thought (Rupley et al., 2012; Gul and Leung, 2004) suggests that directors with much industrial knowledge, skills and experiences from various business sectors will complete their role and responsibilities more efficiently than those without it, because such knowledge and experiences enhance the director's expertise and so a director holding a director position in various companies tend to work effectively to complete their roles and responsibilities. As a result, the board of directors will require high level of disclosure in financial reports. Some studies (Gul and Leung, 2004) agree with the first thought with supporting evidence that a company with a few board members sitting in other companies' board is likely to disclose more information than that with many members. However, other studies (Rupley et al., 2012) argue this statement and empirically reveal a significantly positive relationship between number of board members sitting in other companies' board and disclosure practices.

In Thailand, The SET guidance suggests that a chairperson and the board members should not hold a director position in more than five listed companies, as the multiple directorships may

diminish their ability to monitor management performance and as a result, disclosure practices are limited. Thus, the research hypothesizes that:

**H12: A chairperson holding multiple director position in other companies has a significantly positive relationship with disclosure practices between 2002 and 2007.**

**H13: The number of board members holding a director position in many companies has a significantly negative relationship with disclosure practices between 2002 and 2007.**

#### *3.2.2.7 A number of audit committee meetings and accounting knowledge and disclosure*

The presence of audit committee is considered necessary for good CG and at present, securities committee in many countries requires its listed companies to compulsorily establish the committee. The CG guidance recommends that the audit committee helps the board of directors in supervising internal control activities and ensuring a quality of and financial reporting process. Furthermore, at least one member of the committee should have accounting/financial expertise to ensure that their main responsibilities related to financial reporting are effectively completed. In addition, audit committee should meet at least three to four a year because the meetings provide a chance for the members to share their experiences and review and point out all doubtful matters that need to be raised and addressed to the board of directors before it is too late. With a strong audit committee, disclosure should be effectively practiced. Several researchers (Yekini et al., 2015; Li et al., 2012) empirically confirmed that the number of audit committee meetings has a significantly positive association with disclosure practices. Nevertheless, some (Othman et al., 2014) found a positive relationship with no statistical significance. Similarly, some studies (Liu, 2015) found significant association between financial expertise of audit committee members and disclosure levels but other (Li et al., 2012; Othman et al., 2014) found no significance.

In Thailand, since 2002, SET has required all listed companies to set up audit committee and the best practices of the committee were publicly issued in 2010. The guidance indicates that audit committee should consist of at least 20 percent of total number of board members and all of them should independent. Also, it states that at least one member should have accounting knowledge. However, it has not specifically suggests the number of audit committee meetings, only proposes that the meetings should be organized frequently to ensure that the audit committee responsibilities can be efficiently fulfilled. Therefore, the research hypothesizes that:

**H14: The frequency of audit committee meetings has a significantly positive relationship with disclosure practices between 2002 and 2007.**

**H15: The number of audit committee members having accounting knowledge has a significantly positive relationship with disclosure practices between 2002 and 2007.**

### **3.2.3 Other control variables and disclosure**

Many studies dealing with an association between CG and disclosure practices show that apart from CG attributes, there are other factors relating to disclosure practices. Thus, the current research controls for firm size, leverage, profitability, industry type, and auditor type.

Many researchers (Chau and Gray, 2002; Cheung et al., 2006; Iatridis, 2013; Muttakin and Khan, 2014; Muttakin et al., 2015; Omar and Simon, 2011; Samaha et al., 2012; Sharma, 2014; Hodgdon and Hughes, 2016; Devalle et al., 2016) confirm that large firms tend to disclose more information than small firms because of several reasons. The large firms have enough resources to produce information as it is required and have less costs of production. Also, based on agency theory, large firms usually have a separation of owners and control and thus management tends to disclose more information in order to reduce agency costs which can affect its remuneration and maintain its management reputation. Furthermore, large firms would like to attract investors' and analysts' interests for their ability to attract outside capital and thus disclosure is one of mechanisms to attain this intention. Nevertheless, there are several studies (Kang and Gray, 2011; Sutthachai and Cooke, 2009) finding no significant relationship between the firm size and disclosure practices. Some possible explanations are that the sample is too small for detecting the significance of firm size in explaining disclosure levels (Sutthachai and Cooke, 2009). Thus, the research hypothesizes that:

**H16: The firm size has a significantly positive relationship with disclosure practices between 2002 and 2007.**

Leverage ratio is another indicator of disclosure practices that widely investigated. The ratio is generally calculated by dividing total debt with total assets and it indicates debt covenant of a company. Based on agency theory, the contracting parties between management and debtholders, appear if a company has a high leverage ratio. Therefore, management in a highly leveraged firm tends to be intensively monitored by its debtholders, as a result it is likely to disclose much information in order to ensure that no agency problems arise between its debtholders and management and the company is strictly obliged to its debt covenant and financial conditions in the debt contact. Many researchers (Iatridis, 2013; Sharma, 2014) reveal the significant association between leverage and disclosure practices, but several studies (Chau and Gray, 2002; Omar and Simon, 2011; Cheung et al., 2006; Devalle et al., 2016) indicate no significant association. Devalle et al. (2016) further argues that the significant association between these two variables exists when the financial source is public debt. For private debt, a company is assumed to have a close relationship with its lenders and thus its information can be directly accessed by the lenders and no additional information is needed to be disclosed. Therefore, the research hypothesizes that:

**H17: The leverage ratio has a significantly positive relationship with disclosure practices between 2002 and 2007.**

A company's profitability is another possible explanation of disclosure practices. Omar and Simon (2011) explain that based on agency theory, a company with high profitability tends to disclose much information because the information helps management to validate its position and remuneration arrangements. On the other hand, Devalle et al. (2016) argues that a company with low profitability is likely to disclose much information in order to maintain management credibility in shareholders' perception and consequently to justify its position and compensation. Several researchers (Gul and Leung, 2004; Iatridis, 2013; Omar and Simon, 2011) found the significantly positive relationship but some (Cheung et al., 2006) found negative association between profitability ratio and disclosure practices while other (Sharma, 2014; Devalle et al., 2016; Rupley et al., 2012) found no significant association. Therefore, the research hypothesizes that:

**H18: The profitability of a company has a significant relationship with disclosure practices between 2002 and 2007.**

Industry type is also considered having an influence on disclosure practices. Muttakin and Khan (2014) reviewed related literature and suggest that the level of disclosure practices, particularly voluntary disclosure, of a company depend on the degree of impact of its economic activities on the society. Several studies (Iatridis, 2013; Muttakin and Khan, 2014; Muttakin et al., 2015; Omar and Simon, 2011; Devalle et al., 2016; Rupley et al., 2012) reveal that companies in different business sectors tend to disclose information at different levels. Specifically, companies with business activities heavily involving environment are likely to disclose more information than other. Also, manufacturing firms with intensive labor employment tend to disclose more employee information than those without it. Therefore, the research hypothesizes that:

**H19: The industry type has a significant relationship with disclosure practices between 2002 and 2007.**

Several researchers (Omar and Simon, 2011; Hodgdon and Hughes, 2016; Devalle et al., 2016; Iatridis, 2013) review that auditor type is another influence on disclosure practices. Auditor is considered one of controlling mechanisms of management performance. Its responsibility is to ensure that financial reports are issued in compliance with statutory requirements. These reports are then reviewed by outside shareholders and thus help to reduce information asymmetry between the shareholders and management. Therefore, high auditing quality will generate tension with management in preparing high quality financial reports, specifically disclosing much and necessary information. Generally, large auditing firms are accepted as having such quality because they have sufficient financial and human resources to effectively perform their roles, need to maintain their reputation, and less sensitive to the risk of losing their clients than small auditing firms (Omar and Simon, 2011; Devalle et al., 2016). Many studies (Omar and Simon, 2011; Hodgdon and Hughes, 2016; Iatridis, 2013; Devalle et al., 2016) assume the Big 4 internationally auditing firms (i.e. Deloitte, EY, PWC, and KPMG) as the large firms and the rest

is small and local firms and found the significant positive relationship between the auditor type and disclosure practices whereas several (Chau and Gray, 2002) found no significance. Thus, this research hypothesizes that:

**H20: The auditor type has a significantly positive relationship with disclosure practices between 2002 and 2007.**

### 3.3 Data Collection

#### 3.3.1. Research Instruments

This research develops a research instrument to collect CG and disclosure. The instrument is structure into 3 three parts. The first part deals with the information of a sample company. This information includes name of a company, its industry type, its financial information such as net sales, total assets, and leverage ratio, and its auditor type. The second part contains CG data needed to be collected. The research uses the CG guidelines suggested by various institutions and academics to construct this part. The information gathered includes board composition and characteristics (e.g. a number of independent directors, and family members on a board), ownership structure (e.g. a percentage of top 5 shareholding), and audit committee characteristics (e.g. a number of audit committee meetings).

The third part is a disclosure items list. This list includes the disclosure items that listed companies should provide to the public. The items are grouped into 2 categories: mandatory and voluntary disclosure. The mandatory disclosure checklist is composed of 222 items of information and they are divided into 6 groups: general information; information on managers/directors; information on company's capital; financial information; other information; and social reporting information. The voluntary disclosure checklist consists of 98 items and they are grouped into 3 types of data: strategic information, non-financial information and financial information. This classification is based on paper of Gray, Meek and Roberts (1995) and is further adapted to suit the Thai context. Strategic information refers to additional general information of a company, corporate strategy, future prospects, and research and development. Non-financial information covers additional information about directors and corporate social responsibility reporting information. Financial information includes corporate financial reviews, additional information of notes to financial statement, segmental information, and capital market information.

The research instrument is presented in Appendix A.

#### 3.3.2. Operationalization of Data

##### 3.3.2.1. *The data collected from the 2002 and 2007 annual reports*

The year 2002-2007 is selected because in the year 2002 Thai companies were positively recovered from the 1997 economic crisis and the Thai government set this year as the beginning year of promoting CG practices among Thai companies. Furthermore, the year 2002 marked the launch of Sarbane-Oxley Act. In the year 2007 Thai companies has 5-year time to understand and adopt good governance practices and put it into shape.

To test the hypotheses, two types of data are collected in this research: corporate governance data and disclosure index. The first type of data indicates the corporate governance characteristics in Thai listed companies and the latter type represents the Thai financial reporting practices. Both types of data are hand collected from the sample companies' annual reports. A corporate annual report is the main information source in this study because it is the main source that investors search for information for their decision making (Hong and Wong, 2001) despite other ways that can be used to communicate to outsiders (e.g. newsletter and website). It also contains most of the significant information necessary to be disclosed publicly in according to the Companies Acts, financial reporting standards and for listed companies, the SET requirements, and covers other information that a company intends to communicate to their shareholders and interested parties (Sutthachai, 2006). Furthermore, a corporate annual report is considered a good proxy for indicating the level of disclosures issued by companies (Chau and Gray, 2010). In addition, previous researchers (Cooke and Wallace, 1990; Emenyonu and Gray, 1992; Haniffa and Cooke, 2002; Iatridis, 2013; Muttakin and Khan, 2014) commonly use an annual report as the main source to investigate financial reporting practices.

### 3.3.2.2. Measurement of disclosure practice.

The research employed a manual process to collect the disclosure data from the firms' annual reports. The data is transformed to disclosure indexes for statistical testing. A disclosure index is measured for each company as the ratio of the score obtained to the maximum possible score relevant for that company. A disclosure index is calculated as:

$$I_j = \frac{\sum_{i=1}^{n_j} x_{ij}}{n_j}$$

Where  $n_j$  is number of relevant items for  $j^{\text{th}}$  firm  
 $x_{ij}$  is one if  $i^{\text{th}}$  item is disclosed or zero if  $i^{\text{th}}$  item is not disclosed  
 so that  $0 \leq I_j \leq 1$

The current research applies the unweighted scoring method in measuring a disclosure index. The method assumes that each item in the disclosure list is equally important and thus in scoring financial reporting disclosure, it uses a dichotomous procedure in which an item scores one if it is disclosed and zero if it is not disclosed. However, if the disclosure items are not relevant to the company, they will not be included in total number of relevant items for the company and thus

the company is not penalized for not disclosing. The dichotomous procedure has been used by many studies (e.g. Omar and Simon, 2011; Muttakin, Khan and Belal, 2015; Li, Mangena and Pike, 2012; Muttakin and Khan, 2014; Chau and Gray, 2010). Omar and Simon (2011) justify this unweighted scoring method that it is to measure disclosure for all users group, not particular one and Omar and Simon (2011) suggest that there are the similar results between using weighted and unweighted disclosure indexes in the previous research's investigation and both indexes have significant association between each other. In addition, the impact of weighted individual items differently is less likely to appear when the research has a large number of items in the disclosure checklist.

As mentioned previously, by scoring a disclosure index, the researcher's judgment needs to be made for the number of relevant items of each company and disclosure items in the list that are considered not applicable to the company. To strengthen the reliability, therefore, usually previous studies (Omar and Simon, 2011) had read a corporate annual report twice before scoring. A whole annual report is read twice to ensure consistency in scoring. Omar and Simon (2011) suggest that the first reading aims to familiarize with a company's nature of business and its activities so that the scorer can make a judgment whether the items are applicable to a company. The second reading is performed after scoring a disclosure index to ascertain that the score is correctly calculated in according with reasonable view in order to avoid any mistakes before the score was finalized.

Specifically, for mandatory disclosure, the information items are justified whether they are applicable to the company in according with the regulations. Regarding voluntary disclosure, the justification is mainly based on the company's activities, as it is difficult to judge whether an item is applicable or not, since each company has the opportunity to disclose what it considers appropriate. Therefore, to reduce the subjectivity of these items, they were considered appropriate unless they were not suitable for the company's activities (Omar and Simon, 2011).

The current research determines three types of disclosures: aggregated, mandatory, and voluntary disclosure indexes. The indexes have been computed based on hand-collected data from the fiscal year 2002 and 2007 annual reports.

### *3.3.2.3. Measurement of Corporate Governance*

The CG data is also hand collected from a corporate annual report. The information appears in various parts of the report and some has not been disclosed by the companies. In this research, the CG attributes are grouped into three main categories and are measured as follow.

1. The ownership structure determines the component of shareholders of the company, who possess a company's shares and to what percentage. In this group, the research considers the ownership concentration, managerial ownership, and institutional ownership.

The ownership concentration refers to the percentage of top 5 in shareholding structure of the company. This data is collected from the list of top 10 shareholders presented in a corporate annual report and this capital structure is generally required by the SET regulation to be disclosed. Previous research (Muttakin et al., 2015; Samaha et al., 2012; Gisbert and Navallas, 2013) normally used either the percentage of top 10 shareholders or top 5 shareholders to represent the ownership concentration. In the current research, the top 5 shareholding data is employed because there is a problem of insufficient disclosure of the information, as some companies have disclosed only top 5 shareholders and some have reported only the proportion of each type of shareholders (i.e. institutions, foreign investors, and Thai investors). In order to avoid this problem, the research decides to apply the percentage of top 5 in shareholding structure, which more precisely reflect the ownership concentration.

The managerial ownership refers to the percentage of shares held by management. Generally, the data is not completely disclosed but indicate in term of the number of shares. Thus, the research calculates the percentage of management shares by dividing the number of management shares with total shares issued by the company. Also, only the number of shares held by the top-level management, mostly is also the board members, is revealed and thus, the managerial ownership is mainly limited to the top-level management.

The institutional ownership refers to the percentage of shares held by institutions in the top 10 of shareholding structure. The institutions in this term mean any companies or organizations holding the company's shares in the top 10 shareholders list. Thus, this may include the family-owned companies which have cross ownership.

The board shareholding refers to the percentage of shares held by the board members. This is generally presented with the directors' information in terms of either the number of shares or the percentage. If the number of shares is disclosed, the percentage is calculated by dividing the number of shares with the total issued shares of the company.

2. The board composition and characteristics consider the types of directors on the board and some particular characteristics that can affect disclosure practices. The research determines the following attributes.

The size of the board of directors refers to the number of members on the board. This includes both executive and non-executive directors and both dependent and independent directors. Many members mean a large size of the board.

The CEO duality refers to the dual positions that a chairperson of the board of directors hold, both as the chairperson and as the CEO. The data is collected in term of a dummy variable, zero if a chairperson has no dual positions and one if he/she has.

The family members on the board refer to the proportion of family members on the board of directors. The family members are counted when the board members have the same family name. Thus, the relatives who have different family names are ignored. The research realizes that this ignorance may distort the research results; however, with difficulties and time-consuming, the research considers that the search for the number of relatives on the board in other data sources may not be worth to perform. Furthermore, the number of relatives is likely to have less effect on the research results. Therefore, the proportion of family members on the board is that the number of board members whose have the same family names is divided by the total number of board members.

The independent directors on the board refer to the proportion of independent directors on the board, calculated by dividing the number of independent directors with total number of the board members.

The board members being management refers to the number of board members who are also management of the company. They are responsible for both monitoring management performance and managing the company. This data is presented in the section of directors' information and the list of management team.

The board members with cross directorship in other companies refer to the number of board members who also hold a director position in other companies. This is gathered by considering the current positions of all board members. The information is presented in the detail of the board of directors.

3. The audit committee characteristics determine various aspects of audit committee that previous research (Samaha et al., 2015; Othman et al., 2014) suggests their relevance to disclosure practices. The current research reviews two attributes of this committee.

The audit committee meetings refer to the number of times that the audit committee has their meetings to discuss the matter in their concerns. Generally, this information is presented in the committee report.

The audit committee members having accounting knowledge refers to the number of the committee members having accounting or financial knowledge in order to effectively perform their role and responsibilities. This information is presented in the section of directors' information.

All information of CG attributes can be obtained in a corporate annual report. However, some companies have not disclosed particular information and there is no other sources indicating this data. As a result, some companies are excluded from the sample when some statistical methods are operated.

