THE EMPIRICAL EVIDENCE OF VOLUNTARY DISCLOSURE IN THE ANNUAL REPORTS OF LISTED COMPANIES:

THE CASE OF THAILAND

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ABSTRACT

This study seeks to answer the question of how to explain voluntary disclosure of companies listed on an emerging capital market. It intends to investigate the extent of voluntary disclosure especially that of Thai listed companies, and the influence of company characteristics, financial attributes, and corporate governance related factors on voluntary disclosure practices.

The objectives of this research are (i) To evaluate voluntary disclosure practices of Thai listed companies over the period 1995 to 2005. (ii) To examine the contribution of company characteristics, financial attributes and corporate governance related factors in explaining variation in the extent of voluntary disclosure. (iii) To investigate perceptions of persons positioned to influence voluntary disclosure in order to obtain further insights into voluntary disclosure practices of Thai listed companies.

This study applies an empirical approach to investigate voluntary disclosure practices of Thai listed companies. The quantitative and qualitative methods are employed in order to provide the best understanding of the research problems. This study intends to combine the benefit from obtaining perception towards voluntary disclosure from a semi-structured interview with a quantitative data analysis derived from a self-constructed disclosure index. Results from the qualitative analysis are used to confirm the results and enhance the interpretation of the results from the quantitative analysis.

The examination of the extent of voluntary disclosure in corporate annual reports reveals that even among the most actively traded stocks on the SET, there was considerable variability in the amount of information voluntarily disclosed. By using the univariate and multivariate analyses, significant variables that explain variation in voluntary disclosures

are found to be company size, type of industry, and CEO/Chairman role duality. The results also suggest that variation in voluntary disclosure could be influenced particularly from differences in time periods, especially period before and after the 1997 financial crisis. Of the three specific information categories, non-financial information is most explained, while financial information is least explained by the variables specified in the model. Results on specific information disclosure tend to support those reported at the overall level. The results also support the relative applicability of disclosure theory, especially the agency theory in explaining variation in voluntary disclosure.

The interview findings suggest that voluntary disclosure behaviour is more complicated than previously assumed by the quantitative study. The opinions of preparers, users and regulators help to validate and complement the interpretation of statistical findings. The interviewees reveal some areas that could influence voluntary disclosure decisions which have not been included in the quantitative study.

This study contributes to the literature by providing empirical evidence on voluntary disclosure practices of Thai listed companies, as an example of the emerging capital market in economic transition. Results from statistical analysis, together with perceptions of the influential individuals interviewed, provide a better understanding of voluntary disclosure practices. The examination of voluntary disclosures at the disaggregated level, which has not been observed thoroughly in the Thai context, contributes to in-depth understanding of disclosure behaviour and helps to validate the findings of disclosure at the aggregated level.

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ASB	Accounting Standards Board
AICPA	American Institute of Certified Public Accountants
AMC	Asset Management Corporation
AMEX	American Stock Exchange
ANOVA	Analysis of variance
ASEAN	Association of Southeast Asian Nations
B.E.	Buddhist Era
BIBF	The Bangkok International Banking Facilities
BIS	The Bank of International Settlements
BOT	The Bank of Thailand
BSAccP	The Board of Supervision of Accounting Professions
BSAP	The Board of Supervision Accounting Professionals Practices
BSE	Bangkok Stock Exchange of Thailand
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CG	Corporate Governance
CSR	Corporate social responsibility
FAPT	Federation of Accounting Professions of Thailand
FRA	Financial Sector Restructuring Authority
GAAP	Generally Accepted Accounting Principles
GDP	Gross Domestic Product
GNP	Gross National Product
HPAEs	Highly Performing Asian Economies
IAS	International Accounting Standards
ICAAT	The Institute of Certified Accountants and Auditors of Thailand
IFRS	International Financial Reporting Standards
IMF	The International Monetary Fund
MAI	Market for Alternative Investment, Thailand
MNCs	Multinational companies
NCGC	National Corporate Governance Committee
NIE	Asian Newly Industrialising Economy
NPL	Non-Performing Loan

OECD	Organisation for Economic Co-operation and Development
OLS	Ordinary Least Square
OTC	Over-The-Counter
PAD	People's Alliance for Democracy
PRC	The People's Republic of China
ROE	Return on equity
SEA	Securities and Exchange Act
SEC	Securities Exchange Commission, Thailand
SET	Stock Exchange of Thailand
TAMC	Thai Asset Management Corporation
TAS	Thai Accounting Standards
Thai IOD	Thai Institute of Directors Association
TRIS	Thai Rating and Information Service
UDD	National United Front of Democracy Against Dictatorship
UK	United Kingdom
US	United States
VIF	Variance Inflator Factor

CHAPTER 1

Introduction, Objective and Organisation of the Thesis

1.1 Introduction

It is widely recognised that the quality and quantity of information available to investors has a strong influence on investment decisions. Prior studies on corporate disclosure have identified a wide range of factors influencing the extent of both mandatory and voluntary disclosures. Therefore, this study aims to extend the knowledge of corporate disclosure practices, mainly voluntary disclosures of Thai listed companies.

This chapter provides the foundation for the thesis. It explains the motivations of the study and discusses the problems to be investigated. The research objectives and related research questions are presented. A summary of the research methodology and methods undertaken is provided. The chapter also emphasises the significance of this study in terms of the contribution to knowledge. The organisation of the thesis is summarised at the end of the chapter.

1.2 Motivation

The importance of corporate transparency is not only for protecting the interests of investors, but also preventing the breakdown of capital markets and maintaining economic stability. Disclosure is claimed as an important factor in evaluating the transparency of companies since a lack of adequate accounting disclosure prevents investors and creditors from receiving important information that helps in their decision making. In the discussion of corporate transparency, unique characteristics of Asian businesses such as concentrated ownership, bank-centric financial system, ineffective shareholders' rights and low degree of transparency are often mentioned. According to Ball *et al.* (1999), special attention is needed for corporate disclosures in Asian countries as companies in this region tend to have less incentive for transparent disclosure than Anglo-American firms.

Although it has been over a decade since the devastating financial crisis hit Thailand and many fast developing Asian economies, discussion with varied perspectives on its causes and consequences still continue among many scholars and analysts. According to Jaikengkit (2002), the 1997 financial crisis set in place a paradigm shift concerning the development and evolution of voluntary measures to improve the quality of disclosure, thus restoring trust in, and the reputation of Thai companies in the global community. Since the crisis, there has been an increasing demand from investors, creditors, and stakeholders for improvement on corporate governance practices and disclosures of Thai companies. The government also considers corporate governance and disclosure as necessary measures to boost the confidence of investors. Thailand is still at an early stage of developing good practice in this area. Hence, variances possibly exist in corporate governance practice and disclosure among Thai companies. At present, there are limited empirical studies in the Thai context.

Although all countries affected by the financial crisis underwent a reformation process of financial reporting. The impact of the financial crisis on financial reporting, especially on voluntary disclosures, may depend largely on country specific institutional factors. Circumstances also varied among the countries concerned, for example, between countries with or without assistance from the International Monetary Fund (IMF). Therefore, a country-specific empirical study can provide in-depth understanding of the problem. Findings from this study could contribute to the development of corporate transparency in developing countries, especially those that were affected by the 1997 financial crisis.

Gaps in previous studies can be identified in four areas. Firstly, the review of prior literature reveals that the majority of prior studies applied quantitative techniques to identify factors influencing voluntary disclosure. This leaves room for research on voluntary disclosure to include qualitative analysis to investigate the perception of persons positioned to influence voluntary disclosure. Personal interviews with market participants could provide further insight into factors influencing voluntary disclosure, and other factors not so easily captured from quantitative analysis. Information obtained from the interviews should help to validate and enhance findings from quantitative analysis.

Secondly, the literature review has shown that voluntary disclosure at the disaggregated level had not been investigated thoroughly in the Thai context. The investigation of factors affecting specific information disclosure may help in determining whether factors, which explain overall disclosure, prove the same in specific information disclosure.

Thirdly, there is a lack of studies regarding the impact of some specific Thai business characteristics, including ownership structure (ownership concentration and foreign ownership) and corporate governance characteristics (CEO/Chairman role duality and independent non-executive directors) on corporate voluntary disclosure. By including these factors in the study, a better understanding of voluntary disclosure practices in Thai companies may be created. Although Priebjrivat (1991), Suphakasem (2008), and Sutthachai and Cooke (2009) included ownership concentration in their studies, the results seem to be in conflict. Therefore, ownership concentration is also included in this study in order to verify the mixed results reported in previous studies. In addition, this study includes foreign ownership, which is another important ownership structure related variable that has not been included in previous studies on corporate disclosure in Thailand. Proportion of non-executive directors on the board and CEO/Chairman role duality were included in a study by Suphakasem (2008). However, the focus of Suphakasem's study is only on corporate governance disclosure. Therefore, these two variables have not been examined thoroughly in the context of corporate voluntary disclosure in Thailand.

Finally, the literature review suggests that there is a lack of longitudinal studies on voluntary disclosure. Most prior studies are based on voluntary disclosure made in a single year. As a result, changes in disclosure practices largely remain unexplored. In addition, some previous studies capture changes in levels of disclosure by comparing with other studies. Comparability of results from different studies, which measure disclosures by employing different indices, is likely to be reduced. Therefore, incorporating data from different time periods may provide a better picture regarding the change in voluntary practices over time, especially in the case of Thailand, which was affected seriously by the 1997 financial crisis and underwent a process of financial reporting transformation.

1.3 Overview of the 1997 Asian Financial Crisis

The financial crisis started in Thailand with the devaluation of the Thai Baht currency on July 2nd, 1997. The crisis then spread to other Asian countries. Although East Asia as a whole was affected by the crisis, the severity of its impact varied from country to country. Indonesia South Korea and Thailand were the worst affected (Wang and Tang, 2009). Malaysia, the Philippines, Laos, and Hong Kong were also involved in the crisis. The People's Republic of China, Japan, Taiwan, Singapore, Vietnam, Brunei, and India were less affected, though all suffered from loss of demand and confidence throughout the region.

Although circumstances varied among the countries concerned, some broad similarities were evident across developing Asian countries. Thailand, Indonesia, and South Korea faced similar problems contributing to the financial crisis which were weak corporate and financial systems, excessive unhedged private short-term foreign currency debt, inadequate regulations and supervision, and lack of transparency about the ties between governments (Fischer, 1998). In addition, economic and financial information were inadequate for making informed decisions, which resulted in inadequate risk assessment in creditor countries.

The IMF arranged rescue packages for Thailand, Indonesia, and South Korea. In return for accepting the emergency loans, these three countries agreed to several conditions and reforms in order to strengthen their economy. The IMF's requirements included strengthening financial supervision and regulations and measures to increase transparency in the financial, corporate, and government sectors. Accounting practices and disclosure rules had to be upgraded to be compliant with the international standards (Fischer, 1998). Although Malaysia and the Philippines were also affected badly by the financial crisis, they handled the situation differently. Malaysia stood out as a country that refused IMF assistance and pursued the crisis recovery programme independently. The Philippines implemented a successful IMF-supported programme of macroeconomic adjustment and structural reforms in the late 1980s and early 1990s, which enabled it to cope with the financial crisis effectively (IMF, 2000). The outbreak of the financial crisis served as a wake-up call for Asian economies and forced policy-makers in the region to place more emphasis on capital market development as well as improving corporate governance practices in the business sector (Mortreevat, 2006).

1.4 Objectives of the Studies

This study seeks to answer the question of how to explain voluntary disclosure of companies listed on an emerging capital market. It intended to investigate the extent of voluntary disclosure especiallythat of Thai listed companies, and the influence of company characteristics, financial attributes, and corporate governance related factors on voluntary disclosure practices.

The main objectives of this study are as follow;

Objective 1: To evaluate voluntary disclosure practices of Thai listed companies over the period 1995-2005.

There have been substantial changes in the Thai business environment over the last two decades (see Chapter 3). The 1997 financial crisis seems to be a big turning point. It resulted in the issuance of new laws and regulations, establishment of new accountancy bodies, revision of accounting standards, and government encouragement to enhance the quality of financial reporting. In addition, demand from investors for Thai companies to improve financial disclosures has been increasing. Therefore, this study intends to investigate if there are any changes in voluntary disclosure practices of Thai listed companies in response to changes in the financial reporting environment.

Objective 2: To examine the contribution of company characteristics, financial attributes and corporate governance related factors in explaining variation in the extent of voluntary disclosure.

Examination of certain company characteristics and different categories of variables, which have not been investigated thoroughly in the Thai context, might help to identify additional factors that could influence voluntary disclosure practices of Thai listed companies. Hence, this study provides opportunity to contribute to current knowledge on corporate voluntary disclosure.

Objective 3: To investigate perceptions of persons positioned to influence voluntary disclosure in order to obtain further insights into voluntary disclosure practices of Thai listed companies.

The literature review reveals that the majority of prior research on corporate disclosure applied quantitative techniques for analysing factors influencing voluntary disclosure. On the contrary, Watts and Zimmerman (1990 p.147) declare that:

> *"The study of accounting is a social science. An accounting theory that seeks to explain and predict accounting cannot divorce accounting research from the study of people. The contracting approach to studying accounting requires researchers to understand the incentives of contracting parties."*

Voluntary disclosure is a sensitive issue because it is a matter of managerial discretion. Consequently, it might create extensive understandings of corporate disclosure motives by incorporating qualitative analysis like interview of persons positioned to influence voluntary disclosure.

The research objectives lead to the following research questions;

Research Question 1: What is the extent of voluntary disclosure of Thai listed companies?

Research Question 2: To what extent did voluntary disclosures of Thai listed companies change over the period 1995-2005?

Research Question 3: To what extent are aspects of company characteristics, financial attributes, and corporate governance related factors significant in explaining the extent of voluntary disclosure of Thai listed companies?

Research Question 4: What are the perceptions of persons positioned to influence voluntary disclosure on issues related to voluntary disclosure, and how does interview research help to validate and complement statistical results?

Research Question 5: How are the variations in voluntary disclosure practices of Thai listed companies explained by relevant theoretical frameworks?

1.5 Summary of Research Methodology and Methods

Although one of the gaps in prior studies is a lack of perceptual studies, the author decided to apply a multi-method strategy instead of focusing solely on a perceptual line of enquiry. Quantitative and qualitative methods are employed in this study. Both methods have their own strengths and weaknesses. Quantitative research has the weakness of being unable to capture the perceptions of participants. On the other hand, qualitative research may involve personal interpretations by the researcher and difficulty in generalising findings (Creswell and Plano-Clark, 2007). In addition, quantitative and qualitative research can answer different types of questions. Qualitative research questions are exploratory, while quantitative research questions are confirmatory (Teddlie and Tashakkori, 2003). Therefore, both methods complement each other so that results would be better clarified (Saunders *et al.*, 2003). Furthermore, contradictory findings from using different research methods are valuable, as they lead to re-examination of conceptual frameworks and assumptions underlying quantitative and qualitative components (Teddlie and Tashakkori, 2003).

This study intends to combine the benefit from obtaining perception towards voluntary disclosure from a semi-structured interview with a quantitative data analysis derived from examination of annual reports using the voluntary disclosure checklist. Findings from the qualitative analysis will be used to confirm the results and enhance interpretation of the results from the quantitative analysis. Therefore, data are obtained from both primary (interview findings) and secondary sources (annual reports).

Companies included in this study are selected from the SET100 Index.[1] To evaluate voluntary disclosure practices, a self-constructed voluntary disclosure index is applied to the annual reports of selected companies. A dichotomous procedure was applied in order to compare the items on the disclosure checklist with contents of the annual reports. Both univariate and multivariate analyses are applied in this study. Univariate analysis explains the relationship between a single explanatory variable and the extent of voluntary disclosure. Multivariate analysis simultaneously takes into account the relative importance of each variable in relation to other variables by providing the contribution of each explanatory variable in explaining variability in the dependent variable. The semi-structured personal interview included in this study is expected to help validate and enhance the interpretation of the results from the quantitative analysis. The interviewees are persons positioned to influence voluntary disclosure, including company management, investment analysts, external auditors, regulators, and bankers.

1.6 Contribution to Knowledge

Despite the substantial amount of studies on corporate disclosure, additional empirical evidence of voluntary disclosure from a different financial reporting environment still can enhance understanding of the corporate disclosure system further. There are substantial differences between developed and emerging capital markets in terms of institutional characteristics, culture, and political environment (Jaggi, 1975; Perera, 1989; Saudagaran and Diga, 1997). Prior studies on corporate disclosure in emerging capital markets in particular have identified the significance of ownership structure (ownership concentration, inside ownership, institutional ownership, foreign ownership, government ownership), and

[1] SET100 Index is calculated from stock prices of the top 100 listed companies in the SET in terms of market capitalisation, high liquidity and compliance with the requirement regarding the distribution of shares to minor shareholders.

corporate governance characteristics (independent directors, CEO/Chairman duality, family members on the board) in explaining variation in corporate disclosure.

The major contribution of this study is knowledge extension of voluntary disclosure practices of listed companies in an emerging capital market. This is especially important for developing country, like Thailand, which is currently in the process of developing a respectable financial reporting system. Many areas of financial reporting in Thailand still require further investigation. Empirical study could help in investigating the nature of voluntary disclosure and assist policy makers in the developing regulations. This could also contribute to the development of corporate transparency in developing countries.

Voluntary disclosure is a sensitive issue because it is a matter of managerial judgement. Therefore, it may create extensive understanding of corporate disclosure motives by including qualitative analysis from interviews with persons positioned to influence voluntary disclosure. Quantitative analysis, which was applied mainly in previous studies, has the limitation of only using information from annual reports as a data source. Incorporating qualitative analysis in the study could enhance interpretation of the results from the quantitative analysis. By using interview methods, a wider aspect of voluntary disclosure can be obtained.

The qualitative approach applied in this study validates and enhances interpretation of findings from the quantitative analysis. It also provides further insight into factors influencing voluntary disclosure and helps to identify other factors not so easily captured from the quantitative analysis. In addition, it contributes to the knowledge of voluntary disclosure by incorporating the human aspects of disclosure practices in the analysis. Furthermore, the examination of voluntary disclosures at the disaggregated level, which has not been thoroughly observed in the Thai context, contributes to in-depth understanding of disclosure behaviour and helps to validate findings of disclosure at the aggregated level.

1.7 Organisation of the Thesis

After outlining the motivation of the research, its objectives, methodology applied and contribution to the knowledge in previous sections, this section shows how the rest of the thesis has been organised.

Chapter 2 discusses relevant theoretical frameworks and existing literature on corporate disclosure. The review of empirical evidence helps to identify gaps where research in voluntary disclosure can be extended. It thus assists in the formulation of the research questions and also in planning the research design. The discussion of theoretical frameworks assists in the formulation of testable hypotheses with particular relevance to voluntary disclosure. In addition, it helps in the interpretation of statistical and interview findings in later chapters.

Chapter 3 presents an overview of the financial reporting environment in Thailand. It helps in understanding the Thai characteristics that are expected to have impact on corporate disclosure. The development and characteristics of Thai institutional factors, including the political, financial, and economic system are described. This chapter also explains the 1997 financial crisis and the measures taken by the Thai government to resolve the situation.

Chapter 4 describes the methodology adopted and research methods employed in this study. Steps taken in constructing the research instruments, the voluntary disclosure checklist and interview questionnaire, are explained. The data collection procedures are provided. The research hypotheses are formulated. This chapter ends with a discussion on the statistical techniques applied in the study.

Chapter 5 analyses and evaluates the results obtained from the measurement of voluntary disclosure applied in this study. It also attempts to find the association between voluntary items disclosed and the explanatory variables. Findings of extremely high or low disclosure scores and disclosure items that have received particular attention in prior studies or in real practice are discussed. This chapter also includes the comparison of the extent of voluntary disclosure in different periods of time to find if there were any changes in voluntary disclosure practices after the 1997 Asian financial crisis.

Chapter 6 reports on results of the univariate and multivariate analysis. In both types of analysis, a two-stage evaluation is carried out; the first to identify factors influencing overall voluntary disclosure. The investigation of factors affecting specific information disclosure (strategic, non-financial, and financial information) follows. The two-stage evaluation process helps to determine whether variables that are statistically significant or non-significant in the overall disclosure prove the same in specific information disclosures.

Chapter 7 investigates the perception of persons positioned to influence voluntary disclosure of Thai listed companies. An interview study was planned in order to gain further insight into factors influencing voluntary disclosure and investigate other factors that are not so easily captured from quantitative analysis.

Chapter 8 presents the main conclusions of the thesis. The chapter highlights the interpretation of the quantitative and qualitative results, as well as the contribution of this study. The limitations of the study are addressed. Lastly, suggestions for possible areas of further research are provided.

CHAPTER 2

Review of Theoretical Frameworks and Empirical Evidence

2.1 Introduction

This chapter reviews relevant theoretical frameworks and existing literature in voluntary disclosure. The review of prior studies helps to identify gaps where research in voluntary disclosure can be extended. It thus assists formulating the research questions outlined in section 1.4 and also in planning the research design. The discussion of theoretical frameworks assists in the formulation of testable hypotheses with particular relevance to voluntary disclosure. In addition, it helps in interpreting the statistical and interview findings to be presented in later chapters.

This chapter is organised as follows. Section 2.2 outlines the role of financial reporting in capital markets. Evaluation of voluntary disclosure, including the definition, driving force, and cost-benefit of voluntary disclosure, are discussed subsequently in section 2.3, 2.4, and 2.5. A review of relevant theories of voluntary disclosure is provided in section 2.6. Empirical evidence on corporate voluntary disclosure is summarised in section 2.7. Section 2.8 reviews previous studies in the Thai context. Finally, section 2.9 summarises and concludes the chapter by identifying areas where research on voluntary disclosure can be expanded in this study.

2.2 Roles of Financial Reporting

According to Cooke (1989a), the objective of a corporate report is to supply economic information to a number of user groups and enable them to make decisions on the allocation of scarce resources. Financial reporting and disclosures are important tools that are used by management to communicate the performance of a firm to outside investors (Healy and Palepu, 2001). Stocken and Verrecchia (2004) find that the reporting discretion of managers does not necessarily enhance investor interest in a firm; however, it does present an opportunity for managers to convey useful information that would otherwise not be communicated. Factors influencing accounting disclosure need to be examined in order to understand disclosure choices thoroughly (Archambault and Archambault, 2003). Under assumption of the agency theory, the objective of financial reporting is to monitor the efficiency of agents. As a result, the agent's performance is evaluated by accounting information. Information asymmetry results in high costs of capital for a firm, which could be reduced by efficient disclosure (Verrecchia, 2001). Bens and Monahan (2004) describe the previous accounting studies (Diamond and Verrecchia, 1991) which indicate that commitments to higher disclosure quality could reduce information asymmetry. Consequently, the basic assumption in much accounting research is that high disclosure quality can reduce the problem of information asymmetry.

According to Pae (2002), the information asymmetry problem could be resolved by full disclosure. Nevertheless, he finds that there is no equilibrium in full disclosure because of constant efficiency losses, which happens in terms of discretionary disclosure from the rent-seeking behaviour of informed entrepreneurs, especially when there is an unfavourable signal. Healy and Palepu (2001) explain the reasons for this information problem by stating that entrepreneurs have the incentive to overstate the value of their business, as they have better information than the investors. There are also possibilities for entrepreneurs to create agency problem by expropriation of the amount that investor have already invested. Healy and Palepu (2001) conclude that even with progress on corporate disclosure studies, there are still several unanswered questions, which include: *'What is the objective of disclosure regulation?'*, *'What types of accounting standards produce high quality financial reports?'*, *'Why do companies engage in voluntary disclosure?'*

A good understanding of corporate disclosure is beneficial for information preparers and users, as well as for policy makers (Meek *et al.*, 1995). Cooke (1989a) suggests that knowledge of the extent of disclosure could support policy-makers in deciding whether disclosure meets the needs of users. He also adds that examination of factors influencing disclosure may assist policy-makers in choosing a suitable action to cope with deficiencies in disclosure and help in setting accounting standards. Empirical evidence on the extent of disclosure can provide better understanding of the corporate reporting system and give further insight into how companies respond to demands for enhancing corporate information.

2.3 Definition of Voluntary Disclosure

Information plays an important role in financial markets as it has strong influence on decisions made by the investors. Lee (1987) defines information as *"a communication function which increases the knowledge of its recipient and reduces his uncertainty about the future."* Disclosure is defined in the Cambridge Advanced Learner's dictionary as making something known publicly or showing something that was hidden. By combining these two terms, Tricker (1984, p.123) defines disclosure of information as:

> *"an ex gratia act, by those with knowledge, to convey Information to others...(with) the intention to orientate, or to motivate, to create a climate of understanding, acceptance, involvement and participation, or to reach a consensus between otherwise conflicting views."*

Corporate disclosure has been defined in different ways. Chandra (1974, p.733) gave a broad definition. He defines disclosure as *"the process through which an entity communicates with the outside world"*. Earlier studies define disclosure by focusing on financial information. For example, Kohler (1975) describes disclosure as *"a clear showing of fact or condition on a balance sheet or other financial statements, in footnotes thereto, or in the audit report"*. Choi (1973b, p.160) describes it differently by focusing on perspective of the investor. He defines disclosure as *"the publication of any economic* *information relating to a business enterprise quantitative or otherwise, which facilitates the making of investment decisions"*. Non-financial information has been included in some of the more recent definitions, for example, one from the Accounting Standard Board (ASB), which defines disclosure as *"economic information whether financial or non-financial, quantitative or otherwise of a company's financial position and performance and financial adaptability"* (ASB, 1994).

Defining voluntary disclosure is not easy because of its abstract concept (Wallace, 1987), which does not always follow a specific or known time pattern (Owusu-Ansah, 1998a). This results in diverse understanding of voluntary disclosure. Radebaugh and Gray (1997) comment that the operation of voluntary disclosure interrelates with a set of complex factors, particularly market forces, and institutional and regulatory characteristics. These factors tend to differ across countries and vary in different channels of disclosure.

The Financial Accounting Standard Board (FASB, 2001) defines voluntary disclosure as *"disclosure, primarily outside of the financial statements that are not explicitly required by accounting standards or regulations"*. Most studies define voluntary disclosure by tracing regulations and accounting standards. For example, Cooke (1989a, p.171) defines voluntary disclosure of Swedish companies as *"those items that are not stipulated by the Companies Act 1975, the Accounting Act 1976 and by Notices issued by Accounting Standards Board"*. Similar to Cooke (1989a), Hossain *et al.* (1994, p.341) specify voluntary disclosure of Malaysian companies as *"...which is not referring to the accounting standards promulgated by the MIA (Malaysian Institute of Accountants), the Companies Act 1965 and the KLSE listing requirements"*.

For the purposes of this research, voluntary disclosure is defined as the discretionary release of financial and non-financial information in annual reports in excess of that mandated by the Accounting Act, B.E. 2543 (2000); Public Limited Companies Act, B.E.

2535 (1992); Securities and Exchange Act B.E. 2535 (1992); or any other relevant regulatory requirements.

2.4 Driving Forces Behind Voluntary Disclosure

According to Foster (1986), accounting and financial reporting are influenced by a diverse and complex set of supply and demand. Forces of supply and demand for information may relate to the quality of financial reporting practice and degree of national equity market efficiency (Barrett, 1976). Demand for information is from a diverse set of parties. The International Accounting Standards Committee (IASC, 1997) classifies the users of accounting information into seven groups including investors, employees, lenders, suppliers, customers, governments, and the general public.

The demand for accounting information is not easy to quantify because it comes from a diverse set of users who may have different interests. Boesso and Kumar (2007) suggest that demand for voluntary disclosure from investors, financial markets, and other key stakeholders arises from dissatisfaction with mandatory financial reporting. Ranking of items that need to be disclosed also varies across parties, as between them, there are a number of conflicts on the requirement of financial information (Foster, 1986). Supply of financial information is affected by existing regulations, market forces, and costs arising from disclosure (Foster, 1986).

The growth in stock exchanges makes investors put more pressure on companies to increase public disclosure (Gray *et al.*, 1984b). Berardino (2001, p.12) states that:

> *"Investors want governance that is designed and administered to protect the interests of all shareholders. They want companies to accurately disclose their financial position and business performance"*

Competition among companies on the types of securities tendered, and terms and expected return promised can influence financial reporting in capital markets (Foster, 1986).

Management acknowledges that a well-managed disclosure policy could bring economic benefits to a company (Williams, 2001). In a study to find reasons for managers to release earnings forecasts voluntarily, Trueman (1986) finds that managers may be motivated to disclose earning forecasts, if they aim is to maximise the firm's market value, while keeping control over production decisions. This is because the forecast provides investors with a more favourable assessment of the manager's ability to predict changes in the economic environment and revise production plans accordingly. Therefore, voluntary disclosure could be used as a tool to enhance the investors' perceptions of the manager's ability to anticipate future changes. Thus, management may use voluntary disclosure tools for the successful implementation of corporate goals. Information about operating performance or share prices may be released timely in order to gain advantage of positive outcomes or reduce the impact of negative outcomes (Skinner, 1994). Nonetheless, Nagar (1999) comments that managers may hesitate to disclose information due to uncertainty of its outcome regarding the performance of management.

Hossain and Taylor (2007) summarise the reasons for managers to disclose additional information from the empirical studies on voluntary disclosure. They conclude that management voluntarily discloses information to (1) reduce agency and contracting costs (Chow and Wong-Boren, 1987), (2) reduce the cost of capital (Suwaidan, 1997; Botosan, 1997; Sengupta, 1998), and (3) increase firm value (King *et al.*, 1990; Frankel *et al.*, 1995). Healy and Palepu (2001) suggest other reasons for companies to disclose information voluntarily by stating that voluntary disclosure might be a response to innovation, globalisation or changes in business and capital market environments.

According to Core (2001), in order to maximise firm value, shareholders endogenously optimise disclosure policy, corporate governance, and management incentives. He explains that mandated disclosure might be of adequately high quality to produce low information asymmetry for a firm with low growth opportunities. This is because a low growth company has no need for external finance and has low litigation, incentive and proprietary costs. Therefore, this kind of firm has no need for voluntary disclosure. On the other hand, quality of mandated disclosure could be low and information asymmetry could be high for firms with high growth opportunities. Reduction in information asymmetry by means of voluntary disclosure is the best possibility.

Healy and Palepu (2001) provide a comprehensive review of the voluntary disclosure literature. They identify six forces influencing management decisions on voluntary information disclosure: capital market transactions, corporate control contest, stock compensation, litigation cost, proprietary costs, and management talent signalling. For the capital market transactions hypothesis, firms tend to make voluntary disclosure with the intention of reducing information asymmetry and also cutting the cost of external financing by means of reduced information risk. The corporate control contest hypothesis assumes that management uses voluntary disclosure to explain a firm's poor performance, and thus reduces the likelihood of undervaluation. Regarding the hypothesis of stock compensation, management that is rewarded with stock compensation has an incentive to use voluntary disclosure to reduce the possibility of insider trading allegations. Firms may also increase the level of disclosure to reduce contracting costs for management, who receives stock compensation. The litigation cost hypothesis assumes that management tends to disclose the bad news to avoid legal action from inadequate or untimely disclosures. However, management is inclined to decrease disclosure for forecast information. For the proprietary costs hypothesis, management has the incentive to decrease voluntary disclosure if they perceive that such disclosure could reduce their competitive position. For the management talent signalling hypothesis, the study by Trueman (1986) finds that talented management has the incentive to make voluntary earnings forecasts. However, Healy and Palepu (2001) comment that there is no evidence either to support or disprove this hypothesis. They also conclude that main factors influencing a disclosure decision by management are contracting, political costs and capital market considerations.

Healy and Palepu (2001) categorise the economic consequences of voluntary disclosure into three types of capital market effects. Firstly, voluntary disclosure has the potential to improve stock liquidity. Companies with a high level of voluntary disclosure give investors confident in stock transactions (Diamond and Verrecchia, 1991; Kim and Verecchia, 1994; Healy *et al.*, 1999). This results from the reduction of information asymmetries among informed and uninformed investors. The next possible consequence of voluntary disclosure is reduced cost of capital. There is some evidence that voluntary disclosure can reduce the cost of equity capital (Botosan, 1997) and increase the market's capitalisation (Piotroski, 1999). Disclosure is a strategic tool that enables companies to raise capital at the lowest possible cost (Lev, 1992; Healy and Palepu, 1993). Lastly, companies with a high level of voluntary disclosure are inclined to have larger analyst followings. This hypothesis is supported by the studies of Francis *et al.* (1998) and Healy *et al.* (1999).

Information efficiency can create more efficient investment decisions (Fishman and Hagerty, 1989). By making disclosure, companies can reduce uncertainty about their financial performances and future prospects. Disclosure may also create positive images of management performance and their commitment to society (Harvey and Keer, 1978). Haniffa (1999) also suggests that disclosure is an important element in supporting a viable capital market. It can lead to maximisation of economic welfare, which results from optimal decisions based on greater information. Disclosure can also be used to attract investors and help a company to compete with others (Mautz and May, 1978). With the use of disclosure, companies that need external financing can benefit from the lower cost of capital (Frankel *et al.*, 1995). In addition, disclosure is a good channel for public relations and a proof of management creditability (Elliot and Jacobson, 1994). With respect to response from analysts on additional disclosure, Horngren (1957) suggests that if analysts are well-informed, the following situations will occur: (1) more attention from analysts; (2) favourable attitudes from analysts resulting in higher price-earnings ratios; (3) less chance of fluctuating share prices that result from startling company news, as analysts can predict company performance more precisely; and (4) relatively high stock prices in the long-run.

Management may timely disclose crucial information about operating performance, future results, or share prices in order to benefit from positive outcomes or to reduce impacts of negative ones (Skinner, 1994). Bens and Monahan (2004) conclude that managers tend to disclose more only if they possess good news. They also mention several theoretical studies to support their finding. In the cases of dramatic news such as adverse audit opinions, dramatic deterioration, or adverse impacts on public health, management may use disclosure as a tool to mitigate possible costs and regain public trust. Skinner (1994) finds that managers are inclined to disclose additional information on bad news in order to reduce litigation cost. Nonetheless, voluntary disclosure may not be an effective tool to protect companies from litigation costs (Francis *et al.*, 1994). Companies may choose not to disclose bad news if it would cause unfavourable reaction from users (Waymire, 1984). Shaw (2003) reports the negative relationship between disclosure quality (measured by financial analysts' ratings of corporate disclosure quality) and the timeliness in which accounting earnings capture bad news (measured by the earnings-return association).

Dye (2001) describes the voluntary disclosure theory as a special case of game theory. The central premise is that an entity will disclose information that is favourable to the entity and will not disclose information unfavourable to it. Dye (2001) uses the 'highlights' section of company annual report as an example of this theory. If there are stresses in successful cost reductions, but the company does not emphasise anything on the revenue side. This situation implies that company revenue growth was disappointing even before inspecting the income statement. Dye (2001) also raises the interesting issue that questions on financial reporting are not just about disclosures, and therefore, studying disclosures alone is not very meaningful without ultimately providing comprehension of the whole financial reporting process.

2.5 Cost-Benefit of Voluntary Disclosure

Under the assumption of rationality, individuals always balance potential benefits against costs when they make a decision (Williamson, 1985). Bhushan and Lessard (1992, p. 150) recognises the influence of cost-benefit analysis in voluntary disclosure. They point out that:

> *"...it is now generally recognized that a cost-benefit analysis is required, weighing the benefits of additional disclosure to investors against the costs, both direct and indirect to issuers"*

Management decides the quantity and quality of information to be disclosed based on perceived costs and benefits (Radebaugh and Gray, 1997). Choi and Levich (1990) find that companies are inclined to balance the advantage of a lower cost of capital with cost associated with disclosure and costs of competitive disadvantage. When the benefits from disclosure exceed the costs of disclosure, companies are expected to provide voluntary disclosure (Cooke, 1989a; Choi and Levich, 1990).

Generally, companies are unwilling to allow additional costs from additional disclosure unless it is a requirement, or the potential benefits exceed the estimated costs (Gray *et al.*, 1984b). Patelli and Prencipe (2007) explain cost and benefit of disclosure based on the agency hypothesis. They recognise disclosure as a control mechanism for reduing the chances of opportunistic behaviour by management (perquisites and other personal benefits). Reduction in opportunistic behaviour is a cost that managers compare with benefits from disclosure when making a decision on disclosure. Choi and Levich (1990) find that multinational corporations are inclined to balance the advantage of a lower cost of capital with costs associated with disclosure and costs of competitive disadvantage.

Costs associated with disclosure are an important factor that affects company decisions on disclosing information. These costs include collection and processing costs, litigation costs, political costs, and competitive disadvantage costs, as well as additional constraints on management decisions (Foster, 1986). Costs of disclosure can be classified as direct and indirect (Maulz and May, 1978; Lev, 1992). Direct costs of disclosure are those for information production as well as management supervision, audit and legal fees, and dissemination of information (Cooke, 1989b). Indirect costs cannot be determined straightforwardly, for example, proprietary costs, particularly costs of competitive disadvantage.

Dye (1986, p. 331) defines proprietary information as *"Information whose disclosure reduces the present value of cash flows of the firm endowed with the information"*. Proprietary costs could have strong impact on decisions about voluntary disclosures (Meek *et al.*, 1995). Empirical studies show that management tends to withhold proprietary information. Verecchia (1983) develops a theoretical model on the impact of proprietary costs on disclosure. He finds that companies tend to reduce disclosure if the information affects the cash flows of company owners. Disclosure of proprietary information could lead companies into a competitive disadvantage in the form of the use of additional information by competitors to the detriment of the company that discloses such information (Gray *et al.*, 1984b). Competitive disadvantage can reduce the ability of a company to obtain benefits from innovations, which include technological skills, production methods, advertising programs, product differentiation, patents and copyrights, and organisational skills (Mautz and May, 1978; Beaver, 1981). According to Mautz and May (1978), chance of disclosure creating competitive disadvantage has positive relationships with the timing of an event being disclosed, the extent of specific detail disclosed, and the number of interest groups that find the disclosed information useful. Prior studies agree that companies are reluctant to disclose additional information that will reduce their competitive position even if they have to face a higher cost of equity (Verrecchia, 1983; Darrough and Stoughton, 1990; Wagenhofer, 1990; Darrough, 1993).

2.6 Theories of Voluntary Disclosure

Comprehensive theoretical frameworks can help in structuring empirical experiments, identifying appropriate variables and formulating alternative hypotheses (Fields *et al.*, 2001). Reasons for divergence in the level of voluntary disclosure among firms could be explained by discussing theories of voluntary disclosure.

Watts and Zimmerman (1990, p. 150) state that:

> *"The study of accounting is a social science. An accounting theory that seeks to explain and predict accounting cannot divorce accounting research from the study of people. The contracting approach to studying accounting requires researchers to understand the incentives of contracting parties".*

Obviously, perception of people can change over time. This results in continuous change in disclosure activity in response to changing in values, norms, beliefs and attitudes of members in a society. Also, a company has to cope with inconsistent demands from the society over a period of time. Changes in situations being investigated make researchers apply different theoretical approaches in their studies. In order to understand corporate disclosure, numerous theories have been proposed in prior studies. In most of these studies, agency theory is regarded as the dominant theory.

2.6.1 Agency Theory

Agency theory principally involves a relationship between a principal and an agent. Jensen and Meckling (1976, p.308) define agency relationship as:

> *"A contract under which one or more persons (the principal[s]) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent"*

Agency theory has long been acknowledged as a dominant theory in business. There is evidence of agency relationship since the era of the Greek and Roman accounting. De Ste. Croix (1956, cited in Watts, 1977) explains that *"... the purpose of Greek and Roman accounting was to disclose any loss due to dishonesty or negligence of subordinates"*.

Basic assumption in the agency theory is that both agent and principal are risk and effort averse. They are both acting in their own best interests. Agency theory explains voluntary disclosure in the context of separation between ownership and control. According to Eisenhardt (1989), rationales for the agency theory are conflicts in the desired goal of principal and agent. Information asymmetry, which happens when the agent has superior access to the information, can cause difficulties for the principal in verifying the agent's behaviour. It can also result in two agency problems, moral hazard and adverse selection (Arnold and de Lange, 2004). In adverse selection, the principals are not able to determine whether the agents are performing the work for which they are paid. A moral hazard is caused by the fact that the principals cannot verify the actions of the agents but only the outcome of these actions. In this case, the principals cannot be sure that the agents have performed their work to the best of their ability (ibid.).

The principals who entrust the agents to perform a service and make decisions on their behalf give two responsibilities to the agent: responsibility for actions and responsibility to account for those actions (Gray *et al.*, 1987). The agents are expected to act in the best interests of the principals. However, problems about conflict of interests always occur (Morris, 1987). As the agents are both members of the community and self-seeking individuals, their role in society is in conflict (Lewis and Collins, 1990). A separation of ownership and control of a firm gives rise to agency costs, due to conflicts of interest between the contracting parties (Jensen and Meckling, 1976; Watts, 1977). Jensen and Meckling (1976) define agency costs as the summation of (1) costs of monitoring the agents' behaviour; (2) bonding expenditures by the agents to guarantee that no action by them will be taken to harm the principals' interests (for example, auditing, compensation policies); and (3) the residual loss (reduction in welfare experienced by the principal due to divergence between the agent's decisions and decisions which would maximise principal's interest).

Conflicts between manager and shareholders are varied. They can be related to effort, horizon, risk preference and asset use as defined by Byrd *et al.* (1998) (see Table 2-1).

Table 2-1: Types of agency problems

Problem	**Definition**
Effort	Managers may have incentives to exert less effort than shareholders expect them to.
Horizon	Managers tend to have closer horizons for achieving results than shareholders.
Differential risk preference	Managers typically have so much of their wealth tied to the ongoing viability of the firm that they tend to be more risk averse than shareholders.
Asset use	Managers can have incentives to misuse corporate assets or consume excessive perks because they do not bear the full cost of such actions.

Source: Byrd *et al.*, 1998, p.15

Agency theory assumes that the agents tend to maximise their interests. This could create a problem when the agents decide what information to disclose, as their goals could be either to maximise the shareholders' interests or to satisfy their personal needs. Belkaoui and Karpik (1989) suggest that the agents have the incentive to disclose more information in order to reduce interference from principals. In addition, when the agents perform well, they may use disclosure as a way to improve their status. As for the principals, Mangos and Lewis (1995), comment that the principals face the dilemma of whether the agents discharge their duties out of self-interested or on moral and socially responsible way. This results in the demand from the principals to access both pecuniary and non-pecuniary information on a regular basis. When ownership is dispersed, conflicts between principals and agents will increase. This makes widely held companies disclose more information so that principals are able to monitor their economic interests effectively. Furthermore, the agents can send a signal that they act in the best interests of the principals (Jensen and Meckling, 1976; Fama and Jensen, 1983).

The agents normally gain access to superior information than the principals and thus, there is a chance that the agents will use the superior information to their own advantage. A greater number of shareholders results in monitoring problems. Increased shareholder monitoring or controlling activities could lessen agency problems. As a result, managers are expected to disclose more information so that agency costs involved in monitoring activities could be reduced (Schipper, 1981).

Even though it is a dominant theory in disclosure studies, agency theory has received a number of criticisms, especially on the main assumptions, and ontology and epistemology issues (Armstrong, 1991). Tinker and Okcabol (1991, p.344) criticised the weakness of the agency theory in handling the consequences of monitoring:

> *"Agency theory makes no distinction between price and value, and thus is theoretically incapable of distinguishing between the merits of 'friendly' and real monitoring. The absence of a concept of social value, independent of price, testifies to the poverty of accounting theory and its inability to put into question the social optimality of market equilibriums."*

There are also a lot of comments on the unrealistic assumptions of agency theory. Tinker *et al.* (1982) comment that agency theory does not take into account the institutional background. Ogden (1993) also adds that agency theory seems to oversimplify complex business relations. Consequently, it is not capable of coping with complexities and contradictions in the use of accounting information. Ashton (1991) criticises the main assumption of agency theory that agents and principals are assumed to act in self-interests to maximise their own benefit. He argues that the problem has been exaggerated and there are internal and external pressures, which could mutually fulfil the desire of managers serving the interests of shareholders and also their own interests. Agency model derives normative implications and it is not bias-free, especially in terms of bias associated with researcher opinions (Whittington, 1987).

2.6.2 Signalling Theory

Signalling theory was developed in order to explain problems of information asymmetry and to find a way of reducing these with more information signalling to others (Morris, 1987). It was applied initially in consumer behaviour to explain the problems related to buyers being imperfectly informed about quality of products (Akerlof, 1970). Spence (1976) explains information asymmetry under two aspects. The first aspect concerns difficulty in differentiating high quality products from other products. This may result in withdrawal of products from the market by sellers of high quality items. The second aspect is a signalling process that represents the efforts of sellers in conveying information to buyers about the superiority of their products. Signalling theory is also used in labour markets, where productivity of employees is assumed to be unknown by employers. Employers pay their employees according to signals from the employees such as their educational level (Spence, 1973). The concept of signalling is also applied in the context of capital markets, where there are information asymmetries between management and market participants.

Similarly to the agency theory, signalling theory recognises the separation between ownership and control and also motivation of managers to disclose more information due to market pressures (Ross, 1979). Signalling theory is different from agency theory in that there are signalling costs which have a negative relationship with the quality of information (Morris, 1987). Signalling theory suggests that managers tend to present quality information to minimise signalling costs.

In a market for goods and services, sellers are inclined to adopt a policy of full disclosure. This is because the absence of information creates unfavourable beliefs among buyers (Grossman, 1981; Milgrom, 1981). This concept is also applicable for the capital market. Companies with better performance are inclined to disclose additional information to signal their superior performance and differentiate themselves from others (Akerlof, 1970). Logically, one might assume that companies with unfavourable information are inclined to be silent. However, being silent may not be the best solution because investors may interpret non-disclosure as a negative signal (Ross, 1979; Milgrom, 1981). Companies may suffer from reputational costs if they fail to disclose the bad news in a timely manner (Skinner, 1994).

When shares are mispriced, a company would have signalling incentives to disclose more information in order to adjust the share price to its '*true*' value and prevent undervaluation by the market (Healy and Palepu, 1993; Hossain and Taylor, 2007). As signalling could have a strong impact on share price, it might persuade companies to provide misleading information. However, only short-term benefits could be obtained from providing false information. Being detected for misleading disclosure could lead a company into disaster; it would damage the creditability of all future information provided by such a company, which would eventually affect the share price. This would results in decreased demand for the company's signals in the future (Bird and Locke, 1981).

2.6.3 Capital Need Theory

Capital need theory can help to explain disclosure practice in that a higher level of disclosure reduces the cost of capital by lowering information asymmetry, reducing estimated risks related to expected future returns, and expanding information availability to a wider audience (Diamond and Verrecchia, 1991). Capital need theory suggests that the need to raise capital at the lowest possible cost is motivation for voluntary disclosure (Choi, 1973b; Spero, 1979). Foster (1986) suggests that enhanced voluntary disclosure could support a successful listing or capital raising. A number of studies report that companies tend to increase disclosure activities around the period of capital raising (Choi, 1973b; Firth, 1980; Lang and Lundholm, 1993). There is also empirical evidence that companies that frequently access capital markets for finance tend to increase their level of voluntary disclosure (Choi, 1973a; Firth, 1980; Healy and Palepu, 1993). The reason for increased disclosure is the belief that companies will benefit from the lower cost of capital (Choi and Mueller, 1992). There are a number of studies that support this idea, for example, those of Glosten and Milgrom (1985), Diamond and Verrecchia (1991), and Healy *et al.*, (1999). These studies find that additional disclosure can enhance stock market liquidity and reduce the cost of capital through reduced transaction costs and increased demand for company stock. Additional disclosure can help to reduce investor uncertainty and risk, and also required rate of return, which can eventually lead to a lower cost of capital (Cooke, 1989b). In addition, less uncertainty perceived by investors could result in higher share prices (Gray and Roberts, 1989). Concealing information can lead to difficulties in capital raising. Mueller (1967, P.68) emphasises the importance of disclosure in capital raising that:

> *"...secrecy is self-defeating. Failure to make reasonable disclosure in response to user needs can severely limit the pool of funds available to a corporation.*

Potential providers of capital, when kept in the dark, will simply put their money elsewhere."

Cooke (1989a) raises a number of justifications to support the capital need hypothesis. Firstly, additional disclosure could attract investors and also help in maintaining a pleasing demand for shares. Secondly, information risk could be reduced by additional disclosure that can lead to a lower cost of capital. Thirdly, listed companies tend to have a higher level of disclosure than unlisted companies because listed companies are inclined to increase their voluntary disclosure in order to raise capital on the markets. In addition, multiple listed companies are even more likely to have a higher level of disclosure. Fourthly, companies may have to increase the level of disclosure in order to gain access to foreign capital. This is because overseas capital suppliers may have different disclosure requirements. Lastly, companies might increase their social responsibility disclosures to show that they act responsibly in order to attain their status on the securities markets and attract new investors. However, additional disclosure cannot result in reduced cost of equity capital in all cases. Some types of information are very sensitive and can cause a higher cost of capital, for example, information that increases market uncertainty.

A number of empirical studies support the capital need hypothesis. Most of them find that additional disclosure can lead to a reduced cost of capital, fewer estimation risks and enhanced stock liquidity. Table 2-2 shows the empirical results of the capital need hypothesis.

Table 2-2: Empirical results of the capital need hypothesis

Study	Finding
Horngren (1957)	Better informed analysts and investors result in a favourable impact on company share prices.
Choi (1973b)	Companies increase the level of disclosure upon entry into the Eurobond market.
Firth (1980)	Companies increase the level of disclosure around the time of capital raising.
Copeland & Galai (1983)	Additional disclosure enhances stock liquidity.
Barry & Brown (1985)	A lower systematic risk is associated with high levels of information. Higher level of disclosure reduces estimated risks for investors.
Diamond & Verrecchia (1991)	Additional disclosure reduces the cost of capital, and lowers estimated risks associated with expected future returns, lowering bid-ask spreads and transaction costs for potential investors.
Lang & Lundholm (1993)	Higher analyst disclosure scores for companies issuing securities in the current or future period.
Frankel *et al.*(1995)	Positive association between disclosing earnings forecasts and accessing the capital market.
Welker (1995)	Bid-ask spreads are negatively associated with disclosure.
Botosan (1997)	Additional disclosure can reduce the adverse selection component and cost of equity capital. Negative association between the disclosure level and cost of equity capital for companies with low analyst following.
Sengupta (1998)	Companies with high disclosure ratings have a lower cost of debt.
Healy *et al.* (1999)	Increase in analyst disclosure ratings results in upward revisions in stock valuation and increase in stock liquidity.
Lang & Lundholm (2000)	Companies that increase the level of disclosure prior to equity offerings experience price increases before the announcement, but suffer a large decline on the announcement date.
Richardson & Welker (2001)	Financial disclosure is negatively associated with the cost of equity capital for companies with low analyst following. However, a positive association is observed between social disclosure and the cost of equity capital.

2.6.4 Political Cost Theory

A managerial decision on accounting policy and corporate disclosure could be influenced by political costs arising from various economic factors (Watts and Zimmerman, 1978; Hagerman and Zmijewski, 1979, Ullman, 1985). The earlier studies of Stigler (1971), Peltzman (1976), and Jensen and Mecklin (1976) suggest that politicians tend to interfere with company affairs by performing wealth redistribution. Theoretically, political costs are wealth redistribution from a company to other parties in the economy (Whittred and Zimmer, 1990). Foster (1986) defines political costs as *"the costs associated with government expropriating wealth from corporations and redistributing it to other parties in society"*. Wealth redistribution can occur in several forms: imposition of price controls, increase in governmental control over operations, imposition of higher taxes, and removal of subsidies and licenses. In extreme cases, companies might suffer from nationalisation or expropriation (Watts and Zimmerman, 1978; Leventis and Weetman, 2000; Hossain and Taylor, 2007).