Other control variables, including firm size, leverage, profitability, auditor type, and industry type, are measured as follow. Previous research (Chau and Gray, 2002; Cheung et al., 2006; Iatridis, 2013; Muttakin and Khan, 2014; Muttakin et al., 2015) generally employs either total assets or net sales as a representative of the firm size. The current research uses the amount of net sales of a sample company and this amount is mainly from operating activities of the company. Regarding leverage, the research calculates the ratio of total debts to total assets and this is employed by previous research (Iatridis, 2013; Omar and Simon, 2011). For profitability, previous research (Chau and Gray, 2010; Omar and Simon, 2011) generally employs the ratio of net income to total equity. Dummy variables are used for auditor type and industry type. A company has one if its auditor is from Big 4 auditing firms (Deloitte, EY, PWC, and KPMG) and zero if otherwise. For industry type, seven dummy variables are created to represent seven industries: agribusiness, consumer products, industrial, construction and real estate, national resources, services, and technology. A company has one if it is in a particular industry and zero if otherwise. In general, as the research needs to differentiate N items it needs only N-1 dummy variables in the regression model to avoid the problem of perfect collinearity. The excluded variable acts as a benchmark against which the dummies are compared.

A summary of the measurement of CG variables and other control variables is presented in Table 3-3.

**Table 3-3** A summary of the measurement of CG attributes and control variables

<b>Variables</b>	<b>Measurement</b>
<b>1. Ownership structure</b>	
Ownership concentration	Percentage of top 5 in shareholding structure
Managerial ownership	Percentage of shares held by management
Institutional ownership	Percentage of shares held by institutions in top 10 shareholding
Board shareholding	Percentage of shares held by the board members
<b>2. Board composition and characteristics</b>	
Size of the board of directors	The number of board members
CEO duality	1 if the chairperson of the board being the CEO; and zero otherwise
Family members on the board	Proportion of family members on the board
Independent directors on the board	Proportion of independent directors on the board
Board members being management	Number of board members being management
Board members with cross directorship	Number of board members holding cross directorship in other companies
<b>3. Audit committee characteristics</b>	
Audit committee meeting	Number of meetings organized by the audit committee

**Table 3-3** A summary of the measurement of CG attributes and control variables

<b>Variables</b>	<b>Measurement</b>
Audit committee knowledge	Number of audit committee members having accounting or financial knowledge
<b>4. other control variables</b>	
firm size	Amount of net sales
Leverage	The ratio of total debt to total assets
Profitability	The ratio of net income to total equity
Auditor type	1 if the auditor from Big 4 auditing firms; and zero otherwise
Agribusiness	1 if a company is in agribusiness; and zero otherwise
Consumer products	1 if a company is in consumer products business; and zero otherwise
Industrial	1 if a company is in industrial business; and zero otherwise
Construction and real estate	1 if a company is in construction and real estate business; and zero otherwise
National resources	1 if a company is in natural resources business; and zero otherwise
Services	1 if a company is in services business; and zero otherwise
Technology	1 if a company is in technology business; and zero otherwise

### 3.4 Research Methods

After the data collection, this research addresses the research objectives by employing the quantitative methods. To address the first two research objectives, the tests of differences (i.e. the T-test and the Mann-Whitney U test) are used to find the changes in corporate governance practices and financial reporting practices over time. For the associations between corporate governance and financial reporting practices, the multiple regression analysis is employed.

Nevertheless, before employing these statistical methods, the parametric test assumptions are tested. The results of the skewness and kurtosis and Kolmogorov–Smirnov Lilliefors test (shown in Appendix B) show that the disclosure indexes have no normality problem but all independent variables are not normally distributed, except the percentage of shares held by top 5 shareholders. Therefore, these variables are transformed using the natural log and square root transformations when the regression analysis is carried out. The correlations, the variance

inflation factor (VIF) and the tolerance values are used to detect any potential multicollinearity among independent and control variables. Given the threshold criterion, which is a VIF of 10 or a Tolerance value of 0.2 or a Pearson correlation of 0.8 (Field, 2004), Tolerance value shows a concern for a multicollinearity problem between the percentage of shares held by board members and the percentage of shares held by management. Therefore, the first variable is excluded when the regression analysis is performed to avoid the multicollinearity. However, the residual assumption is verified by determining the Durbin-Watson values. Conservatively, the Durbin-Watson statistics should not be less than 1 and greater than 3, and the assumption of independent errors is almost satisfied if the value is closer to 2 (Field, 2004). The results show no concerns of the residual assumptions.

The T-test is then carried out to examine the statistical significance of the mean differences both in the disclosure indexes and in CG structure between 2002 and 2007. However, as some variables are not normally distributed, the non-parametric test, Wilcoxon Sign-ranked test, is performed to ensure the consistent research results of the T-tests.

After the test of differences, the multiple regression analysis is employed to detect the significant associations between disclosure practices and the independent variables to address to what extent the CG characteristics influence on disclosure practices. The regression model is,

$$\text{Disc}_{jt} = \beta_0 + \beta_1 \text{OwnCon}_{jt} + \beta_2 \text{MngOwn}_{jt} + \beta_3 \text{InsOwn}_{jt} + \beta_4 \text{BShare}_{jt} + \beta_5 \text{BSize}_{jt} + \beta_6 \text{Dulaity}_{jt} + \beta_7 \text{BFam}_{jt} + \beta_8 \text{BInd}_{jt} + \beta_9 \text{BMng}_{jt} + \beta_{10} \text{Cross}_{jt} + \beta_{11} \text{ACMeeting}_{jt} + \beta_{12} \text{ACKnow}_{jt} + \beta_{13} \text{Size}_{jt} + \beta_{14} \text{Lev}_{jt} + \beta_{14} \text{Pros}_{jt} + \beta_{15} \text{Audit}_{jt} + \beta_{16} \text{Agri}_{jt} + \beta_{17} \text{Consumer}_{jt} + \beta_{18} \text{Indus}_{jt} + \beta_{19} \text{Cons}_{jt} + \beta_{20} \text{Resource}_{jt} + \beta_{21} \text{Serv}_{jt} + \beta_{22} \text{Tech}_{jt} + \varepsilon_j$$

Where  $\text{Disc}_{jt}$  is disclosure index;

$\beta_0$  is the intercept;

$\text{OwnCon}_{jt}$  is ownership concentration defined as a percentage of shares held by top 5 shareholders;

$\text{MngOwn}_{jt}$  is managerial ownership defined as a percentage of shares held by management;

$\text{InsOwn}_{jt}$  is institutional ownership defined as a percentage of shares held by institutions;

$\text{BShare}_{jt}$  is board shareholding defined as a percentage of shares held by board members;

$\text{BSize}_{jt}$  is a size of the board of directors defined as the number of board members;

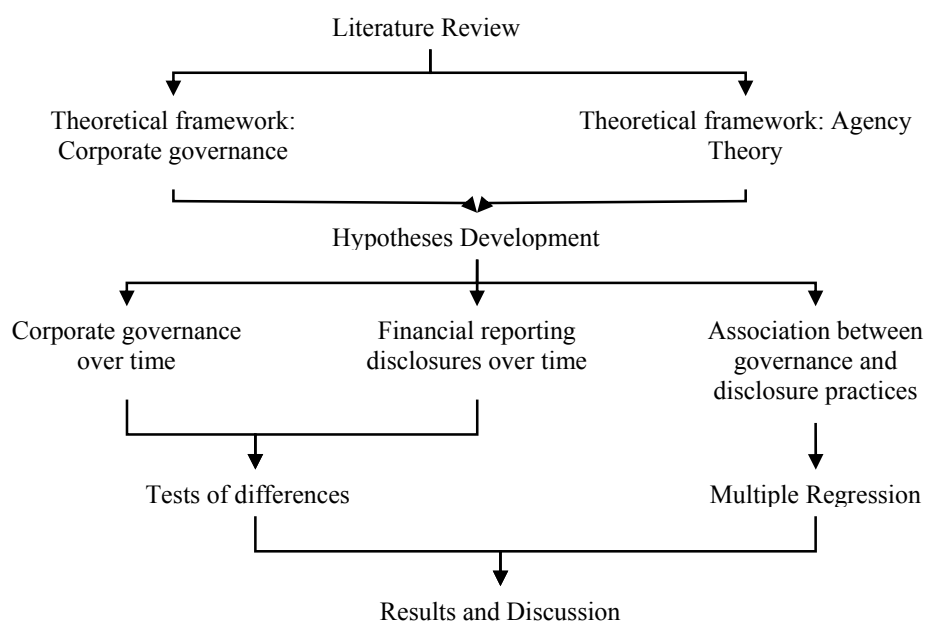
$\text{Dulaity}_{jt}$  is one if a chairperson of the board being CEO in the same company and zero if otherwise;

$\text{BFam}_{jt}$  is family members on the board defined as a percentage of family members of the board of directors;

$\text{BInd}_{jt}$  is independent directors defined as a percentage of independent directors on the board;

$BMng_{jt}$  is managing directors defined as the number of board members being management;  
 $Cross_{jt}$  is cross directorship defined as the number of board members holding a director position in other companies;  
 $ACMeeting_{jt}$  is audit committee meeting defined as the number of audit committee meetings;  
 $ACKnow_{jt}$  is audit committee knowledge defined as the number of audit committee members having accounting and/or financial knowledge;  
 $Size_{jt}$  is firm size defined as net sales;  
 $Lev_{jt}$  is a leverage ratio defined as total debt to total assets;  
 $Pros_{jt}$  is a profitability ratio defined as net income to total equity;  
 $Audit_{jt}$  is one if an auditor from Big 4 auditing firms and zero if otherwise;  
 $Agri_j$  is one if a company is in an agribusiness sector and zero if otherwise;  
 $Consumer_{jt}$  one if a company is in a consumer products sector and zero if otherwise;  
 $Indus_j$  is one if a company is in a heavy industrial sector and zero if otherwise;  
 $Cons_j$  is one if a company is in a construction and real estate sector and zero if otherwise;  
 $Resource_{jt}$  is one if a company is in a natural resources sector and zero if otherwise;  
 $Serv_j$  is one if a company is in a service sector and zero if otherwise;  
 $Tech_{jt}$  is one if a company is in a technology sector and zero if otherwise;  
 $\epsilon_j$  is the residual term.

The summary of research methodology is presented in Figure 3-1.



**Figure 3-1:** Summary of Research Methodology

## Chapter 4

### Research Results

Following the methodology presented in the previous chapter, this chapter reveals the results. The chapter first discusses the descriptive statistics of the sample companies' characteristics and then the changes in Thai CG and financial reporting disclosure are illustrated. After that, the relationships between the CG and disclosure are reported. Finally, the conclusion is made.

#### 4.1. Descriptive statistics

The descriptive statistics aim to present the characteristics of the sample in term of financial information and CG in order to provide general view of the sample before scrutinizing the Thai CG and financial reporting disclosures.

##### 4.1.1 General characteristics

Table 4-1 outlines financial information of the sample. The information implies that the sample is varied from small to big companies and from loss to profitable firms. The sales and assets figures show that among the sample, the smallest company has sales and assets valued about 1,070,000 and 5,742,000 Baht (minimum value) respectively, whereas the biggest firm has both amount around 1,495,810 million and 892,351 million Baht (maximum values) respectively.

**Table 4-1** Overall characteristics of the sample companies.

<b>Unit: 000 Baht</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>Std. Deviation</b>
Sales	1,070	1,495,810,000	15,251,974	85,050,470
Net Income	-5,394,449	97,803,594	1,211,846	6,138,405
Current Assets	3,218	315,931,000	5,142,384	19,105,456
Total assets	5,742	892,351,000	15,926,113	56,634,745
Current Liabilities	2,187	244,885,000	4,260,929	15,577,161
Total liabilities	3,615	493,700,000	8,625,695	33,126,434
Long-term liabilities	0	248,815,000	4,365,438	18,406,353
Total equity	-6,600,894	398,652,000	7,323,563	25,083,371
Leverage	0.0000	11.0300	0.5142	0.7311
Gearing	-0.4800	15.5400	0.2519	0.8346
Profitability	-22.2000	13.4900	0.0723	1.4091
Liquidity	0.0400	89.4600	2.5469	5.2297
Valid N (listwise)	370			

Also, the figures of net income indicate that in the group of sample, there is a company with the huge loss of 5,394 million Baht and with high profit of 97,803 million Baht (see 'net income'). Furthermore, the financial ratios confirm that the sample consists of a variety of companies as

there are companies with either high (low) ratio of liabilities or of liquidity. Additionally, the considerable standard deviation values suggest that financial data of the sample has a wide range of values.

#### **4.1.2 CG characteristics**

Table 4-2 and 4-3 present the CG characteristics of the sample together with separation of the 2002 and 2007 data. They show the characteristics of board of director, ownership concentration and audit committee. Table 4-2 presents that board of directors of the sample consists of 5 to 25 members and over time, this range of number has not been changed considerably. Determining the number of independent directors on the board, the research found that the minimum number is zero whereas the maximum is 10, suggesting no such directors on the board in some companies and many in other. On average, the companies have 3-4 independent directors on the board. Similarly, the number of family members on the board of directors is ranged from zero to 10, indicating that some firms have no family members while other have 10 on the board. On average, the sample has about 2 members on the board. Also, when considering the number of board members being firm's management, the table reveals the range between zero to 13 members, meaning that some firms' board of directors are not in a management team while others are in the team, and the maximum number of directors also being management is thirteen.

For the characteristics of the chairperson of the board, Table 4-3 presents that the majority of the sample (about 67.16 percent) employs different persons as the board chairperson and the chief executive officers (CEO). This suggests that most of the chairpersons have not held dual positions. However, the results reveal that the chairperson in most sample companies (about 54.48 percent) is a member of the board of director and/or being managing directors in other companies. This implies that although they have no dual positions of chairperson and CEO in the same company, they have multi-positions in other companies. The members of the board also have similar characteristic to the chairperson. Many of them work in various companies as the board members and/or managing directors. From Table 4-2, the number of board members who have cross directorship in other companies is ranged from zero to 25, implying that the members of some companies work in many firms whereas in other, the board members totally work for them. On average, about 5-7 members have cross directorship.

According to board of directors' and management's shareholdings, Table 4-2 reports that on average, the board members own 15 percent of common shares and management have 13 percent. Noticeably, comparing between 2002 and 2007, the figures reveal that in 2002, management own about 9 percent of total shares on average and about 15 percent in 2007, suggesting the increasing management ownership in corporate ownership structure and the likelihood of agency problems reduction.

**Table 4-2** CG characteristics of the sample companies.

	Overall					2002					2007				
	N	Min.	Max.	Mean	Std. Deviation	N	Min.	Max.	Mean	Std. Deviation	N	Min.	Max.	Mean	Std. Deviation
Independent directors	369	0	10	3.4363	1.1804	134	0	8	3.1343	1.0244	235	0	10	3.6085	1.2299
Family-member directors	370	0	10	1.8108	2.1176	134	0	9	2.0672	2.2684	236	0	10	1.6653	2.0175
Number of board members	370	5	25	11.2892	2.9824	134	7	25	11.8284	3.3550	236	5	25	10.9831	2.7085
Cross directorship	333	0	25	6.6036	3.8463	115	0	19	5.6696	4.0560	218	0	25	7.0963	3.6449
Board shareholding	332	0	0.7547	0.1516	0.1801	110	0	0.7053	0.1426	0.1716	222	0	0.7547	0.1561	0.1843
Managing directors	368	0	13	3.8152	2.1315	132	0	13	3.8485	2.3099	236	0	12	3.7966	2.0298
Top 5 shareholdings	366	0.1224	0.9959	0.6524	0.1737	131	0.2408	0.9959	0.6531	0.1760	235	0.1224	0.9939	0.6520	0.1727
Top 10 shareholdings	363	0.1979	1	0.7478	0.1525	130	0.3139	1	0.7565	0.1559	233	0.1979	1	0.7429	0.1507
Institution shareholdings in top 10	364	0	0.9968	0.4636	0.2932	130	0	0.9968	0.4977	0.2784	234	0	0.9923	0.4447	0.3001
Mngmnt. shareholdings	333	0	0.7529	0.1315	0.1757	113	0	0.7041	0.0976	0.1587	220	0	0.7529	0.1489	0.1818
Audit com. meetings	339	1	29	6.2596	3.3491	109	1	16	5.9541	3.0258	230	2	29	6.4043	3.4888
Audit com. knowledge	347	0	3	0.8847	0.7160	119	0	3	0.8403	0.7477	228	0	3	0.9079	0.6995
Proportion of independent directors	370	0	0.73	0.3166	0.1149	134	0	0.73	0.2809	0.1033	236	0	0.71	0.3368	0.1164
Proportion of managing directors	370	0	0.67	0.1608	0.1789	134	0	0.64	0.1757	0.1883	236	0	0.67	0.1523	0.1732
<b>Valid N (listwise)</b>	<b>265</b>					<b>71</b>					<b>194</b>				

**Table 4-3** Frequencies of CG characteristics of the sample.

		2002		2007	
		Frequency	Percent	Frequency	Percent
Types of auditors	Non-Big 4	60	44.78	95	40.25
	Big 4	74	55.22	141	59.75
Valid		134	100.00	236	100.00
Missing value		0		0	
Total		134	100.00	236	100.00
Duality of chairperson	No	90	67.16	159	67.37
	Yes	43	32.09	77	32.63
Valid		133	99.25	236	100.00
Missing value		1	0.75	0	
Total		134	100.00	236	100
Multi-positions of chairperson	No	45	33.58	68	28.81
	Yes	73	54.48	154	65.25
Valid		118	88.06	222	94.07
Missing value		16	11.94	14	5.93
Total		134	100.00	236	100.00
Number of audit com. members with accounting knowledge	0	41	30.60	60	25.42
	1	59	44.03	136	57.63
	2	16	11.94	25	10.59
	3	3	2.24	7	2.97
Valid		119	88.81	228	96.61
Missing value		15	11.19	8	3.39
Total		134	100.00	236	100.00

For ownership structure, Table 4-2 shows high concentration of shareholdings among Thai firms, consistent with the work of Suehiro and Wailersak (2001) and Wiwattanakantang (2001) which found that there were some changes in ownership structures of Thai family businesses but the majority is still concentrated after the 1997 economic crisis, and from the current research results, until 2007, this concentration still remains. On average, the percentages of top 5 and top 10 shareholdings are 65% and 74% respectively and when considering the averages of shareholdings in both the year 2002 and 2007, the table reveals no substantial changes, suggesting that over five years the businesses maintain their ownership structure consistently. Among top 10 shareholders of several companies, the institutions play their part. The figures show that on average, there is around 46 percent owned by institutions and the percentage of institution shareholding is slightly changed from 2002 to 2007. Cautiously, some institutions are companies that the main shareholdings are still family-owned.

Table 4-2 and 4-3 also shows the characteristics of audit committee in Thai firms. Table 4-2 presents the number of times that audit committee arrange its meetings in a year. It reveals that overall there is a company organizing the committee meeting once a year whereas another arranges for 29 times in a year. On average, the meetings are organized six times a year, suggesting that the audit committee has met at least every quarter for supervising management performance. Also, comparing the year 2002 and 2007, the research found an increasing number of meetings. Several studies (Yekini et al., 2015; Li et al., 2012) recommend that more meetings will provide opportunity for the audit committee to scrutinize work done by management and thus managers will tend to work for the interests of shareholders and minority. From Table 4-3, the research reveals that the majority of the sample (about 58 percent of total sample) has at least one person having accounting knowledge as their audit committee member. However, the result shows a concern that there is around 25 percent of total sample having no member with accounting knowledge. This concern is arisen, as the SET guidance (2010) indicate that audit committee with accounting expertise will be able to notice irregularities acted by management, if any, more than audit committee with no such knowledge. Also, Liu (2015) empirically confirmed this by finding the statistically significant association between audit committee accounting/financial expertise and financial reporting disclosure or firm performance.

#### 4.1.3 Financial Reporting Disclosures

Table 4-4 shows the disclosure indexes indicating disclosure levels of the sample in overall and in the year of 2002 and 2007. The indexes are presented overall and by types of disclosure—mandatory and voluntary.

**Table 4-4** Level of disclosure by the sample companies.

	Min.	Max.	Mean	Std. Deviation	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
<b>Overall (N = 370)</b>								
Mandatory disclosure	0.6776	0.9261	0.8224	0.0440	-0.5280	0.1268	0.2298	0.2530
Voluntary disclosure	0.0556	0.3587	0.1967	0.0627	0.2722	0.1268	-0.3106	0.2530
Aggregated disclosure	0.4661	0.7232	0.5914	0.0487	-0.0652	0.1268	-0.4589	0.2530
<b>Year 2002 (N = 134)</b>								
Mandatory disclosure	0.6776	0.8819	0.7928	0.0443	-0.2945	0.2093	-0.3809	0.4156
Voluntary disclosure	0.0562	0.3556	0.1609	0.0521	0.6052	0.2093	0.8590	0.4156
Aggregated disclosure	0.4661	0.6569	0.5622	0.0430	0.0667	0.2093	-0.5699	0.4156
<b>Year 2007 (N = 236)</b>								
Mandatory disclosure	0.7482	0.9261	0.8392	0.0339	-0.1440	0.1584	-0.1830	0.3156
Voluntary disclosure	0.0556	0.3587	0.2170	0.0591	0.1315	0.1584	-0.3277	0.3156
Aggregated disclosure	0.4954	0.7232	0.6080	0.0439	-0.1104	0.1584	-0.3451	0.3156

The overall indexes show that the average level of aggregated disclosure is 0.5914 or 59.14 percent and unsurprisingly, the high level belongs to mandatory disclosure with a mean of 82.24 percent. The maximum level nearly reaches a 100 percent and the minimum is more than 60 percent, suggesting that most companies dutifully follow the disclosure regulations. On the other hand, the results reveal that the mean of voluntary disclosure index is only 19.67 percent, much lower than the mandatory disclosures. The minimum level is less than 10 percent (5.62 percent) and the maximum is less than 50 percent (35.56 percent). Furthermore, the standard deviation is quite small, suggesting that the means of overall disclosure are likely to be a good representative of the sample. The results of high levels of mandatory disclosure and low level of voluntary disclosure are consistent with previous research (Omar and Simon, 2011) investigating disclosure practices in emerging markets.

When considering the disclosure practices in each year, it found that the means of disclosure indexes increase of around five percent for all types of disclosures, suggesting the increasing trend of disclosure by the sample. Also, the maximum and minimum indexes of both aggregated and mandatory disclosure improve, suggesting the increasing compliance with the disclosure regulations. However, it is noticeable that the minimum and maximum indexes of voluntary disclosure are rather the same but the means are different (changed from 16.09 percent to 21.7 percent), indicating that many companies increase their voluntary disclosure but no companies rise the disclosure level above the maximum of 35 percent. To determine the details of voluntary disclosures, Table 4-5 shows the types of voluntary disclosure measured in this current study.

Table 4-5 presents that the companies voluntarily disclose additional financial information the most in their annual report. Its level of disclosure nearly reaches 50 percent, followed by the employee information with the mean of disclosure of 35.14 percent. In contrast, the corporate social reporting (CSR) disclosure, which includes information about customer, environment, community, and employee, has an average of 10 percent of disclosure. Nevertheless, the standard deviation values of the two are quite sizable (22.1 percent for financial information and 13 percent for employee information), meaning that there is a wide range of the amount of information voluntarily disclosed by these companies. This suggests that despite the increasing disclosure levels of financial and employee information, the voluntarily disclosing behaviors of these companies are not likely to stay on the same pace. Some significantly improve these types of voluntary disclosure but several keep up the improvement with slower rate.

When considering the disclosure indexes between the year 2002 and 2007, the research reveals the increasing means of all types of voluntary disclosures and the highest increasing rates is of financial information, followed by the employee information. Similarly, the standard deviation value of this type of voluntary is also high.

**Table 4-5** Level of voluntary disclosure by types of disclosure.

	Min.	Max.	Mean	Std. Deviation	Skewness		Kurtosis	
					Statistic	Std. Error	Statistic	Std. Error
<b>Overall (N = 370)</b>								
Strategic disclosure	0.0000	0.7500	0.0746	0.0641	3.4998	0.1268	32.4289	0.2530
Financial information	0.0513	0.9375	0.4636	0.2210	-0.0324	0.1268	-1.1671	0.2530
Non-financial information	0.0000	0.5143	0.2080	0.0996	0.6064	0.1268	0.2941	0.2530
CSR disclosure	0.0000	0.4483	0.1004	0.0927	1.2759	0.1268	1.0409	0.2530
Employee information	0.0476	0.7500	0.3514	0.1304	0.3932	0.1268	0.1696	0.2530
<b>Year 2002 (N = 134)</b>								
Strategic disclosure	0.0000	0.2273	0.0648	0.0481	0.7123	0.2093	0.3698	0.4156
Financial information	0.0513	0.4545	0.2249	0.0862	0.2830	0.2093	-0.3188	0.4156
Non-financial information	0.0000	0.4412	0.1590	0.0786	0.5915	0.2093	1.0851	0.4156
CSR disclosure	0.0000	0.3571	0.0598	0.0637	1.9690	0.2093	4.9361	0.4156
Employee information	0.0476	0.6316	0.2768	0.1022	0.4588	0.2093	0.4101	0.4156
<b>Year 2007 (N = 236)</b>								
Strategic disclosure	0.0000	0.7500	0.0801	0.0711	3.7864	0.1584	32.4601	0.3156
Financial information	0.1429	0.9375	0.5992	0.1468	-0.3653	0.1584	0.2291	0.3156
Non-financial information	0.0286	0.5143	0.2359	0.0997	0.5155	0.1584	0.0121	0.3156
CSR disclosure	0.0000	0.4483	0.1236	0.0986	0.9860	0.1584	0.1812	0.3156
Employee information	0.0952	0.7500	0.3937	0.1258	0.2857	0.1584	0.3214	0.3156

The increasing disclosure indexes among Thai firms during 2002-2007 are consistent with the disclosure trend in other countries, which is found to be increasing over time (Omar and Simon, 2011; Sutthachai and Cooke, 2009; Ratanajongkol et al. 2006). Particularly, the increasing levels of voluntary disclosure are agreeable with Kuasirikul and Sherer (2003) and Ratanajongkol et al. (2006) that there is a good sign for Thailand that Thai firms tend to continually increase their voluntary disclosure over time.

## 4.2 The Changes in Corporate Governance from 2002 to 2007

From the descriptive statistics, previously discussed, some CG characteristics seem to change over time while some tend to be maintained. Table 4-6 and 4-7 present the results of test of differences in CG between 2002 and 2007.

From Table 4-6, there are six characteristics of CG changed significantly from 2002 to 2007. These characteristics involve a composition of the board of directors and ownership structure. The number of board members decreases considerably over the period. However, the number of independent directors in the board increases whereas fewer family members become the board members over the period. This changing component of the board suggests that after the crisis,

Thai businesses were forced to put their effort to improve the CG structure greatly and as a result, independent directors seem to enhance their roles in the companies whereas family members reduce their role in directing the businesses despite the high ownership concentration. Apart from the changing component, the number of board members holding a director position in other companies is also significantly increased over time. This probably benefits to a company, as many studies (Gul and Leung, 2004) suggest that directors working for many firms are more likely to perform well than the directors with no cross directorship due to much knowledge and experiences of their roles as the directors in various companies. However, Rupley et al. (2012) argue that with cross directorship in other firms, directors may not fully be concentrated on their responsibilities to all responsible firms and thus, ineffectively perform their duties.

**Table 4-6** Changes in CG of the sample companies between 2002 and 2007.

	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		t-test for Equality of Means		
					Upper	Lower	t
Independent directors	-0.4742	0.1195	-0.7092	-0.2392	-3.9696	318.99	0.0001***
Family-member directors	0.4019	0.2284	-0.0472	0.8511	1.7596	368.00	0.0793*
Number of board members	0.8453	0.3392	0.1769	1.5137	2.4918	231.69	0.0134**
Cross directorship	-1.4268	0.4370	-2.2864	-0.5672	-3.2651	331.00	0.0012***
Board shareholding	-0.0134	0.0210	-0.0548	0.0279	-0.6384	330.00	0.5237
Managing directors	0.0519	0.2320	-0.4043	0.5080	0.2236	366.00	0.8232
Top 5 shareholdings	0.0012	0.0190	-0.0361	0.0384	0.0607	364.00	0.9516
Top 10 shareholdings	0.0136	0.0167	-0.0192	0.0465	0.8154	361.00	0.4154
Institution shareholdings in top 10	0.0530	0.0320	-0.0099	0.1159	1.6561	362.00	0.0986*
Mngmnt. shareholdings	-0.0512	0.0193	-0.0893	-0.0132	-2.6526	254.75	0.0085***
Audit com. meetings	-0.4502	0.3893	-1.2159	0.3155	-1.1566	337.00	0.2482
Audit com. knowledge	-0.0676	0.0827	-0.2306	0.0955	-0.8166	225.92	0.4150

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

Table 4-6 also shows the substantial changes in shareholding structure. An increasing proportion of shares owned by management are statistically significant at the 10 percent level. On the other hand, the proportion of institution shares in the top 10 of shareholding structure considerably decreases. The positive changes of management shareholding implies that in Thai firms, agency problems between shareholders and management are likely to be alleviated because both have the same interest for a firm, but between shareholders and minority interests are questionable.

Omar and Simon (2011) and Iatridis (2013) suggests that the institutional shareholders can be another monitoring mechanism to constraint management's opportunistic behaviors. The decreasing of the institutional shares indicates that the agency problems between the minority shareholders and management and main shareholders potentially exist. The dominant shareholders and management may take advantages to transfer the minority's wealth (Chau and Gray, 2011). Nevertheless, the increasing number of independent directors on the board discussed previously may substitute this decreasing monitoring role of institutional shareholders.

**Table 4-7** Changes in some CG characteristics of the sample companies between 2002 and 2007.

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
<b>Types of auditors</b>					
Pearson Chi-Square	0.7179	1	0.3968		
Continuity Correction(a)	0.5442	1	0.4607		
Likelihood Ratio	0.7163	1	0.3974		
Fisher's Exact Test				0.4431	0.2302
Linear-by-Linear Association	0.7160	1	0.3975		
N of Valid Cases	370				
<b>Duality of chairperson</b>					
Pearson Chi-Square	0.0034	1	0.9535		
Continuity Correction(a)	0.0000	1	1.0000		
Likelihood Ratio	0.0034	1	0.9535		
Fisher's Exact Test				1.0000	0.5244
Linear-by-Linear Association	0.0034	1	0.9535		
N of Valid Cases	369				
<b>Multi-position of chairperson</b>					
Pearson Chi-Square	1.9557	1	0.1620		
Continuity Correction(a)	1.6321	1	0.2014		
Likelihood Ratio	1.9369	1	0.1640		
Fisher's Exact Test				0.1838	0.1011
Linear-by-Linear Association	1.9500	1	0.1626		
N of Valid Cases	340				

As the CG data is not satisfied the statistical assumption of normality distribution, the Mann-Whitney U test, the non-parametric test, is undertaken to confirm the results of T-tests in Table 4-6. Table 4-8 shows the results of the Mann-Whitney U test.

Table 4-8 shows the similar results to the results of T-test in Table 4-6. That is, there are significant differences in the number of independent directors on the board, the number of board

members, the number of board members holding cross directorship in other companies, the percentage of shares held by institutions in top 10 shareholding structures, and the percentage of shares held by management. However, it found no significant differences in the number of family members on the board and thus the implication of this difference should be cautious.

**Table 4-8** Changes in differences in CG characteristics between 202 and 2007 by using Mann-Whitney U test

	Mann-Whitney U	Wilconxon W	Z	Asymp. Sig. (2-tailed)
Independent directors	11837	20882	-4.4742	0.0000***
Family-member directors	14351	42317	-1.5717	0.1160
Number of board members	13587	41553	-2.2675	0.0234**
Cross directorship	9457	16127	-3.6966	0.0002***
Board shareholding	12161	36914	-0.0595	0.9525
Managing directors	15279.5	24057.5	-0.3070	0.7588
Top 5 shareholdings	15372.5	24018.5	-0.0206	0.9836
Top 10 shareholdings	14320.5	41581.5	-0.8602	0.3897
Institution shareholdings in top 10	13574	41069	-1.7009	0.0890*
Mngmnt. shareholdings	10344	16785	-2.5099	0.0121**
Audit com. meetings	11579	17574	-1.1825	0.2370
Audit com. knowledge	12791.5	19931.5	-0.9785	0.3278

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

Nevertheless, the research results reveal that some CG attributes have not been transformed significantly (see some results in Table 4-6 and 4-8 and all attributes in Table 4-7), such as high ownership concentration, suggesting that CG practices probably have not been rigorously observed with good CG guidance and consequently, Thai firms have not fully gained the benefits of CG. Later, this chapter addresses the question: to what extent Thai firms gain the benefits from good CG practice, by considering the relationship between CG and disclosure practices of Thai firms.

### 4.3. The changes in Financial Reporting Disclosure from 2002 to 2007

Table 4-9 shows the results from the test of differences in all types of disclosure indexes and by year.

From the table, companies tend to disclose more information over time. The disclosure indexes of all types of disclosure increase significantly at the 5 percent level, particularly voluntary disclosure. The increasing of this disclosure probably suggests that management increasingly realize the importance of information disclosure and its impact to companies' performance and

as a result, management tend to voluntarily disclose more information although it is not required by regulators. The researchers (Eng and Mak, 2003; Gul and Leung, 2004; Gisbert and Navallas, 2013) suggest that disclosing voluntarily more information will reduce the information asymmetry between shareholders, management, and the minority and thus the agency problems can be eased.

**Table 4-9** Changes in levels of disclosures between 2002 and 2007.

	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		t-test for Equality of Means		
			Upper	Lower	t	df	Sig. (2-tailed)
Aggregated disclosure	-0.0458	0.0047	-0.0551	-0.0365	-9.7282	368.00	0.0000***
Mandatory disclosure	-0.0464	0.0044	-0.0551	-0.0377	-10.5116	222.44	0.0000***
Voluntary disclosure	-0.0561	0.0059	-0.0677	-0.0444	-9.4694	305.82	0.0000***
Strategic disclosure	-0.0153	0.0062	-0.0275	-0.0031	-2.4582	356.85	0.0144**
Financial information	-0.3743	0.0121	-0.3981	-0.3505	-30.8998	367.59	0.0000***
Non-financial information	-0.0769	0.0094	-0.0954	-0.0584	-8.1838	330.69	0.0000***
CSR disclosure	-0.0638	0.0085	-0.0804	-0.0472	-7.5482	361.91	0.0000***
Employee information	-0.1170	0.0120	-0.1407	-0.0933	-9.7130	324.25	0.0000***

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

From the table, the main difference shows that voluntary financial information has the highest rate of disclosure change (0.3743), followed by employee information (0.1170). This high rate of change implies that financial information is the first choice of management to voluntarily disclose, probably because management considers that financial reporting users prefer financial than non-financial information for their decision-making and the information is not difficult to gather.

#### 4.4. The Relationship between Corporate Governance and Disclosure from 2002 to 2007

In order to address the question—to what extent the CG has an impact on financial reporting disclosure, the multiple regression analysis is undertaken. Before the analysis, the Pearson's correlation is taken and its results show a significant relationship between the board-member-shareholding variable and the management-shareholding variable with the value of 0.846 (see Appendix C for the Pearson's correlation test), suggesting the multicollinearity problem concern. To check this concern, the Tolerance values and Variance Inflation Factor (VIF) are computed for all regression models to be operated. It found that the Tolerance value of the concern variable is

less than 2 for the percentage of shares held by the board members. Field (2004) suggests that the Tolerance values below 0.2 indicate a multicollinearity problem. The correlation matrix (Appendix C) suggests that this variable is significantly and highly related to the percentage of shares held by management. Therefore, the research runs the regression models with and without either the percentage of share held by board members or the percentage of shares held by management. The results show that without the percentage of shares held by board members, the regression models have stronger explanation power than with it in the analysis. Therefore, the percentage of shares held by board members is excluded from the regression analysis. The results of the Tolerance values and VIF for the new models show no indication of a multicollinearity problem (see Table 4-11 for detail).

Table 4-10 shows the model summary of all regression models. It reveals that independent variables can explain the variation in disclosure levels at different explanation power. The R square values show the explanation power of independent variables to the variance of disclosure indexes. In 2002, about 43 percent of the variance in the aggregated disclosure is accounted for by the regression model whereas the same model accounted for 27.98 percent and 41.61 percent of the variance in the mandatory and voluntary disclosure respectively. However, the power of explanation of the models is lessened if the models had been derived from the population from which the sample was taken. This is suggested by the lower values of adjusted R square.