The effects of political costs to a company tend to relate to its political visibility, which prior studies have found applies to large (Buzby, 1975) or highly profitable companies (Wong, 1988). In order to reduce political impact, companies that are politically visible may modify their accounting policy or apply voluntary disclosure to reduce potential political costs (Holthausen and Leftwich, 1983). According to Watt and Zimmerman (1978), companies that are more politically sensitive tend to choose accounting methods that minimise reported earnings and political costs. They find that political costs are highly associated with company size. Larger companies are more politically sensitive, as they are inclined to have more wealth transfers imposed on them.

One solution to minimise political costs and government intervention is through voluntary disclosure (Gray and Roberts, 1989; Lim and McKinnon, 1993). Epstein *et al.* (1976) discuss the role of regulatory bodies on voluntary disclosure in terms of a forthcoming potential regulation. They conclude that companies may build procedures, such as voluntary disclosure, in order to diminish the potential for further governmental interference. Apart from disclosing additional information, management tends to reduce political cost by changes in the content or timing of disclosures (Foster, 1986). This is consistent with the finding of Cahan (1992) that management might adjust some accounting information to accord with changes in potential political costs.

2.6.5 Legitimacy Theory

Legitimacy theory is regarded as complementary to political cost theory, as both of them aim to explain accounting choice in relation to avoidable future costs. Legitimacy theory is based on the hypothesis that business operates via a social contract between a company and the society in which it operates (Patten, 1991; Hossain and Taylor, 2007). In a social contract, business agrees to act in accordance with social desire in order to get approval of its objectives and to survive (Guthrie and Parker, 1989). The social contract also represents a multitude of explicit and implicit expectations that society has on corporate conduct (Shocker and Sethi, 1974). Legitimacy theory is used widely to explain motivation of management for the disclosure of corporate social responsibility information. This is because corporate disclosure is a tool that managers use to inform the community about their responsiveness to specific social responsibility (Wilmshurst and Frost, 2000). Elliott and Jacobson (1994) suggest that companies may use disclosure to discharge some of their accountability obligations to society, as corporate citizenship is served partly by accounting disclosure. However, there is no strong evidence to support legitimacy theory in explaining voluntary disclosure. There are predictions of a higher level of disclosure in highly regulated companies (NG and Koh, 1994) and also companies in politically sensitive industries such as energy sector (Whittred and Zimmer, 1990).

2.7 Empirical Evidence on Corporate Voluntary Disclosure

There is a significant variation among corporate disclosure studies, which contain several interesting issues of disclosure. Each study has a different focus, for example: quality (Singhvi and Desai, 1971; Dhaliwal, 1980; Forker, 1992; Nicholls and Ahmed, 1995; Shaw, 2003), adequacy (Buzby, 1974b; Owusu-Ansah, 1998a), timeliness (Courtis, 1976; Whittred, 1980), comprehensiveness (Barrett, 1976; Wallace *et al.*, 1994; Wallace and Naser, 1995), and cost-benefit (Benston, 1986; Gray and Roberts, 1989; Depoers, 2000). Furthermore, each study is concerned with different aspects of disclosure such as interim reporting (Leftwich *et al.*, 1981; Schadewitz and Blevins, 1998), forecast information (Penman, 1980; Trueman, 1986), segmental disclosure (Bradbury, 1992), and social disclosure (Guthrie and Parker, 1989, Roberts, 1991). In addition to finding relationships between company characteristics and disclosure, some studies try to relate disclosure with particular issues such as the legal system (Scholz, 1984; Inchausti, 1997; Jaggi and Low, 2000), politics (Lim and McKinnon, 1993), and culture (Jaggi, 1975; Jaggi and Low, 2000; Haniffa and Cooke, 2002).

Empirical research on corporate disclosure has a long history, dating back to the early 1960s. The first study that applied a quantifiable measure to disclosure in corporate annual reports is the study by Cerf (1961). He examines the extent of disclosure in corporate annual reports of 527 US firms using a disclosure index containing 31 items. The disclosure index is weighted by assigning integers ranging from 1 to 4 to the disclosure items based on interviews with financial analysts. By using class means, he finds that asset size, number of shareholders, and the rate of return are positively related to the extent of disclosure. Cerf (1961) also finds that disclosure in annual reports vary greatly among firms. Companies whose shares were traded on the New York Stock Exchange (NYSE) disclosed more information than those traded on an exchange other than NYSE or the

Over-The-Counter market (OTC). The study by Cerf (1961) has been a foundation for subsequent research on corporate disclosure.

Singhvi and Desai (1971) give an extension to the study on corporate disclosure by using chi-square and a stepwise least-squares regression. They apply weighted disclosure index that contains 34 disclosure items, 28 of which derived from Cerf (1961).The sample consists of 100 companies listed on the NYSE and 55 companies trading on the OTC market. Listing status is found to be the most significant variable providing 89 per cent of the explanatory power. This is different from the study by Cerf (1961), where company size is found to be the most significant variable. Singhvi and Desai (1971) find that companies disclosing inadequate information are likely to be small, less profitable, free from listing requirements, and audited by small audit firms. This study received criticism from Moore and Buzby (1972) on indiscriminate scoring and failure to resolve the multicollinearity issue.

Buzby (1975) applied a different approach in his study by developing a disclosure index containing 39 disclosure items, which were weighted by financial analysts using a scale from 0 to 4. The sample consists of two sets of data including 44 companies listed on the NYSE or the American Stock Exchange (AMEX) and 44 companies with shares trading on the OTC market. Buzby (1975) introduces a match sample approach in this study by matching companies from each set of data in terms of asset size, three-digit industrial classification, and fiscal year ending. Buzby (1975) finds that there is no significant relationship between the extent of disclosure and listing status and only a moderately positive association between the extent of disclosure and size. The findings of Buzby (1975) are in conflict with the study by Cerf (1961) and Singhvi and Desai (1971).

Stanga (1976) applies the weighting methodology developed by Buzby (1975) to examine the impact of company size and type of industry on the extent of disclosure. The sample comprises 80 of the Fortune 1000 firms. Stanga concludes that there are deficiencies in disclosure and company size is not an important factor in explaining corporate disclosure. However, industry type is the most significant factor in explaining variations in disclosure.

The earlier studies mentioned above have provided guidelines for a large number of subsequent research. While early studies of corporate disclosure applied the weighting score approach to measure the extent of disclosure (for example, Cerf, 1961; Singhvi and Desai, 1971; Buzby, 1975; Stanga, 1976), subsequent studies have refined the measurement of disclosure by using an unweighted disclosure index and adding more variety of independent variables.

2.7.1 National Studies

This section discusses empirical studies on corporate disclosure in annual reports. Because of fundamental differences between the characteristics of developed and emerging capital markets, the discussion is separated into two parts. The studies undertaken in developed capital markets are presented in section 2.7.1.1 and the studies undertaken in emerging capital markets are presented in section 2.7.1.2.

2.7.1.1 Developed Capital Markets

The level of voluntary disclosure in developed capital markets, where the markets are assumed to be more efficient, is expected to be higher than that in emerging capital markets. Efficient capital markets tend to have fewer issues concerning disclosure (Nair and Frank, 1980). The efficiency of capital markets also relies on information production and disclosures (Ndubizu, 1992). According to Foster (1986), US and some other developed capital markets disclose additional information in response to market forces rather than regulatory-based forces. Some US firms publicly disclose financial information well before the establishment of major regulatory bodies. Foster (1986) also adds that Australian and UK firms noticeably disclose more information than regulatory requirements.

Apart from a variation in statistical methods and disclosure checklist, studies of corporate disclosure in developed capital markets apply different sets of variables in order to explain disclosure behaviour. The significance of these variables is compared in Table 2-3. Generally, company size and listing status have been found to be significantly associated with the level of corporate disclosure in most studies (except Malone *et al.*, 1993 for size, and Buzby, 1975 for listing status).

Most studies explain the significance of company size by applying the agency theory, which suggests that large firms tend to have higher agency costs as a consequence of complex business activities (Jensen and Meckling, 1976; Leftwich *et al.*, 1981). Additionally, larger companies are likely to have a high proportion of outside capital, which also results in higher agency costs (Hossain *et al.*, 1995). Larger companies are inclined to have lower information production costs and possibly own information for internal purposes (Buzby, 1975). Furthermore, large firms may have lower costs of competitive disadvantage related with disclosures (Meek *et al.*, 1995). Greater demand for information from financial analysts can also be the cause of a positive association between company size and extent of voluntary disclosure (Hossain *et al.*, 1995).

Listing on international markets results in a high proportion of foreign shareholding as well as a dispersed ownership structure. Therefore, companies with stocks listed on international markets are inclined to have high monitoring costs, which could be reduced through disclosure of additional information. Malone *et al.* (1993) suggest that stock exchange registration requirements for companies listed on international markets could be another reason for disclosing additional information. Most studies apply agency, signalling, and capital need theories to support the listing status hypothesis.

There seem to be conflicting results regarding profitability, liquidity, leverage, proportion of outside directors, audit firm, and industry type. Several possible reasons for inconsistent results have been identified, including differences in socio-economic and political environment between countries, institutional frameworks and cultures, variations in sample size, statistical methods, disclosure index construction, judgements on scoring process, diversity in the nature of disclosure, and periods of time.

Table 2-3: Significance comparison of variables in studies on developed capital markets

Variables	Significant Results	Non Significant Results
Size	Cerf (1961), Firth (1979), Cooke (1989a;1991;1992) Wallace *et al.* (1994), Raffournier (1995), Hossain *et al.* (1995), Inchausti (1997), Depoers (2000), Camfferman&Cooke (2002), Bhojraj *et al.* (2004), Patelli&Prencipe (2007)	Malone *et al.* (1993)
Profitability	Cerf (1961)[+],Singhvi&Desai (1971)[+], Belkaoui&Kahl (1978) [-], Camfferman&Cooke (2002) [-]	McNally *et al.* (1982), Malone *et al.* (1993), Wallace *et al.* (1994),Raffournier (1995), Inchausti (1997),Patelli&Prencipe (2007)
Liquidity	Belkaoui&Kahl (1978), Wallace *et al.* (1994), Camfferman and Cooke (2002)	
Leverage	Malone *et al.* (1993), Hossain *et al.* (1995), Camfferman&Cooke (2002) Bhojraj *et al.* (2004)	Wallace *et al.* (1994),Raffournier (1995), Inchausti (1997), Depoers (2000)
Listing status	Firth (1979), Cooke (1989a; 1991; 1992), Malone *et al.* (1993),Wallace *et al.* (1994), Hossain *et al.* (1995), Inchausti (1997),	Buzby (1975)
Ownership structure	**Number of shareholders:** Singhvi&Desai (1971), Cooke (1989a; 1991; 1992), Malone *et al.* (1993)	**Concentration:** Lutfi (1989), Depoers (2000) **Insider:** Raffournier (1995),
Proportion of outside directors	Adams&Hossain (1998), Patelli&Prencipe (2007)	Malone *et al.* (1993),
Audit firm	Singhvi&Desai (1971), Inchausti (1997)	Firth (1979), McNally *et al.* (1982), Malone *et al.* (1993), Wallace *et al*.(1994), Hossain *et al.* (1995), Raffournier (1995), Depoers (2000), Camfferman&Cooke (2002)
Industry type	Stanga (1976),Belkaoui&Kahl (1978), Cooke (1989a;1991; 1992), Camfferman&Cooke (2002)	McNally *et al.* (1982), Wallace *et al*.(1994),Raffournier (1995), Inchausti (1997)

2.7.1.2 Emerging Capital Markets

A large number of investors find emerging capital markets very attractive. Due to significant growth in recent years, emerging capital markets provide higher returns than developed capital markets (Saudagaran and Diga, 1997). Despite the differences among countries of emerging capital markets, they share some common characteristics, which are significantly different from developed capital markets. Generally, emerging capital markets have limitations in terms of market efficiency (Keane, 1993), liquidity (Feldman and Kumar, 1995), and volatility (Sedaghat *et al.*, 1994). Inadequate regulatory framework and enforcement are also claimed as important factors influencing the quality of disclosure in emerging capital market (Saudagaran and Diga, 1997; Owusu-Ansah, 1998a; Choi *et al.*, 2002). Perera (1989, p.149) comments on the accounting profession in emerging capital market by noting that "*... while some countries have well-established accounting professions, there are others which do not even have a professional organisation for accountants*". Investors in emerging capital markets tend to be less informed or they may experience delay in receiving information (Errunza and Losq, 1985). Thus, improvements on investor protection are very important for emerging capital markets. In addition, there are substantial differences between developed and emerging capital markets in terms of institutional characteristics, culture, and political environment (Jaggi, 1975; Perera, 1989; Saudagaran and Diga, 1997).

The majority of studies on emerging capital markets apply unweighted indices. There are several additional variables included in the studies, particularly those related to corporate governance. Additional variables applied in emerging capital market studies include proportion of family members on the board and ownership structure, multinational affiliation, qualification of principal accounting officers, foreign investment, parent company size, familiarity and language, company age, and race of management. A number of exceptional ownership structures can be found in emerging capital markets. Therefore, a wide variation of variables that relate to ownership structures are included in the studies such as block ownership (Eng and Mak, 2003; Huafang and Jianguo, 2007), inside ownership (Owusu-Ansah,1998b; Eng and Mak, 2003; Huafang and Jianguo, 2007), outside ownership (Wallace and Naser, 1995; Chen and Jaggi, 2000), institutional ownership (Suwaidan, 1997; Barako *et al.*, 2006), government ownership (Suwaidan, 1997; Naser *et al.*, 2002; Eng and Mak, 2003; Huafang and Jianguo, 2007), foreign ownership (Haniffa and Cooke, 2002; Naser *et al.*, 2002; Huafang and Jianguo, 2007), individual ownership (Naser *et al.*, 2002), and racial ownership (Haniffa and Cooke, 2002; Naser *et al.*, 2002). This is different from most studies in developed capital markets, which mainly include only ownership concentration in the analysis.

It is not very easy to compare or generalise the findings among studies in emerging capital markets because a wide variation of variables has been applied. This makes the variables less homogeneous. The significance of variables is summarised in Table 2-4. Generally, company size is the most powerful explanatory variable and the most important factor in most studies. In some studies, company size is the only variable found to be significant (Chow and Wong-Boren, 1987; Wallace, 1987; Tai *et al.*, 1990). While ownership structure is not found to be statistically significant in most studies in developed capital markets, several studies in emerging capital markets report the significance of ownership structure in explaining corporate disclosure. Ownership structures that are found significant include ownership concentration (Hossain *et al.*, 1994; Owusu-Ansah, 1998b; Haniffa and Cooke, 2002; Barako *et al.*, 2006), block ownership (Huafang and Jianguo, 2007), institutional ownership (Suwaidan, 1997; Barako *et al.*, 2006), foreign ownership (Haniffa and Cooke, 2002; Barako *et al.*, 2006; Huafang and Jianguo, 2007), inside ownership (Eng and Mak, 2003), and Government ownership (Suwaidan, 1997).

Several variables included in studies on emerging capital markets show conflicting results. A number of studies find that the proportion of outside directors on the board is negatively associated with the level of disclosure (Eng and Mak, 2003; Gul and Leung, 2004; Barako *et al.*, 2006). This finding seems to support the idea that having outside directors on the board could substitute for public disclosure. On the other hand, Chen and Jaggi (2000) and

Huafang and Jianguo (2007) report a positive association between proportion of outside directors on the board and level of disclosure. Ho and Wong (2001a), Haniffa and Cooke (2002), and Mohd Ghazali and Weetman (2006) however, find no association between proportion of outside directors on the board and level of disclosure. Similar to the findings in developed capital markets, variables including profitability, leverage, audit firm and industry report inconclusive results.

Table 2-4: Significance comparison of variables in studies on emerging capital markets

Variables	Significant Results	Non Significant Results
Size	Singhvi (1968), Chow&Wong-Boren (1987), Wallace (1987), Tai *et al.*(1990), Priebjrivat (1991), Ahmed&Nicholls (1994), Hossain *et al.*(1994), NG&Koh (1994), Al-Modahki (1995), Wallace&Naser (1995), Patton&Zelenka (1997), Suwaidan (1997), Owusu-Ansah (1998b), Rahman (1998), Abd-Elsalam (1999), Sarpong (1999), Chen&Jaggi (2000), Ho&Wong (2001a), Haniffa&Cooke (2002), Naser *et al.*(2002), Eng&Mak (2003), Gul&Leung (2004), Barako *et al.*(2006), Hossain&Taylor (2007), Huafang&Jianguo (2007)	Ahmed (1996)
Profitability	Singhvi (1968), NG&Koh (1994), Wallace&Naser(1995)[-], Patton&Zelenka (1997), Owusu-Ansah (1998b), Chen&Jaggi (2000)[-], Haniffa&Cooke (2002), Naser *et al.*(2002), Gul&Leung (2004), Hassan *et al.*(2006)	Wallace (1987), Abd-Elsalam (1999), Ho&Wong (2001a), Eng&Mak (2003), Barako *et al.*(2006), Hossain&Taylor (2007)
Liquidity	Naser *et al.*(2002)[-]	Wallace (1987), NG&Koh (1994), Wallace&Naser (1995), Owusu-Ansah (1998b), Rahman (1998), Abd-Elsalam (1999), Chen&Jaggi (2000), Gul&Leung (2004), Barako *et al.*(2006)
Leverage	NG&Koh (1994), Naser *et al.*(2002), Eng&Mak (2003)[-], Barako *et al.*(2006)	Chow&Wong-Boren (1987), Priebjrivat (1991), Hossain *et al.*, (1994), Wallace&Naser (1995), Ahmed (1996), Patton&Zelenka (1997), Rahman (1998), Abd-Elsalam (1999), Chen&Jaggi (2000), Ho&Wong (2001a)), Chau&Gray (2002), Haniffa&Cooke (2002), Gul&Leung (2004),Huafang&Jianguo (2007)
Listing status	Hossain *et al.*(1994), Patton&Zelenka (1997), Sarpong (1999)	Gul&Leung (2004), Haniffa&Cooke (2002)
Ownership structure	**Concentration:** Priebjrivat (1991) [-], Hossain *et al.*(1994)[-], Haniffa&Cooke (2002), Barako *et al.* (2006) **Inside:** Owusu-Ansah (1998b), Eng&Mak (2003)[-] **Block:** Huafang&Jianguo (2007) **Institutional:** Suwaidan (1997), Barako *et al.*, (2006)	**Concentration:** Mohd Ghazali&Weetman (2006) **Number of shareholders:** Singhvi (1968), Suwaidan (1997), Naser *et al.*, (2002), Rahman (1998) **Outside:** Wallace&Naser(1995), Chen&Jaggi (2000) **Inside:** Gul&Leung (2004),

Variables	Significant Results	Non Significant Results
	Foreign: Haniffa&Cooke (2002), Barako *et al.* (2006), Huafang&Jianguo (2007) **Government:** Suwaidan (1997)	Huafang&Jianguo (2007) **Block:** Eng&Mak (2003) **Institutional:** Suwaidan (1997), Haniffa&Cooke (2002) **Foreign:** Naser *et al.* (2002) **Government:**Suwaidan (1997), Naser *et al.* (2002), Eng&Mak (2003), Huafang&Jianguo (2007) **Racial:**Haniffa&Cooke (2002) ,Naser *et al.* (2002) **Individual:** Naser *et al.* (2002)
Proportion of outside directors	Chen&Jaggi (2000), Eng&Mak (2003)[-], Gul&Leung (2004)[-],Barako *et al.*, (2006)[-], Huafang&Jianguo (2007)	Ho&Wong (2001a), Haniffa&Cooke (2002), Mohd Ghazali&Weetman (2006)
Audit firm	Priebjrivat (1991), Ahmed&Nicholls (1994), Ng&Koh (1994), Wallace&Naser (1995), Ahmed (1996), Patton&Zelenka (1997), Suwaidan (1997), Abd-Elsalam (1999), Naser *et al.* (2002), Hossain&Taylor (2007)	Singhvi (1968), Tai *et al.* (1990), Hossain *et al.*(1994), Al-Modahki (1995), Owusu-Ansah (1998b), Rahman (1998), Chen&Jaggi (2000), Haniffa&Cooke (2002), Gul&Leung (2004), Barako *et al.* (2006), Huafang&Jianguo (2007)
Industry type	Ng&Koh (1994), Al-Modahki (1995), Wallace&Naser (1995), Suwaidan (1997), Chen&Jaggi (2000), Ho&Wong (2001a), Haniffa&Cooke (2002)	Wallace (1987), Tai *et al.*, (1990), Patton&Zelenka (1997), Owusu-Ansah (1998b), Rahman (1998), Abd-Elsalam (1999), Naser *et al.*, (2002), Eng&Mak (2003), Gul&Leung (2004), Barako *et al.*(2006)
Role duality (CEO/Chairman)	Gul&Leung (2004)[-], Huafang&Jianguo (2007)[-]	Haniffa&Cooke (2002), Ho&Wong (2001a)

2.7.2 Cross-national Studies

Comparing disclosure practices in cross-national contexts by looking at different single national studies might create a strong bias due to differences in research approach. There are also differences in disclosure indices, independent variables, periods of time, statistical methods, and scoring procedures. Cross national research could help in reducing such bias. Empirical research on cross-national disclosure starts with the work by Barrett (1977). The objective of this study was to find whether the extent of disclosure of US companies is higher than that in other countries. Seven countries including the USA, UK, Japan, France, Germany, Sweden, and the Netherlands were selected for this study. Annual reports of companies with the largest market capitalisation in each country were chosen for the analysis. A disclosure index comprising 17 items was constructed. Barrett (1977) finds that there is a wide variation in the extent of disclosure among the seven countries and the extent of financial disclosure in the annual reports of US and UK firms is greater than the other five nations. Barrett (1977) concluded that a positive association exists between the extent of disclosure and the efficiency of national financial markets.

Since the study by Barrett (1977), there has been a number of cross national disclosure studies. Spero (1979) examines voluntary disclosure of 60 companies from France, Sweden and the UK. By using annual reports from 1964 to 1972, he finds that the level of voluntary disclosure in each sample country increases over time. Spero (1979) concludes that a firm's need for capital explains voluntary disclosure. In an industry-specific study, Kahl and Belkaoui (1981) examine the disclosure adequacy in annual reports of 70 banks selected from 18 countries. Similar to Barrett (1977), Kahl and Belkaoui (1981) hypothesise that disclosure adequacy in the annual reports of US banks is superior internationally. A disclosure index consisting of 30 items was applied. The results of this study indicated that differences exist in disclosure among the 18 countries with *'US banks leading the list'*. In addition, a positive correlation exists between disclosure and bank size as measured by total assets. In a more comprehensive study, Gray *et al.* (1995) examine the relative influence of international market pressure on the voluntary disclosure practice of 116 US, and 64 UK multinational companies (MNCs). The main objective of this study is to find whether internationally listed MNCs disclose more voluntary information in their annual reports than those MNCs listed domestically. A disclosure index consisting of 128 items classified into three major categories: strategic, non-financial, and financial was constructed. Gray *et al.* (1995) find that international listing status and country of origin influence voluntary disclosure practices, especially for the disclosure of strategic information for international listing status and the disclosure of non-financial information for the country of origin. The study by Meek *et al.* (1995) also examines the influence of corporate characteristics on sub categories of voluntary disclosure. Data sources were 116 US, 64 UK, and 46 Continental European MNCs. The results of this study indicate that company size, country of origin and listing status are associated with overall disclosure. However, there are conflictingresults for sub categories of voluntary disclosure.

One interesting cross national study in a Southeast Asian (ASEAN) setting is the study by Craig and Diga (1998) which aims to ascertain the extent, pattern and nature of corporate disclosure in ASEAN and to find whether existing disclosure requirements would be conducive to accounting harmonisation in the region. The sample consisted of 145 public companies listed on the stock exchanges of Singapore, Malaysia, Indonesia, the Philippines, and Thailand. A disclosure checklist containing 530 items of financial disclosure required in at least one of the five ASEAN countries was applied in the study. Craig and Diga (1998) find that there is a relatively high level of common disclosure requirements within ASEAN nations. Actual disclosure practices are, however, significantly different among the five countries. They comment that there would be difficulties in achieving disclosure practice harmony in ASEAN countries because of the differences in national environment. They also find that compliance with financial disclosure requirements was quite low throughout the region. For factors influencing financial disclosure, Craig and Diga (1998) find correlations between disclosure levels of ASEAN countries and company size, leverage, foreign operation, industry type, and country of origin. Contrary to expectation, companies in the banking and utilities industry are found to have the lowest level of disclosure. Unlike the majority of prior studies, Craig and Diga (1998) find that foreign owned companies tend to disclose less information than local companies.

A study that covers a larger number of countries was made by Archambault and Archambault (2003). The extent of corporate disclosure was measured by an unweighted disclosure index containing both mandatory and voluntary disclosures. By using a sample of leading industrial companies from 33 countries, they find that the financial disclosure decision is complex and influenced by many factors including culture, national systems, and corporate systems.

Boesso and Kumar (2007) use a different method to measure the extent of voluntary disclosure by applying content analysis. This study aims to investigate country differences in the voluntary disclosure of Italian and US companies. In order to determine the quantity and quality of voluntary disclosures, content analysis was applied in the management discussion and analysis section of annual reports of 72 Italian and US companies. Boesso and Kumar (2007) find that company emphasis on stakeholder engagement was the strongest predictor of voluntary disclosure volume and the only predictor in the case of US companies. Regarding Italian companies, a number of significant predictors exist including business complexity, industry volatility, and company emphasis on stakeholder engagement. However, the results are mixed in the case of disclosure quality. Emphasis on engaging various stakeholders and the need for intangible asset management are found to be significant predictors for the disclosure quality of Italian companies, while no significant relationship is found for US firms.

2.7.3 Voluntary Disclosure by Category of Information

Earlier studies treat voluntary disclosure as a whole. On the other hand, more recent studies, starting with the work by Gray *et al.* (1995) and Meek *et al.* (1995) try to investigate disclosure behaviour of companies in different categories of voluntary disclosure. Gray *et al.* (1995) and Meek *et al.* (1995) find that there is empirical evidence that different types of information result in different disclosure behaviour and can be explained by different factors. Differences in disclosure behaviour in each type of information may result from the intention of management or a wide variety of demands from information users; and each type of information has different characteristics.

When looking at each type of characteristic in turn, financial information is considered to be highly related to investment decisions. It is important for both existing and potential investors, as it reveals the performance of a company. Future growth of a company could also be estimated from financial information. Financial information includes segmental information, financial review, financial history, and market related information. On the other hand, strategic information could be relevant to a broader set of users. It contains information about general corporate information, specific corporate information, economic environment, corporate strategies, and future prospects of the company. Management tends to use strategic information to enhance a company image or to supply certain corporate issues to stakeholders. Finally, non-financial information is an extension of the financial reporting system, which is more related to corporate social responsibility and directed at a wide range of stakeholders. In recent years, companies have paid more attention to the existence of other parties in society, not only shareholders and creditors as in the past. Corporate social responsibility is an area of growing interest and concern, as it involves a variety of issues such as environmental contribution, community involvement and human resources.

Similar to studies on overall disclosure, company size is found to be significant in almost all information categories and seems to be the most powerful factor in explaining variation in corporate disclosure. Other variables that most studies have in common, like profitability, leverage, and industry type, seem to have low explanatory power and also show conflicting results. Gray *et al.* (1995), Meek *et al.* (1995), and Leventis and Weetman (2004) find that listing status is significant in explaining some types of voluntary disclosure. On the contrary, Ferguson *et al.* (2002) finds no significant relationship between listing status and voluntary disclosure. In terms of ownership structure, Chau and Gray (2002) find that outside ownership is consistently significant in influencing disclosure of information types for Hong Kong and Singaporean companies. Mohd Ghazali and

Weetman (2006) report a significant negative association between ratio of shares held by executive and non-independent directors and disclosure of all types of information, including overall disclosure. However, ownership concentration and government ownership are not found to be significantly associated to any type of information. Multinationality measured by percentage of foreign sales is found not to be a significant factor influencing disclosure of all three types of information including overall disclosure in studies by Gray *et al.* (1995), Meek *et al.* (1995) and Chau and Gray (2002).

Some studies categorise voluntary disclosure in different ways, such as studies by Suwaidan (1997) and Patelli and Prencipe (2007). Suwaidan (1997) categorises voluntary disclosure into seven types (general information, balance sheet information, income statement/other statements, projection/future information, financial history, ratios statistics, and market-based information). Patelli and Prencipe (2007) apply six categories of information in their study (background information, summary of historical results, segment information, key non-financial statistics, projected information, and management discussion and analysis). Similar to other studies, Suwaidan (1997) and Patelli and Prencipe (2007) also find that disclosure behaviour varies among types of information.

2.8 Thailand as an Object of Study

Thailand has been included in several cross-national studies with variations on central themes including accounting and economic development (Holzer and Tremblay, 1973), comparability and harmonisation of accounting standards (Saudagaran and Diga, 1997; Craig and Diga, 1998; Ball *et al.*, 2003), informativeness of accounting information (Fan and Wong, 2002), relationship between accounting information and stock prices (Graham and King, 2000), corporate social disclosures (Williams, 1999), and corporate governance (Suphakasem, 2008). Although cross-national study enables direct comparison between countries with less bias than comparing between different single national studies, it has limitation in providing in-depth information of each country included in the study.

There has been an increase in accounting research on Thailand as a single case since the 1990s, when the country was regarded as one of the world's fastest growing economies. In addition, the outbreak of financial crisis in 1997 results in the need for more in-depth studies in the Thai context. Therefore, many areas of accounting have been investigated. MacDonald (1998) examines the role of transparency and disclosure in Thailand's 1997 economic crisis and concludes that transparency and disclosure are key contributory factors for recovery from the crisis. Graham *et al.*, (2000) investigate the value relevance of accounting information during the 1997 financial crisis. They find that Thai book values and earnings prior to the 1997 decline and Baht devaluation are positively and significantly related to Thai security prices. Wiwattanakantang (2001) investigates the effects of controlling shareholders on corporate performance of Thai listed companies and finds that the presence of controlling shareholders is associated with higher corporate performance; however, the controlling shareholder involvement in management has a negative effect on the performance. Jaikengkit (2002) reviews Thai financial reporting and its environment from 1974 to 2002 and predicts that transparency and high quality disclosure will be recognised and practiced by Thai companies. Suehiro and Wailerdsak (2004) examine corporate management and governance restructuring in Thai business after the 1997 financial crisis and find that Thai family business still strongly persists in post-crisis. Kuasirikun and Sherer (2004) evaluate corporate social and environmental practices in Thailand. They conclude that the inconsistent and irregular social and environmental disclosure of Thai company annual reports suggest the need for this type of disclosure to be regulated to allow more meaningful assessment of corporate social and environmental performance.

There are limited empirical studies on corporate disclosure practices in the Thai context. Among the few exceptions are Priebjrivat (1991) and Sutthachai and Cooke (2009). Priebjrivat (1991) investigates mandatory and voluntary disclosures of 63 non-financial listed companies, and relates them to cost of capital and specific company characteristics (size, leverage, audit firm, ownership control status, and capital structure). A disclosure index consisting of 27 items of mandatory, semi-voluntary, and voluntary items which were broken down into 68 sub-elements was used. The results of a regression analysis reveal that size, ownership control status, capital structure, and the choice of auditor are related to disclosure of Thai listed companies in the same way as they are in mature capital markets. Priebjrivat (1991) finds that there is limited evidence of the linkage between level of disclosure and cost of capital. She concludes that Thai listed companies disclose additional information when they perceive benefit to be gained from such disclosure. As a result, greater enforcement of disclosure is needed. In a more recent study, Sutthachai and Cooke (2009) examine the financial reporting practices of Thai companies between 1993 and 2002. They try to ascertain whether the 1997 Asian financial crisis had an impact on financial reporting practices by considering the changes in measurement and disclosure practices. Sutthachai and Cooke (2009) find that there were significant increases in disclosure levels over the ten year period but no substantial changes in measurement methods.

Given the underlying issue of lack of empirical studies on corporate disclosure practices in Thailand, especially for studies that have voluntary disclosure as a main focus; there are gaps in prior studies. Firstly, previous studies in this area in Thailand apply quantitative analysis to examine corporate disclosure practices. This leaves room for research on voluntary disclosure to include qualitative analysis to investigate the perception of persons positioned to influence voluntary disclosure. Personal interviews with market participants could provide further insight into factors influencing voluntary disclosure and other factors not so easily captured from quantitative analysis. Information obtained from the interviews should help to validate and enhance findings from quantitative analysis. Secondly, voluntary disclosure at the disaggregated level had not been investigated thoroughly in the Thai context. The investigation of factors affecting specific information disclosure may help to determine whether factors which explain overall disclosure prove the same in specific information disclosure. Thirdly, although Sutthachai and Cooke (2009) include data up to 2002 in their study, 2002 is only the first year that the corporate governance reformation taking effect in Thailand. In order to investigate the response of listed companies to several government measures and also to examine the continuity of the implementation, this study includes data up to 2005.

Finally, there is a lack of studies regarding the impact of some specific characteristics of Thai business including ownership structure (ownership concentration and foreign ownership) and corporate governance characteristics (CEO/Chairman role duality and independent non-executive directors) on corporate voluntary disclosure. By including these factors in the study, a better understanding of voluntary disclosure practices in Thai companies may be created. Although Priebjrivat (1991), Suphakasem (2008), and Sutthachai and Cooke (2009) included ownership concentration in their studies, the results seem to be in conflict. Therefore, ownership concentration is also included in this study in order to verify the mixed results reported in previous studies. In addition, this study includes foreign ownership, which is another important ownership structure related variable that has not been included in previous studies on corporate disclosure in Thailand. Proportion of non-executive directors on the board and CEO/Chairman role duality were included in a study by Suphakasem (2008). However, the focus of Suphakasem's study is only on corporate governance disclosure. Therefore, these two variables have not been examined thoroughly in the context of corporate voluntary disclosure in Thailand.

2.9 Conclusion

This chapter has reviewed relevant theories and empirical studies in relation to corporate voluntary disclosure in order to establish a basis for developing the research questions, research methods and hypotheses in subsequent chapters.

Financial reporting plays a crucial role in capital markets. A good understanding of corporate disclosure is beneficial to all market participants. However, there are still several unanswered questions in this area. Empirical studies on the extent and factors influencing disclosures can provide better understanding of the corporate reporting system and further insight into how companies respond to demands for enhancing corporate information. The review of theoretical framework shows that there are many theories that could explain voluntary disclosure practices. Although some theories can be applied to explain the same phenomenon, the underlying motivations are different. Each theory is based on specific assumptions and explains voluntary disclosure through a particular perspective.

Gaps in prior studies can be identified in four areas. Firstly, the review of prior literature reveals that the majority of prior studies applied quantitative techniques to identify factors influencing voluntary disclosure. This leaves room for research on voluntary disclosure to include qualitative analysis to investigate the perception of persons positioned to influence voluntary disclosure. Personal interviews with market participants could provide further insight into factors influencing voluntary disclosure and other factors not so easily captured from quantitative analysis. Information obtained from the interviews should help to validate and enhance findings from quantitative analysis.

Secondly, the literature review has shown that voluntary disclosure at the disaggregated level had not been investigated thoroughly in the Thai context. The investigation of factors affecting specific information disclosure may help in determining whether factors which explain overall disclosure prove the same in specific information disclosure.

Thirdly, there is a lack of studies regarding the impact of some specific characteristics of Thai business, including ownership structure (ownership concentration and foreign ownership) and corporate governance characteristics (CEO/Chairman role duality and independent non-executive directors) on corporate voluntary disclosure. By including these factors in the study, a better understanding of voluntary disclosure practices in Thai companies may be created.

Finally, the literature review suggests that there is a lack of longitudinal studies on voluntary disclosure. Most prior studies are based on voluntary disclosure made in a single year. As a result, changes in disclosure practices remain largely unexplored. In addition, some previous studies capture changes in the levels of disclosure by comparing with other research. Comparability of results from different studies that measured disclosures by employing different indices is likely to be reduced. Therefore, incorporating data from different periods may provide a better picture regarding change in voluntary practices over time, especially in the case of Thailand, which is the country that was seriously affected by the 1997 financial crisis.

The next chapter provides an overview of the Thai business environment, which helps in understanding the Thai characteristics that are expected to have an impact on corporate disclosure policies and practices.

Appendices

Appendix 2-A: Empirical studies on corporate disclosure in developed capital markets

Study	Country	Sample	Disclosure items	Independent variables	Major findings
Cerf (1961)	USA	527 listed companies	31 items (weighted)	Size (total assets) Number of shareholders Profitability Listing status	Positive association for size, number of shareholders, profitability and listing in NYSE.
Singhvi and Desai (1971)	USA	55 unlisted and 100 listed companies	34 items (weighted)	Size (total assets) Number of shareholders Listing status Audit firm Profitability (rate of return, earning margin)	All variables were found significant (all positive association). $R^2 = 43.3\%$ Listing status alone explained 87% of the explanatory power.
Buzby (1975)	USA	44 unlisted and 44 listed companies	39 items (weighted)	Size (total assets) Listing status	Positive association for total assets.
Stanga (1976)	USA	80 listed companies	79 items (weighted)	Size (net sales) Industry type	Significance for size and industry type.
Belkaoui and Kahl (1978)	Canada	200 non-financial companies	30 items (weighted)	Size (total assets, net sales) Profitability Liquidity Capitalisation ratio Industry type	Significance for total assets, net sales, liquidity, industry type, profitability (negative) and capitalisation ratio (negative).
Firth (1979)	UK	100 listed companies	48 voluntary items (weighted)	Size (sales, capital employed) Listing status Audit firm	Significance for size and listing status.
McNally *et al.* (1982)	New Zealand	103 manufacturing listed companies	41voluntary items (weighted)	Size Industry Audit firm Rate of return growth	Positive association for size.
Cooke (1989a)	Sweden	38 unlisted, 33 listed, 19 multiple listing non-financial companies	146 voluntary items (unweighted)	Size (assets, sales, number of shareholders) Listing status Parent company relationship Industry type	Significance for size, listing status and industry type. Adj $R^2 = 65.75\%$ Listing status alone explained 90% of the explanatory power.

Lutfi (1989)	UK	122 unlisted companies	53 items (unweighted)	Size Profitability Leverage Director's equity Foreign turnover Substantial shareholdings Audit firm Number of executive directors Existence of executive share option scheme Industry type Tax status	Significance for size, foreign turnover, leverage, executive share option scheme, director's equity (negative) and profitability (negative).
Cooke (1991)	Japan	13 unlisted companies 25 listed companies 10 multiple listing companies	106 voluntary items (unweighted)	Size (total assets, sales, number of shareholders) Listing Status Industry type	Positive association for size, listing status and industry type (manufacturing). Adj $R^2 = 29.4\%$
Cooke (1992)	Japan	35 listed companies	76 voluntary items 89 mandatory items (unweighted)	Size Listing status Industry type	Positive association for size, listing status and industry type (manufacturing).
Malone *et al.* (1993)	USA	125 oil and gas companies	129 mandatory items (weighted)	Size (total assets) Profitability (rate of return, earning margin) Leverage (Debt/equity ratio) Industry diversification Number of shareholders Audit firm Listing status Foreign operations Proportion of outside directors	Significance for listing status, leverage and number of shareholders. Adj $R^2 = 29.4\%$
Wallace *et al.* (1994)	Spain	50 non-financial companies (20 unlisted and 30 listed companies)	16 mandatory items (unweighted)	Size Leverage Earning margin Liquidity Listing status Industry type Audit firm	Significance for size, listing status, and liquidity (negative).

Hossain *et al.* (1995)	New Zealand	55 listed non-financial companies	95 voluntary items (unweighted)	Size (total assets) Leverage Assets-in-place Listing status Audit firm	Significance for size, listing status and leverage.
Raffournier (1995)	Switzerland	161 listed non-financial companies	30 voluntary items (unweighted)	Size (sales) Leverage Profitability Ownership Structure (shares not held by known shareholders) Audit firm Percentage of fixed assets Industry type Internationality	Significance for size and internationality. Adjusted R^2 42% Size alone explained 85% of the explanatory power.
Inchausti (1997)	Spain	49 listed companies for 1989 47 listed companies for 1990 42 listed companies for 1991	30 mandatory items 20 voluntary items (unweighted)	Size Leverage Profitability Dividend payout ratio Listing status Audit firm Industry type	Significance for size, audit firm and listing status.
Adams and Hossain (1998)	New Zealand	34 life insurance companies (193 annual reports from 1988-1993)	189 voluntary items	Organisational form Market value of assets Assets-in-place Product concentration Distribution systems Localisation of operations Proportion of outside directors Reinsurance	Significance for organisational form, market value of assets, proportion of outside directors, reinsurance, distribution systems, and product concentration (negative).
Tauringana (1997)	UK	73 unlisted companies 203 listed companies	65voluntary items (unweighted)	Size Leverage Profitability Liquidity Listing status No. of business activities Audit firm Institutional investment Proportion of outside directors	Significance for size, listing status and profitability. No significance for unlisted companies

Depoers (2000)	France	102 non-financial listed companies	65 voluntary items (unweighted)	Size (Sales) Foreign activity Ownership structure (proportion of shares held by three largest shareholders) Leverage Audit firm Proprietary costs Labour pressure	Significance for size, foreign activity, proprietary costs, and labour pressure (negative).
Camfferman and Cooke (2002)	UK Netherlands	161 Dutch companies 161 UK companies	93 items specified in the 4th and 7th European Union Directives	Size (assets) Leverage Profitability (ROE, net income margin) Liquidity Return of Equity Industry type Audit firm	Dutch: Significance for size, leverage, liquidity, industry type (conglomerate +; trading -). UK: Significance for size, audit firm, industry type (manufacturing & conglomerate +), net income margin (negative).
Bhojraj *et al.* (2004)	USA	81 electric utilities companies.	3 specific disclosure items	Size (total assets) Leverage Growth Regulatory climate rating Regulatory incentives Percentage of revenue from industrial customers Production cost Proxy for incentives to make voluntary disclosure (analysts' earnings forecasts, number of institutional investors, percentage of institutional holdings) Stranded cost issue Stranded costs scaled by total assets	Significance for size, regulatory climate rating, leverage, regulatory incentives (negative), growth (negative)
Patelli and Prencipe (2007)	Italy	175 non-financial listed companies	74 voluntary items (weighted)	Size (Sales) Profitability Equity to total assets ratio Proportion of outside directors Labour pressure (labour charges on turnover ratio)	Significance for size, and proportion of outside directors. Adjusted $R^2 = 24.41\%$ Similar results for weighted and unweighted disclosure index

Appendix 2-B: *Empirical studies on corporate disclosure in emerging capital markets*

Study	Country	Sample	Disclosure items	Independent variables	Major findings
Singhvi (1968)	India	45 listed companies	34 items (weighted) 31 items adopted from Cerf (1961)	Size (assets) Number of stockholders Profitability (rate of return, earning margin) Audit firm Type of management	Significance for size, profitability, and type of management.
Chow and Wong-Boren (1987)	Mexico	52 manufacturing listed companies	24 voluntary items (weighted)	Size Leverage Assets-in-place	Significance for size. Adjusted $R^2 = 15\%$
Wallace (1987)	Nigeria	47 listed companies	185 items (unweighted)	Size Profitability Liquidity Management type Industry type	Significance for size.
Tai *et al.* (1990)	Hong Kong	76 listed companies	10 mandatory items (unweighted)	Size Audit firm Industry type	Significance for size.
Priebjrivat (1991)	Thailand	63 non-financial listed companies	27 mandatory, semi-voluntary, and voluntary items (68 sub-elements) (weighted)	Size (market capitalisation) Leverage Audit firm Ownership control status Capital structure (raise fund in capital market) Costs of capital	Significance for leverage, ownership control status, capital structure, audit firm. Limited evidence of linkage between level of disclosure and costs of capital.
Ahmed and Nicholls (1994)	Bangladesh	63 listed companies	94 mandatory items (unweighted)	Size Leverage Subsidiary of MNCs Qualification of accounting officer Audit firm	Significance for size, audit firm, and subsidiary of multinational companies.

Hossain *et al.*, (1994)	Malaysia	67 non-financial listed companies	78 voluntary items (unweighted)	Size (market capitalisation) Leverage Ownership structure (concentration) Assets-in-place Foreign listing status Size of audit firm	Significance for size, ownership structure, and foreign listing status. Adjusted $R^2 = 28.6\%$
NG and Koh (1994)	Singapore	106 listed companies	3 Statement of Recommended Practice	Size Profitability Liquidity Leverage Audit firm Industry type Complexity of operation	Significance for size, profitability, leverage, audit firm, and industry type (finance, properties, hotels).
Al-Modahki (1995)	Saudi Arabia	33 listed companies	50 mandatory items 71 voluntary items (unweighted)	Size Audit firm Industry type Foreign investment Length of incorporation	Significance for size and industry type.
Wallace and Naser (1995)	Hong Kong	80 non-financial listed companies	30 mandatory items (unweighted)	Size (assets) Profitability (profit margin) Liquidity Leverage Audit firm Industry type Outside ownership Foreign registered office	Significance for size (assets), industry type (conglomerate), audit firm, and profitability (negative).
Ahmed (1996)	Bangladesh	59 non-financial listed companies (118 annual reports)	94 mandatory items 56 voluntary items	Size (assets and sales) Leverage Audit firm Subsidiaries of MNCs Qualification of principal accounting officer	Significance for audit firm and subsidiaries of MNCs.

Patton and Zelenka (1997)	Czech Republic	50 listed companies	66 items (37 narrow, 12 somewhat broader, 17 broader) (unweighted)	Size (total assets) Number of employees Profitability Leverage Listing status Audit firm Industry type	Significance for size, number of employees, profitability, audit firm, and listing status. Adjusted $R^2 = 25\%$
Suwaidan (1997)	Jordan	102 listed companies	75 voluntary items (unweighted)	Size (market capitalisation, sales) Profitability (ROE & ROA) Number of shareholders Audit firm International contact of audit firms Industry type Institutional ownership Government ownership Frequency of external finance	Significance for size, audit firm, industry type (insurance), government ownership.
Owusu-Ansah (1998b)	Zimbabwe	49 listed non-financial companies	214 mandatory items (unweighted)	Size (assets, market capitalisation) Profitability Liquidity Ownership structure Company age Industry type Affiliations with MNCs	Significance for size, profitability, ownership structure, company age, affiliations with MNCs.
Rahman (1998)	Malaysia	54 listed companies (162 annual reports)	1974 97 mandatory 85 voluntary 1984 141 mandatory 58 voluntary 1994 149 mandatory 53 voluntary (unweighted)	Size (assets) Leverage Liquidity Industry type Audit firm Parent company size Type of management Number of shareholder Corporate image Financial year	Significance for size.

Abd-Elsalam (1999)	Egypt	72 listed companies	241 mandatory items (unweighted)	Size Profitability Liquidity Leverage Legal form Share trading Industry type Audit firm Familiarity and language	Significance for size, share trading, legal form, and audit firm. Association between disclosure and familiarity and language.
Sarpong (1999)	Ghana	15 listed companies (1988 – 1997)	113 mandatory items 43 voluntary items (unweighted)	Size Listing status Accounting regulation	Significance for size, listing status (overall and voluntary disclosure). Significance for accounting regulation (overall disclosure).
Chen and Jaggi (2000)	Hong Kong	87 largest listed companies (exclude utilities, finance & non-depository credit institutions) 174 annual reports	30 mandatory items (weighted)	Size (assets, sales, market capitalisation) Profitability Liquidity Leverage Audit firm Year-end Outside ownership Industry type Proportion of outside directors	Significance for size (assets), proportion of outside directors, profitability (negative), and industry type (conglomerate: negative).
Ho and Wong (2001a)	Hong Kong	98 listed companies	20 voluntary items	Size (assets) Leverage Asset in place Profitability Industry type Independent directors Proportion of family members on the board Existence of audit committee CEO/Chairman duality	Significance for size, existence of audit committee, industry (manufacturing), and proportion of family members on the board (negative).

Haniffa and Cooke (2002)	Malaysia	138 non-financial listed companies	65 voluntary items	Size (total assets) Profitability (ROE) Leverage Industry type Asset-in-place Type of auditors Listing age Complexity of business Ownership structure Level of diversification Role duality Cross directorship Foreign activities Foreign ownership Institutional investors Listing status Board composition Independent chairman Family members on the board Finance director on the board Independent chairperson Race of chairperson Race of managing director Racial ownership structure Racial composition of directors on the board Qualification of directors Qualification of finance director	Significance for size, asset-in-place, ownership structure, foreign ownership, profitability, racial composition of directors on the board, level of diversification, industry type (consumer and industrial: negative), independent chairperson (negative), family members on the board (negative).

Naser *et al.* (2002)	Jordan	84 manufacturing and services listed companies	104 items	Size (assets, market capitalisation, sales) Liquidity Profitability (profit margin, ROE) Leverage Audit firm Industry type Number of shareholders Number of employees Government ownership Individual ownership Foreign ownership Arab ownership	Significance for size (market capitalisation, sales), profitability (profit margin), leverage, audit firm, liquidity (negative).
Eng and Mak (2003)	Singapore	158 listed companies	46 voluntary items (weighted)	Size (market value of ordinary shares, book value of preferred shares, book value of debts) Profitability (ROE, ROA) Leverage Growth Stock return Industry type Analyst following Block ownership Managerial ownership Government ownership Proportion of outside directors	Significance for size, government ownership, managerial ownership (negative), proportion of outside director (negative), leverage (negative).

Gul and Leung (2004)	Hong Kong	385 listed companies	44 voluntary items (unweighted)	Size (total assets) Leverage Profitability (ROE) Liquidity Equity market liquidity Negative net income Listing status Industry type Market value to book value of equity Audit firm CEO duality Proportion of outside directors Director's ownership Disclose of existence of audit committee Consolidated enterprise by HKSE Issuance of new share	Significance for size, profitability, market value to book value of equity, negative net income, proportion of outside directors (negative), CEO duality (negative). Negative CEO duality/voluntary disclosure association is weaker for firms with higher proportion of outside directors.
Barako *et al.* (2006)	Kenya	43 listed companies (1992 – 2001)	47 voluntary items (weighted & unweighted)	Size (total assets) Profitability (ROE) Leverage Liquidity Audit firm Industry type Ratio of outside directors Board leadership structure Board size Board audit committee Ownership concentration Foreign ownership Institutional ownership	Significance for size, leverage, foreign ownership, institutional ownership, ratio of outside directors (negative), ownership concentration (negative). $R^2 = 53.4\%$ No difference between results of unweighted and weighted index.