**Table 4-10** Model Summary of regression models

	<b>R</b>	<b>R Square</b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>	<b>Durbin-Watson</b>	<b>F</b>	<b>Sig.</b>
<b>Aggregated disclosure</b>							
All year	0.6046	0.3656	0.3007	0.0397	1.8402	5.6313	0.0000***
2002	0.6559	0.4302	0.1386	0.0397	1.8955	1.4756	0.1356
2007	0.6605	0.4363	0.3531	0.0348	2.1691	5.2423	0.0000***
<b>Mandatory disclosure</b>							
All year	0.4936	0.2436	0.1662	0.0374	1.7370	3.1481	0.0000***
2002	0.5290	0.2798	-0.0887	0.0438	1.9387	0.7593	0.7533
2007	0.4994	0.2494	0.1386	0.0315	2.1100	2.2509	0.0023***
<b>Voluntary disclosure</b>							
All year	0.5277	0.2784	0.2046	0.0536	1.8331	3.7711	0.0000***
2002	0.6451	0.4161	0.1174	0.0475	2.2216	1.3930	0.1733
2007	0.5882	0.3460	0.2495	0.0492	2.0106	3.5836	0.0000***

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

It is noticeable that the explanation power has increased considerably over time, especially voluntary disclosure, which the adjusted R square has changed from 11.74 percent to 24.95 percent during 2002 to 2007. Contradictory, although the power of explanation for mandatory disclosure increases over time, the increasing rate is much lower than the voluntary disclosure. In fact, the R square is reduced from 27.98 percent to 24.94. This is probably because the mandatory disclosure is already required by the regulations and the penalties are executed if not complied with. Management discloses information in compliance with laws and regulations in order to avoid high 'regulatory risk' that may occur (Abdullah et al., 2015a). However, the adjusted R square of mandatory disclosure show different results of the increasing explanation power of the model from no power to 13.86 percent, which is consistent with the results of the voluntary disclosure.

Nevertheless, the increasing explanation power of the regression models from 2002 to 2007 for all types of disclosure indicates that independent variables, including CG indicators, in the models have more power explanation in 2007 than those in 2002. This implies that in 2007, CG plays more part in explaining variance in disclosure levels of Thai firms than that in 2002.

The coefficients of the independent variables are determined to ensure if CG composition contributes to the explanation power of variance in disclosure levels and to what extent they do. Table 4-11 shows coefficients of the regression models for aggregated disclosure indexes. The CG attribute that consistently explain the aggregated disclosure over time is the percentage of shares held by top 5 in shareholding structure and the relationship is negative, suggesting that companies with high ownership concentration are likely to disclose information less than those with low concentration. This result agrees with previous research (Samaha et al., 2012; Muttakin and Khan, 2014; Muttakin et al., 2015; Liao et al., 2015). These researchers discuss that family-owned business tend to disclose less information in order to protect the family's interests and, as agency problems between owners and managers are likely to be absent.

Interestingly, the percentage of family members being the board members also has a consistent relationship with aggregated disclosure indexes over time but the signs of relationship are different. In 2002, the variable has a significantly negative relationship whereas in 2007, the positive association is found. Generally, based on agency theory, the increasing number of family members on the board should lead to the reduction of disclosure because the owners and control are not separated and the agency problems are less likely to appear. The 'management entrenchment', as suggested by Chau and Gray (2010), seem to exist in 2002. However, in 2007, the increasing number of family members on the board tends to relate to the increasing level of aggregated disclosure, suggesting that the family members seem to be increasingly concerned for the minority shareholders and thus they disclose more information. Chau and Gray (2010) determine that the convergence of interest between family members and minority shareholders occur when the members are concerned with long-term benefits they will gain from corporate investments and their lasting reputation and thus, a company with many family members on the

board tends to disclose much information in order to reduce the possibility of agency problems between the majority and minority shareholders. The convergence of interest between the family members and minority shareholders implies that Thai firms increasingly realize the importance of outside capital and the CG regulation becomes effective in practice.

**Table 4-11** Coefficients of the regression models for aggregated disclosure

	All years			2002			2007		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		7.7883	0.0000		4.8266	0.0000		8.1293	0.0000
Auditor type	0.0394	0.6670	0.5055	0.1733	1.2740	0.2095	0.0291	0.4296	0.6681
Duality	0.0729	1.2302	0.2200	0.1656	1.0957	0.2793	0.0530	0.7902	0.4307
Multi-position	0.0279	0.4631	0.6437	0.2769	1.8641	0.0691*	-0.0950	-1.3761	0.1708
Top 5 shareholding	-0.3342	-5.0046	0.0000***	-0.5201	-2.8559	0.0066***	-0.2491	-3.3598	0.0010***
Audit committee meetings	0.0454	0.7735	0.4401	-0.0509	-0.3691	0.7139	0.0739	1.0989	0.2736
Audit committee knowledge	0.0904	1.6062	0.1097	0.1480	1.0433	0.3027	0.0757	1.1808	0.2396
Agribusiness	0.0043	0.0615	0.9510	-0.0084	-0.0482	0.9618	-0.0724	-0.9499	0.3437
Consumers products	0.0528	0.7772	0.4379	0.1140	0.6583	0.5139	-0.0338	-0.4597	0.6464
Construction	0.1222	1.6144	0.1079	-0.1024	-0.6459	0.5218	-0.1617	-1.9630	0.0515*
Natural resources	0.2079	2.8659	0.0046***	0.1835	1.1415	0.2600	-0.0167	-0.2040	0.8386
Services	0.1018	1.3200	0.1883	0.1932	1.2631	0.2134	0.1377	1.8162	0.0713*
Technology	0.2106	2.9783	0.0032***	0.1991	1.3692	0.1781	0.1250	1.5710	0.1183
Firm size	0.2272	3.3488	0.0010***	0.1342	0.7660	0.4478	0.2277	2.9431	0.0038***
Leverage	-0.0543	-0.8518	0.3953	-0.0733	-0.4210	0.6758	-0.0142	-0.1983	0.8430
Profitability	-0.0381	-0.6415	0.5219	0.1019	0.6861	0.4963	-0.0213	-0.3068	0.7594
Number of board members	-0.0639	-0.7918	0.4293	-0.0493	-0.2285	0.8204	-0.0295	-0.3041	0.7615
Cross directorship	0.2211	3.1720	0.0017***	-0.2114	-1.2595	0.2146	0.2857	3.3876	0.0009***
Board being management	0.1206	1.8428	0.0667*	-0.0681	-0.4336	0.6667	0.1397	1.8098	0.0723*
Institutional shareholding	0.2525	2.8546	0.0047***	0.1180	0.4889	0.6274	0.2648	2.5894	0.0106**
Managerial shareholding	0.1471	1.8179	0.0705*	0.1466	0.7657	0.4480	0.0540	0.5590	0.5770
Independent directors	0.1580	2.4979	0.0132**	-0.0586	-0.2963	0.7684	0.0867	1.2428	0.2159
Family-member directors	0.0084	0.1341	0.8934	-0.2800	-1.7652	0.0846*	0.1329	1.8548	0.0656*

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

Other attributes inconsistently relate to aggregated disclosure indexes over time. In 2002, only the multi-position of chairperson has statistically significant association with aggregated disclosure levels. The positive relationship of the multi-position of chairperson indicates that a company with a chairman of the board of directors holding other director positions in other companies tends to disclose more information than that with no such chairman. Haniffa and Cooke (2005) suggested that working experiences of the chairman from various companies will

provide him/her to decide what type and how much information to be disclosed for the company so that his/her corporation gains a full benefit from the disclosure.

However, in 2007, the cross directorship of board members, number of board members being management, and the percentage of shares held by institutions are statistically associated with aggregated disclosure. These variables are positively related to aggregated disclosure indexes, suggesting that the higher values of these variables, the more information disclosed by the companies. For the cross directorship of board members, the result reveals that a company with many board members holding a position of director in other companies is likely to disclose information more than a company with a few members holding cross directorship. Rupley et al. (2012) explains that this cross directorship provides board members with working experiences and business expertise; as a result, they can practice well in disclosure. Similarly, the positive relationship of aggregated disclosure levels with the number of board members being management suggest that a company with many directors being management tends to disclose more information than a company with a few. Generally, the characteristic of directors and management being the same persons is found in a family business and when they are from the same parties, the concern of agency problems between shareholders and management is reduced. Therefore, the information disclosure is done for alleviating the problems between the shareholders and the minority parties. This transparency is to ensure that the family members will receive benefits from long-term investments of the company and maintain their reputation in business, as Chau and Gray suggested the convergence of interests between the controlling shareholders and the minority party. The positive relationship between these two variables also agrees with the significant positive relationship between the percentage of family members on the board and disclosure levels.

The institutional shareholding variable also has a positive relationship with aggregated disclosure indexes, suggesting the higher percentage of institution shareholding in top 10 shareholding structure, the more information disclosed by the companies. The relationship provides support for an argument that institutional shareholders act as the monitoring mechanisms to ensure that management performs in the shareholders' interests and so disclose all necessary information for the review (Iatridis, 2013).

It is noticeable that the variables significant associated with the aggregated disclosure levels in 2007 are not significantly related to the disclosure in 2002 (except the proportion of top 5 shareholding structure), suggesting that particular Thai CG aspects have an influence on disclosure at a particular point in time. However, with the increasing explanation power of the regression models from 2002 to 2007, explained previously, it is unquestionable that CG structure increases its part in explaining disclosure practices of Thai firms.

Other controlled variables significantly associated with the aggregated disclosure are company size and industry type. These associations agree with several previous studies' findings

(Muttakin and Khan, 2014; Omar and Simon, 2011; Samaha et al., 2012; Sharma, 2014) and confirm that a big company tends to disclose more information than a small firm because its information system can provide required information to be disclosed with effortlessly and less cost (Omar and Simon, 2011; Samaha et al., 2012; Sharma, 2014). Furthermore, to reduce the agency costs, management in a big company tends to disclose much information and this also relieves its accountability to shareholders (Omar and Simon, 2011; Samaha et al., 2012). Also, a company in a particular industry is likely to be required to disclose information more than that in other industries. This requirement may be arisen from either regulatory enforcement or social responsibility, as several researchers (Muttakin and Khan, 2014; Omar and Simon, 2011) suggested.

**Table 4-12** Coefficients of the regression models for mandatory disclosure.

	All years			2002			2007		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		15.1980	0.0000		6.5508	0.0000		15.9835	0.0000
Auditor type	0.0401	0.6207	0.5354	0.1448	0.9472	0.3488	0.0005	0.0059	0.9953
Duality	0.0850	1.3134	0.1905	0.1123	0.6611	0.5121	0.1232	1.5912	0.1137
Multi-position	0.0320	0.4877	0.6263	0.1255	0.7515	0.4564	-0.0547	-0.6870	0.4932
Top 5 shareholding	-0.2310	-3.1682	0.0018***	-0.2908	-1.4207	0.1626	-0.1661	-1.9419	0.0540*
Audit committee meetings	-0.0344	-0.5360	0.5925	-0.0755	-0.4866	0.6290	-0.0137	-0.1764	0.8602
Audit committee knowledge	0.0958	1.5589	0.1205	0.1046	0.6555	0.5156	0.0742	1.0026	0.3177
Agribusiness	-0.0880	-1.1552	0.2493	-0.2314	-1.1768	0.2458	-0.1555	-1.7670	0.0793*
Consumers products	0.0534	0.7197	0.4725	-0.0418	-0.2148	0.8310	0.0039	0.0462	0.9632
Construction	0.0932	1.1279	0.2606	-0.2420	-1.3579	0.1816	-0.1361	-1.4317	0.1543
Natural resources	0.1949	2.4602	0.0147**	-0.0214	-0.1185	0.9062	-0.0011	-0.0114	0.9909
Services	0.1336	1.5867	0.1141	0.0909	0.5283	0.6000	0.1295	1.4806	0.1408
Technology	0.2363	3.0607	0.0025***	0.1660	1.0156	0.3155	0.1781	1.9392	0.0544*
Firm size	0.1087	1.4670	0.1438	-0.0863	-0.4384	0.6633	0.1121	1.2552	0.2114
Leverage	-0.0425	-0.6104	0.5423	0.0084	0.0429	0.9660	-0.0030	-0.0369	0.9706
Profitability	-0.0193	-0.2978	0.7661	-0.0204	-0.1225	0.9031	0.0588	0.7325	0.4650
Number of board members	-0.0890	-1.0098	0.3137	-0.0387	-0.1597	0.8739	0.0226	0.2020	0.8402
Cross directorship	0.1505	1.9772	0.0493**	-0.1891	-1.0022	0.3218	0.1506	1.5472	0.1239
Board being management	0.1724	2.4122	0.0167**	0.0743	0.4212	0.6757	0.1744	1.9585	0.0520*
Institutional shareholding	0.1449	1.5002	0.1350	-0.0515	-0.1896	0.8505	0.1541	1.3061	0.1935
Managerial shareholding	0.1398	1.5821	0.1151	-0.0068	-0.0316	0.9749	0.0813	0.7299	0.4666
Independent directors	0.1596	2.3111	0.0218**	0.0460	0.2072	0.8368	0.0890	1.1062	0.2704
Family-member directors	-0.0216	-0.3146	0.7534	-0.0968	-0.5429	0.5900	0.0481	0.5817	0.5617

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

To determine the relationships between CG and disclosure indexes in detail, the research reports the coefficients of the regression models by types of disclosure—mandatory and voluntary disclosures. Table 4-12 shows the coefficients of regression models with the mandatory disclosure indexes as a dependent variable.

When considering the two-year data together, it is found that four CG characteristics, including the cross directorship of board members, the number of board members being management, the proportion of top 5 shareholding, and the percentage of independent directors on the board, can significantly explain the variance of mandatory disclosure levels and the signs of relationships agree with the finding of aggregated disclosure reported previously.

However, when determining the data separately by year, the research reveals that no independent variables in 2002 are significantly associated with the mandatory disclosure, meaning that firm characteristics and CG structure are unlikely to explain the variance of mandatory disclosure of Thai firms. This suggests that in 2002, mandatory disclosure might be influenced by regulatory enforcement rather than internal infrastructure and characteristics of the firms. Management discloses information in compliance with laws and regulations in order to avoid high ‘regulatory risk’ that may occur (Abdullah et al., 2015a). Nevertheless, the result of no significance of independent variables is inconsistent with several studies which found the statistically significant relationship between mandatory disclosure and either CG or firm characteristics. For example, Omar and Simon (2011) and Samaha et al. (2012) found that firm size is associated with the mandatory disclosure and Samaha et al. (2012) found the significant relationship between ownership concentration and the disclosure. Also, Abdullah et al. (2015a) reveal the significant association between the family members being the board members and the disclosure. Nevertheless, there are some that are consistent with the current research’s results, such as Abdullah et al. (2015a) found no significance between firm size and mandatory disclosure.

In 2007, two CG attributes, the number of board members being management and the percentage of shares held by top 5 shareholders, are significantly related to mandatory disclosure indexes. The positive relationship of the number of board members being management suggests that a company with many board members being management tends to disclose more mandatory information than that with a few members. Abdullah et al. (2015a) discuss that management tends to assess costs/benefits, including ‘regulatory risk’, in disclosing mandatory information. The risk involves financial risk, litigation risk, risk of regulatory engagement and reputation risk which could occur if a company is not complied with disclosure requirements. Therefore, usually the directors being management are likely to disclose mandatory disclosure to avoid conflicts with regulators and maintain their position in the minority’s aspect in order to reduce this ‘regulatory risk’. The negative relationship of the percentage of shares held by top 5 shareholders agrees with the regression results of aggregated disclosure in Table 4-11 and this confirms that the ownership concentration is important in explaining Thai disclosure levels.

The association between two CG characteristics and the mandatory disclosure in 2007, but not in 2002, confirming that the CG structure increases its role in explaining the disclosure practices of Thai firms. This increasing may suggest that in 2002, mandatory disclosure is driven by statutory control but in 2007, when some CG characteristics are active in practices in motivating mandatory disclosure, pressure from the capital market seems to play its part in disclosure practice. Apart from the CG attribute, the industry type is significantly associated with mandatory disclosure indexes in 2007 and this is consistent with other previous research (Omar and Simon, 2011).

Overall, for mandatory disclosure, independent variables seem to be less important in explaining management behavior for such disclosure, as a very few variables have a significantly associated with the mandatory disclosure indexes. Omar and Simon (2011) suggest that as mandatory disclosure is compulsorily practiced by legal and regulatory enforcement, other mechanisms, such as the capital market, seems to have less influence on the practices. However, the increasing role of CG indicator in the regression models between 2002 and 2007 infers that the market enforcement seems to enhance the CG role to influence the mandatory disclosure levels.

For voluntary disclosure, Table 4-13 presents the coefficients of regression models. Although there are fewer CG characteristics significantly related to voluntary disclosure indexes when running regression of all-year data, the model has more explanation power, compared with the mandatory disclosure models.

For all-year data, the percentage of shares held by top 5 shareholders, the cross directorship of board members and the percentage of independent directors on the board are significantly associated with voluntary disclosure indexes. The latter two have a positive relationship with the disclosure levels, suggesting that a company with many directors holding a director position in other companies and with high number of independent directors on the board is likely to voluntarily disclose its information more than a company with a few of them. The studies that found the similar results (Rupley et al., 2012) explain that the cross directorship of board members help them to enhance their managing and monitoring skills to supervise management and thus they are able to request all necessary information to be disclosed. Similarly, the independent directors who have no congruent interests with management will be accounted for their roles and responsibilities in order to add value to their creditability as the board of directors and thus act as another monitoring mechanism of management performance (Rupley et al., 2012; Muttakin et al., 2015; Samaha et al., 2012; Sahama et al., 2015; Cheung et al., 2006). On the other hand, the proportion of top 5 in shareholding structure has a negative relationship with the disclosure, meaning that a company with a high ownership concentration tends to voluntarily disclose less information than that with low proportion. The high ownership concentration indicates the dominant group of shareholders and such group can then be dominated in the board of directors and management and thus it is possible that it will hold some information for their favor (Muttakin and Khan, 2014; Muttakin et al., 2015; Samaha et al., 2012). With the positive

relationship of the number of independent directors, it is suggested that the power of dominant group in Thai firms may be balanced by independent directors.

**Table 4-13** Coefficients of the regression models for voluntary disclosure.

	All years			2002			2007		
	Beta	t	Sig.	Beta	t	Sig.	Beta	t	Sig.
(Constant)		-1.1471	0.2526		1.3955	0.1700		-0.7682	0.4436
Auditor type	0.0183	0.2895	0.7724	0.0301	0.2188	0.8278	0.0483	0.6615	0.5093
Duality	-0.0006	-0.0101	0.9920	0.0274	0.1788	0.8589	-0.0359	-0.4967	0.6201
Multi-position	-0.0099	-0.1539	0.8778	0.2542	1.6907	0.0981*	-0.1196	-1.6087	0.1098
Top 5 shareholding	-0.2304	-3.2361	0.0014***	-0.3102	-1.6831	0.0996*	-0.1754	-2.1968	0.0296**
Audit committee meetings	0.0607	0.9693	0.3335	-0.2059	-1.4742	0.1477	0.1329	1.8362	0.0683*
Audit committee knowledge	0.0393	0.6539	0.5139	0.1210	0.8424	0.4042	0.0066	0.0957	0.9239
Agribusiness	-0.0426	-0.5733	0.5670	0.1741	0.9830	0.3311	0.0006	0.0075	0.9941
Consumers products	-0.0023	-0.0316	0.9748	0.3660	2.0883	0.0427**	-0.0083	-0.1047	0.9168
Construction	-0.0314	-0.3893	0.6974	0.2464	1.5354	0.1320	-0.0233	-0.2626	0.7932
Natural resources	0.0904	1.1680	0.2441	0.1423	0.8742	0.3868	-0.0105	-0.1187	0.9057
Services	-0.0596	-0.7248	0.4694	0.2458	1.5874	0.1197	0.1331	1.6300	0.1052
Technology	0.0870	1.1538	0.2498	-0.0458	-0.3109	0.7574	0.1466	1.7107	0.0892*
Firm size	0.3066	4.2362	0.0000***	0.2699	1.5226	0.1352	0.2521	3.0246	0.0029***
Leverage	-0.1461	-2.1479	0.0328**	-0.1732	-0.9822	0.3315	-0.0984	-1.2758	0.2040
Profitability	0.0188	0.2976	0.7663	0.3616	2.4063	0.0205**	-0.0034	-0.0453	0.9639
Number of board members	-0.0387	-0.4495	0.6535	-0.1548	-0.7087	0.4823	0.0166	0.1588	0.8740
Cross directorship	0.2441	3.2832	0.0012***	-0.1284	-0.7560	0.4538	0.3241	3.5673	0.0005***
Board being management	0.0352	0.5046	0.6143	-0.0293	-0.1842	0.8547	0.0010	0.0124	0.9902
Institutional shareholding	0.1377	1.4596	0.1459	0.0666	0.2726	0.7865	0.1395	1.2667	0.2072
Managerial shareholding	0.1150	1.3327	0.1841	0.0188	0.0969	0.9232	0.0812	0.7812	0.4359
Independent directors	0.1315	1.9492	0.0526*	-0.2414	-1.2063	0.2343	0.0715	0.9514	0.3429
Family-member directors	-0.0023	-0.0340	0.9729	-0.3080	-1.9180	0.0618*	0.1165	1.5093	0.1333

\* Significant at 10 percent level.

\*\* Significant at 5 percent level.

\*\*\* Significant at 1 percent level.

Considering the models separately by year, the research reveals that in 2002, the number of board members holding a director position in other companies, the percentage of shares held by top 5 shareholders, and the percentage of family members on the board are significantly associated with the voluntary disclosure levels. The latter two have a negative relationship, suggesting that The higher value of these two CG characteristics are of the companies, the lower levels of voluntary disclosure are performed by Thai firms. A company with a high percentage of family members on the board tends to voluntarily disclose less information than that with a low

percentage. This is explained by several researchers (Muttakin et al., 2015; Samaha et al., 2012) that in many Asian countries where family-owned businesses, characterized by ownership concentration and many family members on the board and being management, are common and unbreakable, family members certainly protect their interests in firms but at the same time, watch out for intruding circumstances that potentially lessen their benefits from the firm (Samaha et al., 2012). Therefore, it is unsurprising that family members may hold some information for their advantages.

In 2007, the percentage of shares held by top 5 shareholders, the number of audit committee meetings, and the number of board members holding a director position in other companies are significantly associated with the voluntary disclosure indexes. The finding of the relationship of the top 5 shareholding concentration with the voluntary disclosure indexes strengthen the importance of this variable in explaining both mandatory and voluntary disclosure practices in Thailand and the direction of association is consistent over time. Apart from the top 5 shareholding concentration, the positive relationship of the cross directorship of the board members is found and consistent with the results of the all-year data, that is, the more number of board members holds a director position in other companies, the more information is disclosed by the company, as the board members will have skills and experiences to require management to disclose all necessary information. In addition, the result shows the positive association of the audit committee meetings indicating that the more meetings an audit committee organizes, the more information a company voluntarily disclose. This infers that audit committee possibly begins to have its role in a company's disclosure practices.

For the control variables, firm size and leverage are significantly related to the voluntary disclosure indexes for all-year data. When determining by the year, the relationship between the industry type and voluntary disclosure levels are consistent over time and this agrees with previous research (Muttakin and Khan, 2014; Muttakin et al., 2015; Omar and Simon, 2011; Liao et al., 2015). However, the leverage is significantly related to the voluntary disclosure for all-year data only. In 2002, apart from the industry type, the profitability is another variable significantly related to the voluntary disclosure levels. In 2007, the firm size is found to be significantly associated with the disclosure practice, agreeing with previous studies (Omar and Simon, 2011; Muttakin et al., 2015). The results of the control variables suggest that explanation power of the firm characteristics on disclosure practices is changeable.

## **4.5. Summary**

From the results, the CG structure and financial reporting disclosure of Thai firms has changed significantly between 2002 and 2007, confirming H1 and H2. Some changes in CG characteristics indicate a positive sign of good CG in practices among Thai firms. For example, while the number of independent directors on the board of directors increases, the number of family members on the board decreases. Furthermore, the smaller size of board of directors is

likely to be appeared and the number of the board members with cross directorship to other companies rises. These changes potentially lead to effective CG practices. Research (Gisbert and Navallas, 2013; Rupley et al., 2012) proposes that independent directors work for their creditability of career path and have no congruent interest with management and thus monitoring closely the corporate performance. Also, the small number of board members allows them to conveniently discuss and monitor all matters of corporations (Gisbert and Navallas, 2013; Samaha et al., 2015). However, some (Cheung et al., 2006; Abdullah, Percy and Stewart, 2015b; Gisbert and Navalass, 2013; Samaha et al., 2015; Liao et al., 2015) argued that a small size of the board of director may limit ability of the board because there is possibility that the board may lack of some skills and knowledge in dealing with some circumstances. For the CG changes in Thailand, this argument may not be strongly valid, as the small size of the board prevails with the occurrence of increasing number of directors with cross directorship. Several researchers (Rupley et al., 2012; Gul and Leung, 2004) suggests that directors holding a director position in various companies at the same time tend to possess more experiences and skills than those without it, because the positions will provide an opportunity for them to access and gain information from several sources, to professionally deal with expected and unexpected events that may risk corporate performance, to seek an opportunity for benefits of the companies, and to sharpen their monitoring skills for closely supervising management. Therefore, although the size of board of directors is reducing, the directors who have knowledge and skills from holding a cross directorship are competent in their roles and responsibilities.

The disclosure levels of all types of disclosure also significantly increase, suggesting that Thai companies tend to disclose more information from 2002 to 2007. The amount of voluntary information disclosed is changed more than mandatory disclosure. Analyzing in detail, for voluntary disclosure, the result shows that the amount of financial information is disclosed most compared to other type of voluntary information, followed by employee information. This is probably due to the low cost of gathering information and the management consideration of information requirements of financial reporting users.

Both changes in CG characteristics and financial reporting disclosure suggest an existence of CG influence on the disclosure and the results of the relationships between disclosure levels and CG characteristics seem to confirm this statement. The research reveals the increasing explanation power of the independent variables, including CG characteristics, in the regression models of all types of disclosure from 2002 to 2007. This implies that CG characteristics have some extent of influence on disclosure practices.

The coefficients of the models further indicate that the proportion of top 5 in shareholding structure is the important CG characteristic in explaining the variance of disclosure indexes, confirming H3. The proportion has a negative relationship with the disclosure levels, meaning that the higher ownership concentration of top 5 in shareholding structure, the lesser information to be disclosed by the companies. This confirms the agency theory that the dominated

shareholders may hold information for their own benefits from the minority and thus the agency problems between these two parties prevail.

Apart from the percentage of shares held by top 5 shareholders, for aggregated disclosure, the percentage of family members on the board are significantly related to the aggregated disclosure indexes over time but with different directions, confirming H9 regardless of the direction. In 2002, the negative relationship is found while the positive one is shown in 2007, implying that in 2002, agency problems either between owners and control or between majority and minority shareholders seem to not bother the dominant shareholders of a company and thus, the insiders hold information for their own interests. However, in 2007, the family members seem to be increasingly concerned for the minority shareholders, due to the presence of agency problems between the majority and minority shareholders. This suggests that Thai firms may increasingly realize the importance of outside capital and the CG regulation becomes effective in practice.

There are also other CG characteristics associated with the disclosure levels; however, the associations are not consistent over time. In 2002, only the chairperson holding a director position in other companies is significantly related to the aggregated disclosure indexes, confirming H12, but not in 2007. Differently, in 2007, the number of board members holding a director in other companies, the number of board member being management, and the institutional shareholding are significantly associated with the aggregated disclosure indexes, confirming H5, H11, and H12.

When determining the regression models separately by two types of disclosure, the research reveals that for mandatory disclosure, in 2002, there is no independent variable significantly explaining the variance of mandatory disclosure indexes, but in 2007, the percentage of shares held by top 5 shareholders and the number of board members being management are significantly associated with the mandatory disclosure levels, confirming H3 and H11. Regarding voluntary disclosure, in 2002, the chairperson holding a director position in other companies, the percentage of shares held by top 5 shareholders, and the number of family members on the board are significantly related to the voluntary disclosure indexes, Confirming H3, H9, and H12, whereas in 2007, the number of board members holding a director position in other companies and the percentage of shares held by top 5 shareholders and the audit committee meetings are significantly associated with the disclosure indexes, confirming H3, H13, and H14. The inconsistent relationships suggest that CG characteristics are inconsistently associated with disclosure levels over time, meaning that they are significantly related to disclosure indexes in a particular year. However, the increasing explanation power of the regression models containing CG characteristics from 2002 to 2007 suggests that CG in Thai firms is not only written in paper but also more effective in practices over time.

To sum up, the regression results suggest that the ownership structure plays an important part in determining financial reporting disclosure in Thailand. Many researchers (Cabalu, 2005; Suehiro

and Wailerdsak, 2001; Wiwattanakantang, 2001) have scrutinized the high ownership concentration among Thai firms and found that after the crisis, more than 50 percent of listed companies still have this characteristic although the government has tried to break this concentration with much effort. In fact, the current research reports that the average percentage of shares held by top 5 shareholders is more than 50 percent and it increases during 2002 and 2007. The ownership concentration in Thai firms has been discussed widely since the 1997 economic crisis and this structure causes Thai CG different from the Anglo-Saxon model in practice although Thai regulations strictly follow the CG concept. The characteristic probably alters other components of good CG in a company. For example, several research (Cheng and Jaggi, 2000; Cheung et al., 2006; Chau and Gray, 2010; Gisbert and Navallas, 2013; Samaha et al., 2015) propose that the existence of a majority shareholders in family-owned businesses can prevent independent directors from performing their monitoring role properly, as the majority and independent directors may have a close relation.

## **Chapter 5**

### **Conclusion, Implications and Limitations**

#### **5.1 Conclusion and Discussion**

The research aims to investigate the development of CG in Thailand, how it has been changed in practice during 2002 and 2007 and its influence on financial reporting practice, specifically disclosure practices. The research employs the T-test to determine the changes in CG and disclosure practices and the multiple regression analysis to investigate the relationship between CG characteristics and disclosure practices during 2002 and 2007. The Thai listed companies' annual reports of the year 2002 and 2007 are read. The CG data and disclosure indexes are collected. The results show that some CG characteristics have been changed from 2002 to 2007. These are the increasing number of independent directors on the board, the reducing number of family members on the board, the decreasing size of the board, the increasing number of directors with directorship in other companies, the decreasing number of shares held by institutions, and the increasing number of shares held by management. The changes indicate that Thai CG seems to move toward the Anglo-Saxon model. Regarding disclosure practices, the levels of disclosure considerably increase over time, both mandatory and voluntary information, suggesting a good trend of transparency among Thai companies. Specifically, for voluntary disclosure, financial information is the most substantially increased, followed by employee information.

The regression results show that ownership concentration can explain the variance in disclosure levels the most, as the explanation can be found across all types of disclosures. The relationship between the disclosure indexes and the percentage of shares held by top 5 shareholders is negative, suggesting that the higher the percentage of shares, the less information the companies disclose. This implies that owners and control are from the same party and thus, disclosure is considered being unnecessary to lessen the information asymmetry between shareholders and management, but the asymmetry between the majority and minority shareholders is doubtful. The inconsistently significant relationships between disclosure indexes and other CG characteristics during 2002-2007 shed light on the problem between these two groups. The positive association between disclosure indexes and the number of family members on the board suggest that although the ownership concentration tends to decrease disclosure levels, there are some concerns with the minority shareholders rise, as companies with high number of family members on the board tend to disclose more information than those with a few number. This implies that the family members seem to be increasingly concerned for the minority shareholders and thus they disclose more information. Chau and Gray (2010) determine that the convergence of interest between family members and minority shareholders occur when the members are concerned with long-term benefits they will gain from corporate investments and their lasting

reputation and thus, a company with many family members on the board tends to disclose much information in order to reduce the possibility of agency problems between the majority and minority shareholders. The convergence of interest between the family members and minority shareholders implies that Thai firms increasingly realize the importance of outside capital and the CG regulation becomes effective in practice.

Furthermore, the inconsistently but significantly positive relationship between disclosure practice and independent directors and the number of directors with cross directorships in other companies over time indicate that from 2002 to 2007, CG mechanism following the Anglo-Saxon model seems to somewhat affect disclosure practices despite the obvious ownership concentration characteristic among Thai firms. This also eases the concern of Cabalu (2005) that in the Thai context, independent directors refer to as being non-executive, which would only exclude insiders (i.e. management and employees) but could include anyone with personal relations with certain insiders. Hence, independent directors can come from friends and family of controlling shareholders, as a result, independent directors can work ineffectively in monitoring management. Some significant relationships also support the validity of agency theory among Thai companies, suggesting that agency theory can be used to partially explain disclosure practices. This is agreeable with other researchers (Habib and Jiang, 2015; Abdullah et al., 2015) dealing with CG and disclosure practices

In addition, the increasing explanation power of the regression models from 2002 to 2007 shows that CG characteristics' power in explaining disclosure indexes increases over time. The increase also implies that disclosure practices, particularly mandatory disclosure, are not only influenced by the regulatory enforcement in 2002 but they are also slightly affected by the market enforcement in 2007.

## **5.2 Research Implications**

The research results will yield several benefits for both academics and practitioners. In Thailand, accounting research dealing with CG and disclosure practices is apparently scarce. This research can boost accounting academics to conduct research related to this area and that can be practical and academic. Furthermore, this research possibly initiates a role of accounting research in improving CG and a company's financial reporting practices. The results of CG and disclosure levels can motivate both regulators and practitioners to assess their own CG characteristics and disclosure levels in order to enhance their performance in investors' perspective. For an international perspective, this research increases knowledge of CG and financial reporting practices existing in one of developing countries and their development in this particular environment, which may be different from other countries but similar to many. Thus, for other similar countries, the changes in CG explanation power over time suggesting the increasing

validity of Anglo-Saxon model in the countries support the possibility of the universal CG model to all environments, but this validity requires time to transform from concept to practice. Thus, the developing countries employing the CG Anglo-Saxon model may have applied only policy and after a while, the practices would be emerged.

For regulators, the research results possibly motivate the Thai regulators to oversee CG and disclosure practices among Thai listed companies, as the results show the low level of voluntary disclosure and of mandatory disclosure of some companies. Also, as some CG characteristics have significantly changed but some have not changed from 2002 to 2007, the regulators may need to identify the changed areas, whether or not they are good CG practices and the unchanged characteristics, whether or not they should be improved. The results would be information for regulators to sustain and/or improve good corporate governance in Thailand. In addition, the Thai regulators may employ the result on Thai financial reporting practices as a guideline to issue new disclosure regulations and to expect what listed companies' responses will be. Furthermore, the regression models suggest the regulators which CG characteristics may strongly motivate Thai companies to disclose more information and which may diminish the motivation. Therefore, the regulators can focus on improving some CG characteristics in Thai companies in order to increase disclosure practices and be cautious with the presence of some CG practices in the companies.

For practitioners, the research results indicate their CG and disclosure practices from 2002 to 2007 and this information provides them to assess themselves in the matter of CG and disclosure. Some CG characteristics have changed significantly, following the Anglo-Saxon model, but other have not changed. Thus, the companies need to consider whether or not more characteristics should be transformed to increase their financial reporting creditability and firm performance and should assess the costs and benefits of those possible changes. Regarding the results of disclosure indexes, on average, the mandatory disclosure has no concern for the amount of information disclosed, as the average disclosure indexes are more than 50 percent. However, some companies may need to improve their mandatory disclosure because their scores no more than 80 percent, suggesting the possibility of non-compliance costs. According to voluntary disclosure, on average, the disclosure indexes are low and this is common in many countries but if the companies require capital from outside resources, the consideration of increasing voluntary disclosure should be in management's financial reporting preparation.

The regression results also provide some implications for the practitioners. The relationships indicate some CG characteristics that are likely to reduce disclosure levels of the companies. The companies with these characteristics then can be in the investors' and regulators' interests. The investors' decision making on investment can be affected and may result in the high cost of capital for the companies. Similarly, the regulators would closely monitor the companies'

performance and disclosure practices and may result in the high cost of non-compliance. Therefore, the companies may need to transform these CG characteristics to the ones that are positive to disclosure practices in order to avoid the occurrence of the costs.

### **5.3 Research Limitations**

Similar to other research, the current study have some limitations to be concerned. First, the study collected the data from only one of disclosure channels, the annual reports. Presently, there are other means the companies use to communicate to their interesting parties, such as website, newsletter, and form 56-1 required by the SEC. However, as an annual report is the main communication channel to investors, the research is justified that have already considered the majority of disclosed information. Nevertheless, future research might investigate other means of disclosure such as prospectuses, press releases to security analysts, financial news and announcements in takeover documents (Chau and Gray, 2010).