Hassan *et al.* (2006)	Egypt	77 non-financial listed companies (264 annual reports)	49 mandatory items 26 voluntary items (unweighted)	Size (sales, assets) Leverage Profitability Stock activity Legal form	Mandatory disclosure model: Significance for leverage, profitability, stock activity, legal form, size (negative). Voluntary disclosure model: Significance size, legal form, stock activity (negative) Adjusted R^2 = 88.6% (voluntary disclosure model) 99.8% (mandatory disclosure model)
Hossain and Taylor (2007)	Bangladesh	20 domestic private banks	45 voluntary items (unweighted)	Size (total assets) Profitability (ROA) Audit firm	Significance for size and audit firm. Adusted R^2 = 24%
Huafang and Jianguo (2007)	China	559 non-finance listed companies	30 voluntary items (unweighted)	Size (total assets) Leverage Intangible assets ratio Audit firm Proportion of outside directors CEO duality Blockholder ownership Managerial ownership State ownership Legal-person ownership Foreign listing/shares ownership	Significance for size, proportion of outside directors, blockholder ownership, foreign listing/shares ownership, intangible assets ratio (negative), CEO duality (negative) Adjusted R^2 = 7.9%
Liao and Lu (2009)	Taiwan	1,219 non-finance listed companies (2005-2007)	51 mandatory and voluntary items (unweighted)	Size (total assets) Leverage Opinions of auditors Ratio of equity owned by outsiders Family control Earnings per share	Significance for size, ratio of equity owned by outsiders, family control Adjusted R^2 = 50.9%

Sutthachai and Cooke (2009)	Thailand	59 non-finance listed companies (1993-2002)	170 mandatory items 47 voluntary items	Size (total sales) Leverage Profitability Audit firm Year Industry type	Mandatory disclosure model: Significance for size, leverage, industry type, and year Voluntary disclosure model: Significance size, industry type, and year Adjusted R^2 = 65.7% (voluntary disclosure model) 40.2% (mandatory disclosure model)

Note: Hong Kong, Singapore and Taiwan are regarded as graduated developing economies which are now considered advanced economies. However, these countries share fundamental business characteristics with many Asian developing countries. Therefore, they are included in Appendix 2-B.

Appendix 2-C: Empirical studies on voluntary disclosure by category of information

Study	Country	Sample	Disclosure items	Independent variables	Type of information			
					T	S	F	NF
Gray *et al.* (1995)	US UK	116 US, 64 UK MNCs	102 (US), 111 (UK) voluntary items (unweighted)	Size (sales) [+]	✓	×	✓	✓
				Multinationality	×	×	×	×
				Listing status [+]	✓	✓	×	×
				Country	✓	×	×	✓
				Interaction of international listing and country	×	×	×	×
Meek *et al.* (1995)	US UK France Germany The Netherlands	116 US, 64 UK, 16 France, 12 Germany, 18 Netherlands MNCs	85 voluntary items (unweighted)	Size (sales) [+]	✓	×	✓	✓
				Profitability	×	×	×	×
				Leverage [-]	✓	×	×	×
				Industry (metals)	×	×	✓	×
				Industry (consumer goods)	×	×	×	×
				Industry (oil)	✓	×	✓	✓
				Country (UK) [+]	✓	×	✓(-)	✓
				Country (Continental Europe) [+]	✓	✓	×	✓
				Listing status [+]	✓	✓	✓	×
				Multinationality	×	×	×	×
Chau and Gray (2002)	Hong Kong Singapore	60 Hong Kong, 62 Singaporean industrial listed companies	106 (Hong Kong), 103 (Singapore) Voluntary items (unweighted)	**Hong Kong**				
				Size (sales) [+]	✓	×	✓	×
				Profitability	×	×	×	×
				Leverage	×	×	×	×
				Audit firm	×	×	×	×
				Industry	×	×	×	×
				Outside ownership [+]	✓	✓	✓	✓
				Multinationality	×	×	×	×
				Singapore				
				Size (sales) [+]	✓	✓	×	✓
				Profitability	×	×	×	×
				Leverage	×	×	×	×
				Audit firm	×	×	×	×
				Industry	×	×	×	×
				Outside ownership [+]	✓	✓	✓	✓

Study	Country	Sample	Disclosure items	Independent variables	Type of information			
					T	S	F	NF
				Multinationality	×	×	×	×
Ferguson *et al.* (2002)	Hong Kong	142 non-financial listed companies	93 voluntary items (unweighted)	Size (total assets) [+]	✓	✓	✓	✓
				Leverage [+]	✓	×	✓	×
				Industry	×	×	×	×
				Listing status [+]	×	×	×	×
				Firm type (H-share) [+]	✓	✓	✓	×(-)
				Firm type (Red-Chip)	×	×	×	×
Leventis and Weetman (2004)	Greece	87 non-financial listed companies	72 voluntary items (unweighted)	Size (market capitalisation) [+]	✓	✓	✓	✓
				Leverage	×	×	×	×
				Profitability [+]	×	×	×	×
				Liquidity	×	×	×	×
				Industry (consumer products) [+]	✓	✓	×	×
				Industry (industrial products) [+]	✓	×	×	×
				Share return [-]	✓	✓	✓	✓
				Listing status	×	×	✓	×
Mohd Ghazali and Weetman (2006)	Malaysia	87 non-financial listed companies	53 voluntary items (unweighted)	Size (number of employees) [+]	✓	✓	✓	×
				Profitability [+]	✓	✓	✓	×
				Leverage [+]	×	×	×	✓
				Regulatory change [-]	×	×	×	×
				Market share	×	×	×	×
				Concentration ratio (ratio of total sales made by the largest two companies in the industry to the total sales of that industry)	×	×	×	×
				Ownership concentration [+]	×	×	×	×
				Number of shareholders	×	×	×	×
				Ratio of shares held by executive and non-independent directors [-]	✓	✓	✓	✓
				Government ownership	×	×	×	×
				Proportion of family members on the board [-]	✓	✓	×	×
				Independent chairman [-]	×	×(+)	×	×
				Proportion of outside directors [-]	×	×	×	×

T = Total disclosure, **S** = Strategic information, **F** = Financial information, **NF** = Non-financial information, ✓ Statistically significant, × Not statistically significant

CHAPTER 3

Thai Financial Reporting Environment

3.1 Introduction

This chapter provides a background on the financial reporting environment in Thailand. It helps in understanding the Thai characteristics that are expected to have an impact on corporate disclosure policies and practices. The chapter is organised as follows. Section 3.2 gives an overview of Thailand including the culture, people and political system. Section 3.3 discusses the Thai economic systems, which are divided into three periods: before, during, and after the 1997 financial crisis. Section 3.4 covers the Thai financial system which includes the business enterprise structure, banking system and capital system. Section 3.5 provides the regulatory framework of Thai financial reporting. Corporate governance reform after the 1997 financial crisis and the role of the accounting profession are discussed in section 3.6 and 3.7 respectively. Finally, a summary is provided in section 3.8.

3.2 The Country

Thailand is located in Southeast Asia and has a total landmass of approximately 513,120 square kilometres. It shares borders with the Union of Myanmar, Lao People's Democratic Republic, Kingdom of Cambodia and Malaysia. The capital city, Bangkok, is most important in both economic and political terms. Thailand's population is approximately 66.72 million (CIA, 2011). *'Thai'* is the official language that is used in most schools (National Statistical Office Thailand, 2007). Even though English is compulsory at every educational level, it is not used widely.

The political system of Thailand is democratic with a constitutional monarchy. The Prime Minister acts as the head of government and the King as the head of state. The power of government comes from three institutions, namely the National Assembly, Council of Ministers and Court (National Statistical Office Thailand, 2007).

The major economic sectors of Thailand are agriculture, manufacturing, tourism and natural resources. Rice is the most important agricultural product for exports. Important industrial products are agro-industry, textiles and electronics. There are many tourist attractions at locations such as Bangkok, Phuket, and Chiang Mai, where a large number of foreigners visit Thailand each year. The important natural resources of Thailand are limestone, gypsum, glass sand, marble, tin and natural gas (National Statistical Office Thailand, 2007).

Ethnic groups in Thailand consist of Thai (75%), Chinese (14%) and other minorities (11%) (CIA, 2011). The first generation of Chinese immigrants dates back many centuries. With extensive intermarriages with Thais, people of Chinese descent regard themselves as Thai. As a result, Thailand can be considered as having a homogenous society, as most Thai people share the same culture, language, religion and ethical behaviour.

Thai people are gentle and group-oriented. They tend to avoid confrontation, criticism, and controversy. As a result, problems are sometimes ignored to avoid conflict. Decisions are usually made based on a group of people rather than individually, which may lead to a lengthy decision-making process. However, this is becoming less true with modernisation. Thai people have become more argumentative and do not follow traditional Thai values as much as they did before (Klausner, 2002).

3.3 The Thai Economy

This section gives an overview of the Thai economy. A summary of the Thai economy from the 19th Century to 1997 is provided in section 3.3.1. Next, section 3.3.2 describes the

1997 financial crisis, which had a large impact on the Thai economy. The Thai economy from the end of the financial crisis to the present is summarised in section 3.3.3.

3.3.1 Thai Economy before the 1997 Financial Crisis

Prior to 1885, the Thai economy was controlled by the King, royal family and nobility. Society was divided into two classes, namely, the upper class and commoners. The commoners provided labour and service to the upper class. The Rights to own land were preserved only for the King and civil servants (Hewison, 1989). International trade, mainly with the Chinese and Europeans, was controlled also by royal families. However, this system changed significantly after the Bowring Treaty was signed between Thailand and Britain in 1855.

The 1855 Bowring Treaty led to the development of modern capitalism in Thailand. Thai administration was reformed to support the treaty allowing free trade with foreigners. The export of rice, timber, rubber and tin expanded significantly (Hewison, 2002). Since then, agriculture has played a significant role in the Thai economy. The first national development plan was introduced in 1961 to cover the period of 1961-1966. The plan emphasised the development of a manufacturing sector together with an agricultural sector. Since then manufacturing has become a significant part of the Thai economy.

In order to stimulate foreign investment, the Board of Investment (BOI) was established in 1972. It offers a range of incentives and privileges to eligible companies, including tax exemption. In the late 1970s, Thailand experienced an economic downturn, due to the decline in export prices of agricultural products, an increase in the Thai Baht currency value, and the oil crisis (Hewison, 2001). In an attempt to stimulate the economy, the government devalued the Baht and shifted its economic policy to export-oriented industrialisation. Thus, main exports changed from agricultural commodities to labour intensive manufacturing products.

During the 1980s, the industrial sector grew extensively. Thailand was regarded as one of the fastest growing economies in the world (Talerngsri and Vonkhorporn, 2005). External trade was liberalised continually by reducing tariffs and abolishing other restrictions. Many East Asian companies, Japanese ones in particular, took advantage of incentives provided by the BOI, and transferred their manufacturing operations to Thailand. As a consequence, the amount of foreign investment increased significantly, and contributed to the fast growth of Gross Domestic Product (GDP). The GDP reached a growth rate of 13.2% in 1988 (see Table 3-1). Thailand was regarded as the second generation of the Asian Newly Industrialising Economy (NIE) and one of the World Bank's seven Highly Performing Asian Economies (HPAEs) (Dixon, 1999). However, in 1997 Thailand's economy changed drastically.

Table 3-1: Thailand's macroeconomic indicators

	2011p	2010	2008	2005	2002	1999	1998	1997	1996	1995	1993	1988	1980
1. Population (Million persons)		63.88	63.39	62.42	62.80	61.80	61.20	60.50	59.90	59.28	58.44	54.96	46.96
2. GDP													
2.1 GDP at constant 1988 price (Billions of Baht)	1,215.4	4,596.1	4,361.4	3,858.0	3,237.0	2,871.9	2,749.6	3,072.6	3,115.3	2,941.7	2,470.9	1,559.8	913.7
(% change)	3.0	7.8	2.5	4.6	5.3	4.4	-10.5	-1.4	5.8	9.2	8.3	13.2	4.6
2.1.1 Agriculture (Billions of Baht)*	108.2	381.4	383.0	347.8	322.1	289.1	282.6	286.8	288.8	276.5	289.0	252.3	184.5
(% change)	6.7	-2.3	3.5	-1.8	0.7	2.3	-1.5	-0.7	4.4	4.0	-2.4	10.5	0.8
2.1.2 Non-agriculture (Billions of Baht)*	1,107.2	4,214.7	3,978.3	3,510.1	2,914.8	2,582.8	2,467.0	2,785.7	2,826.5	2,665.1	2,181.8	1,307.4	729.1
(% change)	2.7	8.8	2.4	5.3	5.9	4.7	-11.4	-1.4	6.1	9.8	9.8	13.8	5.6
2.2 GDP at current price (Billions of Baht)	2,740.6	10,104.8	9,075.4	7,092.8	5,450.6	4,637.0	4,626.4	4,732.6	4,611.0	4,186.2	3,165.2	1,559.8	662.4
(% change)	7.0	11.8	6.4	9.3	6.2	0.2	-2.2	2.6	10.1	15.3	11.8	19.9	17.7
2.3 GNP per capita (Baht : Person)	39,251	143,655	131,140	103,671	82,975	72,981	72,979	76,057	75,146	69,326	53,772	28,256	14,065
3. External Account													
3.1 Export (Billions of USD)	73.2	193.6	175.2	109.3	66.0	56.8	52.8	56.7	54.7	55.7	36.6	15.9	6.4
(% change)	26.7	28.4	15.8	15.1	4.7	7.4	-6.7	3.8	-1.9	24.8	13.4	37.0	23.0
3.2 Import (Billions of USD)	70.3	179.6	175.6	117.6	63.3	47.5	40.7	61.3	70.8	70.4	45.1	19.8	9.3
(% change)	25.7	36.7	26.8	25.8	4.5	16.9	-33.7	-13.4	0.5	31.9	12.3	48.8	24.0
3.3 Trade balance (Billions of USD)	2.8	14.0	-0.3	-8.2	2.7	9.3	12.2	-4.6	-16.1	-14.7	-8.5	-3.9	-2.8
4. Exchange rate (Baht : US$)**	30.43	31.73	33.36	40.27	43.00	37.84	41.37	31.37	25.34	24.92	25.32	25.29	20.48

Remark: 'p' refers to 'preliminary figures.

* Office of the National Economic and Social Development Board (NESDB) has reclassified the GDP by industry to follow the Thailand Standard Industrial Classification (TSIC) 2001 version since 1995. (Formerly using the TSIC 1972 version)

Source: Bank of Thailand (2010), *Thailand Macro Economic Indicators*, Available at: http://www.bot.or.th/English/Statistics/Indicators/Pages/index.aspx [Accessed: 7 May 2011].

3.3.2 The 1997 Financial Crisis

The Thai economy experienced rapid growth during the late 1980s until the mid 1990s. Massive flows of foreign capital came into the country. Financial liberalisation attracted by the Bangkok International Banking Facilities (BIBF) boosted the use of offshore funding. This resulted in an oversupply of funds. Short-term private debts grew to 60 percent of the GDP in 1997. Prior to mid-1997, the Bank of Thailand pegged the value of the Thai Baht to a basket of currencies, of which an estimated 80% was weighted to the US dollar. On the 2nd July 1997 the government announced the float of currency exchange rate system. The Baht value dropped from 25 Baht per one US dollar (under the fixed exchange rate system) to 41 Baht per one US dollar by the end of that year. The Baht value continued to fall significantly. Money borrowed from overseas without foreign exchange hedging increased in value tremendously. Therefore, Thailand became the first country to experience the economic crisis, which soon spread to other Asian countries. Soon after the crisis became apparent, the entire Thai corporate sector was seriously affected. Many companies suffered from devaluation of the Baht and its instability. The number of bankruptcy cases and company closures reached its highest level, and the number of newly registered companies dropped in 1997 by almost 10,000 from the previous year (Limpaphayom, 2001).

In August 1997, the Thai government accepted a loan worth 17 billion US Dollars from the International Monetary Fund (IMF). The IMF's rescue programme required Thai government to undertake significant reformation in order to restore and strengthen stability of its financial systems. As a result, a Range of policies and recovery plans, including liberalisation of regulations relating to foreign business ownership were put into place. Restrictions on foreign investment also were reduced. Privatisation of state-owned enterprises was another condition imposed by the IMF. The target was the communication, transport, and energy sectors. However, privatisation was rather unsuccessful due to strong opposition from social movements and trade unions (Kesboonchoo-Mead and Wanasathop, 2009).

3.3.3 Thai Economy after the 1997 Financial Crisis

The 1997 economic crisis had a confounding impact on the East Asian economy. Among East Asian countries, Thailand was hit harder than others. However, it managed to overcome the damage caused by the crisis and has regained its position as a fast growing economy (Menkhoff and Suwanaporn, 2007). Although the Thai economy has recovered, its growth has become narrower. The real average annual growth of GDP fell by over 40%. Park *et al.*, (2009) believe that this was due mainly to competitive pressures from the People's Republic of China (PRC), and heightened risks and uncertainties. However, the PRC is not only seen as a threat, but also provider of opportunities with a potentially huge market.

Watanagase (2007), then the governor of the Bank of Thailand, seemed to agree with Park *et al.*, (2009) when in her speech; *'Ten year After the Asian Currency Crisis'* at the 2007 International Symposium[2], she stated that the key driver behind Thailand's economic expansion had been a combination of domestic demand and exports. Thailand's export structure has become more diversified in terms of both product and destination. Its exports to ASEAN countries and China, as a percentage of total exports have increased from 25 to 30 percent. Thailand now benefits from growing intra-regional trade, particularly that which is China-related. As for the Thai Banking sector, being the centre of the 1997 crisis, aggressive lending by commercial banks was a major factor that caused a massive currency

[2] Watanagase, T. 2007. *"Changes in Thailand's economic dynamism after the 1997 crisis"*, speech given at The International Symposium "Ten Years After the Asian Currency Crisis: Future Challenges for the Asian Economies and Financial Markets", 22 January 2007.
Available at: http://www.bis.org/review/r070511d.pdf [Accessed 28th September 2010].

mismatch in the real sector. Ten years after the crisis, significant improvement in profitability, asset quality, and risk management could be observed in this sector. Watanagase (2007) also added that non performing loans had been reduced from a peak in 1998 to eight percent approximately in the third quarter of 2006. The BIS capital adequacy ratio in the same quarter of that year was nearly 15%, which suggested a cushion for unexpected shocks in the banking system.

Overall, since the 1997 economic crisis, the Thai Economy has gone through an extensive change. In 1999 and 2000, the economy started to recover, but this was interrupted by the global economic slowdown in 2001, when the GDP growth of that year was 2.2%. However, things began to change in 2002, when the growth rose to 5.3%, despite the continued global economic downturn. During 2003 and 2004 the growth rate increased to 7.1 and 6.3 % respectively. The rate steadied from 2005 to 2007 at approximately 5% per year.

However, there have been ongoing political crises in Thailand since 2008, including the protests against the government from the People's Alliance for Democracy (PAD), which forced Somchai Wongsawat, Prime Minister at that time, to resign. PAD members seized control of terminal buildings at Suvarnabhumi International Airport and Don Mueang Airport in Bangkok. Both airports were closed for weeks, which caused a loss of approximately three billion Baht (approximately 100 million US dollars) a day in lost shipments and trade opportunities. This political crisis caused severe damage to the Thai economy, and resulted in a sharp drop in GDP growth rate to 2.5%. Even with a new government formed from the opposition party, and led by Abhisit Vejjajiva, the situation remained volatile. The National United Front for Democracy against Dictatorship (UDD) formed another protest against the new government. The protest became violent in April 2009, when death, injuries and damage were reported. Then, Thailand's GDP dropped even further to a negative value at -2.2%. Political unrest continued in 2010, with a series of events that reached a critical point again in April, when the protesters took control of a television station and areas around Ratchaprasong intersection at the heart of Bangkok city. Police and troops were used to dissolve the situation. The UDD surrendered in May and a normal political situation was resumed. The political unrest had strong impact on the tourism sector. Nevertheless, the GDP reached a growth rate of 7.8% in 2010. For 2011, the Thai economy is expected to expand at a normal rate of 4.1% (BOT, 2010).

3.4 Thai Financial System

The following sections describe the Thai financial system, which comprises the business enterprise (section 3.4.1), the banking system (section 3.4.2), and the capital system (section 3.4.3).

3.4.1 The Thai Business Enterprise

Hierarchy and seniority are important in Thai culture. Hierarchical relationships also play an important role in Thai business. The management structure of Thai firms is based strongly on rank and hierarchy (Frost and Watkins, 2009). Thai culture is relationship oriented, where personal ties and trust are important. Personal relationships within the social connections of family, friends, classmates, and colleagues are the foundation of many business associations (Nimanandh and Andrews, 2009). As in most developing countries, traditional Thai firms are closely held and managed by majority family interests. Major business groups are family firms founded by Chinese immigrants, who arrived in the country between the 1880s and 1930s (Wailerdsak, 2008). The industrialisation process in Thailand has been driven by family firms, which started their business in textiles, trading, and commerce. These businesses were later diversified into other activities, while still maintaining their original family controlled and managed characteristics (Suehiro and Wailerdsak, 2004).

The characteristics of family control and management in Thai business are similar to those in other Asian countries. The eldest son tends to inherit control of the family business. However, gender barriers are disappearing progressively. A relatively large number of Thai women are holding executive positions in the business sector. Highly concentrated ownership results in a poor management structure. Generally, top management is recruited from owner-family members rather than professional groups. Non-family members barely reach senior executive positions in a company. Therefore, the real management power and decision making remains with the owning family (Frost and Watkins, 2009).

In the past the main financial resources for Thai companies were bank loans and their own retained earnings in order to preserve family ownership. The loan approval from financial institutions was based heavily on personal relationships and a business network rather than feasibility of the proposed project (Thanapornpun, 2002). After the financial crisis, many Thai companies were forced to change their ownership structure into widely-held groups, institution-owned, or foreign-owned, in order to sustain their business. Nevertheless, the ownership pattern of Thai companies remains highly concentrated. Several large family firms continue listing on the SET (see Table 3-2). According to Suehiro and Wailerdsak (2004), there are three major reasons for supporting continuous dominance of family-owned companies. Firstly, most members of an extended family are well educated abroad. Therefore, it is easy for owner families to recruit persons from their own family. Secondly, the government has not introduced any regulations regarding the ownership of private firms. In addition, revision of the Public Limited Company Act enables owner family members to maintain their control of ownership. Thirdly, Thai family business groups are able to adjust their corporate activities to fit with the government's policies for economic liberalisation.

Table 3-2: Listed companies by ownership

Type of shareholders	1996		2000		2006	
	No. of companies	%	No. of companies	%	No. of companies	%
Family-owned	150	33.5	131	30.3	139	33.2
Semi-family-owned	66	14.7	52	12.0	72	17.2
Widely-held	160	35.7	145	33.5	127	30.3
Foreigners-owned	59	13.2	90	20.8	63	15.0
State or state enterprise	13	2.9	15	3.5	18	4.3
Total listed firms	448	100.0	433	100.0	419	100.0

Source: Wailerdsak, 2008 p.44

Throughout Thai history, several types of business enterprises have operated in the country. Generally, Thai business organisation is divided into four types: sole proprietorships, partnerships, private limited companies and public limited companies. Sole proprietorships are owned by an individual with unlimited liability; while in partnerships all partners are liable jointly for all obligations. In private limited companies, shares are subscribed, of which at least 25 percent must be paid up. This type of organisation is governed by the Civil and Commercial Code. Public limited companies, on the other hand, are governed by the Public Limited Company Act.

3.4.2 The Thai Banking System

In 1888, during the reign of King Rama V, the Hong Kong and Shanghai Banking Corporation established the first bank in Thailand, followed by the Chartered Bank of India, Australia and China in 1894 and Banque de L'Indochine in 1897 (Chaiyasoot, 1993). The Siam Commercial Bank, the first local bank, was established in 1906. Later, other domestic commercial banks, primarily Chinese owned, (Wang Lee Bank in 1933, Tan Peng Chun Bank in 1934, Bank of Asia in 1939, and Bangkok Bank in 1944) were founded. The Thai-Chinese commercial banks were founded mainly for support of Thai-Chinese family business. Therefore, the association between bank and business was very close so that loan approvals were based mainly on personal relationship. Although a number of Thai-Chinese commercial banks had been founded, western ones continued to dominate the market until the 1940s, when the Second World War had begun.

During the Second World War, Thailand was occupied by Japan and foreign bank operations were forced into suspension, except for Japanese ones. This put an end to the operation of western banks in Thailand (Phongpaichit and Baker, 1996). In order to control all banking activities, the Bank of Thailand (BOT) was founded in 1942. It had a significant impact on Thai banking institutions. Laws and regulations to control banking activities were issued, and in 1955, the government passed a decree to restrain the approval of new banks. The regulations caused a threat to new entrants in the banking business and provided opportunities for existing banks to grow. As a result, existing banks, mostly Thai-Chinese owned, expanded their business substantially.

From the late 1960s, Thailand began the process of reforming and developing the financial system. This was support for a rapid growth of the Thai Economy to become the financial centre of the region. In order to support this scheme further, the Bangkok International Banking Facility (BIBF) was established in 1993. The BIBF enabled domestic and foreign banks to provide international banking services, and it became the major means for foreign funding to flow into the country (Dixon, 2001). In general, the government emphasised on reducing its role in economic development from the early 1980s by cutting restrictions on private sector operations (Dixon, 1999).

During the 1997 financial crisis, non-performing loans increased substantially. As a result, banks and financial institutions were in a very difficult position. The government applied several measures to reform and restructure the financial system, including suspension of two domestic banks and fifty-seven financial institutions. In order to cope with problems arising from the suspension of financial institutions, organisations such as the Financial Sector Restructuring Authority (FRA), Asset Management Corporation (AMC), and Thai Asset Management Corporation (TAMC) were set up. In addition, banks were required to recapitalise in order to meet the new standards that were consistent with international best practices (Phuvanatnaranubala, 2005). In addition, the restrictions on foreign ownership of Thai financial institutions were relaxed temporarily, thus allowing foreign investors to acquire major shareholdings for up to ten years (ibid.). As a consequence, the proportion of foreign ownership increased significantly in the banks that remained. The relationship between banks and businesses became less personal. Loans were no longer approved based solely on personal relationship. In addition, tighter supervision from the shareholders was anticipated.

After the 1997 financial crisis, the government has issued several policies to transform Thai financial markets from a credit-based system to a capital market-based system. Three capital market development master plans were launched in 2000, 2003, and 2006; the latest *'Thailand's capital market development master plan 2006-2010'* targets both corporate bond and equity markets with a preparation for full liberalisation of the entire securities industry (Nakornthab, 2007). Therefore, public loans and capital market have increased their role in funding Thai business. Nevertheless, increased use of public loans and the capital market were still not comparable to bank loans.

The Thai financial sector is regulated by the Ministry of Finance (MOF) and the Bank of Thailand (BOT). The MOF sets out a fiscal policy, economic and financial system policy, and economic policy; and oversees public finances, taxation, treasury, government property, operations of state enterprises and government monopolies. The BOT is the central bank, which has responsibilities that include setting monetary policies, managing the foreign exchange rate and controlling foreign exchange, supervising and examining of financial institutions, providing banking facilities to the government and financial institutions, as well as printing and issuing banknotes and other security documents. Banking is regulated by the Financial Institution Act B.E. 2551 (2008), which defines a commercial bank and sets out the types of businesses a bank may undertake. This law covers commercial banks for small businesses, and banks that are subsidiaries or branches of a foreign commercial bank.

3.4.3 The Thai Capital System

The Thai capital market can be traced back to 1962, when a private group established a stock exchange as a limited partnership. It was in 1963 that the group became a limited company under the name *'Bangkok Stock Exchange Co., Ltd (BSE)'*. However, the BSE did not perform well and terminated its operations in the early 1970s (SET, 2010).

Although the Thai capital market can be traced back to the early 1960s, it did not play a significant role until 1975. In May 1974, the Securities Exchange of Thailand was legislated under the Securities Exchange of Thailand Act B.E. 2517 (1974) and began to trade on 10th April 1975. The Securities Exchange of Thailand officially became the Stock Exchange of Thailand (SET) in 1991 (Limpaphayom, 2001).

At present, Listing on the SET requires a minimum registered capital of 300 million Baht (SET, 2011). As of May 2011, the SET had 475 listed companies with a total market value of 8.74 trillion Baht[3].

The Securities and Exchange Act (SEA) B.E. 2535 (1992) defines the primary roles of the SET as follows:

[3] Source: The Stock Exchange of Thailand,
Available at: http://www.set.or.th/en/market/market_statistics.html [accessed: 1st June 2011].

" 1. To serve as a center for the trading of listed securities, and to provide the essential systems needed to facilitate securities trading.

2. To undertake any business relating to the Securities Exchange, such as a clearing house, securities depository center, securities registrar, or similar activities.

3. To undertake any other business approved by the SEC. " [4]

Under the Securities and Exchange Act (SEA) B.E. 2535 (1992), the Securities Exchange Commission (SEC) was established in 1992 to supervise the Thai capital market. SEC is an independent agency responsible for supervising and developing the capital market. The main roles of the SEC are

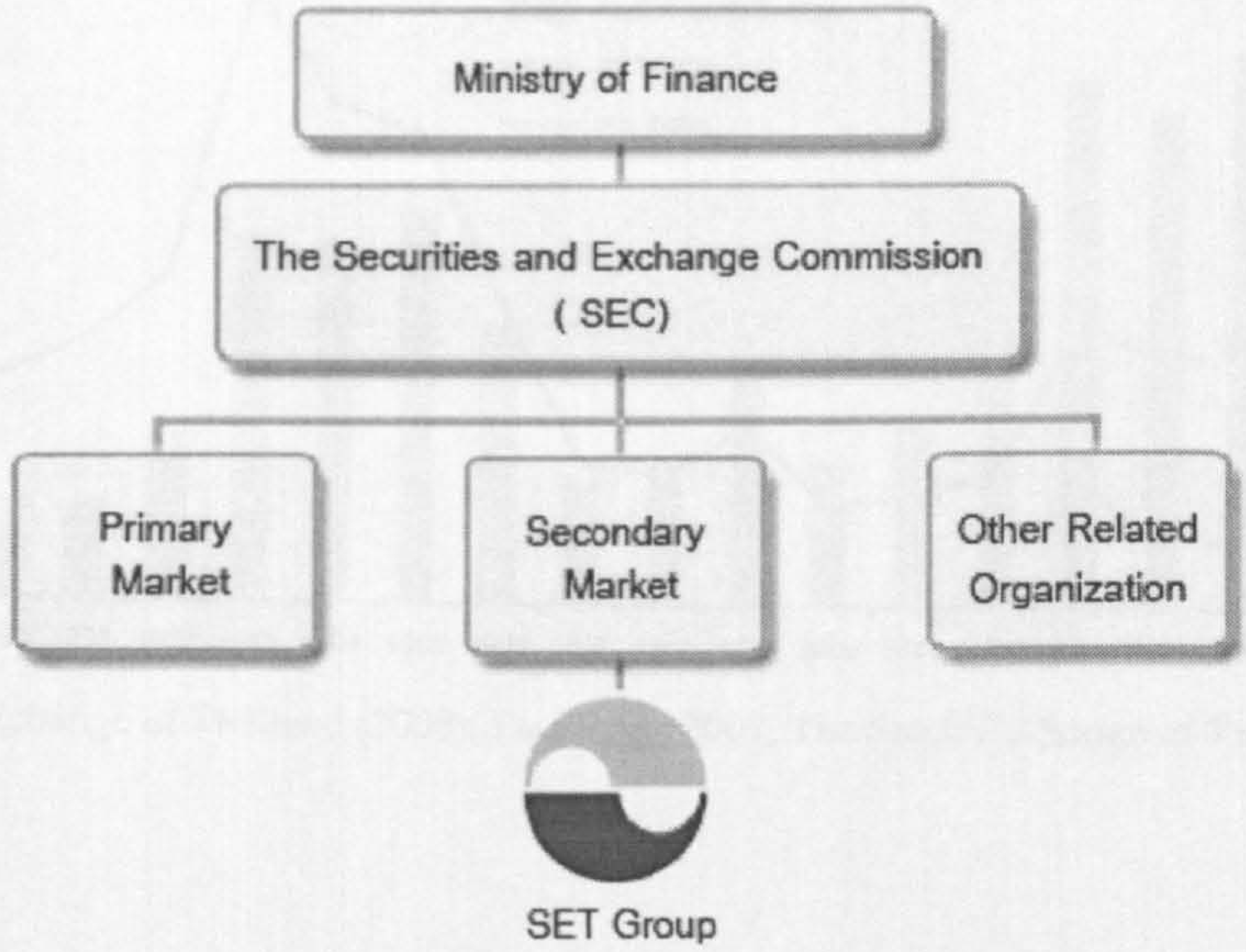
"To formulate policies, rules and regulations regarding the supervision, promotion, and development of securities businesses as well as other activities pertaining to the securities businesses; such as issuance and offer of securities for sale to the public; securities exchange, the Over-the-Counter Centre, and entities related to securities businesses: acquisition of securities for business take-overs; and prevention of unfair securities trading practices"[5].

[4] Source: The Stock Exchange of Thailand,
Available at: http://www.set.or.th/en/about/overview/history_p1.html [accessed: 1st October 2010].

[5] Source: The Securities and Exchange Commission Thailand,
Available at: http://www.sec.or.th/sec/Content_0000000105.jsp?categoryID=CAT0000021&lang=en [accessed: 3rd October 2010].

The regulatory framework of the Thai capital market is shown in Figure 3-1.

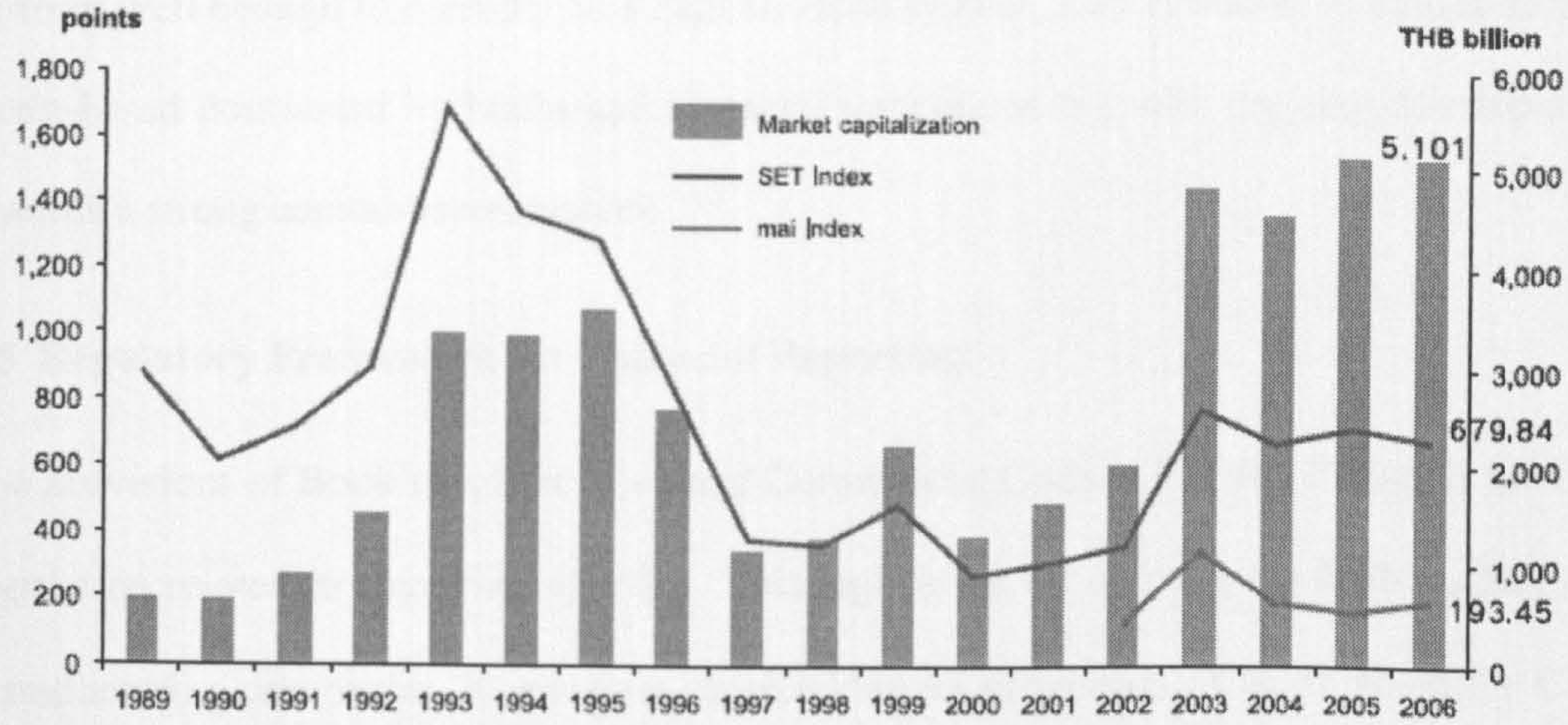
Figure 3-1: Regulatory framework of the Thai capital market



Source: The Stock Exchange of Thailand,
Available at: http://www.set.or.th/en/about/overview/history_p1.html [accessed: 1st October 2010].

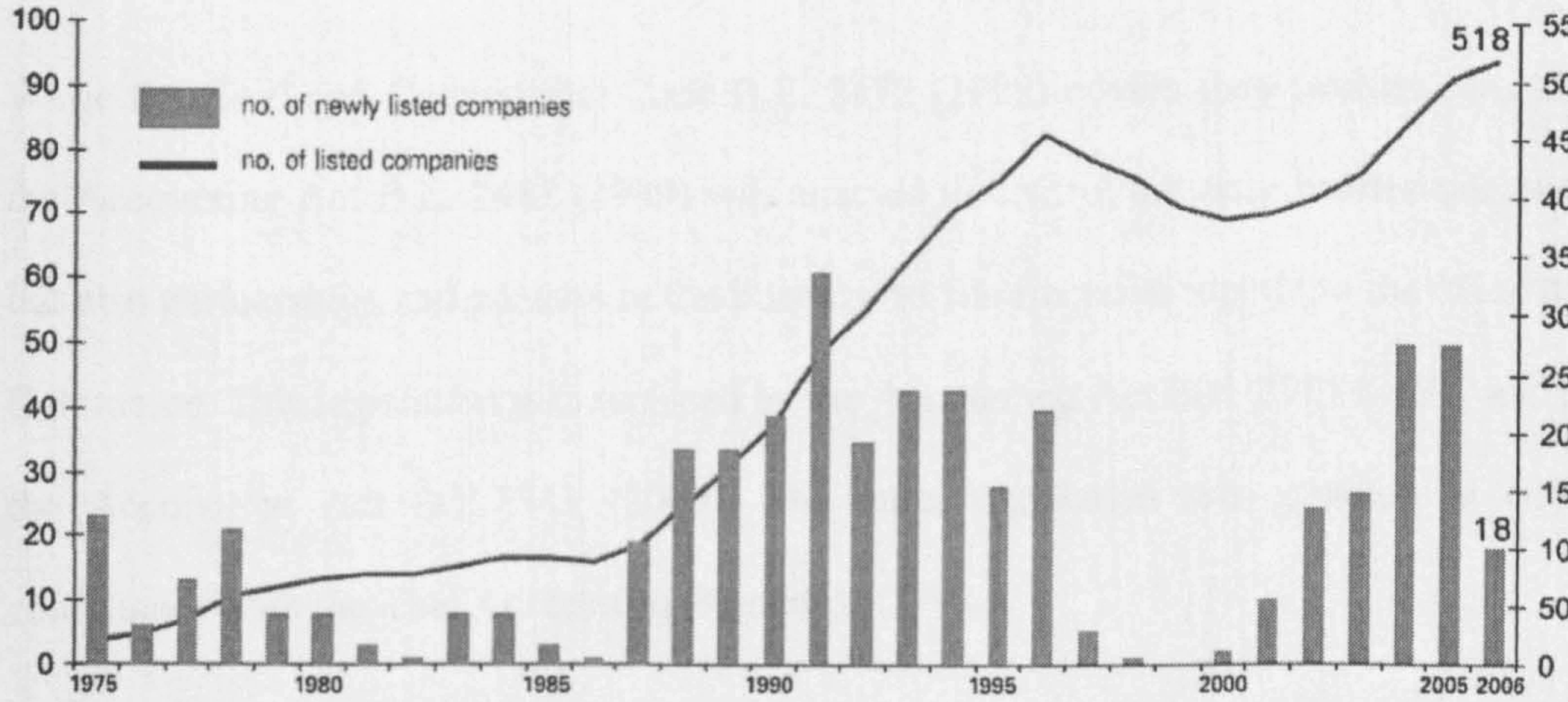
Figure 3-2 shows the performance of the SET in terms of market capitalisation, the SET index and MAI Index (Market for Alternative Investment). As can be seen, the market capitalisation increased significantly in 2003 and has been quite stable since. The number of listed companies, which has shown an increasing trend since 2002, is shown in Figure 3-3.

Figure 3-2: The performance of the Stock Exchange of Thailand



Source: Stock Exchange of Thailand (2008), Fact Book 2007, The Stock Exchange of Thailand

Figure 3-3: Number of listed companies



Source: Stock Exchange of Thailand (2008), Fact Book 2007, The Stock Exchange of Thailand.

After the 1997 economic crisis, the role of the Thai capital market has changed. The capital market has received a high priority in the reformation of the financial system (Nakornthab, 2007). The *'Capital market development master plan'* was set up in order to upgrade financial institutions and make the capital market more attractive to investors. Even though the capital market has played a significant role in the Thai financial system, it did not perform well enough to consider as a capital-based system. Thai financial system is more a credit-based dominated by banks and financial institutions but with ongoing development towards a strong capital-based system.

3.5 Regulatory Framework for Financial Reporting

The provisions of Book III of the Civil and Commercial Code B.E. 2467 (1924) is the first legislation related to financial reporting. This legislation set up rules for both trading and manufacturing companies. It was later replaced by the provisions of Book III of the Civil and Commercial Code B.E. 2472 (1929), which has remained in use until now. It requires all limited companies to prepare and file balance sheets and profit and loss statements to the Ministry of Commerce. These financial reports must be also audited by a certified auditor.

While the Civil and Commercial Code B.E. 2472 (1929) covers only limited companies, the Accounting Act B.E. 2482 (1939) was enacted to control not only limited companies, but also partnerships and persons in the business to file financial reports to the Ministry of Commerce. This legislation was replaced by the Accounting Act B.E. 2515 (1972) and then the Accounting Act B.E.2543 (2000). The latter legislation was enacted to enforce compliance with the Thai Accounting Standards (TASs).

Apart from the Civil and Commercial Code and the Accounting Act, financial reports of listed companies were controlled also by the Securities Exchange of Thailand Act B.E. 2517 (1974) and the Public Companies Act B.E. 2520 (1977), which were enacted to regulate listed companies when the capital market was developed. These Acts were later replaced by the Securities Exchange of Thailand Act. B.E. 2535 (1992) and the Public Companies Act B.E. 2535 (1992) to promote the development of public companies, as some rules and regulations in the previous Acts were believed to be too restrictive (Limpaphayom, 2001). Under the new law, the roles of the SET, SEC, and Ministry of Commerce are more clearly defined. A large number of ministerial regulations have been announced and a range of notifications issued by the SET and SEC (Connelly, 2004). More financial information is required for disclosure under the 1992 Acts. For instance, under the Securities Exchange of Thailand Act, section 56, listed companies are required to prepare a quarterly statement, financial statement for any accounting period, annual report and any other reports specified by the SEC. The new Public Company Act B.E. 2535 (1992) was criticised for some deficiencies. For instance, the protection of minority shareholders was inadequate. Also, the external monitoring and control of corporations were weak (Limpaphayom, 2001).

Rigorous disclosure requirements have been assigned for Thai listed companies. Apart from compliance with Thai accounting standards, financial statements have to be reviewed by external auditors and disclosed to the public on a quarterly basis. The auditors themselves have to be licensed by the Federation of Accounting Professions and also registered with the SEC. The strict criteria for eligibility of an audit firm have been set by the SEC. In addition to issuing annual reports, listed companies are required by the SEC to file their disclosure statement annually. This statement contains extensive information on risk factors that companies are facing, highlights of financial information from financial statements, management discussion and analysis of company performance, and information on related-party transactions that occurred during the year. In cases where there are any negative effects on company performance, a detailed description of plans to resolve the problems must be provided. In addition, an audit committee has to include discussions on the level of internal control and management control in the statement. The SEC conducts random inspections of approximately a quarter of annual disclosure statements submitted by listed companies, and those that fail to comply with the requirement are subjected to sanctions from the SEC (SET 2004).

3.6 Corporate Governance Reform

Prior to the 1997 financial crisis, a majority of the Thai general public did not recognise the concept of corporate governance; even significant players like management, shareholders, investors and other stakeholders were not aware of it. However, the awareness of good corporate governance practice has increased substantially since the crisis.

It is claimed that weak corporate governance was the main cause of overinvestment and poor financing policies that contributed to the financial crisis. A policy study on Thailand's corporate financing and governance structure was conducted by Alba *et al.*, (1998) for the World Bank. They identify five interrelated problems of corporate governance practices in Thailand: concentrated ownership, inadequate protection of minority shareholders, high levels of diversification, weak market incentives, and weak accounting standard and practices. However, Alba *et* al., (1998) comment that these problems are no more severe in Thailand than in the rest of East Asia and many other developing countries.

Since the crisis of 1997, Thailand has attempted to improve corporate governance practice of listed companies through various approaches. The Government's reform strategy has focused on restructuring institutional arrangements, enhancing the reliability of financial information and disclosures, improving corporate board oversight, and increasing shareholder rights (Connelly, 2004). It has focused also on improving the efficiency of the legal and regulatory framework related to public companies (ibid.). Corporate governance reforms were a joint effort between governing entities, including the SET, SEC, and BOT.

In early 1998, the SET issued a listing requirement indicating that all listed companies must have an audit committee, which has to consist of at least three outside independent directors. In this setting, the responsibility of auditing, internal control, and financial disclosures is transferred to the audit committee. The adequacy of companies' financial and non-financial disclosures has to be verified by the audit committee. The establishment of an audit committee is expected to help minimise the influence of management, which typically represents owning families who are major shareholders of companies.

The Thai government designated 2002 as *'the year of good governance'*. The Cabinet put the corporate governance issue into the national agenda and set up the National Corporate Governance Committee (NCGC). The NCGC is chaired by the Prime Minister and committee members, including the Minister of Finance, Minister of Commerce, Governor of the Bank of Thailand, Secretary-General of the SEC, and President of the SET. The responsibilities of the NCGC are as follows:

" 1. Establish policies, measures, and schemes to upgrade the level of corporate governance among institutions, associations, corporations and government agencies in the capital market.

2. Order the related agencies and persons, both in the private and government sectors to testify any information to the NCGC.

3. Suggest related agencies to improve their policy schemes and operating processes including legal reforms, ministerial regulations, rules and enactment to achieve good corporate governance.

4. Promote the guidelines of good corporate governance to the public and related parties to raise confidence from international investors.

5. Appoint subcommittees and working groups to study and assist any operations by using their authority.

6. Monitor the progress and evaluate the performance of subcommittee.'[6]

The SET and SEC focus on three main aspects of corporate governance: quality of corporate disclosures, maintaining of audit committees, and instituting framework for good governance. The responsibility of ensuring that good corporate governance standards are followed by listed companies has been assigned to the board of investment and the good governance supervisory committee (Connelly, 2004). In 2002, the SET proposed the fifteen principles of good corporate governance as guidelines for Thai companies (see Appendix 3-A). The principles are related to the issue about the rights of shareholders, equitable treatment of shareholders, role of stakeholders, disclosure and transparency, and responsibilities of the board. In their annual registration statement and annual reports, Thai listed companies are required to demonstrate how they apply the fifteen principles. If they choose not to apply any principle, they need to provide justification. This requirement has been effective from the accounting period ended 31 December 2002.

The SET and SEC participated in an attempt to set a standard for corporate governance by establishing the Thai Rating and Information Service (TRIS) as part of the corporate governance development programme. The TRIS is Thailand's first rating agency chosen by the SET to give a corporate governance (CG) rating for Thai companies. The CG Rating Project aims to acknowledge listed companies the importance of good corporate governance and to provide information about corporate governance ranking for investment decision making. The SEC and SET collaborate in providing support to listed companies with satisfactory CG rating by offering privileges such as reduced enactment of tender

[6] Source: National Corporate Governance Committee, Thailand, 2011,
Available at: http://www.cgthailand.org/SetCG/about/ncgc_en.html [accessed 2nd March 2011]

offering, reduced annual and securities issuing fee.[7] The SET has initiated a series of educational programmes for investors, directors and company management.

A Range of activities such as the *'Board of the Year awards'*, conferences, seminars, and studies to benchmark governance practices has been launched by the Thai Institute of Directors Association (IOD), professional associations for accountants, auditors and internal auditors, and investors' associations. All these practices are geared toward the promotion of transparency and disclosure of information to improve the quality of Thai capital for market participants and foreign investment.

3.7 Accounting Profession

The first professional accountancy body in Thailand was the Institute of Certified Accountants and Auditors of Thailand (ICAAT) established in 1948. The objective of this organisation was to monitor accountants and auditors who were not considered as professional, but mainly facilitated the purposes of taxable legislation. In 1962, when the Auditor Act B.E. 2505 (1962) was passed, the Board of Supervision of Auditing Practices (BSAP) was established in the same year. The BSAP, under the Ministry of Commerce, was responsible for organising examination of auditors, monitoring the quality of auditors, and regulating accounting practices. After accounting was recognised as professional, the role of the ICAAT has increased. It was responsible for issuing Thai accounting and auditing standards and improving accounting professions.

In 2004, the structure of the two accountancy bodies has changed by the Accounting Profession Act B.E. 2547 (2004). Under this act, the ICAAT was replaced by the Federation of Accounting Professions of Thailand (FAPT), and the BSAP was replaced by the Board of Supervision of Accounting Professions (BSAccP). The FAPT is responsible

[7] Source: National Corporate Governance Committee, Thailand, 2010,
Available at: http://www.cgthailand.org/SetCG/award/disclosure_en.html [accessed 2nd October 2010]

for controlling accounting professions, while the BSAccP supervises and approves the the FAPT tasks. This restructure is expected to strengthen the Thai professional accountancy and raise the standard of Thai financial reporting.

The ICAAT started to publish Thai accounting standards (TASs) in the 1970s. The early TASs were influenced by western standards including IASs, the US and UK standards. Gray *et al.* (1984a) comment that Thai accounting standards reflect *'moderate'* UK influence but *'significant'* IASC influence. In response to the 1997 financial crisis, the government has a policy to reduce the gap between Thai and international accounting standards. Therefore, the ICAAT has made a great deal of effort in adopting the IASs. After the transformation of the ICAAT to the FAPT, the policy of converting the TAS to the international standard is still ongoing. All new standards issued by the FAPT are committed to be in line with the International Financial Reporting Standards (IFRS). Up to now, several new and revised TASs have been issued. There are also a number of exposure drafts of proposed new and revised TASs pending for approval. The FAPT and SEC have indicated that large enterprises in Thailand (companies in the SET50 index) should adopt new TASs based on the IFRSs from 2011 onward. The SEC targets full compliance with the IFRSs for all Thai listed companies by 2013 (Ernst&Young, 2009).

3.8 Conclusion

This chapter focused on explaining the financial reporting environment of Thailand. It has provided information about the development of the Thai economy and financial systems. This is essential for a better understanding of the factors influencing voluntary disclosure practices, which will be discussed in following chapters. This chapter has also discussed features of Thai institutional settings and the regulatory framework governing financial reporting in the country.

The long and unique history of Thailand has influenced the development of its institutions and environment significantly, and it therefore plays an important role in shaping the Thai financial reporting system. The Thai economy experienced rapid growth during the 1980s and the early 1990s. There were major developments in the financial and capital systems in order to compete in the global economy. However, the economic growth was disrupted by the financial crisis, which hit Thailand in 1997. The financial crisis can be seen as the major turning point of the Thai economy. A range of policies and recovery plans have been put into place since then, leading to significant changes in the regulatory environment. In addition, the awareness of good corporate governance practice has increased substantially. At present, despite the political instability, the Thai economy continues to grow steadily.

The next chapter explains the research methodology and research methods employed in this study. Research hypotheses are formulated based on relevant theoretical frameworks, prior empirical evidence, and the Thai financial reporting environment that has been discussed in this chapter.