Secondly, the scoring process contains some degree of subjectivity of the researcher and thus, the disclosure indexes could be distorted by this although the research applies some methods, such as twice reading, to reduce this subjectivity. This limitation is common in the research using the dichotomous approach in scoring disclosure practice (Chau and Gray, 2010; Omar and Simon, 2011; Muttakin, Khan and Belal, 2015; Li, Mangena and Pike, 2012).

Thirdly, due to the anticipated problem of a lack of information in collected data sources, the current research could only examine a selective number of CG factors influencing disclosure practices and there may be other factors that affect Thai disclosure practices which other researchers had been concerned such as the ‘family duality’ (Muttakin, Khan, and Belal, 2015), foreign minority shareholders (Suehiro and Wailerssak, 2001), gender of the members of the board of directors (Liao et al., 2015), and independence of a chairperson of the board (Chau and Ggray, 2010). Nevertheless, the slightly high value of R square is acceptable, compared to other previous studies. The future research however may be able to increase the explanation power of the models by adding other factors in the regression models.

Fourthly, the quantity of information in the disclosure index does not reflect the quality of disclosure, meaning that companies with the high level of disclosure in the research do not necessarily have a high quality of information. Because the research scores disclosure index according to the items list, not the content of information; therefore, the research would not be able to assess whether or not the information disclosed contains good quality of information, such as completeness, clearness, relevance, and concision. Thus, companies with high score of index do not mean their disclosure has a high quality and vice versa.

Finally, the research investigates only direct relationship between CG characteristics and disclosure practices. However, currently, several studies (Ernstberger and Grüning, 2013; Gisbert and Navallas, 2013; Rupley et al., 2012; Samaha et al., 2015) suggest that the degree of association between disclosure and CG is influenced by institutional environment that CG and disclosure are practiced. Also, some studies (Chau and Gray, 2010; Jiang et al., 2011) determine that there are some interactions between CG characteristics and these influence the degree of the impact of CG on disclosure practices. The future research dealing with this complicated association is required.

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## Appendix A. CG data collection and Disclosure items list

<b>Company Information</b> <b>Thai Annual Reports</b>
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01. Identification number
02. Company name
03. Type of company's business:
1=Agribusiness
2=Consumer goods
3=Industrial
4=Real estate & construction
5=National resource
6=Service
7=Technology
04. Total assets
05. annual sales
06. Leverage (total debts/total assets)
07. Gearing (Long-term debt/total long-term debt and equity)—Mangena and Pike (2005)
08. Profitability (net income/total equity)
09. Liquidity (Current assets/current liability)
10. BIG 4 Auditors
11. Multiple listing
12. Foreign Subsidiaries
13. Being foreign subsidiaries

**Corporate Governance Data  
Thai Annual Reports**

		Years		Note
		2002	2007	
	<b>A: Board Composition and Characteristics</b>			
CG-1	Proportion of independent directors			
CG-2	CEO/Chairman duality			
CG-3	Size of the board			
CG-4	Proportion of family members on the board			
CG-5	Number of board members with cross-directorship			
CG-6	Chairperson with cross-directorship			
CG-7	Directors' shareholdings (% of shares owned by executive directors)			
CG-8	Number of Board of Director being management			
	<b>B: Ownership Structure</b>			
CG-9	Ownership concentration (% of shares owned by top ten shareholders)			
	1. % ownership concentration—Top 5			
	2. % ownership concentration—Top 10			
CG-10	Institutional shareholding (% of shares held or controlled by institutions)			
CG-11	Managerial Ownership			
	<b>C: Audit Committee Characteristics</b>			
CG-12	Shareholding of audit committee members			
CG-13	Committee size			
CG-14	Frequency of audit committee meeting			
CG-15	Number of Audit committee with financial expertise			
CG-16	Number of audit committee relating to the board			

**Mandatory Disclosure Index**  
**Thai Annual Reports**

Identification number \_\_\_\_\_

Company name \_\_\_\_\_

	Items	Y/ NA/ N		Notes
		2002	2007	
	<b><i>1. General Information</i></b>			
1	Message from the board of directors			
2	Audit committee report			
3	Company address/telephone/fax			
4	Financial highlight statements			
5	Overall picture of business operation			
6	Company's revenue structure			
7	Summary of main changes in business operations during the year			
8	Corporate policy for the use of inside information by directors/management			
9	Summary of internal control system of the company			
10	Discussion of Industry trends/position			
11	Analysis of risk factors and their effects-qualitative			
12	Information of companies in which more than 10% of total company shares is owned by the reporting enterprise (e.g. name, address, business type and number of shares)			
	<b><i>2. Information on managers/directors</i></b>			
13	Organizational chart			
14	Names of managers/directors			
15	Academic qualification of managers/directors			
16	Working experience of managers/directors			
17	Functional responsibilities of managers/directors			
18	Number of company's shares held by managers/directors			
19	Remuneration of managers/directors			
20	Corporate policy in selecting directors and management			
	<b><i>3. Information on company's capital</i></b>			
21	Capital structure			

Items		Y/NA/N		Notes
		2002	2007	
22	Dividend payment policy			
23	Names and size of holdings of 10 largest stockholders			
	<b>4. Financial information-balance sheet</b>			
24	Total amount of cash in hand and at banks			
25	Gross carrying amount of short term investment			
26	Amount of trade accounts and notes receivable-net			
27	Total amount of short term loans to subsidiaries, associates and other related parties			
28	Total carrying amount of inventories			
29	Total amount of investment in subsidiaries and associates			
30	Gross carrying amount of long term investment			
31	Gross carrying amount of PPE			
32	Gross carrying amount of intangible assets			
33	Amount of bank overdraft and loans from financial institutions			
34	Total amount of trade accounts and notes payable			
35	Amount of current portion of long term loans			
36	Total amount of short term loans from subsidiaries, associates and other related parties			
37	Amount of tax payable and/or deferred income tax			
38	Total amount of long term loans			
39	Total amount of debenture loans			
40	Total amount of convertible debenture loans			
41	Total amount of long term loans/debentures from subsidiaries, associates and other related parties			
42	Amount of authorised share capital			
43	Number of authorised shares			
44	Par value per share			
45	Amount of issued and paid-up share capital			
46	Number of issued and paid-up shares			
47	Par value per issued and paid-up share			
48	Premium on share capital			
49	Amount of appropriated retained earnings-legal reserve			
50	Amount of unappropriated retained earnings			
51	Amount of revaluation increment in assets			
52	Amount of unrealized gain (loss) of investments			

Items		Y/NA/N		Notes
		2002	2007	
53	Minority interest			
	<b>5. Financial information-income statement</b>			
	<b><u>A: Revenues</u></b>			
54	Sales and services			
55	Gain from foreign exchange rate			
56	Gain from sales of investment			
57	Interest income			
58	Equity gain from associate and/or affiliate companies			
59	Amount of the impairment loss recognised prior year and reversed in this year as income			
	<b><u>B: Expenses</u></b>			
60	Cost of sales and services			
61	Selling and administrative expenses			
62	Loss from sales of investment			
63	Loss from foreign exchange rate			
64	Equity loss from associate and/or affiliate companies			
65	Loss from impairment of assets			
	<b><u>C: Interest expenses, income tax and extraordinary items</u></b>			
66	Interest expenses			
67	Income tax			
68	Profit (loss) before extraordinary items			
69	Amount for minority interest			
70	Amount of extraordinary items			
71	Net profit (loss)			
72	<b><u>D: Basic earning per share</u></b>			
73	Profit (loss) before extraordinary items			
74	Minority interest-net			
75	Extraordinary items-net			
76	Net profit (loss)			
	<b>6. Financial information- other statements</b>			
	<b><u>A: Statement of changing in shareholders' equity</u></b>			
77	Amount of retained earning at the beginning and at the end of the period			
78	Movement in share capital			

	Items	Y/NA/N		Notes
		2002	2007	
79	Movement in premium on share capital			
80	Movement in retained earnings-appropriation of legal reserve			
81	Movement in retained earnings-unappropriation			
82	Movement in revaluation increment in assets			
83	Movement in unrealised gain (loss) of investment			
84	Movement in minority interest			
85	<b><u>B: Statement of cash flows</u></b>			
86	Amount of cash at the beginning and at the end of the period			
87	Transactions about cash flows from operating activities			
88	Transactions about cash flows from investing activities			
89	Transactions about cash flows from financing activities			
90	Net increase (decrease) in cash			
91	Additional information about cash (e.g. cash paid, non-cash transactions)			
	<b><i>7. Notes to financial statements</i></b>			
	<b><u>A: Cash in hand and at banks</u></b>			
92	Definition of cash and equivalent cash			
	<b><u>B: Short term investment</u></b>			
93	Breakdown of investments (e.g. securities, bonds, notes)			
94	Market value of investments if different from the carrying amount			
95	Provision for unrealised gain (loss) on investment			
	<b><u>C: Trade accounts and notes receivable</u></b>			
96	Amount of trade accounts and notes receivable-original			
97	Total amount of trade accounts and notes receivable-subsidiaries, associates and other related parties			
98	Trade accounts and notes receivable-subsidiaries-name and amount			
99	Trade accounts and notes receivable-associates-name and amount			
100	Trade accounts and notes receivable-other related parties-name and amount			
101	Allowance for doubtful debt			

	Items	Y/NA/N		Notes
		2002	2007	
102	Corporate policy for allowance for doubtful debt			
103	<b><u>D: Short term loans to subsidiaries and associates</u></b>			
104	Short term loans to subsidiaries-names, amount			
105	Short term loans to associates-names, amount			
106	Short term loans to other related parties (e.g. parent company, directors)-names, amount			
	<b><u>E: Inventories</u></b>			
107	Breakdown of inventories into groups (e.g. raw materials, work in progress, finished goods)			
108	Amount of inventories-net realisable value			
109	Allowance for declining value of inventories			
110	The carrying amount of inventories pledged as security for liabilities			
111	Basis of inventory valuation			
112	Accounting policy for cost of inventory			
113	Circumstances or events that led to the reversal of a writedown of inventories			
	<b><u>F: Investment in subsidiaries and associates</u></b>			
114	Names of subsidiaries and associates			
115	Country that subsidiaries and associates originate from			
116	Types of business of subsidiaries and associates			
117	Number of shares invested in subsidiaries and associates			
118	Percentage of holding shares in subsidiaries and associates			
119	Amount of investment in subsidiaries and associates-cost method (in case of using cost method)			
120	Amount of investment in subsidiaries and associates-equity method			
121	Amount of dividend from subsidiaries and associates			
122	Accounting policy for investment in subsidiaries and associates			
123	Treatment of premium or discount on investment in associate and affiliate companies			
	<b><u>G: Long term investment</u></b>			
124	Amount of long term marketable investment-fair value			
125	Breakdown of investments into types (e.g. debt securities, mutual fund, equity securities)			
126	Provision for unrealized gain (loss) of investment			

	Items	Y/NA/N		Notes
		2002	2007	
127	Provision for impairment of assets-investments			
128	Information about long term investment (e.g. pledged as security for liabilities, dividend payment)			
129	Accounting policy for the determination of carrying amount of investments			
130	Corporate policy for the frequency revaluation of long term investments			
131	The date of the latest revaluation of long term investment			
132	Basis of revaluation of investments			
133	Treatment of changes in market value of current investments carried at market value			
134	Treatment of a revaluation surplus on the sale of a revalued investment			
	<b><u>H: Property plant and equipment (PPE)</u></b>			
135	Breakdown of PPE into categories (e.g. land, building, machines)			
136	Amount of PPE at the beginning of the period			
137	Accumulated depreciation			
138	Movement of carrying amount of PPE			
139	Movement of accumulated depreciation			
140	Provision for impairment of assets-PPE			
141	The existence and amount of restrictions on title, and PPE pledged as security for liability			
142	Amount of commitments for the acquisition of PPE			
143	Depreciation methods			
144	Depreciation rate used or useful life			
145	Measurement bases used for determining the gross-carrying amount of PPE			
146	Basis used to revalue the PPE			
147	Information about commitments for the acquisition of PPE			
	<b><u>I: Intangible assets</u></b>			
148	Breakdown of intangible assets into groups (e.g. patent, copyright, licenses and franchises)			
149	Basis of valuation of intangible assets			
150	Amortisation method for intangible assets			
151	Useful life of intangible assets or the amortisation rates used			

Items		Y/NA/N		Notes
		2002	2007	
	<b><u>J: Bank overdraft and loans from financial institutions</u></b>			
152	Disaggregation into bank overdraft and loans from financial institutions			
153	Information about bank overdraft and loans from financial institutions (e.g. interest rate)			
	<b><u>K: Current liabilities</u></b>			
154	Short term loans from subsidiaries-name and amount			
155	Short term loans from associates-name and amount			
156	Short term loans from other related parties (e.g. parent company, management/directors)-name and amount			
	<b><u>L: Long term debts</u></b>			
157	Disaggregation of amount of long term loans			
158	Details of loans in foreign currencies (in case of loans from foreign financial institutions)			
159	Details of long term loans (e.g. interest rates, loan repayment term, terms of interest payment and collaterals)			
160	Disaggregation of amount of debenture loans			
161	Details of debenture loans (e.g. interest rates, terms of interest payment, principal payment, period and collaterals)			
162	Disaggregation of amount of convertible debenture (domestic/foreign)			
163	Details of convertible debentures (e.g. interest rate, period and conversion condition)			
164	Long term loans/debentures from subsidiaries-name and amount			
165	Long term loans/debentures from associates-name and amount			
166	Long term loans/debentures from other related parties (e.g. parent company, shareholders)-name, amount			
167	Details of long term loans/debentures from related parties (e.g. interest rate, repayment term, term of interest payment)			
	<b><u>M: Share capital and retained earnings</u></b>			
168	Information about appropriated retained earnings-legal reserve and others			
169	Details and information about extraordinary items			
170	Calculation methods of basic and diluted earnings per share			
	<b><u>N: Other disclosures</u></b>			

Items		Y/NA/N		Notes
		2002	2007	
171	Basis of financial statement preparation			
172	Accounting policy for consolidation			
173	Name of companies consolidated in financial statements			
174	Reasons for not consolidating subsidiaries			
175	The effect of the acquisition and/or disposal of subsidiaries on the financial position at the reporting date			
176	Revenue recognition			
177	Basis of conversion of foreign currency transactions			
178	Treatment of gain/loss from foreign currency transactions			
179	Accounting policy adopted for borrowing costs			
180	Amount of borrowing costs capitalised during the year (in case of capitalised borrowing costs)			
181	Capitalisation rate used to determine the amount of borrowing costs			
182	Treatment of loss from the impairment of assets			
183	Basis of the determination of the impaired assets			
184	Description of the impaired assets			
185	Disclosure of cash-generating unit in calculating the impairment of assets			
186	Disclosure of debt restructuring (e.g. details and amount of debt conversion, profit/loss from debt restructuring, profit/loss from debt restructuring per share)			
187	Change in accounting policies-reason			
188	Change in accounting policies-effects			
189	Fundamental errors-nature			
190	Fundamental errors-effect			
191	Disclosure of commitment and contingent liabilities			
192	Disclosure of litigation			
193	Disclosure of subsequent events			
194	Corporate policy on pension funds			
195	Expense for pension funds during the year			
196	Corporate policy for provident fund			
197	Disclosure and presentation of financial instruments			
198	Explanation of the basis for segmental reporting and the basis for allocating expenses for each segment			
	<b>8. Other information</b>			

	Items	Y/ NA/ N		Notes
		2002	2007	
	<b><u>A: Transactions with Related parties</u></b>			
199	Name of related parties that the company has transactions with			
200	Disclosure of transactions with its related parties-quantitative			
201	Disclosure of transactions with its related parties-qualitative			
202	Audit committee's opinion about the transactions			
203	Disclosure of corporate policy for inter-transaction pricing			
204	Corporate policy for future transactions with related parties			
	<b><u>B: Explanation and analysis of the financial position and operating results</u></b>			
205	Overall picture of financial position and operating results			
	<b><u>C: Financial review</u></b>			
206	Financial history or summary-3 or more years			
207	Financial ratios			
	<b><u>D: Segmental reporting information</u></b>			
208	Breakdown of sales/revenue by major product line/industry			
209	Breakdown of sales/revenue by geographical location			
210	Breakdown of profit by major product line/industry			
211	Breakdown of profit by geographical location			
212	Breakdown of assets by industry			
213	Breakdown of assets by geographical location			
	<b><u>E: Other references of information</u></b>			
214	Name and address of auditor			
215	Name and address of official registrars			
216	Name and address of legal advisor			
217	Name and address of financial advisor			
218	Name and address of appraisal company			
	<b><i>9. Social reporting information</i></b>			
	<b><u>A: Employee information</u></b>			
219	Number of employees			
220	Corporate policy on human resource development			
221	Remuneration of employees			
222	Number of employees in each main production line			

**Voluntary Disclosure Index  
Thai Annual Reports**

Identification number \_\_\_\_\_

Company name \_\_\_\_\_

	Items	Y/ NA/ N		Notes
		2002	2007	
	<b>1. General Information (Strategic)</b>			
1	Brief of company history			
2	Analysis of risk factors and their effects on a company's overall performance-quantitative			
	<b>2. Corporate Financial Review (Financial)</b>			
3	Financial history or summary-6 or more years			
4	Explanation and analysis of financial performance			
5	Explanation and analysis of financial position-assets			
6	Explanation and analysis of financial position-liquidity			
7	Explanation and analysis of financial position-investment expenditures			
8	Explanation and analysis of financial position-fund sources			
9	Explanation and analysis of major factors and influences affecting operations or financial position in the future			
	<b>3. Information about Directors (Non-Financial)</b>			
10	Age of directors			
11	Pictures of directors			
12	Commercial experience of the non-executive directors			
13	Commercial experience of the executive directors			
14	Other directorships held by non-executive directors			
15	Other directorships held by executive directors			
	<b>4. Corporate Strategy (Strategic)</b>			
16	Statement of strategy and objectives—general			
17	Statement of strategy and objectives—financial			
18	Statement of strategy and objectives—marketing			
19	Statement of strategy and objectives—social			
20	Impact of strategy on future results			
	<b>5. Future Prospects (Strategic)</b>			
21	Statement of the company's objective in 3-5 years and future prospects			
22	Discussion of a company's future plans			

Items		Y/ NA/ N		Notes
		2002	2007	
23	Forecast of sales—qualitative			
24	Forecast of sales—quantitative			
25	Forecast of profits—qualitative			
26	Forecast of profits—quantitative			
27	Forecast of cash flows—qualitative			
28	Forecast of cash flows—quantitative			
29	Assumptions underlying the forecasts			
30	Description of capital project committed			
31	Committed expenditure for capital projects-quantitative			
	<b>6. Research and Development (Strategic)</b>			
32	Corporate policy on research and development			
33	Description of research and development projects			
34	Location of research and development activities			
35	Number employed in research and development			
	<b>7. Notes to financial statement (Financial)</b>			
	<b><u>A: Assets</u></b>			
36	Disaggregate cash as in hand and at bank			
37	Aging schedule for trade accounts and notes receivable			
38	Movement of short term loans to subsidiaries and associates			
39	Analysis of long term investments			
40	Fixed asset revaluation within the last 5 years			
41	Amount of intangible assets at the beginning of the period			
42	Amount of accumulated amortization on intangible assets			
43	Movement of intangible assets and accumulated amortisation on intangible assets			
44	Disclosure of other intangible valuations (except goodwill)			
	<b><u>B: Liabilities</u></b>			
45	Disaggregate trade accounts payable and notes payable			
46	Sources of differences between accounting income and taxable income			
47	Off balance sheet financing information			
	<b><u>C: Other Information</u></b>			
48	Transfer pricing policy—related parties			
49	Measures/procedures of approving the transactions with			

Items		Y/ NA/ N		Notes
		2002	2007	
	related parties			
50	Effects of inflation on results—qualitative			
51	Effects of inflation on future operations—qualitative			
52	Effects of interest rates on results			
53	Effects of interest rates on future operations			
54	Effects of foreign currency fluctuations on future operations—qualitative			
55	Effects of foreign currency fluctuations on current results—qualitative			
56	Foreign currency exposure management description			
57	Corporate policies for risk of gain/loss from foreign currency transactions			
	<b>8. Segmental Information (Financial)</b>			
58	Geographical capital expenditure—quantitative			
59	Line-of-business capital expenditure—quantitative			
60	Competitor analysis—qualitative			
61	Competitor analysis—quantitative			
62	Market share analysis—qualitative			
63	Market share analysis—quantitative			
	<b>9. Capital Market Information (Financial)</b>			
64	Share price at the year end			
65	Share price trend			
66	Market capitalisation at year end			
67	Market capitalisation trend			
68	Information about share price			
	<b>10. Corporate Social Responsibility Reporting (Non-Financial)</b>			
	<b><u>A: Customer</u></b>			
69	Company policy on product safety			
70	Company policy on information dissemination to its customers			
71	Statement about customer relations			
	<b><u>B: Environment</u></b>			
72	Corporate policy about environment			
73	Environmental protection programs—qualitative			
74	Environmental protection programs—quantitative			
75	Information about products and processes affecting environment (e.g. wastes, packaging, recycling, product			

Items		Y/ NA/ N		Notes
		2002	2007	
	development, and land contamination and mediation)			
76	Discussion of environmental-economic interaction			
77	Discussion of the impact of environmental programs on corporate performance and operations			
	<b><u>C: Community</u></b>			
78	Charitable donations-qualitative			
79	Charitable donations-quantitative			
80	Community programs			
81	Cooperation with governmental organizations in social campaigns			
	<b><u>D: Employee Information</u></b>			
82	Categories of employees by sex			
83	Number of employees from two or more years			
84	Reasons for changes in employee numbers or categories over time			
85	Share option schemes—policy			
86	Profit sharing schemes—policy			
87	Amount spent in training			
88	Nature of training			
89	Policy on training			
90	Number of employees trained			
91	Welfare information (general)			
92	Safety policy			
93	Cost of safety measures			
94	Equal opportunity policy statement			
95	Recruitment problems and related policy			
96	Number of minority and/or women employed			
97	Accident statistics			
98	A company's relationship with trade unions and/or workers			

## Appendix B. Tests of Normality

### One-Sample Kolmogorov-Smirnov Test—Disclosure indexes

		Mandatory	Voluntary	Aggregated
N		370	370	370
Normal Parameters(a,b)	Mean	0.8224	0.1967	0.5914
	Std. Deviation	0.0440	0.0627	0.0487
Most Extreme Differences	Absolute	0.0473	0.0437	0.0286
	Positive	0.0277	0.0437	0.0286
	Negative	-0.0473	-0.0279	-0.0273
Kolmogorov-Smirnov Z		0.9098	0.8412	0.5494
Asymp. Sig. (2-tailed)		0.3793	0.4789	0.9234

### One-Sample Kolmogorov-Smirnov Test—Control variables

	Sales	Leverage	Profitability
N	370	370	370
Normal Parameters(a,b)	15,251,973,600.16	0.5142	0.0723
	85,050,469,946.82	0.7311	1.4091
Most Extreme Differences	0.4288	0.2905	0.3998
	0.3828	0.2905	0.3811
	-0.4288	-0.2502	-0.3998
Kolmogorov-Smirnov Z	8.2490	5.5884	7.6899
Asymp. Sig. (2-tailed)	0.0000	0.0000	0.0000

### One-Sample Kolmogorov-Smirnov Test—Independent variables

	Independent board	Family-member board	Board size	Cross directorship	Board shareholding
N	370	370	370	333	332
Normal Parameters(a,b)	0.3166	0.1608	11.2892	6.6036	0.1516
	0.1149	0.1789	2.9824	3.8463	0.1801
Most Extreme Differences	0.1102	0.2859	0.1278	0.0790	0.1999
	0.1102	0.2859	0.1278	0.0790	0.1852
	-0.0605	-0.1844	-0.0918	-0.0471	-0.1999
Kolmogorov-Smirnov Z	2.1200	5.4990	2.4585	1.4425	3.6422
Asymp. Sig. (2-tailed)	0.0002	0.0000	0.0000	0.0312	0.0000

	Managing directors	Top 5	Institutional shares	Mnagerial shares	AC meeting
N	368	366	364	333	339
Normal Parameters(a,b)	3.8152	0.6524	0.4636	0.1315	6.2596
	2.1315	0.1737	0.2932	0.1757	3.3491
Most Extreme Differences	0.1502	0.0538	0.0716	0.2272	0.2454
	0.1502	0.0240	0.0716	0.2073	0.2454
	-0.0848	-0.0538	-0.0601	-0.2272	-0.2234
Kolmogorov-Smirnov Z	2.8821	1.0292	1.3657	4.1454	4.5183
Asymp. Sig. (2-tailed)	0.0000	0.2400	0.0480	0.0000	0.0000

Correlations		VDisc	TDisc	Sales	Ind_Boa rd_Perce nt	Fam_B oard_P ercent	Board_ Member	Cross_ Direct	Board_ SHold	Board_ Mngm nt	Top_5_ Share	Institutio n_Share	Mngmnt _Share	AC_M eetings	Leverage	Profitability
MDisc	Pearson	0.511	0.849	0.081	0.162	-0.063	-0.036	0.149	-0.011	0.027	-0.210	-0.102	0.056	0.028	0.039	0.033
	Sig. (2-tailed)	0.000	0.000	0.119	0.002	0.224	0.487	0.006	0.841	0.603	0.000	0.053	0.305	0.612	0.449	0.533
VDisc	Pearson		0.803	0.217	0.092	-0.114	0.097	0.308	-0.121	-0.022	-0.096	0.089	-0.098	0.123	-0.042	-0.026
	Sig. (2-tailed)		0.000	0.000	0.078	0.028	0.063	0.000	0.028	0.676	0.067	0.089	0.074	0.023	0.417	0.618
TDisc	Pearson			0.178	0.137	-0.081	0.081	0.307	-0.144	0.037	-0.229	0.046	-0.100	0.116	0.027	0.014
	Sig. (2-tailed)			0.001	0.008	0.119	0.119	0.000	0.009	0.484	0.000	0.381	0.068	0.033	0.605	0.794
Sales	Pearson				0.149	-0.094	0.112	0.014	-0.122	-0.112	0.051	0.153	-0.108	0.044	0.014	0.014
	Sig. (2-tailed)				0.004	0.071	0.032	0.794	0.026	0.031	0.334	0.004	0.048	0.422	0.782	0.794
Ind_Board_Percent	Pearson					-0.076	-0.452	-0.231	0.037	-0.238	-0.034	-0.170	0.069	-0.051	0.086	-0.038
	Sig. (2-tailed)					0.144	0.000	0.496	0.000	0.519	0.001	0.209	0.351	0.099	0.467	
Fam_Board_Percent	Pearson						-0.014	-0.049	0.272	0.183	-0.138	-0.336	0.244	-0.026	0.035	0.031
	Sig. (2-tailed)						0.789	0.370	0.000	0.000	0.008	0.000	0.000	0.638	0.505	0.553
Board_Member	Pearson							0.573	-0.269	0.324	-0.044	0.349	-0.297	0.135	-0.022	0.051
	Sig. (2-tailed)							0.000	0.000	0.000	0.404	0.000	0.000	0.013	0.670	0.331
Cross_Direct	Pearson								-0.176	0.144	-0.083	0.223	-0.205	0.154	-0.025	0.004
	Sig. (2-tailed)								0.002	0.008	0.132	0.000	0.000	0.007	0.648	0.940
Board_SHold	Pearson									0.133	0.008	-0.617	0.832	-0.096	-0.089	0.036
	Sig. (2-tailed)									0.016	0.881	0.000	0.000	0.096	0.104	0.511
Board_Mngmnt	Pearson										-0.070	-0.047	0.145	0.072	-0.028	0.016
	Sig. (2-tailed)										0.183	0.371	0.008	0.189	0.589	0.755
Top_5_Share	Pearson											0.488	0.029	0.025	-0.127	0.013
	Sig. (2-tailed)											0.000	0.598	0.647	0.015	0.811
Institution_Share	Pearson												-0.597	0.094	-0.015	0.025
	Sig. (2-tailed)												0.000	0.085	0.769	0.636
Mngmnt_Share	Pearson													-0.133	-0.091	0.039
	Sig. (2-tailed)													0.020	0.099	0.476
AC_Meetings	Pearson														0.011	-0.004
	Sig. (2-tailed)														0.844	0.946
Leverage	Pearson															-0.003
	Sig. (2-tailed)															0.951

## Appendix D. Regression results

### Aggregated--all years

#### Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.604628	0.365575	0.300657	0.039669	1.840173

a Predictors: (Constant), Root\_FamBoard, R  
b Dependent Variable: TDisc

#### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.194951	22	0.008861419	5.631337	2.69E-12
	Residual	0.338322	215	0.001573591		
	Total	0.533273	237			

a Predictors: (Constant), Root\_FamBoard, R  
b Dependent Variable: TDisc

#### Coefficients(a)

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.3952	0.0507		7.7883	0.0000		
	Audit	0.0038	0.0057	0.0394	0.6670	0.5055	0.8447	1.1838
	Duality	0.0075	0.0061	0.0729	1.2302	0.2200	0.8395	1.1912
	Multi_Chairs	0.0028	0.0061	0.0279	0.4631	0.6437	0.8158	1.2257
	Top_5_Share	-0.0959	0.0192	-0.3342	-5.0046	0.0000	0.6618	1.5109
	AC_Meetings	0.0007	0.0009	0.0454	0.7735	0.4401	0.8557	1.1687
	AC_Knowledge	0.0060	0.0038	0.0904	1.6062	0.1097	0.9310	1.0742
	Agri	0.0006	0.0104	0.0043	0.0615	0.9510	0.6067	1.6484
	Consumers	0.0085	0.0109	0.0528	0.7772	0.4379	0.6393	1.5642
	RealEstate	0.0150	0.0093	0.1222	1.6144	0.1079	0.5147	1.9428
	Natural	0.0327	0.0114	0.2079	2.8659	0.0046	0.5607	1.7836
	Services	0.0114	0.0087	0.1018	1.3200	0.1883	0.4963	2.0150
	Technology	0.0320	0.0107	0.2106	2.9783	0.0032	0.5903	1.6941
	Log_Sales	0.0061	0.0018	0.2272	3.3488	0.0010	0.6408	1.5604
	Log_Leverage	-0.0033	0.0038	-0.0543	-0.8518	0.3953	0.7249	1.3795

	Log_Profitability	-0.0021	0.0032	-0.0381	-0.6415	0.5219	0.8383	1.1929
	Root_BMembers	-0.0070	0.0089	-0.0639	-0.7918	0.4293	0.4527	2.2092
	Root_Cross	0.0124	0.0039	0.2211	3.1720	0.0017	0.6072	1.6469
	Root_BMngmnt	0.0094	0.0051	0.1206	1.8428	0.0667	0.6885	1.4524
	Root_InShare	0.0447	0.0157	0.2525	2.8546	0.0047	0.3772	2.6515
	Root_MngShare	0.0285	0.0157	0.1471	1.8179	0.0705	0.4506	2.2194
	Root_IndBoard	0.0629	0.0252	0.1580	2.4979	0.0132	0.7378	1.3554
	Root_FamBoard	0.0014	0.0106	0.0084	0.1341	0.8934	0.7437	1.3446
a	Dependent Variable: TDisc							

## Aggregated Disclosure—2002

### Model Summary(b,c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.655881	0.43018	0.138644	0.039716	1.895494
a	Predictors: (Constant), Root_FamBoard, Aud				
b	Dependent Variable: TDisc				
c	Year = 2545				

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.051206	22	0.002327538	1.475564	0.135624
	Residual	0.067828	43	0.001577389		
	Total	0.119034	65			
a	Predictors: (Constant), Root_FamBoard, Aud					
b	Dependent Variable: TDisc					
c	Year = 2545					

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients		Collinearity Statistics		
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.6024	0.1248		4.8266	0.0000		
	Audit	0.0148	0.0116	0.1733	1.2740	0.2095	0.7163	1.3960
	Duality	0.0155	0.0142	0.1656	1.0957	0.2793	0.5801	1.7237
	Multi_Chairs	0.0239	0.0128	0.2769	1.8641	0.0691	0.6006	1.6649
	Top_5_Share	-0.1322	0.0463	-0.5201	-2.8559	0.0066	0.3996	2.5023
	AC_Meetings	-0.0007	0.0019	-0.0509	-0.3691	0.7139	0.6958	1.4373

AC_Knowledge	0.0083	0.0080	0.1480	1.0433	0.3027	0.6581	1.5194
Agri	-0.0010	0.0207	-0.0084	-0.0482	0.9618	0.4331	2.3089
Consumers	0.0148	0.0225	0.1140	0.6583	0.5139	0.4420	2.2624
Industrial	-0.0127	0.0196	-0.1024	-0.6459	0.5218	0.5272	1.8967
RealEstate	0.0217	0.0190	0.1835	1.1415	0.2600	0.5127	1.9504
Natural	0.0285	0.0226	0.1932	1.2631	0.2134	0.5663	1.7657
Technology	0.0406	0.0296	0.1991	1.3692	0.1781	0.6268	1.5954
Log_Sales	0.0032	0.0042	0.1342	0.7660	0.4478	0.4320	2.3147
Log_Leverage	-0.0041	0.0097	-0.0733	-0.4210	0.6758	0.4367	2.2899
Log_Profitability	0.0050	0.0073	0.1019	0.6861	0.4963	0.6013	1.6631
Root_BMembers	-0.0044	0.0192	-0.0493	-0.2285	0.8204	0.2846	3.5133
Root_Cross	-0.0093	0.0074	-0.2114	-1.2595	0.2146	0.4704	2.1257
Root_BMngmnt	-0.0043	0.0100	-0.0681	-0.4336	0.6667	0.5380	1.8587
Root_InShare	0.0189	0.0386	0.1180	0.4889	0.6274	0.2275	4.3949
Root_MngShare	0.0277	0.0362	0.1466	0.7657	0.4480	0.3614	2.7672
Root_IndBoard	-0.0217	0.0733	-0.0586	-0.2963	0.7684	0.3391	2.9487
Root_FamBoard	-0.0408	0.0231	-0.2800	-1.7652	0.0846	0.5265	1.8992
a	Dependent Variable: TDisc						
b	Year = 2545						

## Aggregated Disclosure—2007

### Model Summary(b,c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.660538	0.43631	0.353081	0.034786	2.169132
a	Predictors: (Constant), Root_FamBoard, Roo				
b	Dependent Variable: TDisc				
c	Year = 2550				

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.139556	22	0.006343467	5.242261	2.5E-10
	Residual	0.180299	149	0.001210063		
	Total	0.319856	171			
a	Predictors: (Constant), Root_FamBoard, Roo					
b	Dependent Variable: TDisc					
c	Year = 2550					

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.4166	0.0512		8.1293	0.0000		
	Audit	0.0026	0.0060	0.0291	0.4296	0.6681	0.8227	1.2155
	Duality	0.0049	0.0062	0.0530	0.7902	0.4307	0.8404	1.1899
	Multi_Chairs	-0.0091	0.0066	-0.0950	-1.3761	0.1708	0.7946	1.2584
	Top_5_Share	-0.0655	0.0195	-0.2491	-3.3598	0.0010	0.6882	1.4531
	AC_Meetings	0.0011	0.0010	0.0739	1.0989	0.2736	0.8373	1.1943
	AC_Knowledge	0.0047	0.0040	0.0757	1.1808	0.2396	0.9201	1.0868
	Agri	-0.0105	0.0110	-0.0724	-0.9499	0.3437	0.6505	1.5373
	Consumers	-0.0052	0.0112	-0.0338	-0.4597	0.6464	0.7007	1.4271
	Industrial	-0.0181	0.0092	-0.1617	-1.9630	0.0515	0.5575	1.7936
	RealEstate	-0.0018	0.0090	-0.0167	-0.2040	0.8386	0.5625	1.7779
	Natural	0.0194	0.0107	0.1377	1.8162	0.0713	0.6582	1.5193
	Technology	0.0158	0.0101	0.1250	1.5710	0.1183	0.5973	1.6742
	Log_Sales	0.0056	0.0019	0.2277	2.9431	0.0038	0.6319	1.5824
	Log_Leverage	-0.0008	0.0039	-0.0142	-0.1983	0.8430	0.7384	1.3543
	Log_Profitability	-0.0011	0.0035	-0.0213	-0.3068	0.7594	0.7826	1.2777
	Root_BMembers	-0.0031	0.0104	-0.0295	-0.3041	0.7615	0.4014	2.4915
	Root_Cross	0.0161	0.0048	0.2857	3.3876	0.0009	0.5318	1.8802
	Root_BMngmnt	0.0104	0.0057	0.1397	1.8098	0.0723	0.6351	1.5744
	Root_InShare	0.0426	0.0165	0.2648	2.5894	0.0106	0.3617	2.7648
	Root_MngShare	0.0094	0.0168	0.0540	0.5590	0.5770	0.4060	2.4628
	Root_IndBoard	0.0322	0.0259	0.0867	1.2428	0.2159	0.7777	1.2858
	Root_FamBoard	0.0206	0.0111	0.1329	1.8548	0.0656	0.7370	1.3568
a	Dependent Variable: TDisc							
b	Year = 2550							