Appendices

Appendix 3-A: The 15 Principles of Good Corporate Governance

Principle 1: Policy of Corporate Governance

The board of directors should identify and approve a written corporate governance policy. The board should disclose that policy for acknowledgment of shareholders and every group of stakeholders.

Principle 2: Shareholders: Rights and Equitable Treatment

The board of directors should facilitate shareholders' meeting in such a way that they encourage equal treatment for all shareholders. There should not be any difficult procedures, excessive expenses, or denial that would lessen the access to studying company information, as well as attending shareholders' meeting.

Principle 3: Rights of Various Groups of Stakeholders

The board of directors should perceive about stakeholders' legally rights and ensure that those rights are protected and treated with care. The board should support cooperation between the company and the various groups of stakeholders in order to secure the business wealth and stability.

Principle 4: Shareholders' Meeting

Chairman of the meeting should allocate appropriate time and encourage equal opportunities for shareholders to express their opinions and raise any question at the meeting. Every director, particularly chairpersons of the committees should attend the shareholders' meeting to respond to questions.

Principle 5: Leadership and Vision

The board of directors should possess leadership, vision, and decision-making independence for the best interests of the company and the shareholders at large. There should be a system in which roles and responsibilities are clearly separated between the board and the management, as well as between the board and the shareholders.

Principle 6: Conflict of Interests

The board, the management, and shareholders should consider to remove the issues of conflict of interest carefully, honestly, reasonably, and independently on a virtuous ground for the best interests of the company.

Principle 7: Business Ethics

The board of directors should provide code of ethics or statement of business conduct for all directors and employees to ensure that they are aware of, understands, and would keep monitoring the code of conduct as expected by the company and shareholders

Principle 8: Balance of Power for Non-Executive Directors

It is proposed that one-third of the total directors on the board should be independent, with three as the minimum. In case where a company has significant shareholders with dominating power, there should be a certain number of directors representing a fair proportion of each group's investment.

Principle 9: Aggregation or Segregation of Positions

Companies may combine the titles of chairman of the board and president into one position, or keep them as two separate positions. Whichever way companies choose, there should be a clear separation of power and authorities so that no one would be granted unlimited power.

Principle 10: Remuneration of Directors and the Management

Remuneration setting needs to be carried out with transparency and obtain an approval from the shareholders. The board of directors should disclose its remuneration policy and the amounts set for directors and top executives in accordance with the SEC's rule.

Principle 11: Board of Directors' Meeting

Board of directors' meeting should be regularly scheduled in advance. It is a duty of directors to attend every board meeting. The board of directors should disclose the total attendance of each director.

Principle 12: Committee

The board should provide for committees, especially for audit committee and remuneration committee. All or most members of the committees should be non-executive directors, while chairmen of the committees should be independent non executive directors.

Principle 13: Controlling System and Internal Audit

The board of directors should provide, maintain, and review a controlling system in which financial, operations, and compliance controls are incorporated. The board should commence internal audit activities by setting up a separate unit within the company to handle them.

Principle 14: Directors' Reporting

The board should provide a report indicating its responsibility on financial information, and be exhibited alongside auditor's report. The board of directors' report should cover important topics of Code of Best Practice for Directors' of Listed Companies as prescribed by the SET.

Principle 15: Relations with Investors

The board of directors should ensure that the company discloses important information correctly, timely, and transparently. The board should provide an Investor Relations Unit to represent the company in communication with institutional and individual investors, stock analysts in general, and state agencies.

Source: Stock Exchange of Thailand (2002), The Principle of Good Corporate Governance, The Stock Exchange of Thailand

CHAPTER 4

Research Design and Methodology

4.1 Introduction

The objective of this chapter is to outline the methodology adopted and research methods employed in this study. The following section discusses the research approach taken for the empirical work. The quantitative (univariate and multivariate analyses) and qualitative (interviews) methods are applied in order to provide the best understanding of research problems. Section 4.3 provides the data collection procedures. Section 4.4 explains the research instruments and procedures, with particular reference to construction of the voluntary disclosure index, scoring method, and interview structure and process. Section 4.5 presents the formulation of the hypotheses. The statistical techniques applied in this study are presented in section 4.6. Finally, a conclusion is provided in section 4.7.

4.2 Research Approach

While some would believe that adoption of one paradigm unavoidably requires one to choose one methodology over the other, Baker (2003) argues that most researchers would see quantitative and qualitative methods as complementary. Quantitative researchers acknowledge that qualitative data can play an important role in quantitative research, while qualitative researchers believe that reporting qualitative views of a few participants may lead to limitations in generalising the findings (Creswell and Plano-Clark, 2007). By using a multi-method strategy, the results would be better clarified (Saunders *et al.*, 2003). Furthermore, contradictory findings from using different research methods are valuable, as they lead to re-examination of the conceptual frameworks and assumptions underlying quantitative and qualitative components (Teddlie and Tashakkori, 2003).

Quantitative and qualitative methods have their own strengths and weaknesses. Quantitative research has the weakness of being unable to capture the perceptions of participants. On the other hand, qualitative research may involve personal interpretations by the researcher and difficulty in generalising findings (Creswell and Plano-Clark, 2007). In addition, quantitative and qualitative research can answer different types of questions. Qualitative research questions are exploratory, while quantitative research questions are confirmatory (Teddlie and Tashakkori, 2003). Voluntary disclosure is a sensitive issue, as it is a matter of managerial judgement. It may create extensive understandings of corporate disclosure motives by including qualitative analysis from interviews with persons positioned to influence voluntary disclosure. Quantitative analysis in this study has the limitation of only using information from annual reports as the data source. In order to enhance the interpretation of the results from the quantitative analysis, semi-structured interviews are included in the study. By using interviews, a wider aspect of voluntary disclosure can be obtained. Interview questions cover the influence of private voluntary disclosure and other channels of disclosure such as company websites, press releases, or company newsletters.

In order to provide the best understanding of research problems, this study apply quantitative (univariate and multivariate analyses) and qualitative (interviews) methods. Therefore, the data are obtained from both primary (interview findings) and secondary sources (annual reports). Quantitative and qualitative data collections are conducted separately from examination of annual reports using the voluntary disclosure checklist and semi-structured interviews. Results from the qualitative analysis are used to confirm the results and enhance the interpretation of the results from the quantitative analysis.

4.3 Data Collection

The data for this study are obtained from company annual reports and interviews with persons positioned to influence voluntary disclosure. The following sections discuss the process for selecting companies and interview respondents.

4.3.1 Selection of Companies

Companies included in this study are selected from the SET100 Index. The Stock Exchange of Thailand issues the SET100 Index to provide a benchmark of investment. The Index is calculated from stock prices of the top 100 listed companies in the SET, reckoned in terms of market capitalisation, high liquidity and compliance with the requirement regarding the distribution of shares to minor shareholders[8]. The main objective of the SET100 index is to help promote good quality medium to large sized companies. The SET100 represents approximately 80 percent of total market capitalisation and 86 percent of the total share trading value [9]. The SET100 index is selected for the purpose of the analysis in this study because it represents the most actively traded stocks on the SET. SET100 companies are likely to be the companies that most investors are interested in. These companies also have a tendency to disclose additional information perhaps as a result; they tend to attract the interest of analysts. Therefore, SET100 companies are expected to act as a benchmark for the best practice of voluntary disclosure for Thai listed companies.

Companies listed in the banking, finance, securities and insurance sectors are excluded from the study because they report under different or specific regulations. In addition, the nature of business and activities of these companies are not quite comparable to others. This approach has been taken by a number of previous accounting disclosure studies

[8] Source: The Stock Exchange of Thailand, 2010,
Available at: http://www.set.or.th/en/products/index/setindex_p3.html [accessed: 1st October 2010].
[9] Source: Seamico Securities PLC, 2009, Available at:
http://www.seamico.com/Th/news/press_detail.asp?id=5684 [accessed: 14th February 2009].

(McNally *et al.*, 1982; Cooke, 1989a; Hossain *et al.*, 1994; Wallace *et al.*, 1994; Hossain *et al.*, 1995; Meek *et al.*, 1995; Raffournier, 1995; Wallace and Naser, 1995; Owusu-Ansah, 1998b; Depoers, 2000; Ferguson *et al.*, 2002; Haniffa and Cooke, 2002; Naser *et al.*, 2002; Hassan *et al.*, 2006; Patelli and Prencipe, 2007).

Annual reports from 1995, 1996, 2002, and 2005 from the selected companies are chosen for statistical analysis. The reason for choosing these four years for the study is the intention to capture the period before and after the 1997 Asian economic crisis, taking into account the availability of annual reports. The years 1995 and 1996 represent the period before the crisis. Then afterwards, it might take time to see changes in voluntary disclosure practices after a financial crisis, especially changes affected by corporate governance initiatives (see Mohd Ghazali and Weetman, 2006 p.244). The year right after the crisis might be too early to examine changes in voluntary disclosure. Therefore, the years 2002 and 2005 were chosen to represent the period after the crisis. The year 2002 represents the recovery period. It is also the year when the corporate governance reformation took effect in Thailand (see section 3.6). The most recent year that the annual reports were available at the time of data collection is 2005; therefore, it was chosen for the analysis. As previously mentioned in this section that the SET100 companies suit the purpose of this research; however, the SET launched the first SET100 index in 2005. Therefore, sample companies are based on the 2005 index. The intention of having a dataset from the same population for all four years is also the reason for choosing the 2005 index.

The Stock Exchange of Thailand library is the main source of company annual reports. At the time of data collection it provided the annual reports from 1995 to 2005. However, some annual reports of selected companies were not available, particularly those of 1995 and 1996. For the annual reports that were not available, a search was made from company websites and other libraries (the SEC library and university libraries). Letters requesting the annual reports were sent to each company for the annual reports that were not available from the sources mentioned, however, only five companies responded and provided their reports. Table 4-1 summarises the data collected for each year categorised by sector.

Table 4-1: Sector representation of selected companies

Sector	Number of companies				
	1995	*1996*	*2002*	*2005*	*Population*
Agro/Food Industry	1	2	2	2	2
Industrials	5	6	7	8	10
Property/Construction	13	22	25	32	33
Resources	4	5	6	6	7
Services	6	9	11	13	13
Technology	4	11	11	14	14
Total	33	55	62	75	79

Table 4-2 shows the percentage of selected companies to total companies listed in the SET. Companies selected in this study may not represent the whole market, especially for the years before the 1997 financial crisis, when availability of annual reports was limited. However, the selected companies may represent Thai listed companies better in terms of market capitalisation. The high proportion of market capitalisation of the selected companies also indicates that the sample is relatively skewed to the largest companies. These larger companies are expected to act as a benchmark for Thai listed companies.

Table 4-2: Percentage of selected companies to total listed companies

	No. of companies selected	Total listed companies	% of companies	% of market capitalisation
1995	33	416	7.93%	25.25%
1996	55	454	12.11%	39.57%
2002	62	389	15.94%	50.97%
2005	73	468	15.60%	69.79%

4.3.2 Selection of Interviewees

Interview respondents are persons in positioned to influence voluntary disclosure in Thailand. Five groups of interviewees were approached, namely company management (corporate executives, financial controllers, and investor relation manages), investment analysts, external auditors (local firms and Big Four firms), regulators, and bankers. Twenty five individuals were initially targeted as potential interviewees. Twenty of them agreed to be interviewed. The main reason for those declining was time constraint. Table 4-3 compares the number of targeted with actual interviews. Although the interviewees were not randomly selected, all of them were experienced professionals with diverse backgrounds. Familiarity with the Thai business environment is also an important issue in choosing interviewees for this study.

Table 4-3: Interview Respondents

Interviewees	Number targeted	Number interviewed
Listed companies	10	7
Investment analysts	4	3
External auditors	5	5
Regulators	3	3
Bankers	3	2
Total	25	20

4.4 Research Instrument and Procedure

The research instruments of this study are reported in this section. Section 4.4.1 explains the procedure for constructing the voluntary disclosure index. The interview structure and approach are discussed in section 4.4.2.

4.4.1 Voluntary Disclosure Index

Cooke and Wallace (1989, p.51) state that *"Financial disclosure is an abstract concept that cannot be measured directly"*. The difficulty in measuring the extent of voluntary disclosure is a major limitation for studies in this area. In order to understand and be able to analyse and compare voluntary disclosure practices of different companies, a quantifiable measure is needed.

> Lord Kelvin: *"I often say that when you can measure what you are speaking about and express it in numbers, you know something about it, but when you cannot measure it, your knowledge is of a meagre and unsatisfactory kind."* (quoted in Sterling, 1970, p.71).

To evaluate voluntary disclosure practices, a voluntary disclosure index is applied to the annual reports of selected companies. A disclosure index was first developed by Cerf (1961) and has been used by a large number of studies. Despite limitations associated with subjectivity from the selection of disclosure items and measurement process, the use of a disclosure index in measuring the extent of disclosure is widely accepted in the financial disclosure research area. It has been used repeatedly by numerous studies in different countries over various periods of time (see section 2.7).

Previous studies in Thailand that apply a disclosure index to measure the level of disclosure in annual reports are Priebjrivat (1991), Suphakasem (2008), and Sutthachai and Cooke (2009). Researcher-construct disclosure indices are used in all three studies; therefore, dissimilarities exist in the way disclosures are measured. Priebjrivat (1991) constructs a disclosure index consisting of 27 mandatory, 15 semi-voluntary, and 26 purely voluntary disclosure items with *'importance weighting'* attached to each item. Suphakasem (2008) develops a disclosure index of 191 items containing both mandatory and voluntary disclosure items, all items are related to corporate governance disclosure. A disclosure index created by Sutthachai and Cooke (2009) consist of 219 mandatory items and 47 voluntary items. The 219 mandatory items contain 49 items that changed from voluntary to mandatory during the period of their study (1993 – 2002). Therefore, these 49 items were finally excluded to ensure that levels of disclosure in different years are comparable. Disclosure indices developed in previous studies in Thailand provide a basis for constructing a disclosure checklist in this study. However, only voluntary disclosure items are taken into consideration. In addition, this study applies different criteria in categorising disclosure items. Disclosure items are categorised according to the type of information (strategic, financial, non-financial and social responsibility) to enable the analysis of voluntary disclosure at the disaggregated level.

The following sections explain the reasons for choosing annual reports as a data source, construction, and scoring method of the voluntary disclosure index.

4.4.1.1 Reasons for Choosing Annual Reports

There are various channels through which companies can disseminate their information to the public such as annual reports, press releases, websites, company newsletters, and analysts' meetings. Among these different channels of disclosure, the annual report is regarded as one of the most important sources of information. Knutson (1992, p.7) states that *"At the top of every analyst's list (of company financial reports) is the annual report to shareholders. It is the major reporting document and every other financial report is in some respect subsidiary or supplementary to it".*

The importance of annual reports as a source of corporate information has been acknowledged by a number of studies in both developed (e.g. Lee and Tweedie, 1975; Anderson, 1981; Chang *et al.*, 1983; Vergoossen, 1993; Hossain and Adams, 1995; Botosan, 1997) and emerging capital markets (e.g. Firer and Meth, 1986; Abdelsalam, 1990; Abu-Nassar and Rutherford, 1995; Ho and Wong 2001b).

In the case of developed countries, there are a number of alternative sources of corporate information; therefore, the importance of annual reports might be reduced. For example, Eccles and Mavrinac (1995) find that corporate managers, financial analysts and portfolio managers in the USA consider individual meetings and press releases as more important than annual reports. On the other hand, alternative sources of corporate information are quite limited in developing countries, which may suggest that annual reports play a more important role there than in developed countries.

The annual report is chosen as the data source for the statistical analysis of this study because it is a credible attested corporate document, which has been produced regularly; therefore this could help minimise the possible bias arising from comparison of voluntary disclosures among different companies. In addition, annual reports are prepared by companies themselves, which means that the information is not affected by the interpretations of third parties.

Availability and accessibility are also important factors that need to be considered when choosing the data source. There are limitations in the availability of other sources of information, for example, the absence of a disclosure index from reliable rating institutions, lack of management forecasts in Thailand, and restriction in use of Internet for corporate disclosure during the period before the 1997 financial crisis. Therefore, the methodology employed in this study is the examination of corporate annual reports to determine the extent of voluntary disclosure.

4.4.1.2 Construction of the Voluntary Disclosure Checklist

The main task in construction of a disclosure index is selecting items of voluntary disclosure that could be presented in corporate annual reports. The disclosure items should be significant information that corporate management is expected to disclose in annual reports.

Marston and Shrives (1991) criticise the use of researcher-constructed disclosure indices, resulting in a loss in advantage of direct comparison with prior studies. However, a uniform or universal disclosure checklist might not be developed easily, as there are diversities in the economic, social, and political systems between different countries

(Cooke and Wallace, 1989). Therefore, most studies construct disclosure indices based on prior studies with modifications to suit their research context, while taking into account the reporting environment. This study also applies a researcher-constructed disclosure index with support from prior empirical studies.

To ensure that the procedure of constructing the voluntary disclosure checklist in this study is reliable, certain criteria in selecting disclosure items are developed. The criteria are as follows:

a) There should be theoretical or empirical support for including such items.

b) Items have to be applicable to voluntary disclosure of Thai listed companies.

c) Items are not specified for disclosure in corporate annual reports by any regulatory bodies.

d) Items are not associated to any specific group of users.

e) There should be acceptable variability in disclosure of such items among different companies.

f) Items are not biased by difference in periods of time in the dataset.

After the criteria in selection of disclosure items were established, construction of the voluntary disclosure checklist began. The process started with a review of prior studies in corporate disclosure in both developed and developing countries in order to obtain theoretical and empirical support for the checklist. Then, the initial voluntary disclosure checklist based on the list constructed by Meek *et al.* (1995), Haniffa and Cooke (2002), and Mohd Ghazali and Weetman (2006) was created. The main reason for following the checklist originated by Meek *et al.*, (1995) is that it was constructed *"Based on an analysis of international trends and observations of standard reporting practices, taking into account relevant research studies and comprehensive international surveys of accounting and reporting"* (Meek *et al.*,1995, p.561). Some items in the checklist derived from Haniffa and Cooke (2002), Chau and Gray (2002), Eng and Mak (2003) and Mohd Ghazali and Weetman (2006) which are recent studies conducted in Asia (Malaysia, Hong Kong and Singapore).

All disclosure items in the initial voluntary checklist were checked with the Thai Accounting Standards and the Notification of the Security and Exchange Commission (Kor Chor. 40/2540 entitled rules, conditions and procedures for the disclosure of financial status and operating result of listed companies). The items that are mandatory under Thai regulations were eliminated.

The voluntary items which are not relevant to the Thai environment or items that are associated to a specific group of users were also eliminated. The reason for excluding items associated to specific user groups is because this study does not focus on any particular group of users. All types of users: shareholders, financial analysts, investors, creditors, employees, and governing entities are considered to have equal rights in access of information disclosed by companies.

As the sample contains data from 1995 to 2005, the SEC updated the list of mandatory disclosure items for listed companies during this period. As a result, 7 items in the original voluntary disclosure checklist became mandatory. In order to be able to compare levels of disclosure in different years with the same index, these items were excluded. Although elimination of disclosure items could create downward bias to the companies that voluntarily disclosed such information, its effect is not expected to be large. The elimination of the disclosure items that changed from voluntary to mandatory during the period of study is the same as that of Sutthachai and Cooke (2009).

The preliminary list was sent to financial analysts, external auditors and accounting lecturers for verifying validity of the disclosure items and reducing personal subjectivity arising from researcher judgement in the selection of disclosure items. Their feedback was used to refine the list. The refined list was then pilot-tested on a sample of 20 company annual reports from every industry sector to ensure that the checklist was relevant and able to differentiate disclosure practices among Thai listed companies. Applicability and suitability of the disclosure items to companies in different industry sectors were taken into account. In addition, pilot testing was performed to ensure that there is acceptable variability in voluntary disclosure among different companies. The items that were not disclosed by any companies were eliminated, as they were considered to be irrelevant. Also, the items that all companies disclosed in the pilot testing were taken into consideration, as the absolute disclosure might not generate meaningful results.

The final voluntary disclosure checklist contains 60 items, which can be divided into three main categories: strategic, financial, and non-financial and corporate social responsibility information and ten sub-categories (Appendix 4-A). This way of categorising disclosure information was originated by Gray *et al.* (1995) and Meek *et al.* (1995) and followed by a number of studies (see section 2.7.3). When looking at each type of characteristics in turn, financial information is considered as highly related to investment decisions. It is important for both existing and potential investors, as it reveals company performance. Future growth of the company could also be estimated from financial information. Financial information includes segmental information, financial review, financial history, and market related information. On the other hand, strategic information could be relevant to a broader set of users. It contains information about general corporate information, specific corporate information, economic environment, corporate strategies, and future prospects of the company. Management tends to use strategic information to enhance a company's image or to supply certain corporate issues to stakeholders. Finally, non-financial information is an extension of the financial reporting system, which is more related to corporate social responsibility and directed at a wide range of stakeholders. In recent years, companies have paid more attention to the existence of other parties in society, not only shareholders and creditors as in the past. Corporate social responsibility is an area of growing interest and concern. It involves a variety of issues such as environmental contribution, community involvement and human resources.

4.4.1.3 Scoring Method

Once the voluntary disclosure checklist has been constructed, the next important step is the measurement process. This section is concerned with the approach and strategies employed in the measuring process, including discussion on the weighting scheme and the way to treat non-applicable items.

In order to evaluate the extent of voluntary disclosure in company annual reports, a scoring sheet was prepared. There has been extensive debate on weighting of the disclosure index. The rationale for this approach is that different information might not be equally important or relevant. Some prior studies apply a disclosure index weighted by reference to opinions of groups of users, mainly comprising financial analysts (Cerf, 1961; Singhvi and Desai, 1971; Buzby, 1975; Malone *et al.*, 1993). However, having financial analysts assigning weight to the disclosure index means that the information needs of analysts alone are considered, ignoring the needs of other user groups.

The subjectivity associated with weighting is a major limitation of this approach. Assigning weights might create a certain degree of subjectivity, as stated by Ashton (1974, p.728):

> *"Generally, individuals overestimate the extent to which they utilize the less important cues and underestimate the extent to which they utilize the more important cues, i.e., 'subjective' weights are much more evenly distributed across cues than are statistically-derived weights."*

Also, weighting is the perception of a specific group of users, which may not be applicable to all users of corporate annual report. Perceptions are inclined to be selective, adaptive, ordinarily veridical, controlled by patterns and active (McBurney and Collins, 1984). Firer and Meth (1986) comment that there are external factors which cause constantly changing in perceptions. They also find that perceptions of financial analysts, who assign weight to disclosure indices, also differ according to institutional characteristics and countries. In addition, weights are assigned by respondents in a non-decisive situation. Therefore, the results are hypothetical and may not reflect the significance of the items in actual decision-making.

Arguments have been made in the literature concerning subjectivity of the weighting approach. Cooke and Wallace (1989) state that there are other factors that affect the importance level of information including the entities, transaction/event, user, industry, country, and time of the study. Therefore, assigning weight to individual disclosure items may be misleading. Cooke (1989a) comments that an approach endeavouring to encapsulate the subjective weights of various user groups would be *'unwieldy'* and probably *'futile'*. Raffournier (1995) agrees with Cooke (1989a) in that using erroneous weights may result in higher bias than applying equal weights. In addition, Marston and Shrives (1991) criticise the idea that the weighing approach cannot achieve the level of measurement of an interval scale. They comment that an item rated as a four has no reason to be four times as important as an item rated as a one. The judgement of persons who assign weight may affect the validity of weighted indices. Dhaliwal (1980) provides evidence of significantly different weights assigned by financial analysts to some items of information. Different user groups may have different views on the importance of disclosure items. Cooke (1989b, P.115) states that *"clearly one class of user will attach different weights to an item of disclosure than another class of user"*.

Due to the reasons mentioned above, the unweighted scheme is considered to be an appropriate approach for this study. The focus of this study is not on any particular group of user, but rather all users of corporate annual reports, who have equal rights to the information. Therefore, every item in the disclosure checklist is assumed to be equally important. This approach has been employed and supported in several prior studies. It focuses on the relative extent of the disclosure rather than bringing in additional subjectivity by means of a weighting scheme. (Leventis and Weetman, 2004).

A number of prior studies have tested a weighted index together with unweighted index and found no significant difference in the results (Spero, 1979; Firth, 1980; Robbins and Austin, 1986; Chow and Wong-Boren, 1987; Abu-Nassar and Rutherford, 1995; Zarzeski, 1996; Barako *et al.*, 2006). Cooke (1989b) gives the reason for applying an unweighted index that the subjective weights of different user groups would average each other out; therefore, it is unnecessary to attach weights into the index.

A dichotomous procedure was applied in order to compare the items on the disclosure checklist with the contents of the annual reports. Companies are awarded 1 if they disclose a certain item and 0 if they do not disclose it when that item is applicable to such companies. Companies were not penalised for items that are irrelevant to them. Therefore, there are two different scores for the case of non-disclosure, either 0 if the item is relevant to that company or no score in the case of non-applicable (N/A). The applicability of the item concerned is an important issue in applying the dichotomous procedure (Meek *et al.*, 1995). The decision to assign N/A to the disclosure score might create a judgemental element in the scoring procedure; however, it can provide a more realistic assessment of corporate disclosure than a strict dichotomous approach (Cooke, 1992). In order to determine the non-applicable items correctly, Cooke (1989b; 1992) suggests that a review of the entire annual report is necessary. Therefore, a disclosure item was coded as N/A only after the entire annual report had been examined and no similar information found in any part of the report.

The total score is calculated from addition of all scores each company received, according to the following formula:

$$Tscore_j = \sum_{i=1}^{n_j} X_{ij}$$

where

$Tscore_j$ = total score for company j
n_j = number of items applicable for company j
X_{ij} = 1 if the item i of company j is disclosed, and 0 otherwise.

After receiving the total score, the voluntary disclosure index (*VDI*) was calculated by computing the ratio of actual scores awarded to the number of items applicable for each company. The number of items applicable (n_j) can be also viewed as a maximum possible score attainable for a company. The value of a disclosure index can range from zero to one. The higher value of a disclosure score shows the greater extent of disclosure.

$$VDI_j = \frac{Tscore_j}{n_j}$$

where

VDI_j = voluntary disclosure index for company j, $0 \leq VDI \leq 1$

4.4.2 Interview Structure and Process

Apart from the statistical analysis from the voluntary disclosure index, this study includes semi-structured personal interviews. Interviewees are persons positioned to influence voluntary disclosure, including company management, auditors, regulators, bankers and investment analysts.

The objectives of the interviews are as follows:

Objective 1: To obtain additional insightful information on factors influencing voluntary disclosure of the companies.

Objective 2: To investigate other factors not easily captured from quantitative analysis that could affect voluntary disclosure practices.

Objective 3: To apply the information obtained from the interview to confirm the results and enhance the interpretation of results from the statistical analysis part.

Objective 4: To apply the information obtained from the interview to support the analysis of the applicability of the theoretical frameworks to the voluntary disclosure practice of Thai listed companies.

Semi-structured interview is considered appropriate for this study. It not only helps the researcher to reveal and understand 'what' and 'how', but also place more emphasis on 'why' questions (Saunders *et al.*, 2003, p.248). Semi-structured interview combines the advantage of the fixed response and open-ended interviews by establishing a main idea to be covered, while allowing the sequence and the content of the interview to be adaptable (Freebody, 2003). It also provides more opportunities for interviewees to express their thoughts and views. By using less-structured interviews, researchers can decide which lines of questioning they should explore further, and which lines to discard (Easterby-Smith *et al.*, 2008). More in-depth information can be obtained because the replies of the interviewees tend to be more personal in nature. Non-verbal clues from the interviewees such as inflection of the voice and facial expression can be used to develop further questions (ibid.).

The interviews were carried out after the statistical analysis so that the results could be discussed in the interview. The statistical results also help the researcher gain prior knowledge about the companies and assist in construction of the interview questionnaire. In order to ensure that the interview questions were understood by the interviewees, the questions were pre-tested with two Thai academics. The questions that have the potential to be misinterpreted were then revised.

The first part of the interview questionnaire contains questions related to each group of interviewees. Therefore, some of the questions in this part are different according to the type of interviewees (company management, investment analysts, external auditors, regulators, and bankers). The second part of the questionnaire focuses on the issues related to findings from the quantitative analysis. (see Appendix 4-B for the interview questionnaire).

The interview questionnaire was used as a topic guide for the interview. In order to follow interesting lines of inquiry, the sequence of the questions was not necessarily followed. Interviewees were also invited to provide additional information or comment on other issues that may not be included in the interview questions. All interviews were transcribed based on notes and recordings taken during the interviews (all interviewees allowed voice recordings).

The interview transcripts were analysed using content analysis. In the content analysis, words of the text are classified into fewer categories, where each category may consist of one or several words. Words or phrases classified in the same category are presumed to have similar meanings (Weber, 1990, p.12). Key phrases or words are counted, and then the frequencies are analysed (Easterby-Smith *et al.*, 2008, p.173). The richness of answers from the interviewees might be lost in the process of coding the interview transcripts. To prevent this problem, Oppenheim (1992, p.112) suggests that it would be useful to report some of the answers in full to provide the reader with *'some of the* *flavour of the replies'.* Therefore, the interview results are reported in both coding words and quotations of the interviewees' answer.

4.5 Formulation of the Hypotheses

This section reports the hypotheses formulated for testing relationships of voluntary disclosure with company specific characteristics. Theoretical frameworks and prior empirical literature suggest a number of variables that may explain variation in voluntary disclosure practices. Applicability to the Thai financial reporting environment is also an important factor when choosing variables to be included in the analysis. Variables applied in this study contain financial attributes (profitability and leverage), firm-specific characteristics (company size, industry type, and auditor type), variables related to corporate governance (ownership control status, board composition and role duality), and time factor. The following are criteria for selecting variables:

Criterion 1: Relevance to research objectives.

Criterion 2: Support from theoretical frameworks/ empirical studies.

Criterion 3: Particular relevance to emerging economies, specifically to Thailand.

Criterion 4: Reliability of the variables/sources of variables.

4.5.1 Company Specific Characteristics

4.5.1.1 Hypothesis 1: Company Size and Voluntary Disclosure

A number of prior studies find that firm size is associated with the extent of corporate voluntary disclosure. Agency theory suggests that large firms tend to have higher agency costs (Jensen and Meckling, 1976; Leftwich *et al.*, 1981), which according to Hossain *et al.* (1995), arise from a high proportion of outside capital. In addition, larger companies are inclined to have lower information production costs and possibly own information for internal purposes (Buzby, 1975). Meek *et al.* (1995) comment that large firms may have lower costs of competitive disadvantage related to disclosures. Berglöf and Pajuste (2005) find that voluntary disclosure is positively associated with resource availability. Large firms, firms with less leverage, firms with high cash balance and slow growth firms tend to disclose more. Market pressures and greater demand for information from institutional shareholders, international capital providers, and financial analysts might also be the reason for a higher disclosure level from larger companies. According to the capital need theory, responses to the need for information could attract potential investors and at the same time fulfil the demands of existing investors.

Results from several empirical studies support the theoretical hypothesis on the relationship between firm size and extent of voluntary disclosure in both developed capital markets (for example, Firth, 1979; McNally *et al.*, 1982; Cooke, 1989a, 1991; Hossain *et al.*, 1995; Raffournier, 1995; Depoers, 2000; Patelli and Prencipe, 2007) and emerging capital markets (for example, Chow and Wong-Boren, 1987; Hossain *et al.*, 1994; Haniffa and Cooke, 2002; Eng and Mak, 2003; Barako *et al.*, 2006; Huafang and Jianguo, 2007).

Company size has been included in prior studies of corporate disclosure in Thailand. However, conflicting results are reported. Priebjrivat (1991) finds a positive association between size (market capitalisation) and corporate disclosures of Thai listed companies but the results are not statistically significant. In more recent studies, while Sutthachai and Cooke (2009) find significant positive association between size (total sales) and level of disclosures (mandatory and voluntary), while Suphakasem (2008) finds no association between size (market capitalisation) and corporate governance disclosure of Thai listed companies.

Companies included in this study are from the SET100 index, which consists of larger companies in terms of market capitalisation. However, even within the SET100 index, there is still a significant variation in size of companies (see Appendix 6-A). Based on clear evidence from theoretical and empirical studies, size is expected in this study to be positively associated with voluntary disclosures. The hypothesis is stated as follows:

H1: *Ceteris paribus,* there is a positive association between company size and the extent of voluntary disclosure.

4.5.1.2 Hypothesis 2: Type of Industry and Voluntary Disclosure

Proprietary costs vary across industries. Legitimising activities may relate to a motivation in voluntary disclosure in certain industries. However, there is no strong evidence to support the legitimacy theory in explaining voluntary disclosure. According to Cooke (1992), the relationship between disclosure and type of industry are different in each country due to historical background and environment.

There are predictions for a higher level of disclosure in highly regulated companies (NG and Koh, 1994) and also companies in politically sensitive industries such as the energy sector (Whittred and Zimmer, 1990). Meek *et al.*, (1995) find that companies in oil, chemicals and mining industry disclose more non-financial information. Haniffa and Cooke (2002) find that there is a high level of voluntary disclosure in the construction sector, but a low level of voluntary disclosure in the consumer sector. Wallace *et al.* (1994), Naser *et al.* (2002), and Eng and Mak (2003) find no evidence that industry type is related to corporate disclosure.

With regard to disclosures of specific categories of information, Chau and Gray (2002) find no association between type of industry and voluntary disclosure of Hong Kong and Singaporean listed companies (overall, strategic, financial, and financial information). Ferguson *et al.*, (2002) find that industry type is not significantly related to overall, strategic, and non-financial disclosure, but it is marginally related (at the 10% level) to the disclosure of financial information.

In Thailand, there are differences in accounting standards and disclosure regulations for certain types of industry such as property and construction companies, which are under additional disclosure requirements. This might have a certain amount of influence on management incentives on voluntary disclosures. The 1997 financial crisis is expected to be another important factor that contributes to divergence in level of disclosure across industry types. There are differences in the impact of the financial crisis on each industry. Apart from bank and finance companies, which are excluded from the study, real estate companies seem to be the worst affected industry. Management might handle the situation differently due to dissimilarity in the impact of the financial crisis on business. Therefore, the impact of industry type on voluntary disclosure is expected to be different in the period before and after the financial crisis.

There is no clear evidence on the impact of industry type on the level of disclosure of Thai companies. Suphakasem (2008) finds weak and insignificant influence of industry type on corporate governance disclosure of Thai listed companies. On the other hand, Sutthachai and Cooke (2009) report a mixture of positive and negative impact of each industry type over the years studied.

In the light of the contradictory evidence of previous studies, no expectation is formed in relation to the direction of the relationship between industry type and voluntary disclosure. The hypothesis is stated as follows:

H2: *Ceteris paribus*, there is a significant association between type of industry and the extent of voluntary disclosure.

4.5.1.3 Hypothesis 3: Type of Auditor and Voluntary Disclosure

External auditors could be one way of alleviating the conflict of interest between principals and agents (Watts and Zimmerman, 1986). Big audit firms are likely to ensure transparency and eliminate mistakes in company financial statements because they have to maintain a high reputation, because they may be more independent than local firms, or because they face higher legal liability for making errors (Mitton, 2002). The choice of external auditor may signal the firm's value (Morris, 1987). Management is likely to choose a big audit firm to signal the investors of the expectation of high cash flow (Bar-Yosef and Livnat, 1984) or the quality of a firm's disclosure (Datar *et al.*, 1991). In addition, the contents of annual reports could be influenced by auditors because big audit firms might demand their clients to disclose more information (Wallace *et al.*, 1994).

Watts and Zimmerman (1981) argue that auditors tend to act in the interest of the managers who hire them, more willingly than in the interest of investors. Healy and Palepu (2001) also mention the difficulty for auditors in providing timely signals to capital markets, as the auditors provide formal assurance only on annual reports. There is also a tendency for auditors to be more concerned with minimising their legal liability, rather than boosting the credibility of financial reports.

Craswell and Taylor (1992), Wallace and Naser (1995), Inchausti (1997), Archambault and Archambault (2003), and Hossain and Taylor (2007) find a positive relationship between big audit firms and corporate disclosure. Nonetheless, a number of empirical studies find no relation between type of auditor and corporate disclosure in both developed capital markets (for example, McNally *et al.*, 1982; Malone *et al.*, 1993, Wallace *et al.*, 1994; Hossain *et al.*, 1995; Camfferman and Cooke, 2002) and emerging capital markets (for example, Hossain *et al.*, 1994; Owusu-Ansah, 1998b; Chen and Jaggi, 2000, Haniffa and Cooke, 2002; Gul and Leung, 2004; Barako *et al.*, 2006). Chau and Gray (2002) find no association between type of auditor and voluntary disclosure of specific information (strategic, non-financial, financial, and total disclosure) for Singaporean and Hong Kong listed companies.

In the context of Thai studies, Priebjrivat (1991) finds that type of auditor is significantly associated with semi-voluntary disclosure of Thai listed companies. However, the results are not significant in the case of mandatory and purely-voluntary disclosure. In more recent study, Sutthachai and Cooke (2009) find the significant association between type of auditor and mandatory disclosure but the results are not consistent among all models included in their study. No significant relationship between type of auditor and the extent of voluntary disclosure is reported by Sutthachai and Cooke (2009).

Fan and Wong (2005) find that East Asian firms with agency problems embedded in the ownership structures are more likely to employ Big Four auditors, especially firms that frequently raise equity capital. They conclude that big audit firms play an important role in the emerging market. Big audit firms ordinarily take their clients' agency problems into consideration when deciding the audit fee and when giving audit opinion.

In Thailand, auditors play an important role in influencing corporate reporting. They have to be licensed by the Federation of Accounting Professions and also registered with the SEC. The strict criteria for eligibility of an audit firm to audit listed companies have been set by the SEC. Although strong regulations might lessen the gap between local and Big Four auditors, it is expected that type of auditor influences voluntary disclosure. The 1997 financial crisis is also expected to be an important factor affecting the role of auditors. According to Haley (2000), the crisis created a requirement for transparency and symbolic adoption of best managerial practices, which increased the visibility and reach of Big Four accounting firms.

In view of the arguments, it is likely that there will be a positive relationship between Big Four auditors and voluntary disclosure. Therefore, the hypothesis is stated as follows:

H3: *Ceteris paribus*, there is a positive association between large audit firms and the extent of voluntary disclosure.

4.5.2 Financial Attributes

4.5.2.1 Hypothesis 4: Profitability and Voluntary Disclosure

Signalling theory suggests that well-run firms have incentives to voluntarily disclose additional information in order to distinguish themselves from lower performing companies. This can help to ease capital raising (Akerlof, 1970). Managers of firms with good performance are motivated to disclose additional information in order to signal quality of management and to support continuance of appointment and remuneration (Singhvi and Desai, 1971; Courtis, 1978).

Empirical evidence indicates mixed results in the relationship between the extent of disclosure in company annual reports and profitability. While some studies (for example, Tauringana, 1997; Owusu-Ansah, 1998b; Haniffa and Cooke, 2002; Naser *et al.*, 2002) find a positive relationship, other studies (for example, Wallace and Naser, 1995; Chen and Jaggi, 2000; Camfferman and Cooke, 2002) report a negative association. A number of studies find that profitability is not related to the level of voluntary disclosure (McNally *et al.*, 1982; Meek *et al.*, 1995; Inchausti, 1997; Ho and Wong, 2001a; Chau and Gray, 2002; End and Mak, 2003; Leventis and Weetman, 2006; Barako *et al.*, 2006; Hossain and Taylor, 2007; Patelli and Prencipe, 2007).

According to the capital market theoretical proposition, an inconsistent relationship between profitability and extent of voluntary disclosure is possible. Companies may disclose more information either when they have good news in order to attract investors or when they have bad news in order to inform investors of their financial status. It is also possible that companies voluntarily disclose other types of information as a way of drawing attention to a bad performance away from the press and investors.

Previous studies on disclosures in annual reports of Thai companies report a weak association between profitability and the extent of disclosure. Sutthachai and Cooke

(2009) find a weak and inconsistent relationship between profitability and the extent of disclosure. Priebjrivat (1991) and Suphakasem (2008) find profitability as having no explanatory power on the disclosure of Thai listed companies.

Due to conflicting arguments and lack of evidence in prior studies, no expectation is formed in relation to the direction of the relationship between profitability and the extent of voluntary disclosure. Therefore, the hypothesis is stated as follows:

H4: *Ceteris paribus,* there is a significant association between profitability and the extent of voluntary disclosure.

4.5.2.2 Hypothesis 5: Leverage and Voluntary Disclosure

Agency theory suggests that the extent of voluntary disclosure tends to increase in higher geared companies, with leverage, potential wealth transfers from debt holders to shareholders and managers. Consequently, there are higher agency costs for firms with more debt in their capital structure (Jensen and Meckling, 1976). A number of previous studies predict that highly leveraged firms disclose more information to reduce the agency costs of debt (Meek *et al.,* 1995; Wallace *et al.*, 1994; Lakhal, 2005). Highly leveraged firms may disclose more information to ensure creditors that shareholders and management are unlikely to bypass covenants in debt (Myers, 1977; Schipper, 1981). More disclosure from highly leveraged firms may also result from the need of lenders (Cooke, 1996).

However, there are also predictions for inverse relationship between voluntary disclosure and leverage. As creditors may be able to obtain private information, Zarzeski (1996) predicts that disclosure will decrease with leverage. Eng and Mak (2003) use the well-known free cash flow problem to explain the inverse relationship. They find that a need for disclosure decreases with leverage because debt is used as a mechanism for controlling free cash flow problems.

Empirical studies report conflicting results in the relationship between voluntary disclosure and leverage. Hossain *et al.* (1995) and Barako *et al.* (2006) find a positive relationship between level of voluntary disclosure and leverage. Meek *et al.* (1995) and Eng and Mak (2003) find an inverse relation between level of voluntary disclosure and leverage. Hanifa and Cooke (2002), Chau and Gray (2002), and Leventis and Weetman (2006) find no evidence of voluntary disclosure relating to leverage.

Excessive private debt, especially foreign currency loans, is an important factor that contributed to the 1997 financial crisis in Thailand. After the crisis, the relationships among banks and businesses became less personal. Approval of loans is no longer based solely on personal relationship. In addition, the government has issued several policies to transform Thai financial markets from a credit-based to capital market-based system. These changes are expected to have an impact on the financial reporting environment, which might contribute to changes in voluntary disclosure practices. Although previous studies in Thailand (Priebjrivat, 1991; Suphakasem, 2008; Sutthachai and Cooke, 2009) find no association between leverage and extent of disclosures in annual reports, leverage is expected in this study to be associated with the extent of voluntary disclosure. However, in the absence of a clear direction in the empirical literature, no expectation is formed in relation to the direction of the relationship. The hypothesis is stated as follows:

H5: *Ceteris paribus,* there is a significant association between leverage and the extent of voluntary disclosure.

4.5.3 Corporate Governance

4.5.3.1 Hypothesis 6: Ownership Control Status and Voluntary Disclosure

Ownership concentration could bring considerable benefits to a company, as it might enhance its operational efficiency and investment; however, it may also lead controlling owners to expropriate other investors and stakeholders and pursue personal non-profit maximising objectives (World Bank, 1998). Agency theory suggests that potential for high agency costs exist in a widely held company, due to conflicts of interest between the contracting parties (Jensen and Meckling, 1976). As a result, there should be greater information disclosure in widely held companies, in which additional information disclosed by management tends to signal that they act in the best interests of the shareholders (Chau and Gray, 2002). Companies with concentrated ownership are less reliant on outside shareholders. Large block owners have the potential to obtain information directly from the company. Therefore, the need for additional disclosure may be decreased (LaPorta *et al.*, 1998; Schadewitz and Blevins, 1998).

Claessens and Fan (2002) find that the company ownership structure can affect the nature of agency problems. Normally in the US and UK, where ownership is dispersed, agency problems are the conflicts of interest between outside shareholders and managers who own an insignificant equity in a company. Conversely, in most Asian companies with concentrated ownership, the nature of agency problems are typically conflicts between the controlling owner and minority shareholders. Exceptional ownership structures such as inside ownership, outside ownership, block ownership, institutional ownership, foreign ownership and government ownership are found to be significantly associated with the extent of voluntary disclosure in developing countries (Haniffa and Cooke, 2002; Eng and Mak, 2003; Suwaidan, 1997). In the Thai context, Sutthachai and Cooke (2009) find that ownership concentration is not significantly related with the extent of voluntary disclosure. In contrast, Priebjrivat (1991) finds significant negative association between ownership concentration and the level of voluntary disclosure.

As in most developing countries, traditional Thai firms are closely held and managed by majority family interests. Highly concentrated ownership results in a poor management structure. Generally, top management is recruited from owner-family members rather than professional groups. Therefore, the real management power and decision making remains with the owning family (Frost and Watkins, 2009). After the financial crisis, many Thai companies were forced to change their ownership structure into widely-held groups, institution-owned, or foreign-owned, in order to sustain their business. Nevertheless, the ownership pattern of Thai companies remains highly concentrated. The change of ownership structure from family-owned business to widely-held companies, as a result of the financial crisis, is expected to influence Thai financial reporting practices.

Although foreign ownership is an important characteristic of Thai business, especially after the 1997 financial crisis, it has not been included in prior corporate disclosure studies. Therefore, it might be of interest to investigate this factor further in the Thai context in order to obtain more insightful information on the effect of foreign ownership on voluntary disclosure practices.

Previous studies report mixed results regarding foreign ownership. Haniffa and Cooke (2002), Barako *et al.* (2006), and Huafang and Jianguo (2007) find significant positive association between voluntary disclosure and foreign ownership. This finding supports the argument that obtaining foreign funds results in a higher need for disclosure in order to monitor actions by management (Haniffa and Cooke, 2002). Generally, foreign shareholders would expect that the disclosure level of companies in which they have invested to be at least comparable to the standard in their home country. On the contrary, Naser *et al,* (2002) find no significant association between foreign ownership and corporate information disclosures. The probable reason that could help explain the non-significant association between foreign ownership and level of disclosures is that foreign shareholders, who are mostly institutional investors, might obtain the information directly from the companies. Another possible reason might be the fact that foreign investors do not pay much attention to disclosures in annual reports, which are generally historical and untimely for decision making purposes.

In view of the arguments, it is likely that a negative relationship exists between ownership concentration and the extent of voluntary disclosure. Foreign ownership is expected in this study to be positively associated with voluntary disclosure. Therefore, the hypothesis is stated as follows:

$H6_A$: *Ceteris paribus,* there is a negative association between ownership concentration and the extent of voluntary disclosure.

$H6_B$: *Ceteris paribus,* there is a positive association between foreign ownership and the extent of voluntary disclosure.

4.5.3.2 Hypothesis 7: Board Composition and Voluntary Disclosure

There are two different views regarding the influence of outside (independent) non-executive directors: the complementary relationship and the substitute relationship. The complementary relationship indicates positive association between the proportion of non-executive directors on the board and the extent of voluntary disclosure. On the other hand, the substitute relationship views non-executive directors as a substitute for public disclosure, which implies a negative relationship (Eng and Mak, 2003). Based on the agency theory and resource dependency theory, independent directors play an important role in monitoring management behaviour (Jensen and Meckling, 1976; Fama and Jensen, 1983).

Dechow *et al.* (1996), Beasley (1996), and Fama and Jensen (1983) agree that independent directors are more willing to provide effective supervision and disclosure, due to the necessity of maintaining their reputations. Conversely, boards comprising executive directors are more likely to hide negative information to gain private benefits or to limit stakeholder intervention. Anderson and Reeb (2004) find that outside shareholders usually look for independent director representation, while founding-families make an attempt to minimise the presence of independent directors. They find that the most valuable public firms are those in which independent directors balance family board representation.

Tricker (1984) comments that outside directors can provide *'additional windows on the world'*, as implied by the resource dependence theory. Outside directors can use their expertise, prestige and contacts to provide a firm with connection to the external environment. However, there is also evidence to indicate negative consequences from the high proportion of outside directors, such as excessive monitoring (Baysinger and Butler, 1985), insufficient business knowledge (Patton and Baker, 1987), and lack of real independence (Demb and Neubauer, 1992).

Empirical evidence that supports the substitute relationship between voluntary disclosures in annual reports and independent director is found in Eng and Mak (2003), Gul and Leung (2004), Barako *et al.*(2006). On the other hand, the complementary relationship is supported by Adams and Hossain (1998), Huafang and Jianguo (2007), and Patelli and Prencipe (2007). Ho and Wong (2001a), Haniffa and Cooke (2002), and Mohd Ghazali and Weetman (2006) find no relationship between voluntary disclosures and the existence of independent directors. In the Thai context, there is limited empirical evidence on the impact of board independence in explaining corporate disclosures. One exception is the study by Suphakasem (2008), who finds a significant positive relationship between board independence and corporate governance disclosure of Thai listed companies.

In Thailand, there are many listed companies in which directors and management have come from families who owned these businesses before they were listed on the SET. Therefore, the role of monitoring activities by an independent, non-executive director is crucial. Furthermore, after the 1997 financial crisis, independent, non-executive directors played an important role in regaining confidence from shareholders and investors. The importance of independent directors is emphasised in the 15 principles of good corporate governance issued by the SET. Nevertheless, Thai culture, which is relationship oriented, could affect the *'real'* independence of non-executive directors. There is the possibility that controlling owners would appoint persons within their social or family connections, friends, classmates, and colleagues as non-executive directors.

In view of the arguments, the proportion of independent non-executive directors on the board is expected in this study to be positively associated with the extent of voluntary disclosure. The hypothesis is stated as follows:

H7: *Ceteris paribus,* there is a positive association between proportion of independent non-executive directors on the board and the extent of voluntary disclosure.

4.5.3.3 Hypothesis 8: Role Duality and Voluntary Disclosure

Role duality can be explained in a different way by agency theory or stewardship theory. Agency theory suggests that a CEO, who is also the chairman, tends to be more managerially dominated (Molz, 1988). Separation between the roles of CEO and chairman could provide checks and balances over management performance (Haniffa and Cooke, 2002). Stewardship theory suggests that managements are inclined to act in the best interests of the company and shareholders. Role duality enables a CEO to easily lead a company to achieving its goals with less interference (Haniffa and Cooke, 2002).

There is empirical evidence that support agency theory based hypothesis regarding CEO duality. A significant negative association between CEO duality and voluntary disclosures is documented in studies by Gul and Leung (2004) and Huafang and Jianguo (2007). This finding supports the idea that role separation of CEOs and Chairmen helps to enhance monitoring quality, which may result in improvements in disclosure. Forker (1992) finds a negative association between the quality of share-option disclosure and CEO duality. Ho and Wong (2001) and Haniffa and Cooke (2002) find that CEO duality is not related to the level of voluntary disclosure.

In the Thai context, CEO/Chairman role duality is quite common among listed companies. Due to a family business background, many Chairmen and CEOs are family members who owned such companies before they were listed on the SET. The 15 principles of good corporate governance, issued by the SET in 2002, give listed companies freedom to combine or separate the roles of Chairmen and CEOs. In this study, CEO/Chairman role duality exists in the samples both before and after the 1997 financial crisis. Although Suphakasem (2008) finds no significant association between corporate governance disclosure of Thai listed companies and CEO duality, there is limited empirical evidence on the impact of CEO duality on corporate disclosures of Thai companies, especially in the case of voluntary disclosures.

Based on theoretical and empirical studies, a negative association between the existence of CEO/Chairman role duality and the extent of voluntary disclosure is expected. Therefore, the hypothesis is stated as follows:

H8: *Ceteris paribus,* there is a negative association between CEO/Chairman role duality and the extent of voluntary disclosure.

4.5.4 The 1997 Asian Financial Crisis

4.5.4.1 Hypothesis 9: Period Before/After the 1997 Asian Financial Crisis and Voluntary Disclosure

One of the research questions is to find if there have been changes in the extent of voluntary disclosure. During the four years selected, the business environment in Thailand has changed dramatically, especially after the 1997 Asian financial crisis. Therefore, the period before and after the 1997 Asian financial crisis was included as a variable. The data of the year 1995 and 1996 represent the period before the crisis. The data of the year 2002 and 2005 represent the period after the crisis.

Jaikengkit (2002) reviews Thai financial reporting and its environment from 1974 to 2002 and predicts that transparency and high quality disclosure would be recognised and practiced by Thai companies. A higher level of voluntary disclosures after the financial crisis is also expected in this study because of two major factors. Firstly, in order to sustain company business after the crisis, companies themselves could use voluntary disclosure as a way of communicating to the public and regaining confidence from the investors. Secondly, apart from economic disturbance, which might have an impact on disclosure practices, improvement in voluntary disclosure is expected in this study as a response from Thai companies to several government initiatives that promote good corporate governance (see section 3.6).

Based on the discussion, the extent of voluntary disclosure after the 1997 financial crisis is expected to be higher than before the crisis. Therefore, the hypothesis is stated as follows:

H9: *Ceteris paribus,* there is a positive association between the period after the 1997 financial crisis and the extent of voluntary disclosure.

4.6 Statistical Technique

This study applies both univariate and multivariate analyses. Univariate analysis explains the relationship between a single explanatory variable and the extent of voluntary disclosure. Multivariate analysis simultaneously takes into account the relative importance of each variable in relation to other variables by providing the contribution of each explanatory variable in explaining variability in the dependent variable.

4.6.1 Univariate Analysis

Before statistical tests are undertaken, it is important to check the underlying distribution of the dataset first. The distribution of dependent and independent variables were tested based on skewness and kurtosis. All variables (dependent and independent variables) were examined by box-plots, histograms, stem-and-leaf plots, normal Q-Q plots and detrended normal Q-Q plots. The findings reveal that the distribution of the data deviates significantly from normality. In addition, the Kolmogorov-Smirnov Lilliefors (K-S) test was also undertaken. The K-S test is significant ($p<.01$), confirming that the distribution is significantly different from a normal distribution. In order to use parametric statistical methods, the following assumptions must be met: (1) data should be normally distributed (2) variances are homogeneous (3) data should be measured at least at the interval scale (4) data from different participants are independent (Field, 2009, p.133). Data in this study do not meet the conditions of parametric tests; therefore, non-parametric statistical methods were applied. Continuous independent variables were tested by Kendall's rank correlation coefficient (tau). Kendall's rank correlation measures the degree of agreement between two sets of ranks. The Kendall test was chosen because it has been claimed to be superior to the Spearman rank correlation coefficient (Hays, 1973; Griffiths, 1980; Noether, 1981). It has also been applied in numerous studies in financial disclosure (Buzby 1974a, 1975; Belkaoui and Kahl, 1978, Firth, 1979; Suwaidan, 1997, Leventis, 2001). In the case of categorical (dummy) variables, Mann-Whitney U tests (for two-category variables) and Kruskal-Wallis tests (for more than two-category variables) were performed in order to determine whether associations between voluntary disclosure and the nominal independent variables exist.

4.6.2 Multivariate Analysis

Univariate analysis indicates the associations between dependent variable and each of independent variables. It can only measure the relationship between dependent variable and one independent variable at a time. On the other hand, multivariate analysis can take this process a step further, as it is capable of handling several explanatory variables simultaneously. In the multivariate analysis, the existence of other factors that might influence the outcome variable is taken into account. Different variables, which have been measured on different scales, can be included in the model.

In this study, multiple regression models were applied in order to find how the voluntary disclosure could be explained by a set of independent variables. The multiple regression analysis was conducted at two levels: aggregated and disaggregated levels. At the aggregated level, the total voluntary disclosure score was applied as the dependent variable in order to investigate the collective relationship between the independent variables and overall voluntary disclosure. This relationship was then investigated for each type of information at the disaggregated level. Therefore, the variables which explain variation of voluntary disclosure at the aggregated level were tested if they are also able to explain variation of voluntary disclosure at the disaggregated level.

The distribution of the data in this study deviates significantly from normality, as discussed earlier in section 4.6.1. Therefore, regressions were run based on the normal scores of both dependent and continuous independent variables. Normal score transformation based on van der Waerden approach is a method proposed by Cooke (1998) and has been applied in prior research in accounting disclosure (for example, Abd-Elsalam, 1999; Camfferman and Cooke, 2002; Haniffa and Cooke, 2002; Leventis and Weetman, 2004; Mohd Ghazali and Weetman, 2006; Sutthachai and Cooke, 2009). This method helps to mitigate the problems of skewness, kurtosis, outliers and heteroscedasticity (Cooke, 1998). The transformation from actual observations to the normal distribution is achieved by dividing the distribution into the number of observations plus one region; on the basis that each region has equal probability (ibid.). Cooke (1998) suggests that both dependent and independent variables should be transformed. Transforming only dependent variable could result in changing the relationship between dependent variable and all independent variables (ibid.).

4.7 Conclusion

This chapter has described the methodology adopted and research method employed to answer the research questions of this study. The research approach taken and the methods (quantitative and qualitative) applied to carry out the empirical work were discussed. The data collection procedures were explained. The construction of the research instrument: the voluntary disclosure index and the interview questionnaires were also discussed. This covered the construction of the voluntary disclosure checklist, reasons for choosing annual reports, measurement approach, and interview structure and process. The formulation of the hypotheses was also presented. The statistical techniques used to analyse quantitative data were presented at the end of the chapter. The reasons for choosing the non-parametric tests were explained. Univariate and multivariate analyses were briefly described. The details of how these techniques were applied will be reported in Chapter 6.

Appendices

Appendix 4-A: Voluntary Disclosure Checklist

Strategic Information

1. General information about the economic environment
   - 1.1 Information about the economy
   - 1.2 Information about the industry
   - 1.3 Specific factors influencing business
2. General Corporate information
   - 2.1 Brief history of company
   - 2.2 Corporate vision and mission
   - 2.3 Organisational structure
   - 2.4 Financial highlight statement
   - 2.5 Discussion on last year performance
   - 2.6 Contact details of investor relations
3. Specific corporate information
   - 3.1 Statement of corporate goals or objectives
   - 3.2 General statement of corporate strategy
   - 3.3 Specific statement of strategy (financial)
   - 3.4 Specific statement of strategy (marketing)
   - 3.5 Specific statement of strategy (social)
   - 3.6 Discussion about acquisition and expansion
   - 3.7 Discussion about disposals and cessation
   - 3.8 Corporate policy on research and development
   - 3.9 Significant events during the year
   - 3.10 Overview of the major subsidiaries
   - 3.11 Analysis of subsidiaries
   - 3.12 Analysis of products
   - 3.13 Improvement in product/ service quality
   - 3.14 Analysis of capital projects
4. Future prospects
   - 4.1 Discussion of future industry trend
   - 4.2 New developments
   - 4.3 Forecast of earnings/profits
   - 4.4 Forecast of cash flows
   - 4.5 Future risks/ Opportunities for the company

Non-financial and social responsibility information

5. Information about directors/ management
   - 5.1 Other positions held by the directors in the company/affiliated companies
   - 5.2 Other positions held by the directors outside the company
   - 5.3 Shares held by directors
   - 5.4 Family connection between directors or between directors and senior management)
   - 5.5 Function of operational managers
6. Employee Information
   - 6.1 Employees' appreciation
   - 6.2 Discussion of employee welfare
   - 6.3 Corporate policy on human resources
   - 6.4 Staff training
   - 6.5 Information about employee workplace safety
7. Corporate social responsibility information
   - 7.1 Statement of social responsibility
   - 7.2 Product safety
   - 7.3 Environmental policies
   - 7.4 Environmental protection programmes (Qualitative)
   - 7.5 Environmental protection programmes (Quantitative)
   - 7.6 Charitable donations/sponsorships

7.7 Participation in government campaigns/community programmes
7.8 Social rewards/achievements

Financial Information

8. Financial review
    8.1 Review of current financial results and discussion of major factors underlying performance
    8.2 Financial history or summary (5+ years)
    8.3 Profitability ratios (4+ years)
    8.4 Gearing ratios (4+ years)
    8.5 Liquidity ratios (4+ years)
    8.7 Dividend payout / Dividend per share (4+ years)
    8.6 Other ratios (4+ years)

9. Segment information
    9.1 Market share analysis
    9.2 Competitor analysis

10. Market related information
    10.1 Market capitalisation at year end
    10.2 Share price information
    10.3 Share price trend
    10.4 Distribution of shareholdings
    10.5 Domestic and foreign shareholdings

Appendix 4-B: Interview Questionnaire

<u>Part One</u>: General interview questions

1. **Company management**

1.1 What are the objectives of the annual report produced by your company? Do you think the annual report meets the information needs of receivers?

1.2 What are the motivations/constraints of your company to voluntarily disclose information in the annual report? Are there any other factors that may influence relevant decisions?

1.3 How much importance do you place on voluntary disclosure in the annual report?

1.4 Can you explain the procedure you undertake to prepare the annual report? In this process are there any internal reasons that influence the decision on voluntary disclosure?

1.5 Considering costs and benefits, what types of information (or themes) does your company prefer to emphasise and why?

1.6 How do you treat the credibility issues for voluntary disclosure in the annual report?

1.7 Apart from the annual report, does your company voluntarily disclose information through other media? What motivates your company to use other media for voluntary disclosure?

2. **External Auditors**

2.1 What are the main objectives of the annual report of companies listed on the SET? Do you think the objectives have been achieved?

2.2 In your opinion, what are the motivations/constraints for companies to voluntarily disclose information in the annual report? Are there any other factors that may influence relevant decisions?

2.3 In your opinion, how reliable and credible is the annual report?

2.4 In your opinion, how important is the annual report compared with other media?

2.5 In the audit process, how much do you emphasise voluntary disclosure in the annual report? Do you discuss with your clients about the benefits and risks of additional disclosure in the annual report?

2.6 Do you think that there are shortcomings in the current financial reporting system? What changes in the regulatory framework do you anticipate in the future?

2.7 Do you think that information provided in annual reports satisfy user needs? If not, do you think that additional information should be mandated or voluntarily provided?

3. Regulators

3.1 What is your opinion of the quality of information provided from annual reports?

3.2 In your opinion, how important is the annual report compared with other media?

3.3 Do you think that the current financial reporting requirements satisfy the information needs of users? If not, do you think that additional information should be mandated or voluntarily provided?

3.4 What are the key themes of information that should be disclosed to enhance the quality of annual reports?

3.5 What are the motivations/constraints for companies to voluntarily disclose information in the annual report? Are there any other factors that may influence relevant decisions?

3.6 In your opinion, how reliable and credible is the annual report?

3.7 In your opinion, are there shortcomings in the current financial reporting system? What changes in the regulatory framework do you anticipate in the future?

4. Investment Analysts

4.1 How much do you rely on information from annual reports in order to make investment decisions?

4.2 What types or themes of voluntary disclosure in annual reports do you consider most important?

4.3 What do you think are the main reasons for companies to voluntarily disclose information? What are the major constraints?

4.4 In your opinion, how reliable and credible is the annual report?

4.5 Do you think that information provided in annual reports meets your needs for making investment decisions? If not, do you think that the additional information you require should be mandated or voluntarily provided?

4.6 Apart from the annual report, do you rely on other corporate media? If so, what are they and how do you obtain them?

5. **Bankers**

5.1 How much do you rely on information from annual reports in order to make financial decisions?

5.2 What types or themes of voluntary disclosure in annual reports do you consider most important?

5.3 What do you think are the main reasons for companies to voluntarily disclose information? What are the major constraints?

5.4 In your opinion, how reliable and credible is the annual report?

5.5 Do you think that information provided in annual report meets your needs for making decisions? If not, do you think that the additional information you require should be mandated or voluntarily provided?

5.6 Apart from the annual report, do you rely on other corporate media? If so, what are they and how do you obtain them?

Part Two: Questions relating to findings from quantitative analysis

1. What type of voluntary information do Thai companies tend to pay most attention to among strategic information, financial information and nonfinancial & CSR information?

2. In your opinion, have there been any changes in corporate voluntary disclosure in response to the 1997 Asian financial crisis? If yes, what are the reasons for the changes?

3. In your opinion, to what extent does each of these factors impact on information voluntarily disclosed in annual reports?

    a. Company size

    b. Profitability

    c. Leverage

    d. Type of industry

    e. Type of auditor (Big4 / Non-Big 4)

    f. Ownership structure

    g. CEO/Chairman role duality

h. Ratio of non-executive directors to total number of directors on the board

i. Foreign shareholding

CHAPTER 5

Extent of Voluntary Disclosure in Annual Reports

5.1 Introduction

As discussed in Chapter 4, the extent of voluntary disclosure in annual reports of Thai listed companies is measured by a researcher-constructed disclosure index. A dichotomous procedure is applied in order to compare the items on the disclosure checklist with the contents of the annual reports. This chapter analyses and evaluates the results obtained from the measurement of voluntary disclosure applied in this study.

This chapter answers research question 1, 2 and 3 which are as follows:

Research Question 1: What is the extent of voluntary disclosure of Thai listed companies?

Research Question 2: To what extent do voluntary disclosures of Thai listed companies change over the period 1995 to 2005?

Research question 3: To what extent are aspects of company characteristics, financial attributes, and corporate governance related factors significant in explaining the extent of voluntary of Thai listed companies?

Research question 1 and 2 are answered by analysing and evaluating voluntary disclosure scores. The findings of extremely high or low disclosure scores and disclosure items that received particular attention in prior studies or in the real practices are discussed. The analysis of company characteristics that disclose certain items under each category is presented. To answer research question 2, comparisons of the extent of voluntary disclosures in different time period are included in order to find if there were changes in voluntary disclosure practices over the period 1995 to 2005.

In order to answer research question 3, further analysis of the association between items disclosed and the explanatory variables is performed based on Kendall's rank correlation coefficient (tau). The disaggregated analysis of voluntary disclosure provides an opportunity to obtain better insight into voluntary disclosure practices of the companies included in this study.

The extent of overall voluntary disclosure is discussed in section 5.2, followed by a detailed analysis of the disaggregated voluntary disclosure in section 5.3. Finally, a conclusion is provided in section 5.4.

5.2 Extent of Voluntary Disclosure: Overall Disclosure

Table 5-1 provides the descriptive statistics of voluntary disclosure scores. The voluntary disclosure scores range from 0.00 to 81.03%, with a mean score of 37.02%. Skewness and kurtosis indicate that the disclosure scores deviate from normality. The positive skewness values indicate that the scores are clustered towards the lower-end, except for those in 2005, which have a negative value of skewness. The disclosure score for each year has a positive kurtosis value, which indicates that the distributions are relatively peaked, rather than flat, as in the case with negative kurtosis values.

It can be seen from the percentage change of scores over the four periods that there is a significant positive trend of voluntary disclosure. The biggest increase in the level of voluntary disclosure occurred in 2002; from 1996 to 2002 the average disclosure scores increased by 75.99%. The scores imply that the level of voluntary disclosure increased markedly after the financial crisis.

Out of the total 225 cases, there was one company in 1996 that did not disclose any information in the checklist at all. This company is in the technology sector (electronic components). The non-disclosure of this company in 1996 is quite unexpected because in 1995 it disclosed 6.67% (4 items). This implies that inconsistency in voluntary disclosure occurred within a company and there is a chance that a company decrease its disclosure level over the period studied. It can be seen from Table 5-1 that the highest disclosure score in the sample set is 81.03% which occurred in 2005. There are two companies that achieved this maximum score, both of them are in the resources sector. This seems to imply that companies in this sector have a higher level of voluntary disclosure.

Table 5-1: Descriptive statistics of voluntary disclosure scores

	1995	1996	2002	2005	Total
Mean (%)	21.26%	22.91%	40.32%	51.57%	37.02%
% change		+7.76%	+75.99%	+27.90%	
Median (%)	16.67%	19.30%	40.17%	50.00%	37.93%
% change		+15.78%	+108.13%	+24.47%	
Min(%)	1.67%	0.00%	10.34%	6.78%	0.00%
Max(%)	53.33%	67.24%	79.66%	81.03%	81.03%
SD	.118	.145	.133	.150	.188
Skewness	.932	.955	.374	-.298	.185
SE skewness	.409	.322	.304	.277	.162
Kurtosis	.452	.564	.473	.101	-.751
SE kurtosis	.798	.634	.599	.548	.323
z-score skewness	2.279	2.966	1.230	-1.076	1.142
z-score kurtosis	.566	.890	.790	.184	-2.325
K-S	.234	.132	.072	.065	.079
K-S Sig.	.000	.019	.200	.200	.002

5.3 Disaggregated Analysis of Voluntary Disclosure

This section focuses on the disaggregated analysis of voluntary disclosure in order to gain a better insight into voluntary disclosure practices of the companies included in this study. Voluntary disclosures by three main information categories and ten sub-categories, as developed in section 4.4.1.2 are discussed. This section also includes the analysis of individual voluntary disclosure items.

5.3.1 The Extent of Voluntary Disclosure by Main Information Categories

Table 5-2 presents the descriptive statistics of voluntary disclosure by main information categories (strategic, non-financial, and financial). It can be seen that the mean score of strategic information is considerably higher than non-financial and financial information. The positive skewness value of non-financial and financial information indicates that the scores are clustered towards the lower-end. Skewness and kurtosis indicate that the disclosure scores of all information types deviate from normality. This is supported further by the Kolmogorov-Smirnov test.

Table 5-2: Descriptive statistics of voluntary disclosure scores by main information categories

	Strategic	Non-Financial	Financial
Mean (%)	45.11%	29.62%	30.95%
Median (%)	46.15%	27.78%	28.57%
Min(%)	0.00%	0.00%	0.00%
Max(%)	100.00%	83.33%	92.86%
SD	.212	.221	.214
Skewness	-.009	.564	.260
SE skewness	.162	.162	.162
Kurtosis	-.615	-.607	-.858
SE kurtosis	.323	.323	.323
z-score skewness	-.056	3.481	1.605
z-score kurtosis	-1.904	-1.879	-2.656
K-S	.062	.111	.130
K-S Sig.	.036	.000	.000

Table 5-3 presents the descriptive statistics of disclosure scores by main information categories separated by year. It can be seen that over the period studied, the average voluntary disclosure scores increased in all kinds of information (except for the disclosure of non-financial information in 1996, where the average score is lower than in 1995). Similar to the result of the overall voluntary disclosure discussed earlier in section 5.2, the biggest increase in voluntary disclosures of specific information occurred in 2002. The disclosure scores imply that the extent of voluntary disclosures of specific information increased significantly after the financial crisis.

Table 5-3: Descriptive statistics of disclosure scores by main information categories separated by year

	Mean		Median		Min	Max	SD	Skewness	SE skew	Kurtosis	SE kurt	K-S	K-S sig.
	score	% change	score	% change									
Strategic disclosure													
1995	28.69%		25.00%		3.57%	71.43%	.157	.873	.409	.688	.798	.229	.000
1996	30.28%	+5.54%	29.63%	+18.52%	0.00%	73.08%	.179	.401	.322	-.424	.634	.095	.200
2002	48.93%	+61.59%	50.00%	+68.75%	0.00%	100.00%	.157	.026	.304	1.956	.599	.108	.070
2005	60.06%	+22.75%	61.54%	+23.08%	11.11%	92.86%	.173	-.496	.277	.094	.548	.107	.032
Non-financial													
1995	14.49%		11.11%		0.00%	55.56%	.143	1.288	.409	1.470	.798	.199	.002
1996	13.17%	-9.11%	7.88%	-29.07%	0.00%	61.11%	.150	1.740	.322	2.602	.634	.228	.000
2002	27.93%	+112.07%	22.78%	+189.09%	0.00%	77.78%	.164	.682	.304	.585	.599	.116	.037
2005	42.42%	+51.88%	41.44%	+81.91%	0.00%	83.33%	.201	.034	.277	-1.027	.548	.096	.082
Financial disclosure													
1995	15.15%		7.14%		0.00%	64.29%	.157	1.532	.409	2.193	.798	.219	.000
1996	21.30%	+40.59%	14.29%	+100.14%	0.00%	78.57%	.184	.963	.322	.653	.634	.157	.002
2002	34.68%	+62.82%	35.71%	+149.90%	0.00%	85.71%	.197	.112	.304	-.652	.599	.136	.006
2005	41.90%	+20.82%	42.86%	+20.02%	0.00%	92.86%	.199	-.394	.277	-.120	.548	.159	.000

5.3.2 The Extent of Voluntary Disclosure by Individual Disclosure Item

In order to gain a better insight into the voluntary disclosure practices of Thai listed companies, the percentage of companies disclosing each item of information in the disclosure checklist is investigated. Table 5-4 displays voluntary disclosure frequency of each individual item separated by year, as well as the whole dataset. The table shows a range of percentages of disclosure from as low as 0.00% to a maximum of 93.55%. Therefore, considerable variation in voluntary disclosure exists across the 60 items in the 225 annual reports. Table 5-4 also reveals that:

- No item was fully disclosed by 100% of companies.
- The item that most companies disclosed is a general statement of corporate strategy (76.44%).
- The item that least companies disclosed is employees' appreciation (1.33%).
- Forty-three items (71.67%) were disclosed by less than 50% of the sample.
- Eight items (7.47%) were disclosed by less than 10% of the sample.
- Eight items were not disclosed by any company in1995.
- Four items were not disclosed by any company in1996.
- One item was not disclosed by any company in 2002.
- There were no non-disclosed items in 2005.

Table 5-4: The frequency of voluntary disclosure by individual items

Item of Information	%					Rank				
	1995	1996	2002	2005	Total	1995	1996	2002	2005	Total
Strategic information										
1. General information about the economic environment										
1.1 Information about the economy	21.21	30.91	85.48	84.00	62.22	29	21	4	7	9
1.2 Information about the industry	33.33	36.36	82.26	77.30	62.22	15	16	6	14	9
1.3 Specific factors influencing business	51.52	52.73	87.10	88.00	73.78	4	5	3	1	2
2. General corporate information										
2.1 Brief history of company	48.48	67.27	83.87	80.00	73.33	6	2	5	11	4
2.2 Corporate vision and mission	36.36	38.18	25.81	49.33	38.22	11	13	38	34	31
2.3 Organisational structure	51.52	49.09	77.42	86.67	69.78	4	10	10	3	7
2.4 Financial highlight statement	36.36	41.82	66.13	84.00	61.78	11	12	12	7	11
2.5 Discussion on last year performance	30.30	32.73	53.23	85.33	55.56	19	19	22	5	13
2.6 Contact details of investor relations	27.27	30.91	55.56	62.67	52.89	20	21	18	22	15
3. Specific corporate information										
3.1 Statement of corporate goals or objectives	24.24	32.73	46.77	64.00	45.78	25	19	25	21	21
3.2 General statement of corporate strategy	60.61	67.27	91.94	77.33	76.44	2	2	2	12	1
3.3 Specific statement of strategy (financial)	21.21	20.00	51.61	62.67	43.11	29	28	23	22	24
3.4 Specific statement of strategy (marketing)	12.12	10.91	12.90	24.00	16.00	38	42	49	48	48
3.5 Specific statement of strategy (social)	3.03	3.64	8.06	14.67	8.44	50	53	51	53	53
3.6 Discussion about acquisition and expansion	41.94	72.73	81.82	82.76	68.27	9	1	7	10	8
3.7 Discussion about disposal and cessation	13.79	50.00	55.56	73.33	39.34	37	9	18	15	28
3.8 Corporate policy on research and development	15.15	5.45	16.13	21.33	15.11	33	50	46	49	50
3.9 Significant events during the year	33.33	36.36	41.94	60.00	45.33	15	16	27	27	22
3.10 Overview of the major subsidiaries	21.21	28.30	53.33	66.22	46.82	29	24	21	20	20
3.11 Analysis of subsidiaries	9.09	16.98	38.33	44.59	30.91	42	33	31	41	36
3.12 Analysis of products	66.67	50.91	80.65	88.00	73.78	1	6	8	1	2
3.13 Improvement in product/service quality	45.45	38.18	59.68	68.00	55.11	7	13	14	17	14
3.14 Analysis of capital projects	24.24	10.91	17.74	38.67	24.00	25	42	44	43	43

Item of Information	%					Rank				
	1995	1996	2002	2005	Total	1995	1996	2002	2005	Total
4. Future prospects										
4.1 Discussion of future industry trend	15.15	23.64	41.94	62.67	40.44	33	26	27	22	27
4.2 New development	36.36	43.64	20.97	61.33	42.22	11	11	42	25	26
4.3 Forecast of earnings/profits	3.03	1.82	4.88	14.67	7.11	50	54	53	53	54
4.4 Forecast of cash flows	6.06	0.00	1.61	1.33	1.78	48	57	59	58	58
4.5 Future risks/Opportunities for the company	39.39	20.00	37.10	54.67	39.11	10	28	32	30	29
Non-financial and social responsibility information										
5. Information about directors/management										
5.1 Other positions held by the directors in the company/affiliated companies	22.12	15.45	64.52	66.67	49.11	28	36	13	19	19
5.2 Other positions held by directors outside the company	12.06	15.09	67.74	77.33	51.56	41	37	11	12	17
5.3 Shares held by directors	9.03	10.64	51.61	73.33	43.00	47	44	23	15	25
5.4 Family connection between directors or between directors and senior management	0.00	1.82	4.84	45.33	16.89	53	54	54	38	47
5.5 Function of operational managers	57.58	50.91	79.03	86.67	71.56	3	6	9	3	6
6. Employee information										
6.1 Employees' appreciation	6.06	0.00	0.00	1.33	1.33	48	57	60	58	60
6.2 Discussion of employee welfare	9.09	9.09	35.48	37.84	25.89	42	45	34	44	42
6.3 Corporate policy on human resources	33.33	25.45	30.65	57.33	38.67	15	25	36	29	30
6.4 Staff training	27.27	23.64	58.06	53.33	43.56	20	26	17	31	23
6.5 Information about employee workplace safety	0.00	12.73	6.45	32.00	15.56	53	40	52	47	49
7. Corporate social responsibility information										
7.1 Statement of social responsibility	0.00	14.55	19.35	41.33	22.67	53	38	43	42	44
7.2 Product safety	15.63	9.09	12.24	32.79	18.82	32	45	50	46	46
7.3 Environmental policies	9.09	7.27	25.81	37.33	22.67	42	48	38	45	44
7.4 Environmental protection programmes (Qualitative)	27.27	16.36	22.58	48.00	30.22	20	34	41	35	38
7.5 Environmental protection programmes (Quantitative)	3.03	0.00	3.23	1.33	1.78	50	57	55	58	58
7.6 Charitable donations/sponsorships	12.12	12.73	27.42	48.00	28.44	38	40	37	35	39

Item of Information	%					Rank				
	1995	1996	2002	2005	Total	1995	1996	2002	2005	Total
7.7 Participation in government campaigns/community programmes	24.24	18.18	24.19	48.00	30.67	25	32	40	35	37
7.8 Social rewards/ achievement	15.15	16.36	37.10	45.33	31.56	33	34	32	38	35
Financial information										
8. Financial review										
8.1 Review of current financial results and discussion of major factors underlying performance	36.36	38.18	59.68	84.00	59.11	11	13	14	7	12
8.2 Financial history or summary (5+ years)	42.22	36.36	17.74	21.33	27.11	8	16	44	49	41
8.3 Profitability ratios (4+ years)	33.33	58.18	93.55	85.33	73.33	15	4	1	5	4
8.4 Gearing ratios (4+ years)	12.12	14.55	46.77	53.33	36.00	38	38	25	31	33
8.5 Liquidity ratios (4+ years)	9.09	9.09	33.87	45.33	28.00	42	45	35	38	40
8.6 Dividend payout/ Dividend per share (4+ years)	27.27	50.91	59.68	60.00	52.89	20	6	14	27	15
8.7 Other ratios (4+ years)	15.15	20.00	38.71	52.00	35.11	33	28	30	33	34
9. Segment information										
9.1 Market share analysis	0.00	5.45	14.52	16.00	10.67	53	50	48	52	52
9.2 Competitor analysis	0.00	7.27	16.13	20.00	12.89	53	48	46	51	51
10. Market related information										
10.1 Market capitalisation at year end	0.00	1.82	3.23	6.67	3.56	53	54	55	56	56
10.2 Share price information	0.00	5.45	3.23	8.00	4.89	53	50	55	55	55
10.3 Share price trend	0.00	0.00	3.23	5.33	2.22	53	57	55	57	57
10.4 Distribution of shareholdings	27.27	30.91	54.84	68.00	49.33	20	21	20	17	18
10.5 Domestic and foreign shareholdings	9.09	20.00	41.94	61.33	38.22	42	28	27	25	31

Table 5-5 categorises the disclosure of individual items from Table 5-4 into the frequency distribution. It can be seen that there seem to be an improvement in voluntary disclosure in 2002 and 2005. The number of items with a low percentage of disclosure dropped significantly and the number of items with a high percentage of disclosure increased considerably. Some items achieved a high percentage of disclosure of over 80 percent in 2002 and 2005. In 2002, two items (General statement of strategy and Profitability ratios) were disclosed by more than 90 percent of companies. In addition, six items in 2002 and eleven items in 2005 were disclosed by more than 80 percent of companies. This indicates a very high level of disclosure for these items. On the other hand, no item has percentage of disclosure above 70 percent in 1995 and only one item (Discussion about acquisition and expansion) has the percentage of disclosure above 70 percent in 1996.

Table 5-5: Frequency distribution of the disclosure of individual items

Percentage of disclosure	Number of items in the Checklist				
	1995	1996	2002	2005	Total
Above 90%	-	-	2	0	-
80% - 90%	-	-	6	11	-
70% - 80%	-	1	2	5	6
60% - 70%	2	2	3	12	5
50% - 60%	3	6	11	5	6
40% - 50%	4	3	5	9	10
30% - 40%	10	11	7	5	11
20% - 30%	12	8	6	4	7
10% - 20%	9	13	8	3	7
0 - 10%	20	16	10	6	8
Total items	60	60	60	60	60

5.3.3 The Extent of Voluntary Disclosure by Sub-categories of Information

Table 5-6 presents the average scores of voluntary disclosure under each sub-category. There is a wide variation in the range of the scores in each category. The highest score was Information about economic environment (66.07%), followed by General corporate information (59.73%). In contrast, the lowest were Segmental information and Market related information (11.78% and 19.64% respectively). The average scores separated by year are also presented in this table. The scores show signs of improvement for all categories in 2002 and 2005; however, the level of improvement is varied among different categories.

Table 5-6: The extent of voluntary disclosure by sub-category of information

Information category	1995	1996	2002	2005	Total	
	Mean				Mean	SD
Information about economic environment	35.35	40.00	84.95	83.11	66.07	0.42
General corporate information	40.61	45.82	61.29	77.07	59.73	0.28
Specific corporate information	26.20	26.96	46.64	56.39	42.08	0.23
Future prospects	20.00	17.82	21.29	38.93	26.13	0.24
Information about directors/ management	15.76	14.18	53.55	69.87	43.82	0.32
Employee information	15.15	14.18	26.13	36.40	25.02	0.25
Corporate social responsibility information	13.26	11.88	21.60	37.69	23.37	0.28
Financial review	25.11	32.47	50.00	57.33	44.51	0.30
Segmental information	0.00	6.36	15.32	18.00	11.78	0.27
Market related information	7.27	11.64	20.97	29.87	19.64	0.23

The following sections discuss the disclosure of voluntary information for each sub-category in more detail. Further analysis of the association between individual disclosure items and the explanatory variables is based on Kendall's rank correlation coefficient (tau) at the 5% significance level. The reason for choosing Kendall's rank correlation is discussed earlier in section 4.6.1. The results are presented in Appendix 5-A.

5.3.3.1 General Information about the Economic Environment

A significant number of companies provided information regarding general information about the economic environment. The average disclosure score for this category is 66.07%, which is the highest among all categories. Specific factors influencing business item appears to be the item most disclosed (73.78%) in this category. This implies that companies tend to be more cautious about specific factors that directly influence their own business rather than information about the industry or the economy, which may affect them in wider aspects. The frequency distribution of number of items disclosed by each company under this category (Table 5-7) shows that the percentage of companies that disclosed all three items substantially increased in 2002 and 2005 (from 15.15% in 1995 and 23.64% in 1996, to 80.65% in 2002 and 73.33% in 2005). The percentage of companies that did not disclose any item at all under this category also significantly decreased (from 42.42% in 1995 and 43.64% in 1996, to 9.68% in 2002 and 10.67% in 2005).

Table 5-7: Frequency distribution of general information about the economic environment items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	42.42	43.64	9.68	10.67	23.11
1	24.24	16.36	6.45	2.67	10.22
2	18.18	16.36	3.23	13.33	12.00
Maximum 3	15.15	23.64	80.65	73.33	54.67

Table 5-4 presents the percentage of the disclosure of individual items in terms of ranking. High ranking could imply that companies gave more importance to the disclosure of such items. All three items in this category are top ten ranked in the highest disclosures. It can be seen that the ranking of the disclosure of information about the economy improved significantly (from 29th in 1995 and 21st in 1996, to 4th in 2002 and 7th in 2005). This could be due to response of the companies to the financial crisis. It suggests that companies were aware of the economic situation, which could affect their operation.

Further analysis on the association between the disclosure of items in this category and explanatory variables indicates that all three items are related to the ratio of non-executive directors on the board with a positive sign (at the 1% significance level). This may suggest that non-executive directors could play an important role in deciding to disclose information about the economic environment. Profitability is also found to be positively related to the disclosure of all three items under this category. The reason for less profitable companies not disclosing this information may be due to limited resources for engaging in such activities. Company size is found to be positively related to the disclosure of Information about the economy and Information about the industry, but not for the disclosure of specific factors influencing business. Foreign ownership is found to be positively related (at the 1% significance level) only to the disclosure of Information about the economy. This information is necessary for foreign investors, who may have less knowledge of the Thai economy.

5.3.3.2 General Corporate Information

General corporate information seems to be the type of information that has a relatively high level of disclosure in 1995 and 1996. This type of information is still the commonly disclosed information in 2002 and 2005. The relatively higher disclosure level of general corporate information is not surprising given that this kind of information, being basic information that most companies already have, is easily obtained. Therefore, the cost of processing the information is considerably low. Also, the nature of this information is not very sensitive and companies would not lose their competitive advantages by disclosing such information.

The average disclosure score of this of information type is 59.73%, which is the second highest score among all ten categories (see Table 5-6). The most popular item disclosed was Brief history of company (73.33%), followed by Organisational structure (69.78%). This information is easily obtained and quite static in nature. This may suggest that the ease in obtaining and processing the information affects company decision on voluntary disclosure. Companies seemed to give less importance to the disclosure of corporate vision and mission in 2002 and 2005, as seen in Table 5-4, where a substantial change in ranking of this item can be observed (from 11th in 1995 and 13th in 1996, to 38th in 2002 and 34th in 2005). This might be due to the fact that companies paid more attention to other types of disclosure after the financial crisis, for example, the disclosure of information about the economy, which received much higher ranking in 2002 and 2005. In spite of the lower ranking for disclosure of corporate vision and mission after the financial crisis, the percentage of companies that disclosed this item in 2005 was considerably higher than in 1995, 1996, and 2002.

The majority of companies that did not disclose any items under this category in 1995, 1996, and 2002 came from the technology sector, one of them did not disclose any items in all three years. It can be seen from table 5-8 that there were changes in the number of items disclosed in 2002 and 2005. While the majority of companies disclosed one to two items out of total six items in 1995 and 1996, they disclosed three to five items in 2002 and 2005. More interestingly, it was found that the proportion of companies disclosing the maximum six items under this category sharply increased in 2005.

Table 5-8: Frequency distribution of general corporate information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	6.06	10.91	1.61	0.00	4.00
1 - 2	69.69	47.27	25.80	6.67	31.11
3 - 5	15.15	29.09	66.13	65.33	49.33
Maximum 6	9.09	12.73	6.45	28.00	15.56

The proportion of non-executive directors on the board and company size seem to influence the disclosure of information inthis category. Further analysis indicates that the disclosure of every item under this category, except for corporate vision and mission, is related to the proportion of non-executive directors on the board with a positive sign (at the 1% significance level). Every item, except Brief history of company, is also positively related to company size. Financial highlight statement and Discussion on last year performance are the only two items under this category that directly related to company performance. Both items were found to be related to foreign ownership with a positive sign (at the 1% significance level), which implies that foreign shareholders may influence the disclosure of this type of information.

5.3.3.3 Specific Corporate Information

The average disclosure score of specific corporate information is 42.08%. There is considerable variation in the percentage of companies that disclosed each item under this category. The most disclosed item was General statement of corporate strategies (76.44%), followed by Analysis of products (73.78%). However, fewer companies were found to disclose information about corporate policy on research and development (15.11%) and specific statement of strategy (marketing: 16.00% and social: 8.44%).

It is found that most companies were more willing to disclose corporate strategy in general rather than the specific statement of strategy, especially for specific strategy in marketing and social where the disclosure rates were considerably low. It can also be seen from table 5-4 that 84.89% of the sample did not reveal any information regarding their policy on research and development, and 76.00% did not disclose information about their capital projects. The reason for this may probably be attributed to competitive disadvantages for companies if they provide too many facts and figures.

Table 5-9: Frequency distribution of specific corporate information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	9.09	0.00	0.00	0.00	1.33
1 - 3	36.36	27.27	6.45	1.33	14.22
4 - 6	39.39	45.45	25.81	14.67	28.89
7 - 9	12.12	20.00	37.10	41.33	30.67
10 - 11	3.03	7.27	25.81	30.67	19.56
12-13	0.00	0.00	3.23	9.33	4.00
Maximum 14	0.00	0.00	1.61	2.67	1.33

The frequency distribution of the number of items disclosed under this category (Table 5-9) shows that there are 9.09% of companies in 1995 that did not disclose any items under this category, one of them came from the technology sector, and the other two were property and construction companies. There is one company from industrial sector that achieved the maximum disclosure level of fourteen items in 2002. However, this company failed to attain this maximum disclosure level in 2005. Two companies that achieved the maximum disclosure level under this category in 2005 are technology and agro companies. The majority of companies disclosed around four to nine out of fourteen items under this category. However, the number of items disclosed in 2002 and 2005 was considerably higher than that in 1995 and 1996. The percentage of companies disclosing more than ten items was significantly higher in 2002 and 2005. In addition, the number of disclosed items reached the maximum of fourteen items in 2002 and 2005, while no companies disclosed more than eleven items in 1995 and 1996.

Again, the proportion of non-executive directors on the board seems to be an important determinant of the disclosure of information under this category. It is found to have a positive association with ten items under this category (nine items at the 1% significance level). However, there are four items that are not significantly associated with proportion of non-executive directors: Specific statement of marketing strategy, Specific statement of social strategy, Corporate policy on research and development, and Significant events during the year. The disclosure of all specific statements of strategies (financial, marketing, and social) is related to company size with a positive sign (at the 1% significance level) and foreign ownership (at the 5% significance level). This suggests that company size and foreign ownership may be particularly influential on the disclosure of specific statements of strategies.

5.3.3.4 Future Prospects

The average disclosure score of future prospects is 26.13%, which ranks sixth out of ten categories. Within this category, New development is the most widely disclosed item (42.22%). This information may inform users that companies are developing constantly and, as such, have the opportunity to grow and survive in their industries. This kind of information also enhances corporate image and shows that companies have the resources to create new developments. On the other hand, the least disclosed items were Forecast of cash flow (1.78%) and Forecast of earnings (7.11%) which ranked 58th and 54th out of 60 disclosure items (see Table 5-4).

For future prospects information, companies seem to prefer disclosing non-numerical descriptive information (Discussion of future industry trend, New developments, Future risks or opportunities for the company) rather than forecasted figures like earnings, profits or cash flows. The disclosure of forecasted figures remained at a low level even in 2002 and 2005. This may indicate that management was more cautious about disclosing forecasted figures, which may have adverse effects on companies. Other reasons for not disclosing this information could be competitive disadvantages, fear of giving a wrong prediction, difficulties in obtaining information or cost of providing it. The low level in the disclosure of quantitative future prospects information is consistent with the finding of Haniffa (1999).

Table 5-10: Frequency distribution of future prospects items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	30.30	41.82	48.39	17.33	33.78
1 - 2	63.64	47.27	38.71	44.00	46.22
3 - 4	6.06	10.91	11.29	38.67	19.56
Maximum 5	0.00	0.00	1.61	0.00	0.44

There is one company from industrial sector that achieved the maximum level of disclosure under this category in 2002. However, this company failed to attain this maximum disclosure level in 2005. Frequency distribution of number of items disclosed under this category (Table 5-10) shows that the numbers of items disclosed by the majority of the sample (80.00%) were no more than two items. This table also reveals an improvement in the percentage of companies that did not disclose any information regarding future prospects in 2005. Unlike other categories discussed earlier, the changes in number of items disclosed in 2002 and 2005are not very obvious.

5.3.3.5 Director and Management Information

The average disclosure score under this category is 43.82%. The highest disclosed item is Function of operational managers (71.56%), which is the only item that seemed to have an acceptable level of disclosure in 1995 and 1996. This item is also in the top ten ranking every year (Table 5-4). On the contrary, the least disclosed item was Family connection between directors (16.89%). Overall, Thai listed companies did not seem to pay much attention to disclosure of this category of information. There was considerably low level of disclosure in 1995 and 1996. However, the disclosure of all items in this category showed extensive improvement in 2002 and 2005. This could possibly be the response of companies to the corporate governance campaigns carried out by Thai government after the 1997 financial crisis. A higher level of disclosure of director and management information also implies an improvement in corporate transparency.

As seen in Table 5-11, the numbers of companies that did not disclose any item at all under this category decreased significantly in 2002 and 2005 (from 36.36% in 1995 and 49.09% in 1996, to 4.84% in 2002 and 2.67% in 2005). While most companies disclosed two items or less in 1995 and 1996 (93.94% and 94.54% respectively), only 14.67% of companies disclosed two items or less in 2005 (41.94% in 2002).

Table 5-11: Frequency distribution of directors and management information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	36.36	49.09	4.84	2.67	19.56
1 - 2	57.58	45.45	37.10	12.00	33.78
3 - 4	6.06	5.45	56.45	64.00	39.10
Maximum 5	0.00	0.00	1.61	21.33	7.56

Similar to most categories, the proportion of non-executive directors on the board tends to be the variable with the strongest association for the disclosure of director and senior management information. It is significantly correlated (at the 1% significance level) to all five disclosure items. This confirms that non-executive directors influence the disclosure of director and management information.

5.3.3.6 Employee Information

The average disclosure score of employee information is 25.02%, which ranks seventh out of ten categories. The highest disclosed item was Staff training (43.56%). The lowest disclosed item was Employees' appreciation (1.33%), which was also the lowest among all sixty disclosure items. There is only one company from the resources sector, which achieved the maximum disclosure level under this category in 2005.

Table 5-12: Frequency distribution of employee information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	54.55	63.64	30.65	20.00	38.67
1 - 2	36.36	25.45	53.23	49.33	42.67
3 - 4	9.09	10.91	16.13	29.33	18.22
Maximum 5	0.00	0.00	0.00	1.33	0.44

Table 5-12 reveals that in 1995 and 1996, the majority of companies (54.55% and 63.64% respectively) did not disclose any items at all under this category. However, the non-disclosure ratios show signs of improvement in 2002 and 2005. The proportion of non-executive directors on the board once again seems to be the variable with the strongest association with disclosure of employee information. It is found to be positively related with all items under this category, except Employees' appreciation. The disclosure of corporate policy on human resources and information about employee workplace safety are positively related to company size. Bigger companies may have more employee information that they need to disclose due to a larger number of employees. Foreign ownership is found to be related to the disclosure of staff training, employee welfare, and information about employee workplace safety. Having Big Four audit firms as auditors is found to be positively related to the disclosure of employee welfare and information about employee workplace safety. These findings suggest that the disclosure of employee information is influenced by various factors.

5.3.3.7 Corporate Social Responsibility Information

Corporate social responsibility (CSR) information has its own unique characteristics that make it different from other categories of information. The motivation underlying the disclosure of CSR information could be influenced by corporate philosophy or managerial perception towards ethical issues. Therefore, the nature of CSR disclosure could be more sophisticated than other information.

The average disclosure score of CSR is 23.37%, which ranks eighth out of ten categories. The highest disclosed item was Social reward or achievement (31.56%). The lowest disclosed item was Environmental protection programmes (quantitative, 1.78%). Thai companies seemed unready to disclose quantitative information about environmental protection programmes or they might not have seen the benefits from disclosing such information. The ranked percentage of the disclosure of individual items shows that the companies did not seem to pay much attention to the disclosure of CSR information. None of the items under this category are ranked in the top thirty of disclosed items.

It can be seen from table 5-13 that a number of companies did not disclose any CSR information in 1995 (63.64%) and 1996 (45.45%). The table also shows that the number of items disclosed tended to improve over time. The proportion of companies disclosing one to two items increased considerably in 1996 and 2002, and proportion of companies disclosing three to seven items also rose significantly in 2005.

Table 5-13: Frequency distribution of corporate social responsibility information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	63.64	45.45	29.03	24.00	36.44
1 - 2	18.18	38.18	43.55	17.33	29.78
3 - 5	15.15	14.55	19.35	38.67	24.00
6-7	3.03	1.82	8.06	20.00	9.78
Maximum 8	0.00	0.00	0.00	0.00	0.00

Further analysis reveals that company size is significantly correlated (at the 1% significance level) with the disclosure of every item under this category (except quantitative environmental protection programmes). This finding is not surprising given that larger companies, which normally receive more attention, have the resources to provide this kind of information. Disclosing CSR information can also enhance corporate image and contribute to a competitive advantage. Proportion of non-executive directors on the board and the existence of role duality between chairman and CEO are also highly correlated with the disclosure of CSR information. They are found to be positively related to six out of eight items under this category. There are significant positive relationships between companies in the resources sector and the disclosure of six out of eight items under this category. The reason for the higher level of the disclosure of environmental information from resource companies may be due to their nature of business, which has a direct impact on the environment. Profitability is found to be significantly related to only one item (environmental policies) under this category. This is quite opposite to the expectation because highly profitable companies have the tendency to show that they have made a contribution to society, not just seeking their own profit.

The low level of CSR disclosure is not surprising, and it is consistent with the finding of Kuasirikun (1998), who examines annual reports of 63 Thai listed companies and finds the limited disclosure of social and environmental information. There seems to be room for improvement in this area of disclosure in Thailand. However, it is possible that Thai companies have paid more attention to responding to the government's call for enhanced corporate transparency and issues related to the economic situation. Therefore, the corporate social responsibility issue has not been the first priority for voluntary disclosure of Thai listed companies.

5.3.3.8 Financial Review

Most information in this category can be obtained easily from the financial statements, which make the processing cost of financial information considerably low. However, the decision to disclose the financial review might depend on other factors such as company performance, competitive disadvantage, or management perception. The average disclosure score for the financial review category is 44.51%, which is ranked third out of ten categories. The highest disclosed item was Profitability ratio (73.33%), and the lowest was Financial history (27.11%).

The disclosure of financial review showed signs of significant improvement in 2002 and 2005, as seen from Table 5-14, which shows that the percentage of companies that disclosed more than five items significantly improved in those years. The proportion of non-executive directors on the board may be particularly influential on the disclosure of the financial review. It is found to be significantly correlated (at the 1% significant level) with the disclosure of every item under this category, except for dividend payout information. None of the financial review items are related to profitability or leverage, which is quite opposite to the expectation.

Table 5-14: Frequency distribution of financial review items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	27.27	21.82	6.45	8.00	13.78
1 - 2	45.45	34.55	30.65	10.67	27.11
3 - 4	15.15	32.73	27.42	37.33	30.22
5 - 6	9.10	9.09	32.25	37.33	24.89
Maximum 7	3.03	1.82	3.23	6.67	4.00

5.3.3.9 Segmental Information

Segmental related information is regarded as being particularly important for Thai listed companies; therefore, most segmental information items are mandatory. After excluding the mandatory items, this category contains only two voluntary disclosure items. The voluntary disclosure score of segmental information is very low at an average of 11.78%, which is the lowest among all ten categories. The majority of companies did not disclose any items under this category in all four years. In addition, the disclosure scores did not improve much in 2002 and 2005.

Further analysis finds that the disclosure of market share analysis is positively related to foreign ownership (at the 1% significant level) and profitability (at the 5% significance level). Companies in the agro and food industry tend to disclose more market share analysis information. This might be due to the nature of their business which is quite competitive. The proportion of non-executive directors on the board is found to be positively related to the disclosure of competitor analysis (at the 1% significant level).

Table 5-15: Frequency distribution of segmental information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	100.00	90.91	77.42	72.00	82.22
1	0.00	5.45	14.52	20.00	12.00
Maximum 2	0.00	3.64	8.06	8.00	5.78

5.3.3.10 Market Information

The average disclosure score of marketing information is 19.64% which is the second lowest among all ten categories. The highest disclosed item was Distribution of shareholdings (49.33%). On the other hand, the three items least disclosed in this category were Share price trend (2.22%), Market capitalisation (3.56%), and Share price information (4.89%). These three disclosure items were ranked 55th, 56th, and 57th, respectively, from a total of sixty (see Table 5-4).

The scores indicate that companies were more willing to disclose information about the shareholdings (Domestic and foreign shareholdings, and Distribution of shareholdings). On the contrary, none of the companies disclosed information about market capitalisation, share price information, and share price trend in 1995, and less than 8% of companies disclose these items in later years. The low level of scores reinforces the view that these items were not considered as important as other types of information for disclosure in company annual reports. Also, the reason for not disclosing these items might be because such information can be obtained from alternative sources such as the Stock Exchange of Thailand website.

The frequency distribution of the items disclosed (Table 5-16) shows that nearly half of the sample (49.78%) did not disclose any market information at all. It can also be seen that the percentage of companies that did not disclose any items decreased in 2002 and 2005, with more companies disclosed one to two items. However, a very small number of companies disclosed more than three items in all four years.

Table 5-16: Frequency distribution of market information items disclosed

No. of item(s) disclosed	%				
	1995	1996	2002	2005	Total
0	72.73	67.27	43.55	32.00	49.78
1 - 2	27.27	27.27	54.84	60.00	45.77
3 - 4	0.00	5.45	0.00	4.00	2.67
Maximum 5	0.00	0.00	1.61	4.00	1.78

Further analysis finds that company size is positively related to the disclosure of every market related items, except for the disclosure of market capitalisation. The proportion of non-executive directors on the board is also significantly correlated with the disclosure of share price trend, distribution of shareholdings and foreign shareholdings. Foreign ownership seems to influence the disclosure of shareholding information, it is found to be positively with the disclosure of both shareholding related items (distribution of shareholdings and foreign shareholdings). In addition, the existence of role duality between chairman and CEO was also found to be negatively associated (at the 1% significant level) with the disclosure of these two items. Companies in the resources sector tend to have a higher level of disclosure for every item under this category.