**Mandatory Disclosure—All years****Model Summary(b)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.493602	0.243643	0.166249	0.037368	1.736969
a	Predictors: (Constant), Root_FamBoard, R				
b	Dependent Variable: MDisc				

**ANOVA(b)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.096708	22	0.004395808	3.148065	8.71E-06
	Residual	0.300216	215	0.001396353		
	Total	0.396924	237			

a Predictors: (Constant), Root\_FamBoard, R

b Dependent Variable: MDisc

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.7265	0.0478		15.1980	0.0000		
	Audit	0.0033	0.0054	0.0401	0.6207	0.5354	0.8447	1.1838
	Duality	0.0075	0.0057	0.0850	1.3134	0.1905	0.8395	1.1912
	Multi_Chairs	0.0028	0.0058	0.0320	0.4877	0.6263	0.8158	1.2257
	Top_5_Share	-0.0572	0.0181	-0.2310	-3.1682	0.0018	0.6618	1.5109
	AC_Meetings	-0.0005	0.0009	-0.0344	-0.5360	0.5925	0.8557	1.1687
	AC_Knowledge	0.0055	0.0035	0.0958	1.5589	0.1205	0.9310	1.0742
	Agri	-0.0113	0.0098	-0.0880	-1.1552	0.2493	0.6067	1.6484
	Consumers	0.0074	0.0103	0.0534	0.7197	0.4725	0.6393	1.5642
	RealEstate	0.0099	0.0088	0.0932	1.1279	0.2606	0.5147	1.9428
	Natural	0.0264	0.0107	0.1949	2.4602	0.0147	0.5607	1.7836
	Services	0.0129	0.0082	0.1336	1.5867	0.1141	0.4963	2.0150
	Technology	0.0309	0.0101	0.2363	3.0607	0.0025	0.5903	1.6941
	Log_Sales	0.0025	0.0017	0.1087	1.4670	0.1438	0.6408	1.5604
	Log_Leverage	-0.0022	0.0036	-0.0425	-0.6104	0.5423	0.7249	1.3795
	Log_Profitability	-0.0009	0.0031	-0.0193	-0.2978	0.7661	0.8383	1.1929
	Root_BMembers	-0.0084	0.0083	-0.0890	-1.0098	0.3137	0.4527	2.2092
	Root_Cross	0.0073	0.0037	0.1505	1.9772	0.0493	0.6072	1.6469
	Root_BMngmnt	0.0116	0.0048	0.1724	2.4122	0.0167	0.6885	1.4524
	Root_InShare	0.0221	0.0147	0.1449	1.5002	0.1350	0.3772	2.6515
	Root_MngShare	0.0233	0.0148	0.1398	1.5821	0.1151	0.4506	2.2194
	Root_IndBoard	0.0549	0.0237	0.1596	2.3111	0.0218	0.7378	1.3554
	Root_FamBoard	-0.0031	0.0100	-0.0216	-0.3146	0.7534	0.7437	1.3446

a Dependent Variable: MDisc

## Mandatory Disclosure—2002

### Model Summary(b,c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.528953	0.279792	-0.08869	0.043815	1.93865
a	Predictors: (Constant), Root_FamBoard, Aud				
b	Dependent Variable: MDisc				
c	Year = 2545				

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.03207	22	0.001457714	0.759316	0.753314
	Residual	0.08255	43	0.001919773		
	Total	0.11462	65			
a	Predictors: (Constant), Root_FamBoard, Aud					
b	Dependent Variable: MDisc					
c	Year = 2545					

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.9020	0.1377		6.5508	0.0000		
	Audit	0.0122	0.0128	0.1448	0.9472	0.3488	0.7163	1.3960
	Duality	0.0103	0.0156	0.1123	0.6611	0.5121	0.5801	1.7237
	Multi_Chairs	0.0106	0.0142	0.1255	0.7515	0.4564	0.6006	1.6649
	Top_5_Share	-0.0725	0.0510	-0.2908	-1.4207	0.1626	0.3996	2.5023
	AC_Meetings	-0.0010	0.0021	-0.0755	-0.4866	0.6290	0.6958	1.4373
	AC_Knowledge	0.0058	0.0088	0.1046	0.6555	0.5156	0.6581	1.5194
	Agri	-0.0269	0.0229	-0.2314	-1.1768	0.2458	0.4331	2.3089
	Consumers	-0.0053	0.0249	-0.0418	-0.2148	0.8310	0.4420	2.2624
	Industrial	-0.0294	0.0216	-0.2420	-1.3579	0.1816	0.5272	1.8967
	RealEstate	-0.0025	0.0210	-0.0214	-0.1185	0.9062	0.5127	1.9504
	Natural	0.0132	0.0249	0.0909	0.5283	0.6000	0.5663	1.7657
	Technology	0.0332	0.0327	0.1660	1.0156	0.3155	0.6268	1.5954
	Log_Sales	-0.0020	0.0046	-0.0863	-0.4384	0.6633	0.4320	2.3147
	Log_Leverage	0.0005	0.0107	0.0084	0.0429	0.9660	0.4367	2.2899
	Log_Profitability	-0.0010	0.0081	-0.0204	-0.1225	0.9031	0.6013	1.6631

	Root_BMembers	-0.0034	0.0212	-0.0387	-0.1597	0.8739	0.2846	3.5133
	Root_Cross	-0.0081	0.0081	-0.1891	-1.0022	0.3218	0.4704	2.1257
	Root_BMngmnt	0.0046	0.0110	0.0743	0.4212	0.6757	0.5380	1.8587
	Root_InShare	-0.0081	0.0426	-0.0515	-0.1896	0.8505	0.2275	4.3949
	Root_MngShare	-0.0013	0.0399	-0.0068	-0.0316	0.9749	0.3614	2.7672
	Root_IndBoard	0.0168	0.0809	0.0460	0.2072	0.8368	0.3391	2.9487
	Root_FamBoard	-0.0139	0.0255	-0.0968	-0.5429	0.5900	0.5265	1.8992
a	Dependent Variable: MDisc							
b	Year = 2545							

## Mandatory Disclosure—2007

### Model Summary(b,c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.499442	0.249442	0.138622	0.031529	2.110034
a	Predictors: (Constant), Root_FamBoard, Roo				
b	Dependent Variable: MDisc				
c	Year = 2550				

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.049226	22	0.002237526	2.250866	0.00228
	Residual	0.148117	149	0.000994073		
	Total	0.197342	171			
a	Predictors: (Constant), Root_FamBoard, Roo					
b	Dependent Variable: MDisc					
c	Year = 2550					

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.7424	0.0464		15.9835	0.0000		
	Audit	0.0000	0.0054	0.0005	0.0059	0.9953	0.8227	1.2155
	Duality	0.0090	0.0057	0.1232	1.5912	0.1137	0.8404	1.1899
	Multi_Chairs	-0.0041	0.0060	-0.0547	-0.6870	0.4932	0.7946	1.2584
	Top_5_Share	-0.0343	0.0177	-0.1661	-1.9419	0.0540	0.6882	1.4531

AC_Meetings	-0.0002	0.0009	-0.0137	-0.1764	0.8602	0.8373	1.1943
AC_Knowledge	0.0037	0.0036	0.0742	1.0026	0.3177	0.9201	1.0868
Agri	-0.0176	0.0100	-0.1555	-1.7670	0.0793	0.6505	1.5373
Consumers	0.0005	0.0102	0.0039	0.0462	0.9632	0.7007	1.4271
Industrial	-0.0120	0.0084	-0.1361	-1.4317	0.1543	0.5575	1.7936
RealEstate	-0.0001	0.0081	-0.0011	-0.0114	0.9909	0.5625	1.7779
Natural	0.0143	0.0097	0.1295	1.4806	0.1408	0.6582	1.5193
Technology	0.0177	0.0091	0.1781	1.9392	0.0544	0.5973	1.6742
Log_Sales	0.0022	0.0017	0.1121	1.2552	0.2114	0.6319	1.5824
Log_Leverage	-0.0001	0.0035	-0.0030	-0.0369	0.9706	0.7384	1.3543
Log_Profitability	0.0023	0.0031	0.0588	0.7325	0.4650	0.7826	1.2777
Root_BMembers	0.0019	0.0094	0.0226	0.2020	0.8402	0.4014	2.4915
Root_Cross	0.0067	0.0043	0.1506	1.5472	0.1239	0.5318	1.8802
Root_BMngmnt	0.0102	0.0052	0.1744	1.9585	0.0520	0.6351	1.5744
Root_InShare	0.0195	0.0149	0.1541	1.3061	0.1935	0.3617	2.7648
Root_MngShare	0.0111	0.0152	0.0813	0.7299	0.4666	0.4060	2.4628
Root_IndBoard	0.0260	0.0235	0.0890	1.1062	0.2704	0.7777	1.2858
Root_FamBoard	0.0059	0.0101	0.0481	0.5817	0.5617	0.7370	1.3568

a Dependent Variable: MDisc  
b Year = 2550

## Voluntary Disclosure—All years

### Model Summary(b)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.527671	0.278437	0.204603	0.053641	1.833137

a Predictors: (Constant), Root\_FamBoard, R  
b Dependent Variable: VDisc

### ANOVA(b)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.238717	22	0.010850754	3.771103	1.98E-07
	Residual	0.618629	215	0.002877342		
	Total	0.857345	237			

a Predictors: (Constant), Root\_FamBoard, R  
b Dependent Variable: VDisc

**Coefficients(a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-0.0787	0.0686		-1.1471	0.2526		
	Audit	0.0022	0.0077	0.0183	0.2895	0.7724	0.8447	1.1838
	Duality	-0.0001	0.0082	-0.0006	-0.0101	0.9920	0.8395	1.1912
	Multi_Chairs	-0.0013	0.0083	-0.0099	-0.1539	0.8778	0.8158	1.2257
	Top_5_Share	-0.0839	0.0259	-0.2304	-3.2361	0.0014	0.6618	1.5109
	AC_Meetings	0.0012	0.0012	0.0607	0.9693	0.3335	0.8557	1.1687
	AC_Knowledge	0.0033	0.0051	0.0393	0.6539	0.5139	0.9310	1.0742
	Agri	-0.0081	0.0141	-0.0426	-0.5733	0.5670	0.6067	1.6484
	Consumers	-0.0005	0.0147	-0.0023	-0.0316	0.9748	0.6393	1.5642
	RealEstate	-0.0049	0.0126	-0.0314	-0.3893	0.6974	0.5147	1.9428
	Natural	0.0180	0.0154	0.0904	1.1680	0.2441	0.5607	1.7836
	Services	-0.0085	0.0117	-0.0596	-0.7248	0.4694	0.4963	2.0150
	Technology	0.0167	0.0145	0.0870	1.1538	0.2498	0.5903	1.6941
	Log_Sales	0.0105	0.0025	0.3066	4.2362	0.0000	0.6408	1.5604
	Log_Leverage	-0.0112	0.0052	-0.1461	-2.1479	0.0328	0.7249	1.3795
	Log_Profitability	0.0013	0.0044	0.0188	0.2976	0.7663	0.8383	1.1929
	Root_BMembers	-0.0054	0.0120	-0.0387	-0.4495	0.6535	0.4527	2.2092
	Root_Cross	0.0174	0.0053	0.2441	3.2832	0.0012	0.6072	1.6469
	Root_BMngmnt	0.0035	0.0069	0.0352	0.5046	0.6143	0.6885	1.4524
	Root_InShare	0.0309	0.0212	0.1377	1.4596	0.1459	0.3772	2.6515
	Root_MngShare	0.0282	0.0212	0.1150	1.3327	0.1841	0.4506	2.2194
	Root_IndBoard	0.0664	0.0341	0.1315	1.9492	0.0526	0.7378	1.3554
	Root_FamBoard	-0.0005	0.0143	-0.0023	-0.0340	0.9729	0.7437	1.3446
a	Dependent Variable: VDisc							

**Voluntary Disclosure—2002****Model Summary(b,c)**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.645073	0.41612	0.11739	0.047493	2.221578
a	Predictors: (Constant), Root_FamBoard, Aud				
b	Dependent Variable: VDisc				
c	Year = 2545				

**ANOVA(b,c)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.069122	22	0.003141905	1.392966	0.173319
	Residual	0.096989	43	0.002255551		
	Total	0.166111	65			

a Predictors: (Constant), Root\_FamBoard, Aud

b Dependent Variable: VDisc

c Year = 2545

**Coefficients(a,b)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	0.2083	0.1492		1.3955	0.1700		
	Audit	0.0030	0.0139	0.0301	0.2188	0.8278	0.7163	1.3960
	Duality	0.0030	0.0170	0.0274	0.1788	0.8589	0.5801	1.7237
	Multi_Chairs	0.0259	0.0153	0.2542	1.6907	0.0981	0.6006	1.6649
	Top_5_Share	-0.0931	0.0553	-0.3102	-1.6831	0.0996	0.3996	2.5023
	AC_Meetings	-0.0034	0.0023	-0.2059	-1.4742	0.1477	0.6958	1.4373
	AC_Knowledge	0.0080	0.0095	0.1210	0.8424	0.4042	0.6581	1.5194
	Agri	0.0244	0.0248	0.1741	0.9830	0.3311	0.4331	2.3089
	Consumers	0.0563	0.0269	0.3660	2.0883	0.0427	0.4420	2.2624
	Industrial	0.0360	0.0235	0.2464	1.5354	0.1320	0.5272	1.8967
	RealEstate	0.0199	0.0228	0.1423	0.8742	0.3868	0.5127	1.9504
	Natural	0.0429	0.0270	0.2458	1.5874	0.1197	0.5663	1.7657
	Technology	-0.0110	0.0354	-0.0458	-0.3109	0.7574	0.6268	1.5954
	Log_Sales	0.0076	0.0050	0.2699	1.5226	0.1352	0.4320	2.3147
	Log_Leverage	-0.0114	0.0116	-0.1732	-0.9822	0.3315	0.4367	2.2899
	Log_Profitability	0.0211	0.0088	0.3616	2.4063	0.0205	0.6013	1.6631
	Root_BMembers	-0.0163	0.0230	-0.1548	-0.7087	0.4823	0.2846	3.5133
	Root_Cross	-0.0066	0.0088	-0.1284	-0.7560	0.4538	0.4704	2.1257
	Root_BMngmnt	-0.0022	0.0120	-0.0293	-0.1842	0.8547	0.5380	1.8587
	Root_InShare	0.0126	0.0462	0.0666	0.2726	0.7865	0.2275	4.3949
	Root_MngShare	0.0042	0.0433	0.0188	0.0969	0.9232	0.3614	2.7672
	Root_IndBoard	-0.1057	0.0877	-0.2414	-1.2063	0.2343	0.3391	2.9487
	Root_FamBoard	-0.0531	0.0277	-0.3080	-1.9180	0.0618	0.5265	1.8992

a Dependent Variable: VDisc

b Year = 2545

## Voluntary Disclosure—2007

### Model Summary(b,c)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.588244	0.346031	0.249472	0.049195	2.010597
a	Predictors: (Constant), Root_FamBoard, Roo				
b	Dependent Variable: VDisc				
c	Year = 2550				

### ANOVA(b,c)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	0.190802	22	0.008672832	3.583612	1.73E-06
	Residual	0.3606	149	0.002420137		
	Total	0.551403	171			
a	Predictors: (Constant), Root_FamBoard, Roo					
b	Dependent Variable: VDisc					
c	Year = 2550					

### Coefficients(a,b)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-0.0557	0.0725		-0.7682	0.4436		
	Audit	0.0056	0.0085	0.0483	0.6615	0.5093	0.8227	1.2155
	Duality	-0.0044	0.0088	-0.0359	-0.4967	0.6201	0.8404	1.1899
	Multi_Chairs	-0.0150	0.0093	-0.1196	-1.6087	0.1098	0.7946	1.2584
	Top_5_Share	-0.0605	0.0276	-0.1754	-2.1968	0.0296	0.6882	1.4531
	AC_Meetings	0.0025	0.0014	0.1329	1.8362	0.0683	0.8373	1.1943
	AC_Knowledge	0.0005	0.0057	0.0066	0.0957	0.9239	0.9201	1.0868
	Agri	0.0001	0.0156	0.0006	0.0075	0.9941	0.6505	1.5373
	Consumers	-0.0017	0.0159	-0.0083	-0.1047	0.9168	0.7007	1.4271
	Industrial	-0.0034	0.0131	-0.0233	-0.2626	0.7932	0.5575	1.7936
	RealEstate	-0.0015	0.0127	-0.0105	-0.1187	0.9057	0.5625	1.7779
	Natural	0.0246	0.0151	0.1331	1.6300	0.1052	0.6582	1.5193
	Technology	0.0244	0.0143	0.1466	1.7107	0.0892	0.5973	1.6742
	Log_Sales	0.0082	0.0027	0.2521	3.0246	0.0029	0.6319	1.5824
	Log_Leverage	-0.0070	0.0055	-0.0984	-1.2758	0.2040	0.7384	1.3543

## Appendix

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	Log_Profitability	-0.0002	0.0049	-0.0034	-0.0453	0.9639	0.7826	1.2777
	Root_BMembers	0.0023	0.0147	0.0166	0.1588	0.8740	0.4014	2.4915
	Root_Cross	0.0240	0.0067	0.3241	3.5673	0.0005	0.5318	1.8802
	Root_BMngmnt	0.0001	0.0081	0.0010	0.0124	0.9902	0.6351	1.5744
	Root_InShare	0.0295	0.0233	0.1395	1.2667	0.2072	0.3617	2.7648
	Root_MngShare	0.0185	0.0237	0.0812	0.7812	0.4359	0.4060	2.4628
	Root_IndBoard	0.0349	0.0367	0.0715	0.9514	0.3429	0.7777	1.2858
	Root_FamBoard	0.0237	0.0157	0.1165	1.5093	0.1333	0.7370	1.3568
a	Dependent Variable: VDisc							
b	Year = 2550							