5.4 Conclusion

Examination of voluntary disclosure in annual reports of companies selected for this study shows a range of disclosure levels from as low as 0.00 % to a maximum of 81.03 %. Further investigation into sub-categories of information revealed that information about economic environment and general corporate information were the highest disclosed categories. On the other hand, segmental, market related, and corporate social responsibility information were the least disclosed categories. The results show a significant improvement in voluntary disclosure of Thai listed companies in 2002 and 2005, especially for items related to the economic situation and corporate governance. This could be due to the response of companies to government campaigns to improve corporate transparency after the 1997 financial crisis. The positive changes in voluntary disclosure found in this study may raise expectation for governing entities that there is an improvement in the quality of financial reporting practices of Thai listed companies.

There seemed to be a substantial gap in the voluntary disclosure of each sub-category of information. Thai listed companies tend to provide information that is non-specific in nature. There is a relatively low level of quantitative information disclosure. Information associated with high cost, either information processing costs or competitive disadvantage cost, was not disclosed frequently. This may suggest that Thai listed companies are aware of the potential costs and benefits of making voluntary disclosure. Further analysis of the association between individual disclosure items and the explanatory variables indicates that voluntary disclosure of companies in the sample varied significantly according to company characteristics, which are mainly the proportion of non-executive directors on the board and company size.

The next chapter applies univariate and multivariate analyses to examine relationships between voluntary disclosure and company specific characteristics, financial attributes, corporate governance characteristics, and time factors.

Appendix 5-A: Correlations between explanatory variables and disclosure items

Item of Information	SIZ	PRO	LEV	OWN	BOA	FRN	AUD	CEO	IND1	IND2	IND3	IND4	IND5	IND6
Strategic information														
1. General information about the economic environment														
1.1 Information about the economy	.121*	.160**	-.023	.080	.401**	.229**	-.004	-.074	.087	-.005	.059	.092	.058	-.161*
1.2 Information about the industry	.122*	.109*	.010	.021	.279**	.083	-.004	-.097	.034	-.091	-.012	.092	.082	-.068
1.3 Specific factors influencing business	.088	.112*	-.016	.105	.269**	.088	-.042	-.052	.049	.089	.046	.052	.053	-.188**
2. General corporate information														
2.1 Brief history of company	-.062	-.020	-.116*	.033	.155**	.022	119	.031	.108	-.002	-.002	-.083	.004	.005
2.2 Corporate vision and mission	.141**	.038	-.086	.011	-.017	.041	011	-.048	.070	.030	.031	-.032	.109	-.145*
2.3 Organisational structure	.134*	-.015	-.010	-.064	.267**	.098	.077	-.082	.062	-.035	.010	.078	-.039	-.010
2.4 Financial highlight statement	.132*	.070	-.044	.065	.242**	.189**	-.068	-.093	.088	.027	.040	.064	.062	-.153*
2.5 Discussion on last year performance	142**	.012	028	.083	.303**	.162**	-.029	-.122	.109	.044	.028	.072	093	-.192**
2.6 Contact details of investor relations	.112*	.152**	-.110*	-.005	.557**	.114	.129	.045	017	-.046	.104	.000	049	-.086
3. Specific corporate information														
3.1 Statement of corporate goals or objectives	077	.041	-.017	.087	.236**	-.026	-.026	-.074	-.062	.086	.028	-.019	-.105	.024
3.2 General statement of corporate strategy	.049	.144**	-.018	.137*	.160**	.037	.003	-.057	.099	.070	.045	.034	-.029	-.119
3.3 Specific statement of strategy (financial)	239**	-.018	.008	.046	.234**	.154**	.065	-.164*	-.001	.050	.101	.060	.015	-.151*
3.4 Specific statement of strategy (marketing)	.176**	-.023	.034	.087	.011	.125*	.020	-.022	.061	-.006	.139*	-.015	.094	-.187**
3.5 Specific statement of strategy (social)	.246**	.103	.093	.049	.040	.118*	.059	-.022	.038	.040	.064	.177**	-.094	-.120
3.6 Discussion about acquisition and expansion	.012	-.060	049	-.046	.167**	.085	059	-.092	.074	-.165*	000	.047	.053	009
3.7 Discussion about disposal and cessation	.034	.038	-.027	-.023	.244**	.082	-.004	-.064	.010	-.102	.085	.060	.040	-.050
3.8 Corporate policy on research and development	.081	.043	-.113*	.154**	.089	.085	.080	-.107	139*	.197**	.090	-.050	-.058	-.171*
3.9 Significant events during the year	.111*	.079	.007	.096	.081	.082	.117	-.093	.094	.006	.148*	.076	-.005	-.187**
3.10 Overview of the major subsidiaries	.115*	.154**	-.011	.001	.270**	.112*	.026	-.026	.135*	.042	.053	.150*	-.124	-.121
3.11 Analysis of subsidiaries	.187**	.151**	-.017	.041	.250**	.150**	.019	-.113	.149*	.076	.066	.169*	-.110	-.165*
3.12 Analysis of products	054	.054	.024	-.054	.247**	.048	.000	-.052	.107	-.006	-.033	.018	.026	-.044
3.13 Improvement in product/service quality	.119*	.001	.038	-.062	.182**	.075	.058	-.164*	.162*	-.093	.079	.105	.025	-.148*
3.14 Analysis of capital projects	.090	.018	.011	.054	.115*	.046	-.039	-.082	.079	-.040	058	.142*	-.114	-.039
4. Future prospects														
4.1 Discussion of future industry trend	.162**	.088	-.023	-.016	.195**	.099	.063	-.069	.165*	-.015	.057	.047	-.033	-.089
4.2 New development	.026	.006	-.094	.075	.056	.024	-.004	-.086	.158*	.085	.039	.004	.047	-.173**

Item of Information	SIZ	PRO	LEV	OWN	BOA	FRN	AUD	CEO	IND1	IND2	IND3	IND4	IND5	IND6
4.3 Forecast of earnings/profits	.065	.059	-.026	-.029	.107	.026	-.011	.001	.050	.116	.004	-.089	-.079	.019
4.4 Forecast of cash flows	.041	-.046	.119*	-.003	-.086	-.040	-.041	-.064	-.024	.057	-.064	-.043	.209**	-.111
4.5 Future risks/Opportunities for the company	.032	.049	-.007	-.029	.126*	.023	.005	-.010	.066	-.005	-.048	-.007	.028	.008
Non-financial and social responsibility information														
5. Information about directors/management														
5.1 Other positions held by the directors in the company/affiliated companies	.087	.070	-.069	.001	.342**	.088	.009	.044	-.001	-.090	-.016	-.002	.087	.014
5.2 Other positions held by directors outside the company	.063	.040	.045	.059	.430**	.027	-.036	-.022	-.068	-.066	-.058	.123	.117	-.041
5.3 Shares held by directors	.169**	.084	.015	.024	.398**	.116*	.076	-.112	.063	-.068	.108	.112	-.029	-.100
5.4 Family connection between directors or between directors and senior management	.009	-.076	-.107	-.012	.256**	-.022	.013	.058	-.081	-.089	.187**	-.063	-.013	-.009
5.5 Function of operational managers	.133*	.056	-.069	.072	.216**	.012	.046	-.128	.056	-.019	-.034	.202**	.074	-.163*
6. Employee information														
6.1 Employees' appreciation	.082	-.068	.043	.071	-.036	.067	.005	-.056	-.021	079	-.055	.229**	-.052	-.096
6.2 Discussion of employee welfare	.102	.038	.059	-.010	.240**	.130*	147*	-.026	.010	037	.059	.052	.028	-.121
6.3 Corporate policy on human resources	.234**	.056	.060	.060	.137*	.084	.056	-.146*	-.037	.084	-.044	.090	.105	-.134*
6.4 Staff training	-.015	-.063	-.060	.063	.229**	.123*	-.059	.062	.049	.131*	.119	.057	.011	-.231**
6.5 Information about employee workplace safety	.229**	.052	-.028	.078	.157**	.119*	139*	-.143*	.064	.190**	-.044	.115	.003	-.179**
7. Corporate social responsibility information														
7.1 Statement of social responsibility	.286**	.061	.037	.117*	.212**	.037	.025	-.232**	.025	.070	.074	.228**	-.046	-.208**
7.2 Product safety	.174**	.071	.049	.152**	165**	.145**	118	-.161*	-.015	.046	.238**	.006	.270**	-.416**
7.3 Environmental policies	.269**	.113*	.021	.101	.187**	.105	003	-.205**	.270**	.170*	-.173**	.337**	-.102	-.187**
7.4 Environmental protection programmes (Qualitative)	.272**	.034	.032	.083	.132*	.091	.024	-.166*	.105	.246**	-.135*	.221**	-.090	-.148*
7.5 Environmental protection programmes (Quantitative)	.061	.044	-.032	.001	.016	.019	-.041	-.064	.170*	-.049	.024	.072	-.061	-.042
7.6 Charitable donation/sponsorships	.271**	.021	-.028	.074	.213**	.111*	.118	-.201**	.057	.019	.187**	.136*	-.074	-.198**
7.7 Participation in government campaigns/community programmes	.312**	.007	.051	.146**	.095	.112*	.071	-.244**	.103	.121	.111	.184**	-.017	-.293**
7.8 Social rewards/ achievement	.185**	.096	.049	.112*	.167**	.100	.025	-.104	.044	.024	.026	.210**	.000	-.170*
Financial information														
8. Financial review														
8.1 Review of current financial results and discussion of major factors underlying performance	.110*	.057	-.054	.055	.244**	.177**	-.051	-.066	.097	.018	-.006	.049	.061	-.107

Item of Information	SIZ	PRO	LEV	OWN	BOA	FRN	AUD	CEO	IND1	IND2	IND3	IND4	IND5	IND6
8.2 Financial history or summary (5+ years)	.071	.096	.075	-.129*	-.184**	.059	-.069	-.138*	.236**	.030	-.081	-.058	.125	-.095
8.3 Profitability ratios (4+ years)	.020	.067	-.078	068	.288**	.086	.035	-.046	.108	-.065	-.028	-.083	-.023	.108
8.4 Gearing ratios (4+ years)	.095	.015	.013	.015	.251**	.084	.054	-.027	.186**	-.068	-.042	-.018	.008	.023
8.5 Liquidity ratios (4+ years)	.088	-.052	-.052	.008	.171**	.109*	.070	-.045	.173**	-.040	-.012	-.064	.010	.010
8.6 Dividend payout/ Dividend per share (4+ years)	.007	-.005	-.072	.003	.067	.043	.006	-.005	.118	-.077	-.039	-.003	-.026	.070
8.7 Other ratios (4+ years)	.194**	.020	.025	.014	133*	.102	118	-.137*	.190**	-.033	.015	-.076	.066	-.056
9. Segment information														
9.1 Market share analysis	.016	.112*	-.077	-.004	.094	.153**	-.044	-.055	.187**	-.080	.061	-.061	.113	-.109
9.2 Competitor analysis	-.024	.018	-.066	.037	.195**	.064	009	.020	.007	.027	.059	.059	.004	-.101
10. Market related information														
10.1 Market capitalisation at year end	.067	.014	-.018	.026	.103	.028	.092	-.030	-.034	.006	-.028	.186**	-.022	-.060
10.2 Share price information	.139*	-.016	.005	.050	.077	.027	.039	-.056	-.041	-.017	.000	.211**	.008	-.103
10.3 Share price trend	.115*	046	-.035	.114*	.129*	.033	.049	-.072	-.027	.040	-.071	.263**	.013	-.124
10.4 Distribution of shareholdings	.364**	040	.101	.048	.202**	.168**	.027	-.222**	.130	-.162*	.179**	.172**	-.018	-.161*
10.5 Domestic and foreign shareholdings	.315**	.046	.070	.054	.244**	.121*	.030	-.189**	.070	-.141*	.197**	.125	.012	-.164*

** correlation significant at the 1% level (2-tailed) * correlation significant at the 5% level (2-tailed)

SIZ = market capitalisation
PRO = return on equity
LEV = long term debt to equity
OWN = ratio of total shares owned by top ten shareholders to total number of share issued
BOA = ratio of non-executive directors to total number of directors on the board
FRN = ratio of shares owned by foreigners to total number of shares issued
AUD = dummy variable, 1 if a company is audited by a Big Four auditor, 0 otherwise
CEO = dummy variable, 1 if the chief executive officer is also chairman of the board, 0 otherwise
IND1 = dummy variables, 1 if industry type is agro/food, 0 otherwise
IND2 = dummy variables, 1 if industry type is industrial, 0 otherwise
IND3 = dummy variables, 1 if industry type is technology, 0 otherwise
IND4 = dummy variables, 1 if industry type is resource, 0 otherwise
IND5 = dummy variables, 1 if industry type is service, 0 otherwise
IND6 = dummy variables, 1 if industry type is property and construction, 0 otherwise

CHAPTER 6

Univariate and Multivariate Analysis

6.1 Introduction

The objective of this chapter is to identify factors that are significantly associated with the variation in the level of voluntary information disclosed in corporate annual reports. The analysis is first conducted by examining the effect of each variable on the extent of voluntary disclosure (univariate analysis). Secondly, all the variables are incorporated in a regression model to determine their joint effect in explaining variation in the extent of voluntary disclosure among companies (multivariate analysis). In both types of analyses, a two-stage evaluation is carried out, the first to identify factors influencing overall voluntary disclosure. The investigation of factors affecting specific information disclosure (strategic, non-financial, and financial information) follows. The two-stage evaluation process helps in determining whether variables that are statistically significant or non-significant in the overall disclosure prove to be the same in specific information disclosures.

This chapter answers research question 2, 3, and 5 which are as follows:

Research question 2: To what extent did voluntary disclosures of Thai listed companies change over the period 1995 to 2005?

Research question 3: To what extent are aspects of company characteristics, financial attributes, and corporate governance related factors significant in explaining the extent of voluntary of Thai listed companies?

Research question 5: How are the variations in voluntary disclosure practices of Thai listed companies explained by relevant theoretical frameworks?

Research question 2 and 3 are answered by using the univariate and multivariate analyses to identify factors that are significantly associated with variation in the level of voluntary disclosure. In order to answer research question 2, time factors are included in the univariate and multivariate analyses. Research question 5 is answered by analysing and interpreting the outputs of the statistical results within the context of voluntary disclosure in Thailand and the relevant theoretical frameworks. The analysis is based on relevant theoretical frameworks and existing literature on corporate disclosure discussed in chapter 2 and the review of Thai financial reporting environment in Chapter 3.

Univariate analysis is presented in section 6.2, followed by the multivariate analysis in section 6.3. Comparison of univariate and multivariate results is reported in section 6.4. Section 6.5 presents the interpretation of results. Finally, a conclusion is provided in section 6.6.

6.2 Univariate Analysis

This section presents the results of univariate non-parametric analysis. Results are presented by reference to overall voluntary disclosure and also according to specific categories of voluntary disclosure (strategic, non-financial, and financial information).

6.2.1 Continuous Independent Variables

As mentioned in Chapter 4 (section 4.6), Kendall's rank correlation coefficient (tau) is applied in order to measure the association between voluntary disclosure and the continuous independent variables. Table 6-1 presents the results by reference to overall voluntary disclosure and also according to specific categories of voluntary disclosure. The descriptive statistics for the continuous independent variables included in this study are shown in Appendix 6-A.

Table 6-1: Correlations between continuous independent variables and voluntary disclosure

Measures	Overall	Strategic	Non-Financial	Financial
Market capitalisation (1-tailed)	.242** (.000)	.194** (.000)	.259** (.000)	.191** (.000)
Total assets (1-tailed)	.254** (.000)	.181** (.003)	.322** (.000)	.165** (.007)
Return on equity (2-tailed)	.093* (.038)	.114* (.012)	.058 (.211)	.054 (.247)
Debt to equity (2-tailed)	-.015 (.746)	-.038 (.407)	.002 (.957)	-.010 (.824)
% of non-executive directors (2-tailed)	.356** (.000)	.343** (.000)	.368** (.000)	.229** (.000)
% of shares owned by top ten shareholders (2-tailed)	.075 (.097)	.051 (.263)	.118* (.010)	.029 (.540)
% of foreign shareholding (2-tailed)	.181** (.000)	.181** (.000)	.140** (.002)	.157** (.001)

Statistically significant at the 1%** or the 5%* level

The bivariate statistical results for continuous independent variables and voluntary disclosure indices indicate that voluntary disclosure scores are significantly correlated with company size (measured by market capitalisation and total assets), proportion of independent non-executive directors on the board, and foreign ownership. These four variables provide a significant association at the 1% level for overall voluntary disclosure and also for all three information categories.

The results of the test also indicate that there is a positive association between profitability (measured by the return on equity) and the extent of voluntary disclosure. However, a significant association (at the 5% level) only exists in the case of overall and strategic information disclosure. There is a weak positive association between proportion of shares owned by the top ten shareholders and the extent of voluntary disclosure. Only non-financial information is found to be significantly related (at the 5% level) with the proportion of shares owned by the top ten shareholders. There seems to be no significant association between leverage (measured by the debt to equity) and voluntary disclosure either on overall scores or on specific information categories

Table 6-2 presents the correlations between continuous independent variables and overall voluntary disclosure separated by year. Company size seems to be the variable with the strongest association. It is significantly correlated (at the 1% level) with the extent of voluntary disclosure in all four years selected in this study. The results also indicate the existence of a positive association between foreign ownership and the extent of voluntary disclosure. However, the results are significant (at the 5% level) only in 2002 and 2005. Profitability provides a significant association at the 5% level in 2002 and 2005. However, while a negative association is seen in 2002, the result of 2005 shows a positive association. Leverage is significantly correlated (at the 5% level) with the extent of voluntary disclosure in 1996, but not in the other three years. The proportion of non-executive directors on the board and proportion of shares owned by the top ten shareholders are not significantly associated with the extent of voluntary disclosure in any year.

Table 6-2: Correlations between continuous independent variables and overall voluntary disclosure separated by year

Measures	1995	1996	2002	2005
Market capitalisation (1-tailed)	.341** (.003)	.247** (.004)	.271** (.001)	.286** (.000)
Return on equity (2-tailed)	-.127 (.311)	.129 (.168)	-.175* (.046)	.174* (.028)
Debt to equity (2-tailed)	.131 (.297)	.193* (.039)	.103 (.241)	.029 (.711)
% of non-executive directors (2-tailed)	.083 (.547)	.036 (.724)	-.165 (.068)	-.004 (.963)
% of shares owned by top ten shareholders (2-tailed)	.216 (.084)	.125 (.181)	-.003 (.971)	.058 (.467)
% of foreign shareholding (2-tailed)	.085 (.502)	.111 (.236)	.201* (.022)	.172* (.030)

Statistically significant at the 1%** or the 5%* level

6.2.2 Categorical Independent Variables

The Mann-Whitney U test and Kruskal-Wallis test were performed to determine whether the categorical variables included in this study have an impact on voluntary disclosure. The results are provided in Table 6-3 and Table 6-4.

Table 6-3: Mann-Whitney U test for categorical independent variables

Measure		N	Overall	Strategic	Non-financial	Financial
Role duality	With CEO duality (mean rank)	42	89.18	94.14	90.27	92.61
	Without CEO duality (mean rank)	183	118.47	117.33	118.22	117.68
	z-value Significance		-2.630 .009**	-2.082 .037*	-2.515 .012*	-2.264 .024*
Type of auditor	Big 4 (mean rank)	145	116.02	115.78	116.17	114.76
	Non-Big4 (mean rank)	80	107.53	107.97	107.25	109.81
	z-value Significance		-.936 .349	-.861 .389	-.987 .324	-.550 .583

Statistically significant at the 1%** or the 5%* level

It can be seen that companies with CEO/Chairman role duality disclosed significantly less ($p<0.05$) information than those without role duality in all categories of information, especially for overall voluntary disclosure where the result is significant at the 1% level. The results of Mann-Whiney U test show no statistically significant difference of voluntary disclosure between companies audited by the Big Four and non-Big Four audit firms.

It can be seen from Table 6-4 that type of industry is a significant factor in explaining variation of voluntary disclosure. The results are significant at the 1% level for overall voluntary disclosure, strategic information, and non-financial information disclosure; and significant at the 5% level for financial information disclosure. The results show that there is a consistency between the findings of each type of disclosure. Companies in the agro and food industry seem to have a higher level of voluntary disclosure in all types of information. On the other hand, companies in property and construction industry tend to disclose less voluntary information. The results for non-financial disclosure differ slightly from other types of disclosure in that companies in the resources sector seem to have the highest level of non-financial information disclosure.

Table 6-4: Kruskal-Wallis test for categorical independent variables

Measure		N	Overall	Strategic	Non-financial	Financial
Type of industry	Agro/Food (mean rank)	7	175.57	172.93	135.07	188.50
	Industrials (mean rank)	26	116.13	115.19	130.42	94.98
	Property/Construction (mean rank)	92	93.97	94.93	89.99	105.26
	Resources (mean rank)	21	140.45	133.90	155.81	119.52
	Services (mean rank)	38	116.78	117.57	116.83	119.88
	Technology (mean rank)	41	125.46	126.98	124.33	119.20
	Significance		.001**	.004**	.000**	.016*
Year	1995 (mean rank)	33	56.91	61.38	65.76	63.97
	1996 (mean rank)	55	63.39	67.28	60.28	83.07
	2002 (mean rank)	62	125.96	125.12	126.02	125.39
	2005 (mean rank)	75	163.35	159.22	161.68	146.28
	Significance		.000**	.000**	.000**	.000**

Statistically significant at the 1%** or the 5%* level

There is a highly significant difference (p=.000) in the means of voluntary disclosure scores among the four years. The results suggest that variation in voluntary disclosure could be particularly influenced from difference in time periods. Disclosure scores seem to improve continuously, especially in 2002 and 2005.

In summary, the univariate analysis shows a consistency in terms of direction of association between each variable and the extent of voluntary disclosure. The results indicate the existence of positive associations between company voluntary disclosure scores and size, foreign ownership, and proportion of independent non-executive directors on the board. The existence of CEO/Chairman role duality is negatively associated with voluntary disclosure scores. Type of industry and year are also observed to be significantly associated with voluntary disclosure. Profitability and ownership concentration seem to have some association with the disclosure scores, whereas, leverage and type of auditor show no significant association of these two variables to the disclosure scores.

6.3 Multivariate Analysis

The univariate analysis reported in the previous section only indicates the relationship between dependent variable and each of the independent variable; it cannot reflect the interrelationships among these variables in explaining variation in voluntary disclosure. On the other hand, multivariate analysis can take this process a step further, as it is capable of handling several explanatory variables simultaneously. In the multivariate analysis, the existence of other factors that might influence the outcome variable is taken into account. Different variables, which have been measured on different scales, can be included in the model. This allows variables that are best in explaining variations in the dependent variable be identified.

This section reports the results of multivariate analysis, which determines the collective impact of the explanatory variables in explaining variation in voluntary disclosure. An ordinary least squares (OLS) regression was employed in this study. The multiple regression analysis was conducted at two levels: aggregated and disaggregated levels. At the aggregated level, the total voluntary disclosure score was applied as the dependent variable in order to investigate the collective relationship between the independent variables and overall voluntary disclosure. This relationship was then investigated for each type of information at the disaggregated level. Therefore, the variables that explained variation of voluntary disclosure at the aggregated level were tested if they are also able to explain variation of voluntary disclosure at the disaggregated level.

6.3.1 Assumptions in Multiple Regression Analysis

An important part in using multiple regression analysis is that the assumptions are not violated. These assumptions involve no perfect multicollinearity between explanatory variables, uncorrelated residual terms, constant in the variance of the residual terms (homoscedasticity), normality of the residual terms, and linear relationship between the dependent and independent variables.

There are several techniques suggested by statisticians to detect multicollinearity. Therefore, four different multicollinearity tests were conducted in this study. Firstly, the correlations between all pairs of independent variables were examined through the correlation matrix (see Appendix 6-B). The rule of thumb for detecting multicollinearity problem is when the correlation coefficient exceeds 0.8 (Gujarati, 2003). Examination of the correlation matrix of the continuous independent variables indicates that the variables are not significantly correlated (the correlation coefficients are lower than 0.2 for all pairs of variables). However, a certain degree of multicollinearity may exist even when the correlation coefficient between independent variables is relatively low (Gujarati, 2003). Apart from the correlation matrix, multicollinearity was also assessed by using the variance inflation factor (VIF). A VIF value above 10 indicates the likelihood of a harmful degree of multicollinearity (Gujarati, 2003). In this study, VIF values of all independent variables are below 4.0, thus giving further support to the potentially low degree of multicollinearity in the regression model. Furthermore, the eigenvalues and condition index also suggest that multicollinearity should not be a point of concern for the existing data.

Regarding the assumptions of homoscedasticity, linearity, and normality, an analysis of residuals was conducted by a visual inspection of the plots of the regression standardised residuals. If the plot of the regression standardised residual against the predicted value looks like a random array of dots evenly dispersed around zero, it is an indication that the assumptions of linearity and homoscedasticity have been met (Field, 2009, pp.247-249). If the graph funnels out, there may be heteroscedasticity in the data, but if it is in the curve shape, there is a chance that the assumption of linearity might be broken (ibid.). To test the normality of residuals, the histogram of regression standardised residual should look like a normal distribution. The points symmetrically distributed around a diagonal line in the normal probability plot of regression standardised residuals also represent the normality of residuals (ibid.).

Normal probability plot of regression standardised residuals and scatterplot of the regression standardised residual against the predicted value are presented in Appendix 6-C. The scatterplot shows that the residuals appear to be randomly scattered around a horizontal line through zero. The observations also cluster around a straight line in the normal probability plot. Therefore, the graphs reveal that homoscedasticity, linearity, and normality assumptions are not violated.

Regarding the assumption of uncorrelated residual terms, the Durbin-Watson test for autocorrelation was undertaken. A Durbin-Watson value of 2 indicates that the residuals are uncorrelated (Field, 2009, p.220). A value close to 2 indicates less correlation between residuals (ibid.). The Durbin-Watson value for each model is shown in the regression result tables (Table 6-5 and Table 6-6). Generally, the figures are quite close to 2. Therefore, autocorrelation should not be a point of concern.

6.3.2 The Regression Model

The full regression model is shown as follows:

$$VDI = \beta_0 + \beta_1 SIZ + \beta_2 PRO + \beta_3 LEV + \beta_4 OWN + \beta_5 BOA + \beta_6 FRN + \beta_7 AUD + \beta_8 CEO + \beta_9 IND1 + \beta_{10} IND2 + \beta_{11} IND3 + \beta_{12} IND4 + \beta_{13} IND5 + \beta_{14} Y1996 + \beta_{15} Y2002 + \beta_{16} Y2005 + \varepsilon$$

Where:

VDI = voluntary disclosure index

SIZ = market capitalisation

PRO = return on equity

LEV = long term debt to equity

OWN = ratio of total shares owned by the top ten shareholders to total number of shares issued

BOA = ratio of non-executive directors to total number of directors on the board

FRN = ratio of shares owned by foreigners to total number of shares issued

AUD = dummy variable, 1 if a company is audited by a Big Four auditor, 0 otherwise

CEO = dummy variable, 1 if the chief executive officer is also chairman of the board, 0 otherwise

IND1 = dummy variables, 1 if industry type is agro/food, 0 otherwise

IND2 = dummy variables, 1 if industry type is industrial, 0 otherwise

IND3 = dummy variables, 1 if industry type is technology, 0 otherwise

IND4 = dummy variables, 1 if industry type is resources, 0 otherwise

IND5 = dummy variables, 1 if industry type is service, 0 otherwise

Y1996 = dummy variable, 1 if the year is 1996, 0 otherwise

Y2002 = dummy variable, 1 if the year is 2002, 0 otherwise

Y2005 = dummy variable, 1 if the year is 2005, 0 otherwise

β = regression coefficients

ε = error term

6.3.3 Regression Results

In order to find whether time factor influences voluntary disclosure practices, regression models using pooled data for all four years were run. The results are reported in section 6.3.3.1. In addition, separate multiple regressions for observations before (pooling data for years 1995 and 1996) and after (pooling data for years 2002 and 2005) the 1997 financial crisis were undertaken to find whether independent variables had the same influence on voluntary disclosure before and after the crisis. The results of separate multiple regressions for observations before and after the crisis are reported in section 6.3.3.2.

6.3.3.1 Pooled Regressions

Table 6-5 presents the pooled regression results for overall voluntary disclosure. The result based on untransformed data is also presented for comparison purposes. The model is significant (F = 23.043, p= .000) with an adjusted R squared of 61.2%. Therefore, approximately 61.2% of the variation in voluntary disclosure scores between companies can be explained by the variables included in this model.

In order to assess the contribution of each independent variable, the *BETA* value under standardised coefficients is referred to. The standardised coefficients provide a better insight into the importance of a predictor in the model because the coefficients are all converted to the same scale and are thus directly comparable (field, 2009 p.239). The dummy variables for years 2005 and 2002 tend to be the variables with the strongest association. They are not only significant at the 1% level, but also produce the highest *BETA* weight (*BETA* = .712 for 2005 and .459 for 2002). On the other hand, the dummy variable for 1996 is not significant in this model. With 1995 being used as baseline, the result indicates that the levels of voluntary disclosure in 2002 and 2005 are significantly higher than in 1995 and 1996.

Table 6-5 Pooled regression results for overall voluntary disclosure

	Untransformed data				Normal scores[a]			
Adjusted R^2	62.2%				61.2%			
F statistic	24.011				23.043			
Significance	.000				.000			
Std. Error	.115				.611			
Durbin-Watson	1.855				1.849			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.057		-.937	.350	-.884		-5.938	.000**
SIZ	.023	.189	4.066	.000**	.194	.194	4.013	.000**
PRO	-.007	-.022	-.295	.768	-.060	-.060	-1.318	.189
LEV	.000	.008	.112	.911	.066	.065	1.426	.155
OWN	.014	.012	.269	.788	.039	.039	.852	.395
BOA	.039	.032	.449	.654	.063	.060	.877	.381
FRN	.079	.076	1.644	.102	.087	.086	1.829	.069
AUD	.000	.001	.012	.990	-.023	-.011	-.246	.806
CEO	-.101	-.210	-4.715	.000**	-.507	-.202	-4.441	.000**
IND[b]								
= Agro&Food	.202	.187	4.344	.000**	1.068	.190	4.308	.000**
= Industrial	.085	.146	3.136	.002**	.394	.129	2.740	.007**
= Technology	.045	.092	1.807	.072	.192	.076	1.527	.128
= Resources	.104	.162	3.469	.001**	.492	.146	3.086	.002**
= Services	.050	.100	2.161	.032*	.221	.085	1.789	.075
YEAR[c]								
= 1996	.030	.069	1.167	.244	.102	.045	.748	.456
= 2002	.203	.484	6.295	.000**	1.004	.459	6.135	.000**
= 2005	.298	.750	8.812	.000**	1.479	.712	8.608	.000**

** significant at the 1% level.
* significant at the 5% level.
[a] dependent and continuous independent variables were transformed into normal scores
[b] property/construction industry is used as baseline
[c] year 1995 is used as baseline

The results also reveal that company size is associated with increase in voluntary disclosure. Company size measured by market capitalisation is significant at the 1% level. The dummy variable for the presence of CEO/Chairman role duality is significant at the 1% level with a negative coefficient. The negative signs imply that companies, in which the Chairmen and CEOs are the same person, disclose significantly less voluntary information in their annual reports. Using the property and construction industry as an omitted variable, all remaining types of industry have positive coefficients. This result implies that companies in the property and construction industry disclose less voluntary information than those in other industries, especially when compared with companies in agro and food, industrial, and resources industries, where the associations are found to be significant at the 1% level.

Foreign ownership is marginally significant (at the 10% level) with a positive coefficient in the normal scores regression, but it is not significant in the untransformed regression. Profitability, leverage, ownership structure, proportion of non-executive directors, and type of auditor are found to have no explanatory power in this model.

In order to verify the reliability of the size measure, the alternative model was run. The results are reported in Appendix 6-E. This model incorporates total assets as the measure of size. Company size measured by total assets is still significant at the 1% level. The results from alternative model confirm the significance of company size in explaining variation in voluntary disclosure.

The highest *BETA* weight of year dummy variables reported in Table 6-5 indicates that time factors might be important factors in explaining the variation in voluntary disclosures of Thai listed companies. Therefore, the effects of time have been investigated further by grouping the observations prior to (1995 and 1996) and after (2002 and 2005) the 1997 financial crisis. The model incorporating the crisis factor (dummy variable for the period of time before or after the 1997 financial crisis) as an independent variable is presented in Appendix 6-F. The results confirm the significance of time factors in explaining variation in voluntary disclosures; the crisis factor produces the highest *BETA* weight in this model.

The explanatory power (adjusted R squared) of the regression models in this study seems to be higher than in prior studies. However, the adjusted R squared of these models may not be comparable to previous studies that selected data from the same time period because the regression models in this study contain the data of four different time periods and time factors seem to be the most influential factors in explaining variation in voluntary disclosures. As discussed above, the time factors (year dummy variables and crisis factor) provide the highest contribution to the model. By using stepwise as a method for selecting variables into the model in the model incorporating the crisis factor as an independent variable, the crisis factor was selected at stage one of the stepwise regression. It is the most important variable, providing 67.1% of the explanatory power of the significant independent variables (see Appendix 6-G). The crisis factor alone can explain 38.3% of variation in voluntary disclosure. Similarly, by using stepwise as a method for selecting variables into the model in the model incorporating year dummy variables as independent variables, the year 2005 was selected at stage one of the stepwise regression, followed by 2002. Dummy variables for 2005 and 2002 provide 70.8% of the explanatory power of the significant independent variables. They can explain 42.9% of variation in voluntary disclosure. The high value of adjusted R squared of the regression model incorporating data from different time period is consistent with the finding of Sutthachai and Cooke (2009) who find a dramatic increase in the values of adjusted R squared after the year dummy variables were included in pooled regression models.

Table 6-6 presents pooled multiple regression results for voluntary disclosures of specific information categories. The models are also statistically significant (p= .000) for all three information types. However, the amount of explained variation in voluntary disclosure (adjusted R^2) ranges from 30.0% for financial information, to 48.0% for strategic information, to 63.0% for non-financial information. The results of voluntary disclosure of specific information tend to support those reported at the overall level. The regression models confirm size, industry type, year, and CEO/Chairman role duality as significant variables in explaining variation in voluntary disclosure across the information types.

Table 6-6 Pooled regression results for strategic, non-financial, and financial information disclosures: normal scores approach

	Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	48.0%				63.0%				30.0%			
F statistic	13.940				24.849				7.006			
Significance	.000				.000				.000			
Std. Error	.707				.580				.793			
Durbin-Watson	1.744				2.056				1.988			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.808		-4.691	.000**	-.843		-5.962	.000**	-.677		-3.505	.001**
SIZ	.138	.138	2.465	.015*	.205	.210	4.463	.000**	.138	.143	2.201	.029*
PRO	.003	.003	.064	.949	-.104	-.107	-2.405	.017*	-.075	-.078	-1.275	.204
LEV	.047	.047	.880	.380	.058	.059	1.317	.189	.027	.028	.450	.653
OWN	-.013	-.013	-.244	.807	.051	.053	1.175	.241	.078	.081	1.312	.191
BOA	.068	.064	.811	.418	.088	.085	1.276	.203	-.033	-.032	-.349	.728
FRN	.079	.078	1.441	.151	.076	.077	1.683	.094	.102	.105	1.654	.100
AUD	-.056	-.027	-.524	.601	.007	.004	.085	.932	-.032	-.016	-.269	.788
CEO	-.443	-.176	-3.356	.001**	-.419	-.171	-3.866	.000**	-.348	-.143	-2.351	.020*
IND[a]												
= Agro&Food	1.039	.185	3.627	.000**	.547	.100	2.322	.021*	1.112	.204	3.457	.001**
= Industrial	.464	.152	2.791	.006**	.623	.209	4.560	.000**	-.139	-.047	-.745	.457
= Technology	.304	.120	2.092	.038*	.210	.085	1.765	.079	.005	.002	.028	.978
= Resources	.374	.111	2.028	.044*	.807	.247	5.327	.000**	.068	.021	.327	.744
= Services	.224	.086	1.572	.117	.290	.114	2.477	.014*	.103	.041	.645	.520
YEAR[b]												
= 1996	.093	.041	.594	.553	-.016	-.007	-.122	.903	.279	.127	1.581	.115
= 2002	.877	.401	4.635	.000**	.857	.402	5.511	.000**	.944	.446	4.444	.000**
= 2005	1.338	.645	6.737	.000**	1.315	.651	8.060	.000**	1.203	.600	5.399	.000**

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] year 1995 is used as baseline

Similar to the pooled regression results of overall disclosure, the findings of all specific information categories confirm the significance of time factors in explaining strategic, non-financial, and financial disclosures. Year dummy variables for 2002 and 2005 are not only significant at the 1% level, but they also produce the highest *BETA* weight for all three specific categories of voluntary disclosure. In addition, the results of the model incorporating crisis factor as an independent variable (Appendix 6-F) also confirm that there are higher levels of voluntary disclosures of strategic, non-financial, and financial information after the 1997 financial crisis.

The explanatory power of company size in explaining variation in voluntary disclosure of specific information categories seems to be lower than that of overall disclosure. While company size measured by both market capitalisation and total assets is significant at the 1% level for overall disclosure, only market capitalisation is significant for all three specific information categories (at the 1% level for non-financial information and at the 5% level for strategic and financial information). It seems that company size measured by total assets is not significantly associated with strategic or financial disclosure (see Appendix 6-E). However, there is a significant association (at the 1% level) with non-financial disclosure.

6.3.3.2 Separate Regressions for Observations before and after the 1997 Financial Crisis

In order to test whether independent variables have the same influence on voluntary disclosure before and after the 1997 financial crisis, separate multiple regressions for the observations before and after the 1997 financial crisis are undertaken. The observations are segregated into two groups: before the crisis (pooling data for years 1995 and 1996), and after the crisis (pooling data for years 2002 and 2005). The results are presented in Table 6-7 and Table 6-8. The *F* values show the significance of the models for overall and specific categories of disclosure in both time periods (except for the model of financial disclosure after the crisis). However, the explanatory power (adjusted R squared) of the separate regression models is much lower than those of the pooled regressions reported in 6.3.3.1.

Similar to the pooled regressions, both before and after the crisis models confirm the significance of CEO/Chairman role duality in explaining variation in voluntary disclosure at both aggregated and disaggregated level. Company size, which was highly significant in the pooled regressions, is still significant in the models before the crisis (at the 1% level for overall and financial disclosure, at the 5% level for strategic disclosure, and marginally significant at the 10% level for non-financial disclosure). On the contrary, in the models after the crisis, size is only significant in the disclosure of non-financial information, but it is not significant in overall, strategic, and financial disclosures. Type of industry seems to have more influence on voluntary disclosure after the financial crisis. In the models after the crisis, more industry types tend to have significantly higher level of voluntary disclosures from the baseline industry (property and construction). Regarding the time factor, the year dummy variable is only significant with a positive coefficient (at the 5% level) for financial information disclosure, but not significant for overall, strategic, and non-financial disclosure in the models before the crisis. In contrast, the models after the crisis, year dummy variable is significant with positive coefficients (at the 1% level) for overall, strategic, and non-financial disclosures. This implies that the time factor still has influence on voluntary disclosure even in the separate analysis of the observations before and after the crisis.

Table 6-7: Regression results for observations before the 1997 financial crisis (normal score approach)

	Overall Disclosure				Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	32.6%				15.4%				25.4				41.9%			
F statistic	4.005				2.132				3.112				5.489			
Significance	.000				.019				.001				.000			
Std. Error	.628				.721				.630				.618			
Durbin-Watson	1.936				1.886				2.398				1.745			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.748		-2.883	.005	-.702		-2.356	.021	-.725		-2.789	.007	-.664		-2.601	.011
SIZ	.233	.320	2.975	.004**	.211	.283	2.348	.022*	.147	.211	1.868	.066	.237	.307	3.077	.003**
PRO	-.106	-.104	-.980	.330	-.084	-.080	-.679	.499	-.125	-.128	-1.156	.252	-.072	-.067	-.679	.499
LEV	.098	.116	1.121	.266	.041	.047	.409	.684	.135	.167	1.540	.128	.068	.075	.785	.435
OWN	.098	.128	1.178	.242	.050	.064	.530	.598	.139	.191	1.676	.098	.074	.092	.910	.366
BOA	-.012	-.007	-.073	.942	.008	.005	.044	.965	-.032	-.020	-.194	.847	-.060	-.034	-.369	.713
FRN	.122	.172	1.604	.113	.109	.149	1.247	.216	.119	.176	1.562	.123	.106	.141	1.416	.161
AUD	-.167	-.108	-1.010	.316	-.090	-.056	-.473	.637	-.215	-.145	-1.293	.200	-.143	-.087	-.877	.384
CEO	-.684	-.297	-3.051	.003**	-.580	-.246	-2.254	.027*	-.272	-.124	-1.212	.229	-.676	-.277	-3.068	.003**
IND[a]																
= Agro&Food	1.030	.246	2.324	.023*	1.110	.259	2.183	.032*	-.094	-.024	-.212	.832	1.766	.398	4.052	.000**
= Industrial	.200	.087	.852	.397	.197	.084	.733	.466	.541	.247	2.300	.024*	-.168	-.069	-.727	.469
= Technology	.095	.047	.402	.689	.059	.028	.216	.830	.213	.111	.895	.374	.109	.051	.465	.643
= Resources	.142	.056	.542	.589	.028	.011	.092	.927	.505	.211	1.929	.058	.091	.034	.355	.724
= Services	.174	.086	.860	.393	.133	.064	.573	.569	.127	.066	.625	.534	.287	.134	1.439	.155
YEAR[b]	.086	.055	.596	.553	.090	.056	.539	.592	-.056	-.037	-.384	.702	.287	.172	2.014	.048*

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] dummy variable, 1 if the year is 1996, 0 if the year is 1995

Table 6-8: Regression results for observations after the 1997 financial crisis (normal score approach)

	Overall Disclosure				Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	38.2%				25.0%				50.5%				1.6%			
F statistic	7.010				4.239				10.905				1.153			
Significance	.000				.000				.000				.320			
Std. Error	.608				.709				.548				.875			
Durbin-Watson	1.832				1.744				1.822				1.970			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.022		-.162	.871	-.047		-.299	.766	-.093		-.773	.441	.151		.784	.434
SIZ	.133	.161	1.906	.059	.057	.065	.704	.483	.221	.265	3.514	.001**	.044	.046	.435	.665
PRO	-.044	-.062	-.838	.404	.044	.057	.702	.484	-.102	-.142	-2.139	.034*	-.079	-.097	-1.036	.302
LEV	.017	.022	.282	.778	.021	.026	.300	.765	.026	.033	.479	.633	-.050	-.057	-.588	.558
OWN	-.005	-.006	-.080	.937	-.065	-.077	-.939	.350	.022	.027	.407	.685	.045	.050	.532	.596
BOA	.045	.039	.514	.608	.042	.035	.418	.677	.142	.122	1.806	.073	-.091	-.069	-.722	.471
FRN	.090	.101	1.314	.191	.113	.120	1.415	.160	.056	.063	.915	.362	.083	.082	.842	.402
AUD	.078	.048	.611	.543	-.078	-.045	-.520	.604	.140	.085	1.214	.227	.192	.102	1.041	.300
CEO	-.416	-.226	-3.054	.003**	-.374	-.191	-2.351	.020*	-.432	-.233	-3.526	.001**	-.244	-.116	-1.247	.215
IND[a]																
= Agro&Food	.989	.216	2.929	.004**	1.003	.207	2.544	.012*	.860	.187	2.824	.006**	.496	.095	1.019	.310
= Industrial	.499	.202	2.600	.010*	.681	.260	3.037	.003**	.576	.232	3.328	.001**	-.125	-.045	-.453	.651
= Technology	.256	.130	1.576	.118	.506	.243	2.670	.009**	.168	.085	1.146	.254	-.092	-.041	-.394	.694
= Resources	.775	.284	3.431	.001**	.664	.230	2.516	.013*	.870	.317	4.273	.000**	.221	.071	.678	.499
= Services	.273	.133	1.699	.092	.306	.140	1.630	.106	.357	.172	2.463	.015*	.048	.021	.209	.835
YEAR[b]	.486	.314	4.151	.000**	.500	.305	3.658	.000**	.413	.265	3.915	.000**	.276	.157	1.639	.104

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] dummy variable, 1 if the year is 2005, 0 if the year is 2002

6.4 Univariate and Multivariate Results

Table 6-9 summarises the statistical results of univariate and multivariate analyses (based on pooled observations). Multivariate and univariate results, when compared, are not substantially different. Both univariate and multivariate results support year, CEO/Chairman role duality, company size, and industry type as significant factors in explaining variation in voluntary disclosure, and the results are also significant in all three specific information categories. There is also agreement between two analyses with respect to the non-significance of leverage, ownership structure, and type of auditor, except for the disclosure of non-financial information, where ownership structure is significant at the 5% level in the univariate analysis.

Table 6-9: Univariate and Multivariate Results

Variable	Sign observed /Significance level							
	Overall		Strategic		Non-Financial		Financial	
	Univariate	Multivariate	Univariate	Multivariate	Univariate	Multivariate	Univariate	Multivariate
SIZ	(+)**	(+)**	(+)**	(+)*	(+)**	(+)**	(+)**	(+)*
PRO	(+)*	×	(+)*	×	×	(-)*	×	×
LEV	×	×	×	×	×	×	×	×
OWN	×	×	×	×	(+)*	×	×	×
BOA	(+)**	×	(+)**	×	(+)**	×	(+)**	×
FRN	(+)**	×	(+)**	×	(+)**	×	(+)**	×
AUD	×	×	×	×	×	×	×	×
CEO	(-)**	(-)**	(-)*	(-)**	(-)*	(-)**	(-)*	(-)*
IND								
Agro/food	(+)**	(+)**	(+)**	(+)**	(+)**	(+)*	(+)*	(+)**
Industrial	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**	(+)*	×
Technology	(+)**	×	(+)**	(+)*	(+)**	×	(+)*	×
Resource	(+)**	(+)**	(+)**	(+)*	(+)**	(+)**	(+)*	×
Service	(+)**	(+)*	(+)**	×	(+)**	(+)*	(+)*	×
YEAR	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**

Statistically significant at the 1%** or the 5%* level
× not statistically significant, + positive relationship, - negative relationship

Disagreement occurs between univariate and multivariate results with respect to the variable for profitability, proportion of non-executive directors, and foreign ownership. Proportion of non-executive directors and foreign ownership are found to be significant at the 1% level for all types of disclosure in the univariate analysis, but they are found to be insignificant in the regression analysis (foreign ownership is marginally significant at the 10% level in the regression analysis of overall and non-financial disclosures). This suggests that other variables are more significant in influencing voluntary disclosures, when all variables are considered simultaneously in one regression run. The direction of association in respect of profitability is not consistent. It is significant at the 5% level with positive coefficients by the univariate test for overall and strategic information, but not significant by multivariate tests, except for non-financial disclosure, where it is significant at the 5% level with a negative coefficient. Given that the multivariate analysis takes into account the interrelationship among all variables in explaining variation in the dependent variable, it might be considered as providing more reliable results than the univariate analysis.

6.5 Interpretation of Results

This section interprets the results of statistical analysis within the context of the Thai business environment. Comparison is made to prior studies and the theoretical framework previously discussed in Chapter 2.

6.5.1 Company Specific Characteristics

The univariate and multivariate results indicate that company specific characteristics, which are significantly associated with voluntary disclosure in the case of Thai listed companies, are size and industry type. Type of auditor is not significant in either univariate or multivariate analyses.

6.5.1.1 Size

The univariate results indicate existence of a positive association between company size and voluntary disclosures at both aggregated and disaggregated level. In the multivariate analysis, size is also found to be an important factor in explaining variation in voluntary disclosures, especially in the pooled regressions, where it is significant in explaining overall disclosure and all three specific information categories.

In order to investigate the consistency between different measures of size, total assets were applied in the univariate and multivariate analyses. Company size measured by total assets is also significant in the univariate analysis for overall and all three specific information categories. However, while being significant in explaining overall and non-financial disclosures, it is not significant in explaining strategic and financial information disclosures in the multivariate analysis. Therefore, market capitalisation is better able to capture variation in voluntary disclosure when compared to total assets.

In the separate regressions for observations before the 1997 financial crisis, size is found to be significant in explaining variation in voluntary disclosures at both aggregated and disaggregated level (except for non-financial information, where size is marginally significant at the 10% level). However, after the crisis, size is no longer a significant determinant of the variation in strategic and financial information disclosure, and it only marginally associates (at the 10% level) with overall voluntary disclosure. Nevertheless, it is found to be one of the most important factors in explaining variation in non-financial information disclosure. The results imply that the significance of size in explaining non-financial disclosure seems to occur after the crisis. This is different from before the crisis, where a majority of companies, including large companies, did not pay much attention to the disclosure of non-financial information, as can be seen from relatively low disclosure scores under this category (see section 5.3.1). The non-significance of company size in explaining variation in strategic and financial information after the crisis is probably due to the fact that a majority of companies, no matter what their size, tend to enhance their disclosures under these two categories in response to the financial crisis. This results in less dissimilarity between large and small companies in the disclosure of strategic and financial information. However, this change does not occur in the case of non-financial information disclosure, where the disclosure still depends largely on the size of companies.

The significance of company size as a determinant of voluntary disclosure is consistent with the vast majority of prior research in both developed capital market (for example, Firth, 1979; McNally *et al.*, 1982; Cooke, 1989a, 1991; Hossain *et al.*, 1995; Raffournier, 1995; Depoers, 2000; Patelli and Prencipe, 2007) and emerging capital market (for example, Chow and Wong-Boren, 1987; Hossain *et al.*, 1994; Haniffa and Cooke, 2002; Eng and Mak, 2003; Barako *et al.*, 2006; Huafang and Jianguo, 2007). Prior studies in Thailand reported conflicting results with regard to company size. Priebjrivat (1991) finds positive association between size and corporate disclosures of Thai listed companies, but the results are not statistically significant. In more recent studies, while Sutthachai and Cooke (2009) find significant positive association between size and level of disclosures (mandatory and voluntary), Suphakasem (2008) finds no association between size and corporate governance disclosure of Thai listed companies.

The significance of company size in explaining variability in voluntary disclosure for specific types of information (strategic, non-financial, and financial information) is consistent to the findings of Ferguson *et al.*, (2002) and Leventis and Weetman (2004). However, other studies (for example Meek *et al.*, 1995; Chau and Gray, 2002; Mohd Ghazali and Weetman, 2006) found that size is only significant in some specific types of information.

The results indicated the relative applicability of several theoretical propositions, including agency, capital need, political cost, and information costs. Larger companies with greater need for external capital may use additional disclosure as a way to reduce agency costs arising from information asymmetry. Lower cost factors could also be the reason for the higher level of disclosure from larger companies. Larger companies tend to have lower information production costs, due to the economies of scale and possibly own information for their internal purposes. In addition, they may have lower costs of competitive disadvantage and opportunity costs related to disclosure (Meek *et al.*, 1995).

Market pressures and greater demand for information from institutional shareholders, international capital providers, and financial analysts might also be the reason for a higher disclosure level from larger companies. Consistent with the capital need theory, responses to the need for information could attract potential investors and at the same time fulfil the demands of existing investors.

The results imply that disclosure of non-financial and corporate social responsibility information of Thai listed companies still depends largely on the size of companies. The impact of operations, together with social position and public image, may influence large companies in the decision to disclose additional information. The significant positive association between company size and social responsibility information has been reported in prior studies (for example, Meek *et al.*, 1995; Ferguson *et al.*, 2002; Leventis and Weetman, 2004).

6.5.1.2 Type of Industry

Results concerning the impact of industry type on voluntary disclosure suggest that differences exist among the six industry types in the extent to which each industry disclosing its information. Industry type was identified by both univariate and multivariate analyses as a significant variable in explaining variation in the extent of voluntary disclosure in overall as well as specific information categories. The results indicate that the property and construction industry is significantly associated with a lower level of disclosure. Using the property and construction industry as an omitted variable in the multiple regressions, the remaining types of industry are significant with positive coefficients. A possible explanation for this finding is that companies in the property and construction industry are obliged by Thai accounting standards to disclose a great deal of specific information. Legal obligation to disclose very detail of their operation might discourage property and construction companies to disclose additional information. In addition, the majority of companies in this sector were severely damaged from the financial crisis. The main focus of these companies might be on survival rather than improvement in disclosures.

The univariate and multivariate results also reveal that type of industry is related to variability in the disclosure of specific categories of information. However, there is less variation in the disclosure of financial information across industry groups. This might be due to the nature of financial information which has a similar format that companies from every industry tend to disclose their information in the same way. In the separate regressions for observations before and after the 1997 financial crisis, type of industry seems to have more influence on voluntary disclosures after the crisis. In the post crisis models, more industry types tend to have a significantly higher level of voluntary disclosures than the baseline industry (property and construction).

The significance of industry type in explaining variation in disclosure found in this study seems to contradict previous studies in Thailand. Suphakasem (2008) finds weak and insignificant influence of industry type on corporate governance disclosure of Thai listed companies. Sutthachai and Cooke (2009) report a mixture of positive and negative impact of each industry type over the years studied.

The finding of lower level of voluntary disclosure from property and construction companies contradicts Haniffa and Cooke (2002), who find that Malaysian companies in all sectors have a lower level of voluntary disclosure than property and construction companies. The significance of industry type in explaining specific categories of information is in contrast to the finding in a study by Chau and Gray (2002) and Ferguson *et al.*, (2002). Chau and Gray (2002) find no association between type of industry and voluntary disclosure of Hong Kong and Singaporean listed companies (overall, strategic, financial, and financial information). Ferguson *et al.*, (2002) find that the industry type is not significantly related to overall, strategic, and non-financial disclosure, but it is marginally related (at the 10% level) to the disclosure of financial information.

The results suggest that companies in the resources sector provide more non-financial information. The dummy variable for the resources sector in the disclosure of non-financial information is significant with the highest coefficient in the regression (see Table 6-6). The mean score of resources sector for non-financial information disclosure in the univariate analysis is also the highest among the six industry types (see Table 6-4). The higher level of disclosure of non-financial information for companies in resources sector suggests that these companies tend to be more sensitive to social accountability issues. This might be due to their nature of business, which has a direct impact on the environment and society. Most of the companies in this sector operate under government concessions with the close monitoring. Therefore, companies in the resources sector are more politically sensitive than other sectors. Voluntary disclosure could be a solution for reducing potential political costs or government intervention (Gray and Roberts, 1989; Lim and McKinnon, 1993). Voluntary disclosure may also help companies to discharge their social accountability (Elliott and Jacobson, 1994). The significant positive association between resources companies and disclosure of non-financial information is consistent with Meek *et al.* (1995). This is also in line with political cost and legitimacy theoretic framework (see section 2.6.4 and 2.6.5).

In summary, the impact of industry type on voluntary disclosure found in this study is relatively stronger and more consistent across information types when compared to previous studies. Type of industry seems to be a significant determinant of variation in the voluntary disclosure of Thai listed companies, especially in the period after the 1997 financial crisis.

6.5.1.3 Type of auditor

The results from both univariate and multivariate analyses show no association between type of auditor and voluntary disclosure. Type of auditor is found to have no explanatory power, for either overall or subcategories of disclosure. A possible explanation for this finding is that voluntary disclosure is an arbitrary decision of the company itself. Therefore, auditors tend to have little or no influence on it, as it is beyond the scope of their responsibility. In addition, strict criteria from the SEC for the eligibility of audit firms to audit listed companies could lessen the gap between local and Big Four auditors.

The non-significance of auditor type in explaining variation in corporate disclosure is consistent with the vast majority of prior studies in both developed capital markets (for example, McNally *et al.*, 1982; Malone *et al.*, 1993, Wallace *et al.*, 1994; Hossain *et al.*, 1995; Camfferman and Cooke, 2002) and emerging capital markets (for example, Hossain *et al.*, 1994; Owusu-Ansah, 1998b; Chen and Jaggi, 2000, Haniffa and Cooke, 2002; Gul and Leung, 2004; Barako *et al.*, 2006). Chau and Gray (2002) find no association between type of auditor and voluntary disclosure of specific information (strategic, non-financial, financial, and total disclosure) for Singaporean and Hong Kong listed companies. However, the lack of significance of auditor type is opposite to the findings of Inchausti (1997), Wallace and Naser (1995), and Hossain and Taylor (2007), who find that type of auditor is significantly associated with the extent of corporate disclosure.

In the context of Thai studies, Priebjrivat (1991) finds that type of auditor is significantly associated with the semi-voluntary disclosure of Thai listed companies. However, the results are not significant in the case of mandatory and purely-voluntary disclosure. In a more recent study, Sutthachai and Cooke (2009) find a significant association between type of auditor and mandatory disclosure, but the results are not consistent among all models included in their study. Sutthachai and Cooke (2009) find no significant relationship between type of auditor and the extent of voluntary disclosure. Therefore, non-significance of type of auditor in explaining voluntary disclosure in this study is consistent with prior studies in Thailand. This finding supports the idea that voluntary disclosures of Thai listed companies do not differ between companies that use services of local or Big Four auditors.

6.5.2 Financial Attributes

The results from univariate and multivariate analyses show some association between profitability and the voluntary disclosure level. However, the sign of the coefficients associated with this variable did not provide a clear indication of the direction of the relationship between profitability and voluntary disclosure. There seems to be no significant association between leverage and voluntary disclosure.

6.5.2.1 Profitability

Prior studies report mixed results for the relationships between profitability and corporate disclosure. Therefore, no expectation was formed regarding the direction of the association. The univariate and multivariate results show that there is some association of profitability with the extent of voluntary disclosure. However, the level of association tends to be small and the sign of the coefficients associated with this variable did not provide a clear indication of the direction of the relationship between profitability and voluntary disclosure.

According to the capital market theoretical proposition, the inconsistent relationship between profitability and the extent of voluntary disclosure is possible. Companies may disclose more information voluntarily either when they have good news in order to attract investors or when they have bad news in order to inform investors of their financial status. It is also possible that companies voluntarily disclose other types of information as a way to draw attention from press and investors away from their bad performances. This might explain the significant negative association (at the 5% level) between profitability and non-financial information disclosure in the pooled regression and the model after the financial crisis.

The weak association between profitability and the level of disclosure, especially for financial information, is opposite to the expectation. This seems to contradict the signalling theory based hypothesis that companies with better performance are inclined to disclose additional information in order to signal their superior performance. Nonetheless, a number of prior studies also find that profitability is not significantly associated with the extent of disclosure in company annual reports (for example, Mcnally *et al.*, 1982; Meek *et al.*, 1995; Inchausti, 1997; Ho and Wong, 2001a; Chau and Gray, 2002; Eng and Mak, 2003; Leventis and Weetman, 2006; Hossain and Taylor, 2007). With regard to the direction of the association between profitability and level of disclosure, previous studies show conflicting results. While some studies (for example, Tauringana, 1997; Owusu-Ansah, 1998b; Haniffa and Cooke, 2002; Naser *et al.*, 2002) find a positive relation, other studies (for example, Wallace and Naser, 1995; Chen and Jaggi, 2000; Camfferman and Cooke, 2002) report a negative association.

The finding of weak association between profitability and voluntary disclosure is consistent with prior studies on Thai listed companies. Sutthachai and Cooke (2009) find a weak and inconsistent relationship between profitability and the extent of disclosure. Priebjrivat (1991) and Suphakasem (2008) find profitability as having no explanatory power on the disclosure of Thai listed companies.

6.5.2.2 Leverage

The results from both univariate and multivariate analyses indicate that there is no association between leverage and voluntary disclosure levels. Leverage is found to have no explanatory power, for either overall or specific categories of disclosure. This suggests that gearing level is unlikely to influence company disclosure policy. A possible explanation for this finding could be the vital role of financial institutions, particularly banks, as the source of funding for business. Most Thai companies rely significantly on credit from banks, and companies tend to create their personal relationship and business networks with the banks (Thanapornpun, 2002). Therefore, information from company annual reports is unlikely to be a major source of information for the creditors, since they are able to obtain the required information directly from the companies. This could lessen the need to reduce agency costs of debt through voluntary disclosure. The result also implies that the role of corporate disclosure in raising capital of Thai listed companies has not been fully recognised by the management.

The non-significance of leverage has been documented in prior studies (Chow and Wong-Boren, 1987; Raffournier, 1995; Wallace and Naser, 1995; Inchausti, 1997; Depoers, 2000; Ho and Wong, 2001a; Haniffa and Cooke, 2002; Gul and Leung, 2004; Huafang and Jianguo, 2007). This is also consistent with previous studies in Thailand (Priebjrivat, 1991; Suphakasem, 2008; Sutthachai and Cooke, 2009).

6.5.3 Corporate Governance

The existence of CEO/Chairman role duality is identified by both univariate and multivariate analyses as being significantly related to voluntary disclosure levels. However, foreign ownership and proportion of non-executive directors on the board are only significant in the univariate analysis and ownership concentration is not significant in either univariate or multivariate analyses.

6.5.3.1 CEO/Chairman Role Duality

In the Thai context, CEO/Chairman role duality is quite common among listed companies. Due to a family business background, many Chairmen and CEOs are members of families who owned such companies before listed on the SET. The 15 principles of good corporate governance issued by the SET in 2002 give listed companies freedom to combine or separate the roles of Chairmen and CEOs. In this study, CEO/Chairman role duality exists in the samples both before and after the 1997 financial crisis.

The results from univariate and multivariate analyses tend to support strong significance for CEO duality in explaining variation in voluntary disclosures. CEO duality is consistently significant with a negative coefficient for all types of information disclosure. It is also significant in separate regression models for observations before and after the financial crisis. This implies that companies with CEO duality tend to have a lower level of voluntary disclosures. A significant and negative association between CEO duality and voluntary disclosure is also documented in prior study (Gul and Leung, 2004; Huafang and Jianguo, 2007). This result provides support for the agency theory based hypothesis that separation of the roles of CEOs and chairmen will help to enhance monitoring quality, which may consequently result in improvements in disclosure (Forker, 1992). Separation of the roles provides checks and balances mechanism over management performance (Haniffa and Cooke, 2002), which could help to reduce agency costs.

6.5.3.2 Independent Non-Executive Directors

In Thailand, there are many listed companies in which directors and management came from families who owned these businesses before they were listed on the SET. Therefore, the role of independent non-executive director in monitoring activities is crucial. Furthermore, after the 1997 financial crisis, independent non-executive directors played an important role in regaining confidence from shareholders and investors. The independence of boards from management is consistent with the agency theory. It could help monitor management performance and limit managerial opportunism (Fama and Jensen, 1983).

Results from univariate analysis show that the proportion of independent non-executive directors on the board is significant at the 1% level for all types of disclosure. The sign is positive, confirming the complementary effect between proportion of independent non-executive directors on the board and voluntary disclosure. However, this variable is not significant in the regression analysis. There seems to be no difference between the results for observations before and after the 1997 financial crisis; board independence is not significant in the regression models in both time periods. Despite the importance placed on independent directors as suggested in the 15 principles of good corporate governance, proportion of independent directors on the board does not seem to have much impact on voluntary disclosures of Thai listed companies. The possible explanation for the lack of significance of board independence in this study could results from the effect of Thai culture which is relationship oriented. This exceptional characteristic might affect the *'real'* independence of non-executive directors. There is a possibility that controlling owners would appoint persons within their social connections of family, friends, classmates, and colleagues as non-executive directors.

Significant positive association between proportion of independent non-executive directors and the extent of voluntary disclosures in annual reports has been documented in previous studies (Adams and Hossain, 1998; Patelli and Prencipe, 2007; Huafang and Jianguo, 2007). On the other hand, some previous studies (Eng and Mak, 2003; Gul and Leung, 2004; Barako *et al.*, 2006) find support for substitutive relationship, which means that independent non-executive directors are a cost-efficient substitute for information disclosure. Non-significant association between the existence of independent non-executive directors and voluntary disclosures has also been reported in the empirical studies (for example, Ho and Wong, 2001a; Haniffa and Cooke, 2002; Mohd Ghazali and Weetman, 2006). In the Thai context, there is limited empirical evidence on the impact of board independence in explaining corporate disclosures. With one exception is the study by Suphakasem (2008) who finds a significant positive relationship between board independence and corporate governance disclosure of Thai listed companies.

6.5.3.3 Ownership Concentration

Ownership concentration is not significant in both univariate and multivariate analyses at both aggregated and disaggregated level, except for non-financial information disclosure where it is significant with a positive coefficient at the 5% level in the univariate analysis. The positive association contradicts the agency theory based hypothesis in that voluntary disclosure can help to reduce agency costs when shareholdings become more dispersed (Hossain *et al.*, 1994). However, the significant positive association between ownership concentration and voluntary disclosure is consistent with the findings of Haniffa and Cooke (2002) and Barako *et al.* (2006).

For overall, strategic, and financial information disclosure, ownership concentration is found to have no explanatory power, in either the univariate or multivariate analysis. The results of insignificance of ownership concentration in explaining disclosure in annual reports are similar to those found in either developed (Lutfi, 1989; Depoers, 2000) or emerging capital markets (Mohd Ghazali and Weetman, 2006).

A possible reason for the weak association between ownership concentration and voluntary disclosure might be due to the measurement of ownership concentration. In some cases, the top ten shareholders acquired from the SET database may not reflect the real ownership concentration. Shareholding structures in many companies are quite complex. For example, a company could be owned by a number of corporate shareholders that have the same ultimate owner. In this case, ownership by the company's controlling shareholder applied in the analysis is likely to be underestimated.

In the Thai context, Sutthachai and Cooke (2009) find that ownership concentration is not significantly related with the extent of voluntary disclosure. In contrast, Priebjrivat

(1991) finds significant negative association between ownership concentration and the level of voluntary disclosure.

6.5.3.4 Foreign Ownership

Proportion of foreign shareholding seems to have a certain amount of influence on voluntary disclosure of Thai listed companies. It is significant at the 1% level, with a positive coefficient for overall disclosure, as well as the three specific information categories in the univariate analysis. The multivariate results also indicate that there is a positive association between foreign ownership and the extent of voluntary disclosure. However, the level of association tends to be small and not significant at the 5% level.

Previous studies report mixed results with respect to foreign ownership. Haniffa and Cooke (2002), Barako *et al.* (2006), and Huafang and Jianguo (2007) find significant positive association between voluntary disclosure and foreign ownership. This finding supports the argument that obtaining foreign funds results in a higher need for disclosure in order to monitor actions by management (Haniffa and Cooke, 2002). Generally, foreign shareholders would expect that the disclosure level of companies in which they have invested be at least comparable to the standard in their home country. On the contrary, Naser *et al,* (2002) find no significant association between foreign ownership and corporate information disclosures. The probable reason that could help explain the non-significant association between foreign ownership and level of disclosures is that foreign shareholders, who are mostly institutional investors, might obtain the information directly from the companies. Another possible reason might be the fact that foreign investors do not pay much attention to disclosures in annual reports, which are generally historical and untimely for decision making purposes.

Although foreign ownership is the important characteristic of Thai business, it has not been included in prior corporate disclosure studies. The results from this study provide support for the influence of foreign ownership on voluntary disclosure practices of Thai listed companies. It might be of interest to investigate this factor further in the Thai context in order to obtain more insightful information on the effect of foreign ownership on Thai business operations.

6.5.4 The 1997 Financial Crisis

The results generally show increases in voluntary disclosure levels after the 1997 financial crisis. The univariate analysis result (Kruskal-Wallis test) shows that there is a highly significant difference (p=.000) in the mean of voluntary disclosure scores among the four years. Similarly, the time factors (year dummy variables and crisis factor) provide the highest contribution to the regression models. The high-significance of time factors helps to explain the high value of adjusted R squared in most of regression models in this study. The results of specific information disclosures also confirm the significance of time factors in explaining strategic, non-financial, and financial disclosures. The time factors seem to have influence on voluntary disclosure even in the separate regressions for observations before and after the 1997 financial crisis. The finding of a higher level of voluntary disclosures after the financial crisis is consistent with Jaikengkit (2002), who discusses the development of Thai financial reporting and predicts that transparency and high quality of disclosure will be recognised and practiced by Thai listed companies.

During the four years selected, the business environment in Thailand has changed dramatically, especially after the 1997 Asian financial crisis. The results provide support that financial reporting practice may follow these changes. Apart from the economic disturbance, which may have an impact on disclosure practices, improvement in voluntary disclosure could come from company response to several government initiatives that promote good corporate governance (see Section 3.6). In order to sustain their business during the crisis, companies themselves also use voluntary disclosure as a way of communicating to the public and regaining confidence following the major financial crisis.

6.6 Conclusion

The results from univariate and multivariate analyses tend to support a strong significance of size, industry type, and CEO/Chairman role duality in explaining variation in voluntary disclosure. The results also suggest that variation in voluntary disclosure could be influenced, particularly from differences in time periods. The results generally show increases in voluntary disclosure levels after the 1997 financial crisis. Results between univariate and multivariate analyses are not materially different, except for those regarding proportion of non-executive directors on the board, foreign ownership, and profitability, which are found to be significant only in univariate analysis. Leverage, type of auditor, and ownership concentration do not show significant association with the extent of voluntary disclosure. In terms of the explanatory power of the model, the pooled regression for overall voluntary disclosure shows that variables included in the model are able to explain 61.2% of the variation in the voluntary disclosure level. The explanatory power of the regression models in this study seems to be higher than in prior studies. However, the adjusted R squared of these models may not be comparable to previous studies that selected data from the same time period because the regression models in this study contain the data of four different time periods and time factors seem to be the most influential factors in explaining variation in voluntary disclosures. The high value of adjusted R squared of the regression model incorporating data from different time period is consistent to the finding of Sutthachai and Cooke (2009) who find dramatic increase in the values of adjusted R squared after the year dummy variables were included in pooled regression models. Of the three specific categories of information, non-financial information is most explained, while financial information is the category least explained by the variables specified in the model.

Results on specific information disclosure tend to support those reported at the overall level.

In summary, the univariate and multivariate results are significant in terms that they explain a significant part of variation in voluntary disclosure for both overall and specific information disclosures. The results also support the relative applicability of the disclosure theories, especially the agency theory in explaining variation in voluntary disclosure. However, the results indicate that part of the variation in voluntary disclosure of Thai listed companies has not been captured by the statistical models. This highlights the need to identify other factors influencing voluntary disclosure. Opinion from persons positioned to influence voluntary disclosure might help to identify other influencing factors. Therefore, the next chapter reports on the findings from interviews conducted with company management, auditors, bankers, investment analysts, and regulators. The information obtained from the interviews will be used to confirm results and enhance the interpretation of the quantitative analysis reported in this chapter.

Appendix 6-A: Descriptive statistics of continuous independent variables

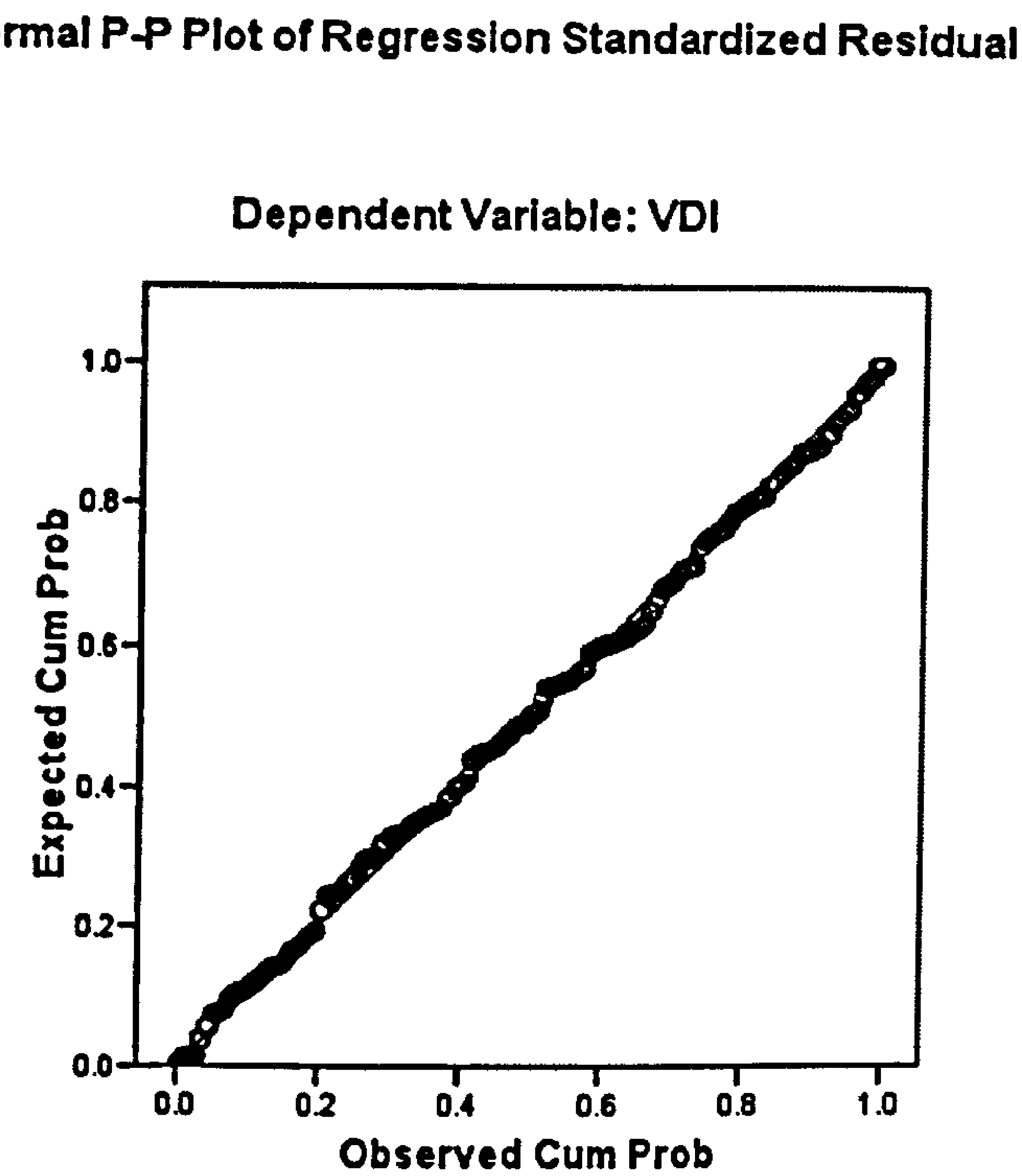
Variables	Market Capitalisation (million Baht)	Return on Equity	Debt to equity	Non-executive directors (%)	Shares owned by top ten shareholders (%)	Foreign shareholding (%)
Label	SIZ	PRO	LEV	BOA	OWN	FRN
Untransformed data						
Mean	28,344.000	.067	1.347	.225	.646	.222
Median	7,350.000	.134	.627	.250	.674	.196
Min	75.600	-5.000	.000	.000	.054	.000
Max	741,000.000	1.800	30.855	.667	.936	.885
SD	76,430.930	.626	3.667	.154	.161	.182
Skewness	6.623	-6.316	7.187	-.054	-.813	1.144
SE skew	.162	.162	.162	.162	.162	.162
Kurtosis	52.106	48.896	54.976	-.610	.836	1.791
SE kurt	.323	.323	.323	.323	.323	.323
Normal scores						
Mean	.000008	.000	.003	.024	.0001	.004
Median	.000	.000	.000	-.028	.000	-.006
Min	-2.618	-2.618	-1.934	-1.200	-2.476	-1.867
Max	2.618	2.618	2.476	2.618	2.618	2.476
SD	.982	.982	.972	.923	.981	.970
Skewness	.0001	.000	.057	.314	.003	.070
SE skew	.162	.162	.162	.162	.162	.162
Kurtosis	-.216	-.216	-.364	-.603	-.230	-.388
SE kurt	.323	.323	.323	.323	.323	.323

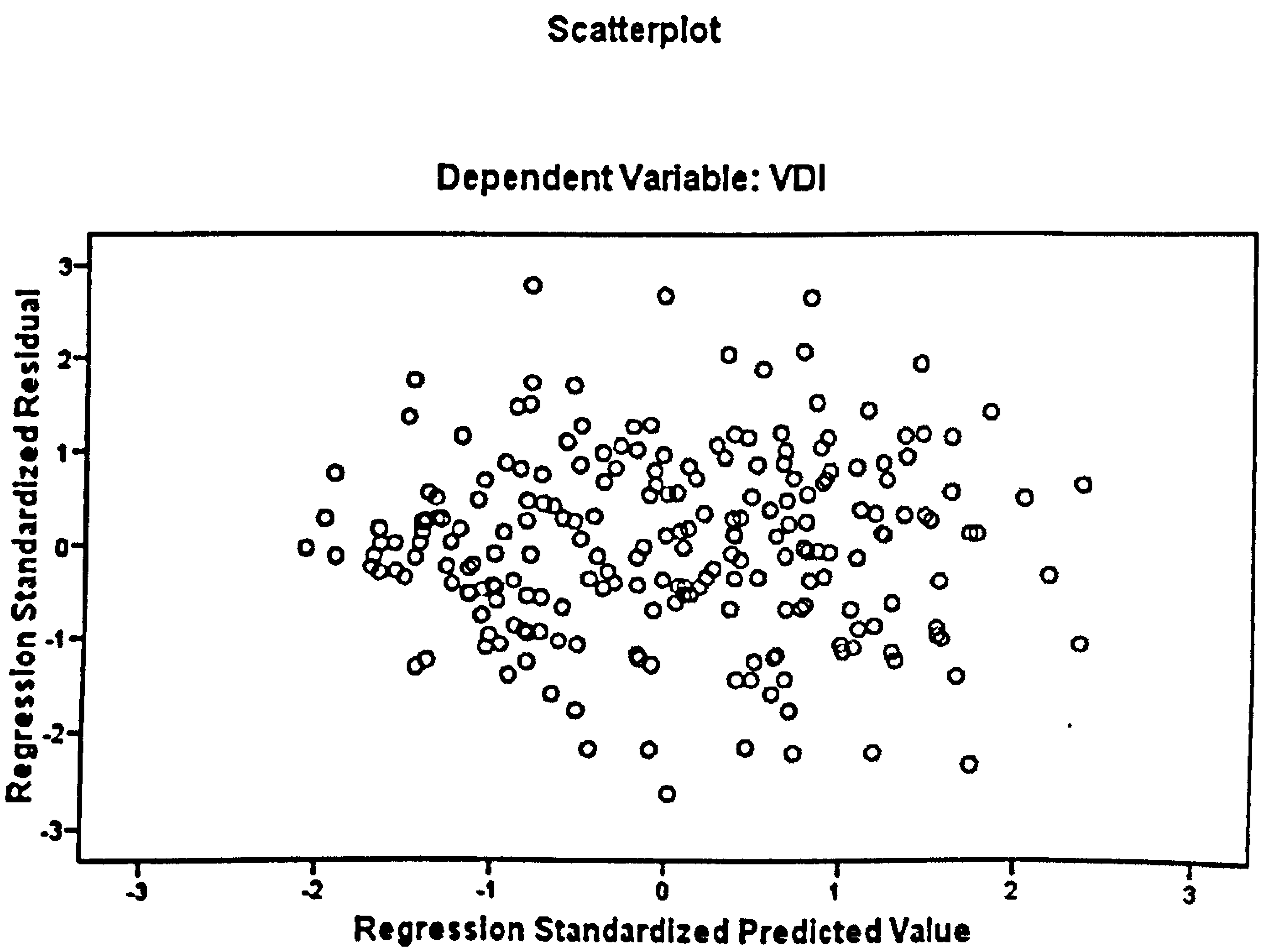
Appendix 6-B: Kendall's rank correlations between continuous independent variables

	SIZ	PRO	LEV	OWN	BOA
PRO	.194**				
LEV	.081	-.052			
OWN	.122**	.025	-.048		
BOA	.003	.134**	-.149**	.035	
FRN	.112*	.101*	-.046	-.047	.072

** correlation significant at the 1% level (2-tailed)
* correlation significant at the 5% level (2-tailed)

Appendix 6-C: Plots of the regression standardised residuals





Appendix 6-D: Pooled regression results for strategic, non-financial, and financial information disclosures (untransformed data)

	Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	48.9%				61.2%				31.0%			
F statistic	14.420				23.080				7.289			
Significance	.000				.000				.000			
Std. Error	.1517				.137				.178			
Durbin-Watson	1.778				2.009				2.017			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	.066		.830	.408	-.225		-3.115	.002**	-.076		-.817	.415
SIZ	.019	.139	2.582	.011*	.030	.213	4.523	.000**	.020	.146	2.336	.020*
PRO	.020	.059	.691	.491	-.029	-.081	-1.091	.276	-.028	-.082	-.829	.408
LEV	.005	.082	.949	.344	-.001	-.009	-.119	.905	-.006	-.106	-1.058	.291
OWN	-.017	-.013	-.247	.805	.032	.024	.515	.607	.048	.036	.588	.557
BOA	.074	.054	.654	.514	.047	.033	.460	.646	-.035	-.025	-.261	.795
FRN	.082	.070	1.300	.195	.062	.051	1.078	.282	.100	.085	1.359	.176
AUD	-.011	-.024	-.463	.644	.017	.038	.835	.405	-.003	-.006	-.098	.922
CEO	-.100	-.184	-3.566	.000**	-.113	-.201	-4.455	.000**	-.087	-.158	-2.630	.009**
IND[a]												
= Agro&Food	.222	.182	3.637	.000**	.133	.105	2.405	.017*	.247	.201	3.460	.001**
= Industrial	.097	.147	2.710	.007**	.149	.217	4.603	.000**	-.016	-.025	-.393	.695
= Technology	.066	.121	2.037	.043*	.037	.066	1.269	.206	.009	.016	.231	.818
= Resources	.082	.112	2.068	.040*	.195	.258	5.453	.000**	.030	.040	.641	.522
= Services	.051	.090	1.676	.095	.059	.100	2.137	.034*	.033	.057	.918	.360
YEAR[b]												
= 1996	.026	.053	.774	.440	.009	.017	.279	.781	.071	.142	1.787	.075
= 2002	.201	.423	4.731	.000**	.194	.394	5.050	.000**	.224	.469	4.514	.000**
= 2005	.299	.665	6.721	.000**	.316	.678	7.856	.000**	.278	.614	5.335	.000**

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] year 1995 is used as baseline

Appendix 6-E: Pooled regression results incorporating total assets as an independent variable (normal scores approach)

	Overall Disclosure				Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	59.8%				47.1%				62.8%				28.9%			
F statistic	21.858				13.446				24.651				6.704			
Significance	.000				.000				.000				.000			
Std. Error	.621				.713				.582				.799			
Durbin-Watson	1.828				1.727				2.027				1.990			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.831		-5.446	.000**	-.777		-4.441	.000**	-.770		-5.389	.000**	-.648		-3.301	.001**
Total assets	.154	.154	2.956	.003**	.087	.088	1.466	.144	.210	.217	4.327	.000**	.085	.088	1.278	.202
PRO	-.022	-.022	-.496	.621	.031	.031	.603	.547	-.066	-.068	-1.573	.117	-.047	-.049	-.821	.413
LEV	.024	.023	.460	.646	.026	.025	.436	.663	-.006	-.006	-.130	.897	.006	.007	.097	.923
OWN	.050	.050	1.069	.286	-.003	-.003	-.055	.956	.057	.058	1.307	.193	.088	.092	1.480	.140
BOA	.058	.055	.789	.431	.063	.060	.752	.453	.083	.080	1.205	.230	-.037	-.036	-.393	.695
FRN	.093	.092	1.926	.055	.086	.085	1.555	.121	.077	.078	1.691	.092	.110	.112	1.759	.080
AUD	-.066	-.032	-.700	.485	-.084	-.041	-.776	.439	-.045	-.022	-.506	.614	-.060	-.030	-.494	.622
CEO	-.514	-.205	-4.409	.000**	-.457	-.182	-3.415	.001**	-.407	-.166	-3.723	.000**	-.364	-.150	-2.423	.016*
IND[a]																
= Agro&Food	1.053	.187	4.156	.000**	1.042	.185	3.584	.000**	.501	.091	2.112	.036*	1.116	.205	3.426	.001**
= Industrial	.405	.132	2.764	.006**	.471	.154	2.802	.006**	.636	.214	4.642	.000**	-.133	-.045	-.706	.481
= Technology	.233	.092	1.841	.067	.338	.133	2.324	.021*	.244	.099	2.053	.041*	.039	.016	.242	.809
= Resources	.531	.158	3.283	.001**	.415	.123	2.233	.027*	.820	.250	5.408	.000**	.110	.034	.526	.599
= Services	.257	.098	2.047	.042*	.248	.095	1.722	.087	.333	.131	2.831	.005**	.127	.050	.786	.433
YEAR[b]																
= 1996	.052	.023	.380	.704	.060	.027	.382	.703	-.072	-.033	-.558	.577	.246	.112	1.386	.167
= 2002	.933	.426	5.626	.000**	.829	.379	4.353	.000**	.777	.365	5.004	.000**	.896	.423	4.199	.000**
= 2005	1.447	.697	8.187	.000**	1.328	.640	6.550	.000**	1.253	.620	7.571	.000**	1.195	.596	5.259	.000**

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] year 1995 is used as baseline

Appendix 6-F: Pooled regression results incorporating the crisis factor as an independent variable (normal scores approach)

	Overall Disclosure				Strategic Information				Non-financial Information				Financial Information			
Adjusted R^2	58.1%				45.3%				60.1%				28.8%			
F statistic	23.213				14.265				25.142				7.462			
Significance	.000				.000				.000				.000			
Std. Error	.635				.725				.602				.800			
Durbin-Watson	1.696				1.646				1.890				1.935			
Variables	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.	β	*BETA*	*t*	Sig.
Constant	-.778		-6.136	.000	-.708		-4.888	.000	-.811		-6.743	.000	-.480		-3.001	.003
SIZ	.243	.243	5.029	.000**	.186	.186	3.363	.001**	.255	.262	5.548	.000**	.160	.166	2.629	.009**
PRO	-.082	-.082	-1.744	.083	-.018	-.018	-.332	.740	-.123	-.126	-2.766	.006**	-.091	-.094	-1.534	.126
LEV	.032	.032	.687	.493	.014	.014	.267	.790	.023	.024	.517	.606	.013	.014	.222	.825
OWN	.018	.018	.380	.704	-.034	-.034	-.620	.536	.030	.030	.659	.511	.069	.071	1.157	.249
BOA	.119	.112	1.606	.110	.121	.114	1.439	.152	.140	.135	1.995	.047*	-.001	-.001	-.006	.995
FRN	.072	.071	1.464	.145	.065	.064	1.153	.250	.063	.064	1.344	.180	.092	.094	1.474	.142
AUD	-.005	-.002	-.052	.958	-.039	-.019	-.354	.724	.026	.013	.287	.774	-.026	-.013	-.212	.832
CEO	-.524	-.209	-4.425	.000**	-.459	-.183	-3.398	.001**	-.437	-.179	-3.888	.000**	-.354	-.146	-2.374	.018*
IND[a]																
= Agro&Food	1.036	.184	4.030	.000**	1.008	.179	3.433	.001**	.509	.093	2.086	.038*	1.108	.203	3.417	.001**
= Industrial	.393	.128	2.632	.009**	.463	.151	2.717	.007**	.627	.210	4.421	.000**	-.149	-.050	-.792	.429
= Technology	.187	.074	1.437	.152	.299	.118	2.011	.046*	.199	.081	1.615	.108	.015	.006	.089	.929
= Resources	.454	.135	2.746	.007**	.337	.100	1.785	.076	.773	.236	4.919	.000**	.042	.013	.203	.839
= Services	.232	.089	1.809	.072	.235	.090	1.605	.110	.301	.119	2.475	.014*	.109	.043	.673	.502
Crisis[b]	1.120	.559	8.120	.000**	.993	.496	6.303	.000**	1.040	.533	7.937	.000**	.868	.448	4.991	.000**

** Significant at the 1% level.
* Significant at the 5% level.
[a] property/construction industry is used as baseline
[b] dummy variables, 1 if the year is after 1997, 0 otherwise

Appendix 6-G: Model summary: Stepwise regression (pooled observations)

Model incorporating year dummy variables as independent variables

Model	R	R^2	Adj.R^2	Std.Error	R^2 change	F change	F statistic	F value sig.
1	0.533[a]	0.284	0.281	0.832	0.284	88.423	88.423	.000
2	0.659[b]	0.434	0.429	0.741	0.150	58.965	85.185	.000
3	0.720[c]	0.518	0.512	0.685	0.084	38.635	79.296	.000
4	0.754[d]	0.568	0.560	0.650	0.050	25.264	72.317	.000
5	0.769[e]	0.591	0.582	0.634	0.023	12.315	63.292	.000
6	0.776[f]	0.602	0.591	0.627	0.011	6.019	54.956	.000
7	0.782[g]	0.612	0.599	0.621	0.010	5.511	48.867	.000
8	0.788[h]	0.620	0.606	0.615	0.008	4.731	44.085	.000

[a] Predictors (Constant), Y2005

[b] Predictors (Constant), Y2005, Y2002

[c] Predictors (Constant), Y2005, Y2002, SIZ

[d] Predictors (Constant), Y2005, Y2002, SIZ, CEO

[e] Predictors (Constant), Y2005, Y2002, SIZ, CEO, IND1

[f] Predictors (Constant), Y2005, Y2002, SIZ, CEO, IND1, IND4

[g] Predictors (Constant), Y2005, Y2002, SIZ, CEO, IND1, IND4, IND2

[h] Predictors (Constant), Y2005, Y2002, SIZ, CEO, IND1, IND4, IND2, FRN

Model incorporating crisis factor as an independent variable

Model	R	R^2	Adj.R^2	Std.Error	R^2 change	F change	F statistic	F value sig.
1	0.621[a]	0.386	0.383	0.770	0.386	140.253	140.253	.000
2	0.702[b]	0.493	0.489	0.701	0.107	46.876	107.991	.000
3	0.736[c]	0.542	0.536	0.668	0.049	23.676	87.240	.000
4	0.751[d]	0.564	0.556	0.653	0.022	10.990	71.135	.000
5	0.757[e]	0.573	0.563	0.648	0.009	4.388	58.662	.000
6	0.763[f]	0.582	0.571	0.643	0.010	5.052	50.632	.000

[a] Predictors (Constant), CRISIS

[b] Predictors (Constant), CRISIS, SIZ

[c] Predictors (Constant), CRISIS, SIZ, CEO

[d] Predictors (Constant), CRISIS, SIZ, CEO, IND1

[e] Predictors (Constant), CRISIS, SIZ, CEO, IND1, IND4

[f] Predictors (Constant), CRISIS, SIZ, CEO, IND1, IND4, IND2

CHAPTER 7

Perceptions of Interviewees: Issues Related to Voluntary Disclosure

7.1 Introduction

The main purpose of this chapter is to investigate the perceptions of persons positioned to influence voluntary disclosures of Thai listed companies. This chapter answers research question 4 which is as follows:

Research Question 4: What are the perceptions of persons positioned to influence voluntary disclosure on issues related to voluntary disclosure, and how does interview research help to validate and complement statistical results?

An interview study was conducted in order to gain further insight into factors influencing voluntary disclosures and investigate other factors not easily captured from quantitative analysis. Information obtained from the interview is used to confirm the results and enhance the interpretation of findings from quantitative analysis.

The chapter is organised as follows. In section 7.2, the interview respondents' views on voluntary disclosure of Thai listed companies are discussed. Section 7.3 provides discussion on the role and importance of annual reports as perceived by the interview respondents. Section 7.4 summarises views of the interviewees regarding perceived benefits and costs, and credibility of voluntary disclosure in annual reports. Perception of voluntary disclosure by categories of information is also discussed. Alternative channels of voluntary disclosure are discussed in section 7.5. Section 7.6 covers factors influencing voluntary disclosure as perceived by the interview respondents. Finally, a conclusion is provided in section 7.7.

Table 7-1: Information about interviewees

Listed Companies		Auditors		Bankers		Investment Analysts		Regulators	
Ref.	Type of business *(position)*	Ref.	Audit firm *(position)*	Ref.	Bank *(position)*	Ref.	Firm *(position)*	Ref.	Position
L1	Automotive *(CFO)*	A1	Local audit firm *(Managing partner)*	B1	Leading commercial bank *(Executive vice president)*	I1	International asset management company *(Chief investment officer)*	R1	Corporate finance department *(Director)*
L2	Property development *(Financial Controller)*	A2	International audit firm (Big Four) *(Director)*	B2	Leading commercial bank *(Corporate Loan Officer)*	I2	Institutional investment research *(Director)*	R2	Accounting standard setting committee
L3	Electronic component *(Director)*	A3	International audit firm (Big Four) *(Senior manager)*			I3	Local fund manager *(Senior investment analysts)*	R3	Regulatory policy department *(Senior officer)*
L4	Agricultural *(Chairman/CEO)*	A4	Local audit firm *(Managing partner)*						
L5	Communication *(Manager-Investor relations)*	A5	International audit firm (Big Four) *(Manager)*						
L6	Property development *(Vice President)*								
L7	Health care *(Manager-Investor relation)*								

7.2 Voluntary Disclosure of Thai Listed Companies: Respondents' Views

The interview respondents mainly suggested that substantial improvements have been made in the voluntary disclosure of Thai listed companies. The 1997 financial crisis is an important reason for this change. The crisis revealed a number of significant weaknesses in the Thai financial and business sectors. Majority of interview respondents agreed that a lack of good corporate governance was the most significant factor contributing to the financial crisis. After the crisis, governance has been improved in the public and corporate sectors, with transparency and accountability being strengthened.

> *"I feel that there has been significant change in corporate governance as well as corporate disclosure after the financial crisis. Before the crisis, the concept of good CG was not widely known among the general public; even significant players like management, shareholders, and stakeholders were not aware of the term. Soon after the outbreak of the crisis, the concept of good CG was was widely promoted. The public has been gradually educated about corporate governance and its importance to the Thai economy."* [R3]

Most companies have paid more attention to the corporate governance issue in order to restore investors' confidence. This results in significant enhancement of corporate disclosure. Investment analysts highlighted that:

> *"More transparent in corporate sectors helps stimulate capital inflows to Thailand so that the business can survive after the financial crisis. Therefore, I think the economic disturbance definitely had an impact on disclosure practices."* [I1]

> *"Since the crisis, there has been a dramatic increase in the influence of institutional investors; they are taking a more active role in demanding better disclosures from companies*

.... actually I feel that most companies disclose too much; some things they don't have to disclose, but they disclose. I think we've moved from the era of very low disclosure to too much disclosure!" [I2]

Although law and regulations are main forces behind corporate disclosure policies, regulators believed that enforcement alone is not enough to create changes in quality of disclosures; good understanding and a feeling of acceptance of the benefits of disclosure from companies are more important. Nonetheless, further regulations to enhance the uniformity and comparability of financial reporting are still needed for Thai listed companies. Regulators also agreed that most companies have re-structured their disclosure practice to an acceptable level. However, more educating, training, and open discussions from the professional bodies are still needed. In the view of the preparers, the majority of management and auditors suggested that there are already too many regulatory requirements and some of them are not practical for a number of companies. By allowing companies to disclose certain types of information voluntarily, disclosure practice could become more flexible and logical. Management commented that:

"I think the rules and regulations for financial reporting are already enough. The more important issue is how the preparers understand and interpret the regulations, which are very abstract in some area, and some people tend to take advantage of that." [L1]

"Some smaller or low-performing companies are not quite ready for a big transformation. Instead of announcing more regulations, the government should encourage corporate sectors to participate in the development of financial reporting by providing rewards or benefits such as tax benefit to companies with outstanding performance." [L4]

The interview respondents pointed out possible factors that may delay the improvement in corporate governance and financial reporting in Thailand. An audit partner identified cultural factor as the obstacle in the development of good corporate governance:

> *"Thai culture gives too much respect for others, sometimes we need to learn to speak for our rights. Many audit committees are just 'rubber stamp committees'. They cannot help monitor management and family owners because they tend to be considerate and respectful of the owner's decision"* [A1]

A regulator expressed her view on management perception regarding the importance of financial reporting:

> *"Management has not considered financial reporting as an important tool in managing its business. This ignorance arises due to the characteristic of the Thai financial system. The role of financial reporting in reducing the cost of capital is not recognised by management"* [R1]

Lack of education seems to be another important obstacle in corporate governance and financial reporting development. The majority of interview respondents agreed that most staff at every level, from the operational staff to management and audit committees, do not understand their duties and how to work on good corporate governance. Therefore, there is a need to educate all staff to improve their performance and understand their responsibilities better. Continuous courses to keep knowledge up-to-date are very important. The SET, SEC, Institute of Directors Association (IOD), and professional associations should be responsible for providing educational programmes.

Regulators and auditors expressed their concern about continuity of the development process. They agreed that the improvements in financial reporting practices may not continue after the economy has fully recovered. A regulator commented that:

"Despite all achievements in the corporate governance reformation, considerable doubt exists as to the capability of maintaining the momentum. Thai people tend to forget things easily. It is essential to continue to educate companies and the public on the importance and benefit of good corporate governance." [R2]

In summary, corporate disclosures of Thai listed companies have shown good signs of improvement after the 1997 financial crisis. Lessons learned from the crisis have led to several measures of improvement in accountability of management, and enhancement of corporate transparency, and strengthened minority shareholder rights. However, there is room for companies to improve in order to be comparable with the international practices. The development of regulations should be conducted carefully by taking into account the information needs, whilst maintaining flexibility for the preparers.

7.3 The Role and Importance of Annual Reports as Perceived by Interview Respondents

This section reports perceptions of the interview respondents on the role and importance of annual reports of listed companies. The first question in the interview with the management of seven listed companies concerned the objectives of their annual reports. Table 7-2 summarises the objectives of the annual report given by the management. It was obvious from the responses that the primary objective of the annual report is fulfilling regulatory requirements. A vice president of a property development company said, *"...what we are doing is basically to comply with the SEC's regulations. The annual report is more of a formal requirement..."* [L6]. Apart from complying with the regulatory requirements, a CFO of an automotive company suggested that annual reports provide a good summary of a company's past events and future plans:

"...although we release information through different types of media throughout the year, the annual report gives a summary of what happened in the past year. Users can see the whole picture of our company, not just small and scattered pieces of news. In addition, annual reports also provide some of the future plans which is very important for the users." [L1]

Table 7-2 Objectives of annual reports: views from listed companies

Objectives of annual reports	L1	L2	L3	L4	L5	L6	L7	(7)
To meet regulatory requirements	✓	✓	✓	✓	✓	✓	✓	7
Means of communication to investors/shareholders	✓	✓	✓	✓			✓	5
Summary of company information for the past year	✓					✓		2
To reflect a good image of a company				✓			✓	2
To promote good corporate governance of a company				✓	✓			2
To provide information for prospective investors	✓	✓	✓		✓		✓	5
To provide information for creditors/bankers	✓	✓						2

Two of the management interviewed suggested that annual reports can be used as a public relations tool in order to create a good impression to the public. A Chairman/CEO of an agricultural company added that annual reports can help in promoting good corporate governance so that the company can be seen as transparently governed. The respondents also stressed that annual reports have an important role as a way to communicate to shareholders and prospective investors. The majority of management (5 out of 7) regarded shareholders and prospective investors as the target audiences of annual reports; creditors, bankers and the general public are also mentioned by some of the management. An investor relations manager of a health care company viewed that the target audiences of the annual report are mainly prospective investors, because annual reports provide only basic information that helps in understanding the company. Whereas, the CFO of an automotive company expressed different views, he commented that: *"There is a wide variety of annual report users with different information needs. It is the company's important task to sort the users in order of priority and provide appropriate information for each group ..."* [L1].

Apart from the responses from listed companies discussed above, regulators also expressed their views about the role and importance of annual reports. One of them expressed the view that the annual report is very important because *"...it is the only direct medium of communication from the company to all of the shareholders. It also helps stakeholders to understand the company and minimise misinterpretation of facts."* [R3]. Another regulator pointed out an additional role of the annual report in monitoring company management:

> *"...shareholders can evaluate company management by verifying the information that has been previously published in annual reports. This role is very important because it is the confirmation of things that the management has claimed for. It also helps assure the shareholders that the management is acting in their best interests."* [R2]

Both of the bankers interviewed also confirmed the importance of information in annual reports:

> *"Information in annual reports is very important for our analysis. Generally, when companies come to us, our first step is to look at their annual reports. We learn a lot about the companies by reading their annual reports. We not only look for financial and operational performance, but also the company's background and chairman's statement, which are also very important."* [B1]

> *"Annual reports are very useful for us. We can use information in annual reports to justify the projections and forecasts that companies prepare for us."* [B2]

For the investment analysts, annual reports seemed to be a good source of information in the early stage of their analysis:

> *"Although I need more detailed information, annual reports are good source of company background. Information on annual reports is very useful for me when I start my research and also when I need an official reference in my research."* [I3]

An auditor expressed a different view that the use of annual reports is limited to financial analysts and institutional investors, and minority investors generally do not pay much attention to the information in annual reports:

> *"...I am not sure that additional disclosure in annual reports is necessary, only financial analysts would benefit from this, minority and small shareholders couldn't care less, as they are only interested in the dividends."* [A4]

In summary, the company management interviewed all agreed on the importance of annual reports. The annual report not only fulfils the regulatory requirements, but also serves many useful purposes for both listed companies and stakeholders. The users mainly suggested that an annual report is a useful source of information. However, the importance of annual reports may vary among different types of users.

7.4 Views on Voluntary Disclosures in Annual Reports

The following sections discuss perceptions of the interview respondents on voluntary disclosures in annual reports. Views of the respondents on perceived benefits and costs of voluntary disclosure in annual reports are reported in section 7.4.1. Next, the issue of credibility of voluntary disclosure in annual reports is discussed in section 7.4.2. Perceptions of different categories of information voluntarily disclosed in annual reports (financial, strategic, and non-financial and CSR information) are presented in section 7.4.3, as are respondents' opinions on the important themes of information that companies should disclose voluntarily.

7.4.1 Perceived Benefits and Costs of Voluntary Disclosure in Annual Reports

Overall, the interviewees suggested that cost-benefit analysis plays the most important role in voluntary disclosure. Basically, companies would decide to disclose additional information when perceiving that the benefits from disclosure outweigh the costs of providing such information. A regulator commented that:

"Generally, the disclosures in annual reports are more on mandatory information. The list of mandatory items from the SEC already covers almost everything. Companies may disclose additional information voluntarily only when they perceive that there are benefits associated with that disclosure." [R3]

Table 7-3 summarises the interviewees' response with regard to their perception of benefits of voluntary disclosure. Perception of the interviewees on constraints and cost of voluntary disclosure is reported in Table 7-4. While the most frequently cited benefits were improved company image (12 out of 20), attraction of prospective investors (8 out of 20), and improved accountability to shareholders (8 out of 20), the major constraints were competitive disadvantages (18 out of 20).

Table7-3: Perceptions of benefits of voluntary disclosure

Benefits of voluntary disclosure	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Improve company image/PR exercise	5	2	2	1	2	12
Attract investors/lower cost of capital	2	-	1	3	2	8
Improved accountability to shareholders	4	2	-	1	1	8
International comparability	2	2	-	1	2	7
Promote good corporate governance	3	1	-	-	1	5
Accountability to society	1	-	-	-	1	2

The majority of interviewees agreed that high quality of disclosure will boost company image and build people's confidence in the company. A Chairman/CEO claimed *"...it can be long-term marketing of a company."* [L4]. This view is shared by an investment analyst who said *"...high standard of disclosure can enhance companies' market value in the long run."* [I1]. The respondents mainly suggested that development in capital markets has influenced the way companies disclose information. There is intense competition in the international funding. International capital providers are having high demands for information. Companies that depend on an international source of finance have to make sure that the information they provide is comparable to their overseas rivals. Voluntary disclosure can help companies to attract potential investors in this modern market environment. A regulator suggested that *"...not enough information provided by companies can result in high cost of capital"* [R3]. However, another regulator expressed a different view. She felt that there are still a number of Thai listed companies that do not need external funding. This could result in lack of motivation in voluntary disclosure:

> *"Although the orientation of companies towards the international market is important, there are quite a number of Thai listed companies that have no intention to raise funds in the market. They listed in the SET for other objectives such as to get tax benefits. These companies have a lack of motivation in voluntary disclosure."* [R2]

With respect to constraints and costs of voluntary disclosure, the interviewees pointed out that competitive disadvantages (18 out of 20), company's image (11 out of 20), litigation issues (10 out of 20), and cost of information preparation (7 out of 20) are major constraints (see Table 7-4).

Table 7-4: Perceptions on constraints and costs of voluntary disclosure

Constraints and costs of voluntary disclosure	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Competitive disadvantages	7	5	1	2	3	18
Negative information may damage company image	4	2	1	2	2	11
Litigation issues	3	2	1	1	3	10
Cost of gathering/processing/ disseminating information	2	2	-	1	2	7

Competitive disadvantage was perceived to be the most important constraint on voluntary disclosure. In particular, the views of management are very intense. Competitors' reactions are the main reason mentioned. Costly items perceived by the interview respondents are narrowly defined segment information, strategy in a specific area, technical know-how, trade secrets, cost factors and forward-looking information.

A vice president of a property development company stressed that providing too much detail on company strategy could put the firm at risk:

"Although strategic information is very useful, we may not be able to disclose too much detail of our financial and marketing strategy. The strategy that we feel comfortable to disclose is basic strategy in handling changes in our industry and general discussion of our future plans. It's too risky and not worth disclosing detailed strategy and trade secrets to the public." [L6].

A regulator expressed different views on the issue of competitive disadvantages:

"...I don't think that companies will lose competitive advantages by disclosing additional information in annual reports. There are less and less secrets in the industries in the current competitive environment. Competitors are not going to wait for annual reports, as there are many other ways they could get the information they need, especially in the case of our country, where most of the technical know-how is imported from abroad." [R2]

With regard to the disclosure of segment information, regulators seemed to agree with listed companies about constraints on the disclosure of segment information:

"Thai companies are so different from developed countries in terms of scale of business. Most of listed companies in developed countries have very complex business segments, for example, some companies can have petrochemicals, weapons, and household products as their business segments. While many Thai listed companies have a very narrow line of business with only a few major customers. Providing segment information would cause such companies competitive disadvantage." [R1]

Apart from the constraints and costs of voluntary disclosure discussed above, good understanding of the benefits that companies would gain from the disclosure seemed to be another important issue. A regulator stressed that there is considerable misunderstanding among Thai listed companies about the benefits of voluntary disclosure "*...some* *companies are not aware of the benefits they would gain from voluntary disclosure. They feel that voluntary disclosures are nothing but companies' expenses. Understanding the benefits companies would gain from voluntary disclosure is very important."* [R2]

7.4.2 Credibility of Voluntary Disclosure in Annual Reports

In general, the interview respondents seemed to be satisfied with the credibility of voluntary disclosures in annual reports. The majority of them stated that most companies report reliable and credible information in their annual reports. It can be seen from Table 7-5 that half of the interviewees agreed that voluntary disclosures in annual reports have high credibility, while the other half perceived that there is moderate credibility. None of the interviewees felt that voluntary disclosures in annual reports are low in credibility.

Table 7-5: Perceptions on credibility of voluntary disclosure in annual reports

Credibility of voluntary disclosure	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
High	5	3	-	1	1	10
Moderate	2	2	2	2	2	10
Low	-	-	-	-	-	-

The majority of management interviewed had confidence in the credibility of information their companies disclose:

> *"It is very important that the information we disclose in our annual reports is accurate and comprehensive."* [L6]

> *"Reliability of information is our first priority because the annual report is solely our responsibility. We never disclose any information that we are not 100% confident [about]."* [L1]

> *"Our financial statement is audited by a Big Four audit firm. We also pay very much attention to the correctness of the other parts of the annual report. Both the management and board of director have to approve the annual report before publishing."* [L2]

The annual report is an official document and there is a wide variety of users. The majority of company management shared the same view that disclosing inaccurate information would damage a company's reputation. Also, companies would lose all benefits from additional disclosure if the information they disclose is not credible. The regulators also stressed that the penalty, which might be incurred, is another factor affecting the credibility of information disclosed by listed companies. "*...some companies might overstate some information but they are not likely to disclose totally untrue information. They are aware of the penalty that might be incurred.*" [R3]

An investment analyst who followed the same listed companies for quite a long time shared the same view:

> *"Companies that are dishonest about their disclosure will definitely suffer the consequences. I believe that the credibility of disclosure will be verified by the market after all. All the companies I encountered are credible enough. I know most of the management of companies I'm dealing with. I have been following these companies for years. I don't see any reason for them to start lying."* [I2]

Overall, regulators seemed to be satisfied with the credibility of voluntary disclosure in annual reports. They agreed that there are only a minority of companies that disclose inaccurate information. A regulator from the SEC stated that the credibility of the disclosures in annual reports is at a satisfactory level:

> *"Generally, I would say it [disclosure in annual reports] is quite credible. I think 90% of information is correct. The other 10% is mainly human error, which wouldn't affect the investment decision very much..."* [R1]

On the other hand, another regulator, who is an accounting standard committee, expressed some concern about credibility of the information disclosed by some listed companies:

"I think there is still an issue regarding credibility of information disclosed by listed companies. Although a majority of companies are quite reliable, some companies are still providing inaccurate information. Some companies did it intentionally because they wanted to boost the share price. On the other hand, some companies, mainly small or newly listed, unintentionally disclose wrong information." [R2]

Apart from companies themselves, the interview respondents agreed with the importance of auditors in the credibility of information disclosed by companies. A regulator expressed the view that:

"The biggest and most important part of an annual report is the financial statement. In my opinion, the credibility of corporate disclosures depends substantially on the audit process. If the financial statement is audited by a trustworthy third party, the annual report would be a reliable source of information in the eyes of the public." [R3]

However, a partner of a local audit firm expressed her concern about the accuracy of information in other parts of annual reports.

Most of the time, we do not have a chance to see a draft of the whole annual report of my client companies. The companies always send a copy to me afterwards. Sometimes, there are mistakes in the accounting information that companies referred to in the parts outside the financial statements. Anyway, most of them are not serious mistakes..." [A4]

In this aspect, a change in procedure for preparing annual reports, by providing auditors with a whole draft, could help to improve the way auditors contribute to the credibility of voluntary disclosure in annual reports.

7.4.3 Perceptions of Voluntary Disclosure Categories

It can be seen from Table 7-6 that financial information was perceived by a majority of interviewees (16 out of 20) as the most important category of information. Nonetheless, three interviewees regarded strategy information as the most important, while one perceived non-financial and CSR information to have most importance.

Table 7-6: Perceptions on the importance of voluntary disclosure categories

Voluntary disclosure categories	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Financial	5	5	2	2	2	16
Strategic	1	-	-	1	1	3
Non-financial and CSR	1	-	-	-	-	1

A director of an electronic component manufacturer and a senior manager of a Big Four audit firm shared the same view on the importance of financial information:

> *"I think the majority of readers want to know the company's performance. They are also interested in the company's strategies, but I don't think they would care much about the company's social activities."* [L3]

> *"...financial information is more of a fact that is measurable. We never know whether companies actually did what they claimed in their strategies and social contributions."* [A3]

The users of annual reports, bankers and investment analysts, also placed the importance on financial information. It can be seen from Table 7-6 that 4 out of 5 bankers and investment analysts interviewed gave priority to financial information. An investment analyst pointed out that:

> *"My investors are only interested in numbers and strategies that will affect the numbers. Unfortunately, we do not pay a lot of attention to CSR, we only care about how things affect the stock prices. However, we have our minimum assumption that companies we invest in have good corporate governance."* [I2]

Some of the interviewees gave priority to the disclosure of strategic information. They mainly suggested that financial figures are the reflection of company strategies. Therefore, strategies are the most important factors in controlling company performance. A CFO of an automotive company suggested that:

> *"I pay more attention to strategic information. I want the reader to see the company like I do. I want them to have the whole picture of the company's growth and future, which results from the company's strategies. When we have certain opportunities, we need good strategies to be able to handle different kinds of risks. Good strategies will boost investors' confidence and will eventually lead to good financial figures. Numbers are just a reflection of strategies."* [L1]

A regulator shared the same view:

> *"I am more interested in strategic information. It helps readers to know companies' direction. Financial information is also important, but it's more of a history. It's the outcome of past strategies. For the social information, we can't see how it's going to affect the share prices. There are difficulties in ascertaining how much social contribution could turn into share price value. This could make companies less enthusiastic in performing social activities."* [R2]

Companies seem to place least importance on the non-financial and CSR information category. A Chairman/CEO of agricultural company was only management to place importance on the disclosure of social information:

> *"Social responsibility is the selling point of our company. As a pioneer in cassava plantation, we have done a lot of research and tried to spread the knowledge to the farmer. When global warming became an issue, we tried our best to find a way to alleviate the situation."* [L4]

Type of business seemed to be an important factor that influences the disclosure of non-financial and CSR information. A regulator viewed that companies that their activities are related to environment tend to pay more attention to the social responsibility disclosure:

> *"The business operations of some companies might damage the environment. These companies tend to disclose their social responsibilities to the public to reduce the pressures from the government and environmentalists."* [R3]

Cost-benefit, once again, seemed to be the most important factor affecting company decision in the type of information they are going to disclose. A director of an electrical component manufacturer viewed that companies that perform a lot of social activities will also disclose this information. The reason for a low level of non-financial and CSR information disclosure could be due to the fact that companies do not engage in social activities:

> *"If companies made any kind of social contributions, they would definitely inform the public. It will only give them a positive image. Large companies with a lot of budget surplus are able to contribute, while smaller companies have to focus on profit making."* [L3]

The responses lean towards the idea that only large companies, which achieved their level of profit maximisation,are able to engage in social activities. A vice president of a property development company tended to belief that social responsibility is more of a cost to their companies:

> *"...social contribution is not the main objective for listed companies, otherwise there would be a foundation listed in the SET. Investors only care about their returns. Companies might consider giving back to the society when they achieve their level of profit maximisation."* [L6]

An auditor shared the same view:

"Most of the companies in the SET are still at the stage of profit maximisation, only a few have reached the level that they can afford to pay back to the society. I think in the short future, there could be more companies that achieve their profit maximisation objective and are ready to contribute to the society." [A2]

Table 7-7 presents the view from interview respondents regarding the themes of information that companies should voluntarily disclose. The majority of regulators, auditors, bankers and investment analysts agreed that they wanted to see listed companies disclose more forward-looking information. Information about future prospects of a company is very beneficial for all stakeholders. However, obstacles in providing forward-looking information were raised by listed companies. Competitive disadvantages, once again, were mentioned as a major constraint. In addition, listed companies seemed to be worried about not being able to meet investors' expectations. The litigation issue is also a factor mentioned by both listed companies and regulators. Another concern was that premature disclosure of operating performance is also against the SEC regulations.

Table 7-7: Important themes of information that companies should disclose voluntarily: views from interview respondents

Themes of information	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Future prospects	3	3	2	3	3	14
Operational statistics	4	3	2	2	2	13
Litigation issues	2	2	2	1	2	9
Environmental&social information	2	2	1	2	2	9
Human resources information	1	1	-	-	2	4

Both listed companies and users agreed with the importance of operational statistics information. The majority of listed companies responded that they would be willing to provide additional information in this area, if it will be beneficial for the users. An investment analyst also mentioned that Thai listed companies are quite good at providing operational statistics when compared to other listed companies in the region:

"...in Thailand the level of disclosure is actually quite good. They also release information on operational statistics, not just financial statistics, which is very helpful. I find the levels of disclosures here quite ok when compared to other countries I encounter." [I2]

Because companies can decide by themselves whether to disclose additional information or not, it was obvious from the responses that the majority of voluntary disclosures tended to be good news:

"For voluntary disclosure, we tend to focus on positive information. It is common sense, everybody wants to spread good news and keep bad news to themselves. Voluntary disclosures are supposed to be a PR tool." [L3]

A regulator commented that companies tend to find a way of drawing attention to good news:

"...It's not all about giving positive information. It's more of a way of drawing attention to good news. Sensitive information is communicated differently. For example, when the profit is low, companies might focus on other positive figures such as the cashflow instead." [R2]

7.5 Alternative Channels of Voluntary Disclosure

Overall, the respondents agreed that the annual report is a very important source of information. Nonetheless, other forms of communication were also regarded as important for market participants. A major limitation of annual reports is that they may not provide up-to-date information when compared to other channels such as newspapers and company websites. Therefore, companies may have to choose the most effective channels to disseminate their information. Table 7-8 presents other forms of corporate communication used by the listed companies interviewed.

Table 7-8: Other forms of corporate communication used by the listed companies interviewed

Forms of communication	L1	L2	L3	L4	L5	L6	L7	(7)
Announcement to the SET	✓	✓		✓		✓		4
Press release	✓		✓		✓		✓	4
Analyst briefings, private discussions			✓		✓		✓	3
Investor relations unit					✓	✓	✓	3
Corporate brochures/newsletters		✓			✓		✓	3
Corporate website				✓	✓		✓	3
Company visit				✓				1

It seemed like a variety of communication channels were being used by listed companies. Companies tended to choose disclosure channels that rapidly approach their target audiences:

> *"We try to choose the disclosure channels that suit the type of information we are going to disclose best. Some channels are more effective in terms of target audiences as well as the perceived costs and benefit. For example, when we have good news, we want the public to know about it as quickly as possible. Therefore, we tend to choose newspapers as a media because it's more direct to the audience."* [L1]

> *"We use different channels of communication because we have different target audiences. The annual report is a direct communication to the shareholders, while the communication from our investor relations unit is targeted to potential investors. For positive information of our company, which we want the public to know about, we tend to use newspaper announcement as it hits a wider audience."* [L5]

Although the Internet is widely used in everyday life, listed companies seemed to have different views regarding its use for corporate communication. Some companies tend to give priority to their websites. On the other hand, some companies did not see much benefit from the disclosure of company information through the Internet. A CFO of an automotive company viewed that company website is a passive communication:

"I think people that are going to view our website must be those who already know our company. Therefore, the website is a kind of passive communication." [L1]

Bankers and investment analysts seemed to be persons who have a relatively high demand for information, when compared to other market participants. Most of them responded that they use annual reports in the first step of their analysis. Their major concern about the use of information in annual reports is that it is not very up-to-date. The investment analysts interviewed tended to make more use of information from companies' quarterly reports, even though financial statements in quarterly reports are unaudited:

"...the most important thing for my job is timeliness, the sooner the better. An annual report is detailed and more credible but it's backward-looking. I already have most of the information in the quarterly reports." [I3]

"...future prospects information is the most important information for our investment decision. Unfortunately, most of the information in annual reports is history rather than the future. Therefore, we can only make use of it as a supporting document." [I2]

Some of the bankers and investment analysts interviewed have been dealing with listed companies for a considerable length of time and have created a good relationship with the companies. Therefore, they may be able to obtain privileged information through private discussions with certain companies. In this case, annual reports seemed to be less important. An investment analyst claimed that although she has private access to company information, the information she received is not beyond the boundaries of the regulations: *"...companies are very professional, they won't give you information that they are not ready to release to the public. No insider or advanced privileged information is given."* [I2]

Although various forms of communication are being used, auditors expressed their concern about the credibility of other forms of corporate communication. They stated that the information companies disclose through other media may not be properly verified for correctness. A director of a Big Four audit firm viewed that: *"...information like a press release or company newsletter is not detailed enough for decision making. I still believe that information in the annual report is most detailed and should be most beneficial for users."* [A2]

7.6 Factors Influencing Voluntary Disclosure

Overall, the interview respondents suggested that various complex factors influence voluntary disclosure decisions. Disclosure behaviour seems to be more complicated than it was previously assumed by the quantitative analysis. Additional factors, which were not included in the statistical models such as quality of staff and management, institutional characteristics, and efficiency of company information systems were brought up by the interviewees. Table 7-9 summarises interview responses regarding factors influencing voluntary disclosure.

Table 7-9: Perceptions on factors influencing voluntary disclosure: views from interview respondents

Factors influencing voluntary disclosure	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Size	5	3	2	2	3	15
Profitability	3	2	2	2	1	10
Leverage	2	2	1	1	1	7
Industry type	3	3	2	2	2	12
Auditor	3	2	1	1	2	9
Ownership structure	3	2	2	2	2	11
International financing	4	3	1	3	3	14
Listing age	3	1	-	1	1	6
Management accountability	3	3	1	2	2	11
Governance structure	3	2	1	2	2	10
Competitiveness	4	2	-	3	2	11
Demand from stakeholders	3	2	1	2	2	10
Efficiency of company information systems	2	2	-	-	1	5

Following sections discussed the interview responses in respect of each factor influencing voluntary disclosure practice.

7.6.1 Size

Most of the respondents viewed company size as an important factor that drives voluntary disclosure. However, different explanations for the significance of size were provided. This can be seen in Table 7-10. The interviewees mainly suggested that large companies usually have more institutional shareholders, who have a higher demand for information. Therefore, these companies may have to provide additional information to fulfil the demands of professional investors. At the same time, additional disclosure can help companies attract potential investors. On the other hand, smaller companies with a lower proportion of outsiders' interest may not be able to appreciate the potential benefits of voluntary disclosures.

Table 7-10: Company size: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Large companies have enough resources to implement	4	3	1	2	3	13
Higher business complexity for large companies	3	4	1	1	2	11
Lower proportion of outsiders' interest for small companies	4	2	1	2	2	11
Higher expectation from stakeholders	3	2	1	2	2	10
Better governance structure	2	1	-	1	2	6

Six interviewees shared the view that large companies tend to have a better governance structure because of the public expectation. This could result in better quality of disclosure. Another reason given by the majority of interviewees (13 out of 20) as being an important factor influencing voluntary disclosure is the readiness of large companies in terms of resources and know-how. Generally, large companies are more informative and tend to have proper records, most of information is probably already in their database. In addition, they are able to invest in high-quality personnel. Although most of the interview respondents agreed that company size drives the extent of disclosure, some of them expressed different views. A regulator suggested that:

> *"...there are also some listed companies that are relatively big, but they do not rely on external funding. These companies may not disclose much additional information because there is no pressure."* [R2]

A director of an electronic component manufacturer commented that: *"...it's not necessarily related to company size, I think companies' reputation, quality of management and types of shareholders are more important factors."* [L3]

In conclusion, the majority of interview responses support the positive association of company size on voluntary disclosure. This is consistent with the univariate and multivariate results discussed earlier in Chapter 6 (see section 6.5.1.1). The interview findings also suggest the capital need theory as an explanation for large companies to disclose more voluntary information.

7.6.2 International Financing

Apart from company size, the interviewees frequently cited international financing as an important factor influencing voluntary disclosure practice. They mainly suggested that reliance on international financing makes companies feel that they need to disclose additional information to satisfy the requirements of overseas capital providers. Foreign investors seem to be satisfied with companies that provide high quality of disclosure, and they pay more attention to these companies. In addition, companies also have to make sure that the information they disclose is comparable to their overseas rivals. This view is shared by an investment analyst who commented that:

> *"...if companies still want to attract foreign investors, they must have minimum levels of disclosure that are acceptable in the investment community. Thai companies have to compare themselves among other companies in the region.*

They need to benchmark themselves against the best practice. Investors are not only interested in Thai companies. But if they are small and closely held companies with no need for overseas funding, what do they care?" [12]

The interviewees' perception regarding the importance of international financing in explaining variation in voluntary disclosure practice is consistent with the significance of foreign ownership in univariate and multivariate analyses discussed in Chapter 6 (see section 6.5.3.4). This could also suggest relevance of capital need theory in explaining voluntary disclosure practice.

7.6.3 Ownership Structure

The interview respondents appeared to hold the view that closely held or family-based companies are usually secretive and tend to protect their own interests. These companies do not have much interest in attracting potential investors, so they are not under pressure to disclose additional information. In addition, when ownership and management coincide, companies seem to be less transparently governed and have less professional involvement. Although the majority of the interviewees suggested that closely held companies tend to have a lower level of voluntary disclosure, the results from statistical analysis did not show a strong association between ownership concentration and the extent of voluntary disclosure (see section 6.5.3.3).

Table 7-11: Family businesses/closely held companies: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Ownership and management coincide	3	3	1	1	3	11
Lack of professional involvement	2	3	1	2	2	10
Tend to protect their own interests	2	2	1	1	1	7
Lower proportion of outsiders' interest/institutional investors	2	2	-	2	2	8
No intention to raise funds in the market	1	2	-	2	2	7

A director of an electronic component manufacturer viewed that there seemed to be higher levels of disclosure in companies that are controlled by the government, due to higher degrees of public accountability. This view could be interpreted as relating to the legitimacy theory.

7.6.4 Management Accountability

Management accountability was also suggested by the interviewees as being an important factor influencing corporate disclosure. Eleven interviewees shared the view that disclosure reflects how management places their sense of responsibility and accountability to all stakeholders. A regulator suggested that top management, CEOs and chairmen, tend to have an influence on overall disclosure policy, while lower level of management, CFOs and managers of investor relations, seem to be more involved in voluntary disclosure decisions.

The respondents were asked whether they perceived CEO/Chairman role duality as a factor influencing voluntary disclosure decisions. The responses with regard to this factor are mixed, though the responses lean towards the idea that separation of a CEO and Chairman role counterbalances the CEO's power. Ideally, the Chairman should be independent so that he/she can perform a monitoring function. Five interviewees believed that there would be a higher level of disclosures for a company without CEO duality. However, eight respondents viewed that there is no difference in the disclosure policy between companies with or without CEO duality.

Table 7-12: CEO/Chairman role duality: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Less transparency for a company with CEO duality	3	2	1	1	2	9
Weak internal control system for a company with CEO duality	2	3	-	-	2	7
Separation between CEO and Chairman counterbalances the CEO's power	3	2	1	1	2	9
Higher level of disclosures for a company without CEO duality	2	-	1	1	1	5
No difference in disclosure policy between companies with or without CEO duality	4	2	-	1	1	8

Although the interview responses regarding CEO duality are mixed, the finding from statistical analysis showed that the existence of CEO duality is significant with a negative coefficient for all types of information disclosure (see section 6.5.3.1). The statistical result implies that companies with CEO duality are associated with lower levels of voluntary disclosure. CEO/Chairman role duality is quite common among Thai listed companies and some of listed companies interviewed had CEO duality. There is a possibility that the response could be influenced by the fact that CEO duality existed in the respondents' companies.

7.6.5 Independent Non-Executive Directors

The interviewees suggested that independent non-executive directors play an important role in corporate disclosure. Table 7-13 summarises the respondents' views regarding independent non-executive directors. Ensuring that companies having good communication with the shareholders is their important responsibility. When asked about the process of annual report preparation, the majority of listed companies interviewed responded that the board of directors is involved in the disclosure decision of the companies. Experienced directors can help to improve the way companies disclose information. However, some of the interviewees seemed to be doubtful about the independence and expertise of independent directors. Two regulators criticised the idea that the independence of directors depends on the management or controlling shareholders who appoint them. Three of the auditors interviewed shared the same view that independent directors tend have insufficient business knowledge, which leads to their opinion not being taken seriously. One of the auditors also added that independent directors are appointed because of the SEC's requirement, but they do not have actual authority.

Table 7-13: Independent non-executive directors: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Expected to look after minority shareholders' interests	3	2	1	2	2	10
Play an important role in corporate disclosure	3	2	1	2	2	10
Necessity to maintain their good reputation	2	1	1	1	1	6
Doubts on independence	1	2	1	1	2	7
No actual authority	-	1	-	-	2	3
Lack of knowledge in business	-	3	-	-	2	5

The role of independent directors could help monitor management's performance, which is consistent with the agency theory. A high proportion of independent directors on the board can also signal to the public that companies are transparent. Nonetheless, in reality, the role of independent directors may be limited by their actual independence and expertise. In this study, the statistical result did not show a strong association between proportion of independent directors on the board and voluntary disclosure (see section 6.5.3.2).

7.6.6 Profitability

The interview respondents expressed different views regarding the influence of profitability on voluntary disclosures (Table 7-14). Ten interviewees suggested that profitable companies can be expected to disclose additional information, especially that emphasising outstanding performance and successful strategies. Companies can make use of profitability to attract more investors. In addition, profitability can be seen as a sign that companies are well-managed. There is also a view from the interview respondents that profitable companies tend to be more relaxed in keeping information confidential. A regulator also suggested that less profitable companies tend to focus on the way to improve their performance instead of spending time and effort on producing additional information for public disclosure. On the other hand, seven interviewees expressed different views regarding the effect of profitability on voluntary disclosure. They suggested that less profitable companies would disclose more information in order to explain their bad performance and inform the public about their strategies to overcome the problems. Three interviewees suggested that less profitable companies might voluntarily disclose other positive information to distract public attention away from their bad performance.

Table 7-14: Profitability: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Profitable companies tend to disclose their good news	3	2	1	2	2	10
High profit signals that companies are well-managed	3	2	2	2	2	11
Profitable companies are more relaxed in keeping information confidential	3	3	1	1	2	10
Less profitable companies need to explain their performance	3	2	-	1	1	7
Less profitable companies tend to voluntarily disclose other information	1	-	-	1	1	3
Not relate to voluntary disclosure decisions	1	1	1	-	-	3

The interview responses suggested that profitability could affect voluntary disclosure in different ways. Profitability could result in a higher or lower level of disclosures. With regard to direction of association between profitability and level of disclosure, prior studies also report conflicting results (see section 2.7). The conflicting direction of the association could help to explain the non-significance of profitability in the statistical analysis (see section 6.5.2.1).

7.6.7 Leverage

The interview responses lean towards the idea that too much leverage could relate to higher risk and reflect inefficiency in company operations. However, with regard to the effect of leverage on voluntary disclosure, most of the responses do not indicate any direct association between leverage and voluntary disclosure. While some of the interviewees viewed that companies with more debt might face more pressure from stakeholders to disclose additional information, other respondents suggested that companies with lower leverage would disclose additional information to show the public their greater stability.

Table 7-15: Leverage: views from interview respondents

Views from interview respondents	Listed co. (7)	Auditors (5)	Bankers (2)	Analysts (3)	Regulators (3)	Total (20)
Too much leverage reflects inefficiency	3	2	2	2	2	11
Lower leverage might help attract investors	3	2	1	2	2	10
More stakeholders involved in high leverage companies	2	2	1	1	2	8

Similar to profitability, the interview responses regarding the effect of leverage on voluntary disclosure do not give any clear direction regarding association. This is consistent with previous studies that report mixed results on the association of leverage and corporate disclosure (see section 2.7). The statistical results also indicate that there is no association between leverage and the voluntary disclosure level (see section 6.5.2.2).

7.6.8 Auditors

In the interviews with auditors, when asked how they emphasise voluntary disclosure in the audit process, the majority of respondents agreed that they pay more attention to the compliance with accounting standards:

> "*...in the disclosure of certain things that are not enforced by Thai accounting standards, we inform client companies about international good practice. However, we let the client decide whether to adopt it or not because it is voluntary information.*" [A2]

> "*...information voluntarily disclosed by companies in annual reports is beyond our responsibility. Nonetheless, we do play an advisory role in the preparation of annual reports.*" [A1].

Although it has long been accepted that auditors play a crucial role in corporate disclosure, their role in voluntary disclosures might not be as significant as in mandatory disclosures. In the univariate and multivariate analyses, type of auditor (Big Four and non-Big Four) was not found to be associated with voluntary disclosure scores(see section 6.5.1.3).

7.7 Conclusion

This chapter has analysed and interpreted views on voluntary disclosure from persons positioned to influence voluntary of Thai listed companies, including company management, auditors, bankers, investment analysts, and regulators. The aim was to obtain a broader picture of voluntary disclosure behaviour and indicate factors that have significant impact on the extent, credibility, improvement and use of voluntary disclosure of Thai listed companies. The discussions include the interview respondents views' on voluntary disclosure of Thai listed companies, role and importance of annual reports, benefits and costs of voluntary disclosure, credibility of voluntary disclosure in annual reports, perception of voluntary disclosure categories, themes of information that companies should voluntarily disclose, alternative channels of voluntary disclosures, and factors influencing voluntary disclosures.

The interview respondents mainly suggested that there have been substantial improvements in voluntary disclosure of Thai listed companies after the 1997 financial crisis. Lessons learned from the crisis have led to several measures to improve the accountability of management, and enhance corporate transparency and disclosure. However, there is room for companies to improve in order to be comparable to the international practices.

Overall, the interview respondents agreed that annual reports play an important role in corporate reporting of Thai listed companies. They also emphasised the use of annual reports by a wide range of market participants. Cost-benefit associated with the disclosure was confirmed as one of the main factors influencing voluntary disclosure in annual reports. While improvement of company image, capital-related incentives, and international comparability were perceived as strong driving forces of voluntary disclosure, competitive disadvantage was seen as the most important constraint of voluntary disclosure.

The majority of respondents placed the highest importance on the disclosure of financial information. However, they did not pay much attention to the disclosure of non-financial and CSR information. Future prospects information and operational statistics seemed to be the most important themes of information, which interviewees would like companies to voluntarily disclose. Alternative channels of voluntary disclosure such as press releases, analyst briefings, and private discussions were also regarded as important for market participants. Nonetheless, some respondents expressed concern about the credibility of these alternative channels of disclosure.

Interviewees suggested that various complex factors influence voluntary disclosure decisions. The perceptions of the interviewees on the importance of company size, industry type and international financing on voluntary disclosure match the statistical findings. Although the majority of interviewees suggested that closely held companies tend to have a lower level of voluntary disclosure, the result from statistical analysis did not show a strong association between ownership concentration and the extent of voluntary disclosure. The interview responses regarding the effect of profitability and leverage on voluntary disclosure did not lead to a clear direction on the association. The conflicting direction of the association could help to explain the non-significance of leverage and mixed results of profitability in the statistical analysis.

The interview findings suggested that voluntary disclosure behaviour is more complicated than previously assumed by the quantitative study. The opinions of preparers, users and regulators help to validate and complement the interpretation of statistical findings. The interviewees revealed some areas that could influence voluntary disclosure decisions, which have not been included in the quantitative study, such as quality of staff and management, efficiency of information systems, and company image and reputation. These factors might account for some of the unexplained variations in the statistical results reported in Chapter 6.

In the next chapter, the main results of the thesis are summarised, followed by the identification of limitations and suggestions for further research.

CHAPTER 8

Conclusions, Contribution, Limitations and Suggestions for Further Research

8.1 Introduction

The purpose of this chapter is to summarise the thesis and present its main conclusions. In addition, implications and limitations of the study are discussed. The chapter ends with suggestions for future research.

8.2 Summary of Research Objectives, Research Questions and Method

This study has sought to answer the question of how to explain voluntary disclosure of companies listed on an emerging capital market. It intended to investigate the extent of voluntary disclosures especially that of Thai listed companies, and the influence of company characteristics, financial attributes, and corporate governance related factors on voluntary disclosure practices. The research objectives, empirical research questions and research methods applied by this study are summarised below.

8.2.1 Research Objectives

The research objectives, as previously explained in section 1.4, are as follows:

Objective 1: To evaluate voluntary disclosure practices of Thai listed companies over the period 1995-2005.

Objective 2: To examine the contribution of company characteristics, financial attributes and corporate governance related factors in explaining variation in the extent of voluntary disclosure.

Objective 3: To investigate perceptions of persons positioned to influence voluntary disclosure in order to obtain further insights into voluntary disclosure practices of Thai listed companies.

8.2.2 Research Questions

This study aimed to answer the following research questions:

Research Question 1: What is the extent of voluntary disclosure of Thai listed companies?

Research Question 2: To what extent did voluntary disclosures of Thai listed companies change over the period 1995-2005?

Research Question 3: To what extent are aspects of company characteristics, financial attributes, and corporate governance related factors significant in explaining the extent of voluntary disclosure of Thai listed companies?

Research Question 4: What are the perceptions of persons positioned to influence voluntary disclosure on issues related to voluntary disclosure, and how does interview research help to validate and complement statistical results?

Research Question 5: How are the variations in voluntary disclosure practices of Thai listed companies explained by relevant theoretical frameworks?

The empirical research questions were answered in Chapter 5, 6, and 7 as follows:

Research question 1 was answered in Chapter 5 by analysing and evaluating voluntary disclosure scores. The findings of extremely high or low disclosure scores and disclosure items, which have received particular attention in prior studies or in real practice, were discussed. The analysis of company characteristics that disclose certain items under each category was presented.

Research question 2 was answered in Chapter 5 and 6. In chapter 5, comparisons of the extent of voluntary disclosures in different time periods were included in order to find if there were any changes in voluntary disclosure over the period studied. In Chapter 6, time factors (a crisis factor and year dummy variables) were included in the univariate and multivariate analyses.

Research question 3 was answered in Chapter 5, 6, and 7. A further analysis of association between the items disclosed and the explanatory variables based on Kendall's rank correlation was performed in Chapter 5. Chapter 6 applied univariate and multivariate analyses to identify factors that are significantly associated with variation in voluntary disclosure levels. Chapter 7 applied an interview study to gain further insight into factors influencing voluntary disclosures and investigate other factors not easily captured from quantitative analysis.

Research question 4 was answered in Chapter 7. An interview study was conducted in order to gain further insight into factors influencing voluntary disclosures and investigate other factors not easily captured from quantitative analysis. Information obtained from the interviews was used to confirm the results and enhance the interpretation of findings from quantitative analysis.

Research question 5 was answered in Chapter 5, 6 and 7 by analysing and interpreting the outputs of quantitative and qualitative analyses, within the context of voluntary disclosures in Thailand and the relevant theoretical frameworks. The analysis was based on relevant theoretical frameworks and existing literature on corporate disclosure discussed in Chapter 2 and a review of the Thai financial reporting environment in Chapter 3.

8.2.3 Research Methods

The main research methods employed by this study were as follows:

- Voluntary disclosure index (unweighted scoring method) to measure the extent of voluntary disclosure.

- Univariate and multivariate analyses to test research hypotheses.

- Semi-structured interviews to validate and complement statistical findings.

In order to provide the best understanding of research problems, this study applied quantitative and qualitative methods. Therefore, the data were obtained from both primary (interview findings) and secondary sources (annual reports). Companies included in this study were selected from the SET100 Index. Quantitative and qualitative data collections were conducted separately from examination of annual reports using the voluntary disclosure checklist and semi-structured interviews. Results from the qualitative analysis were used to confirm the findings and enhance the interpretation of the results from the quantitative analysis.

The hypotheses developed in this study were as follows:

H1: *Ceteris paribus,* there is a positive association between company size and the extent of voluntary disclosure.

H2: *Ceteris paribus,* there is a significant association between type of industry and the extent of voluntary disclosure.

H3: *Ceteris paribus,* there is a positive association between large audit firms and the extent of voluntary disclosure.

H4: *Ceteris paribus,* there is a significant association between profitability and the extent of voluntary disclosure.

H5: *Ceteris paribus*, there is a significant association between leverage and the extent of voluntary disclosure.

$H6_A$: *Ceteris paribus*, there is a negative association between ownership concentration and the extent of voluntary disclosure.

$H6_B$: *Ceteris paribus*, there is a positive association between foreign ownership and the extent of voluntary disclosure.

H7: *Ceteris paribus*, there is a positive association between proportion of independent, non-executive directors on the board and the extent of voluntary disclosure.

H8: *Ceteris paribus*, there is a negative association between CEO/Chairman role duality and the extent of voluntary disclosure.

H9: *Ceteris paribus*, there is a positive association between the period after the 1997 financial crisis and the extent of voluntary disclosure.

In the univariate analysis, continuous independent variables were tested by Kendall's rank correlation coefficient (tau), which measures the degree of agreement between two sets of ranks. The Kendall test was chosen because it claims to be superior to the Spearman rank correlation coefficient and it has been applied in numerous studies on financial disclosure. In the case of categorical (dummy) variables, Mann-Whitney U tests (for two-category variables) and Kruskal-Wallis tests (for more than two-category variables) were performed in order to determine whether associations between voluntary disclosure and nominal independent variables exist.

In the multivariate analysis, the multiple regression analysis was conducted at two levels: aggregated and disaggregated. At the aggregated level, the total voluntary disclosure score was applied as the dependent variable in order to investigate the collective relationship between the independent variables and overall voluntary disclosure. This relationship was then investigated for each type of information at the disaggregated level. The distribution of the data in this study deviates significantly from normality. Therefore, regressions were run based on the normal scores of both dependent and continuous independent variables. Normal score transformation, based on van der Waerden's approach was applied.

In both univariate and multivariate analysis, variables reported as significantly influencing voluntary disclosures were decided based on statistical significance at either 1% or 5%.

Apart from the statistical analysis from the voluntary disclosure index, this study included semi-structured personal interviews. Interviewees were persons positioned to influence voluntary disclosure, including company management, auditors, regulators, bankers and investment analysts. A semi-structured interview was considered appropriate for this study because it provides more opportunities for interviewees to express their thoughts and views. The interviews were carried out after the statistical analysis so that its results could be discussed in the interview. The statistical results also help the researcher gain prior knowledge about the companies and assist in construction of the interview questionnaire. Content analysis was applied in order to analyse the interview transcripts.

8.3 Key Findings of the Empirical Studies

The examination of the extent of voluntary disclosure in corporate annual reports revealed that even among the most actively traded stocks on the SET, there was considerable variability in the amount of information voluntarily disclosed with overall voluntary disclosure scores ranging from as low as 0.00% to a maximum of 81.03%. By examining the annual reports of 1995, 1996, 2002 and 2005, the results show a significant improvement in voluntary disclosure of Thai listed companies in 2002 and 2005, especially for items related to the economic situation and corporate governance. As expected, the biggest increase in the level of voluntary disclosures at both aggregated and disaggregated levels occurred in 2002. The scores imply that the levels of voluntary disclosures increased markedly after the financial crisis period. This could be the response of companies to government campaigns to improve corporate transparency after the 1997 financial crisis. The positive changes in voluntary disclosure found in this study may raise expectation for governing entities that there is an improvement in the quality of financial reporting practices of Thai listed companies.

There seems to be substantial gaps among the ten sub-categories of information. The highest score was information about the economic environment, followed by general corporate information. In contrast, the lowest scores were segmental information market related information, and corporate social responsibility information. Thai listed companies tended to provide information that is non-specific in nature. There was a relatively low level of quantitative information disclosure. Information associated with high cost, either information processing costs or competitive disadvantage cost, was not disclosed frequently. This may suggest that Thai listed companies were aware of the potential costs and benefits of making voluntary disclosure.

In terms of factors influencing voluntary disclosure in company annual reports, the results from univariate and multivariate analyses tend to support strong significance of size, industry type, and CEO/Chairman role duality in explaining variation in voluntary disclosure. The results also suggest that variation in voluntary disclosure could be influenced, particularly from differences in time periods. Results between univariate and multivariate analyses were not materially different, except for those regarding proportion of non-executive directors on the board, foreign ownership, and profitability, which were found to be significant only in the univariate analysis. Leverage, type of auditor, and ownership concentration did not show significant association with the extent of voluntary disclosure. In terms of explanatory power of the model, the pooled regression on overall voluntary disclosure shows that variables included in the model are able to explain 61.2% of the variation in voluntary level in the annual reports investigated in this study.

The explanatory power of the regression models in this study seems to be higher than in prior studies. However, the adjusted R squared of these models may not be comparable to previous studies, which selected data from the same time period, because the regression models in this study contain the data of four different time periods and time factors seem to be the most influential factors in explaining variation in voluntary disclosures. A high value of adjusted R squared of the regression model incorporating data from different time periods is consistent with the finding of Sutthachai and Cooke (2009), who find a dramatic increase in the values of adjusted R squared after the year dummy variables were included in pooled regression models.

Table 8-1: Summary of statistical results of hypotheses testing

Variable	Expected sign	Observed sign	Statistical significance							
			Univariate				Multivariate			
			O	S	NF	F	O	S	NF	F
SIZ	Positive	Positive	(+)**	(+)**	(+)**	(+)**	(+)**	(+)*	(+)**	(+)*
PRO	Positive/ Negative	Positive/ Negative	(+)*	(+)*	×	×	×	×	(-)*	×
LEV	Positive/ Negative	Positive/ Negative	×	×	×	×	×	×	×	×
OWN	Negative	Positive/ Negative	×	×	(+)*	×	×	×	×	×
BOA	Positive	Positive	(+)**	(+)**	(+)**	(+)**	×	×	×	×
FRN	Positive	Positive	(+)**	(+)**	(+)**	(+)**	×	×	×	×
AUD	Positive	Positive/ Negative	×	×	×	×	×	×	×	×
CEO	Negative	Negative	(-)**	(-)*	(-)*	(-)*	(-)**	(-)**	(-)**	(-)*
IND[a]	Positive/ Negative									
Agro/food		Positive	(+)**	(+)**	(+)**	(+)*	(+)**	(+)**	(+)*	(+)**
Industrial		Positive	(+)**	(+)**	(+)**	(+)*	(+)**	(+)**	(+)**	×
Technology		Positive	(+)**	(+)**	(+)**	(+)*	×	(+)*	×	×
Resource		Positive	(+)**	(+)**	(+)**	(+)*	(+)**	(+)*	(+)**	×
Service		Positive	(+)**	(+)**	(+)**	(+)*	(+)*	×	(+)*	×
YEAR	Positive	Positive	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**	(+)**

O = Overall disclosure, S = Strategic information, NF = Non-financial information, F = Financial information
× not statistically significant, + positive relationship, - negative relationship
Statistically significant at the 1%** or the 5%* level
[a]property/construction industry is used as baseline

Of the three specific information categories, non-financial information was most explained, while financial information was least explained by variables specified in the model. Results on specific information disclosure tend to support those reported at the overall level. The results also support the relative applicability of disclosure theory, especially the agency theory in explaining variation in voluntary disclosure. Table 8-1 summarises the results of hypotheses testing based on univariate and multivariate analyses.

The significant improvement in voluntary disclosures of Thai listed companies after the 1997 financial crisis is consistent with the finding of Sutthachai and Cooke (2009). This may confirm the assumption that the financial crisis had an impact on financial reporting of Thai companies. With respect to factors influencing voluntary disclosures, the significance of company size in explaining variation in voluntary disclosures reported in this study is similar to the findings of Sutthachai and Cooke (2009). The non-significant results of leverage and type of auditor in explaining voluntary disclosures are consistent with the findings of Priebjrivat (1991) and Sutthachai and Cooke (2009). This study give extension to the study by Priebjrivat (1991) and Sutthachai and Cooke (2009) by adding CEO/Chairman role duality, foreign ownership, and proportion of independent non-executive directors on the board in the statistical analysis. These variables were found to be influential factors in voluntary disclosure of Thai listed companies.

The statistical results indicate that part of variation in voluntary disclosure of information in annual reports of Thai listed companies has not been captured by the statistical models. This highlights the need to identify other factors influencing voluntary disclosure. Opinion from persons positioned to influence voluntary disclosure helped to identify other influencing factors. Interviews with twenty market participants including company management, auditors, bankers, investment analysts, and regulators were conducted to gather insight into important issues related to voluntary disclosures. Issues that were discussed and analysed are relevant to views on voluntary disclosure of Thai listed companies, role and importance of annual reports as a source of voluntary disclosures, perceived benefits and costs, credibility of voluntary disclosures, alternative channels of voluntary disclosures, and influential factors of voluntary disclosures.

The interview respondents mainly suggested that corporate disclosures of Thai listed companies showed a good sign of improvement after the 1997 financial crisis. Lessons learned from the crisis have led to several measures to improve the accountability of management, and enhance corporate transparency and disclosure. However, there is room for companies to improve in order to be comparable to the international practices. The development of regulations should be conducted carefully by taking into account the information needs, whilst maintaining flexibility for the preparers.

The interview respondents agreed that annual reports play an important role in corporate reporting of Thai listed companies. They also emphasised the use of annual reports by a wide range of market participants. Cost-benefit associated with the disclosure was confirmed as one of the main factors influencing voluntary disclosure in annual reports. While improvement of company image, capital-related incentives, and international comparability were perceived as strong driving forces of voluntary disclosure, competitive disadvantage was seen as the most important constraint of voluntary disclosure.

The majority of respondents placed the highest importance on the disclosure of financial information. However, they did not pay much attention to the disclosure of non-financial and CSR information. Future prospects information and operational statistics seemed to be the most important themes of information that the interviewees would like to see voluntarily disclosed. Alternative channels of voluntary disclosure such as press releases, analyst briefings, and private discussions were also regarded as important for market participants. Nonetheless, some respondents expressed concern about the credibility of these alternative disclosure channels.

The interviewees suggested that various complex factors influence voluntary disclosure decisions. The perceptions of the interviewees on the importance of company size, industry type and international financing on voluntary disclosure matched the statistical findings. Although the majority of interviewees suggested that closely held companies tend to have a lower level of voluntary disclosure, the result from statistical analysis did not show a strong association between ownership concentration and extent of voluntary disclosure. The interview responses regarding the effect of profitability and leverage on voluntary disclosure did not lead to a clear direction on the association. The conflicting direction of the association could help to explain the non-significance of leverage and mixed results of profitability in the statistical analysis.

The interview findings suggested that voluntary disclosure behaviour is more complicated than previously assumed by the quantitative study. The opinions of preparers, users and regulators helped to validate and complement the interpretation of statistical findings. The interviewees revealed some areas that could influence voluntary disclosure decisions, which have not been included in the quantitative study, such as the quality of management, efficiency of information systems, and company image and reputation. These factors might account for some ofthe unexplained variations in the statistical results.

8.4 Contribution to Knowledge

This study contributes to the literature by providing empirical evidence on voluntary disclosure practices of Thai listed companies as an example of the emerging capital market in economic transition. Results from statistical analysis, together with perceptions of the influential individuals interviewed, provide a better understanding of voluntary disclosure practices. The examination of voluntary disclosures at the disaggregated level, which has not been thoroughly observed in the Thai context, contributes to in-depth understanding of disclosure behaviour and helps to validate findings of disclosure at the aggregated level. Interviews with persons positioned to influence voluntary disclosure provides further insight into factors influencing voluntary disclosure and helps in identifying other factors not easily captured from quantitative analysis. In addition, it contributes to the knowledge of voluntary disclosure by incorporating the human aspects of disclosure practices in the analysis. Voluntary disclosure is a sensitive issue because it is a matter of managerial judgement. By including qualitative analysis from interviews, extensive understanding of corporate disclosure motives is created. This knowledge can assist policy makers in developing a financial reporting regulatory framework in order to achieve higher levels of compliance. Findings from this study could contribute to the development of corporate transparency and disclosures in developing countries, especially those that were affected by the 1997 financial crisis.

8.5 Implications of Findings

This research outlines company behaviour in voluntary disclosures. It gives information, to a certain extent, about the characteristics of companies that are likely to have good practices. This knowledge provides a significant benefit to users of corporate information because it could help them estimate types and extent of information provided by listed companies. Therefore, users can adjust their strategy in collecting additional information from other sources and act cautiously when evaluating corporate disclosures. This study also provides implication for listed companies about the importance of corporate transparency and disclosures, which can lead to higher firm value and can be used as a tool to differentiate well governed firms from companies that do not practice good corporate governance. The 1997 financial crisis caused significant changes in the financial reporting environment in both policy and practice aspects. Lessons learned from the crisis have led to several measures to improve the accountability of management, enhance corporate transparency, and strengthen minority shareholder rights. High-quality of disclosure was found to be an important factor for Thai companies to be able to sustain their business after the crisis.

The knowledge on disclosure behaviour is also important for regulators because it can help them to foresee likely responses to financial reporting regulations. This knowledge can help regulators in developing future schemes in the financial reporting regulatory framework in order to achieve a higher level of compliance. Similar to other developing countries, laws and regulations seem to be main force behind corporate disclosure in Thailand. If the government can encourage Thai companies to be more aware of the importance of corporate transparency and disclosure, some regulations could be replaced by a self-monitoring system like in developed countries. The Thai capital market has not been fully developed to be capital market-based system. The role of financial reporting in raising a company's capital has not been fully recognised by Thai management. In addition, there seem to be considerable gaps between disclosure practices of small and large companies. Therefore, the development of regulations should be conducted carefully by taking into account the information needs, whilst maintaining flexibility for the preparers. Allowing certain types of information to be voluntary disclosed by companies could help disclosure practice to be more flexible and logical.

The increase in levels of voluntary disclosure reported in this study may not guarantee an improvement in quality of financial reporting. However, it gives some indication of the enhancement in voluntary disclosure practices of Thai listed companies. Looking back, Thailand has come a long way since the outbreak of the financial crisis; however, it might take a long time to achieve the desired behavioural outcome. Therefore, continuity of the development is essential. It is very important to continue to educate companies and the public on the importance and benefit of corporate transparency and disclosures.

8.6 Limitations of the Study

The first limitation of the current study comes from the use of companies in the SET100 index as the sample size. This may affect the generalisability of the findings. The findings in this study may not be applicable to smaller and less actively traded listed companies. Although the sample may not be representative of the whole population, these larger companies are expected to be benchmarks for the best practices for Thai listed companies. Sampling was also influenced by the availability of annual reports, as discussed in Chapter 4 (section 4.3). Access to data of Thai listed companies remains limited, especially for corporate annual reports.

Further limitations may be related to scoring processes of the voluntary disclosure index, which have been widely used in prior literature and have been followed by this study. As discussed in Chapter 4 (section 4.4), the scoring process in this study includes procedures that are considered to be subjective. While every possible effort has been made to reduce subjectivity of the research instruments, total elimination of subjectivity might not be possible.

In order to be able to compare the levels of disclosure in different years with the same index, disclosure items that became mandatory after 1995 were excluded from the checklist. Elimination of these items could create a downward bias to companies that voluntarily disclosed such information. Nevertheless, the effect of the elimination is not expected to be large.

There are several sources of information that companies can use to communicate their information. However, this study focused on voluntary disclosures in company annual reports. Therefore, voluntary disclosure scores in this study should not be considered as absolute scores for the extent of corporate voluntary disclosure. Nevertheless, results from the interviews conducted in this study confirm that annual reports can be regarded as a very important channel of voluntary disclosure.

8.7 Suggestions for Further Research

There is an opportunity for future research to investigate disclosure practices using other channels of voluntary disclosure. Future research in Thailand might extend the sample size to medium and small-sized companies. This study investigated voluntary disclosure in different time periods from four different years. The sample size was limited by data availability and constraints of manual data collection. It might create a clearer picture of changes in voluntary disclosure by using time-series study.

The interviews conducted in this study identified other factors that might explain variation in voluntary disclosure. Including more factors in the analysis may improve the explanatory power of the model applied. However, some factors may not be easily quantified. Corporate disclosure is a broad area that one study cannot be expected to cover all aspects. Therefore, it may be interesting to investigate corporate disclosure using different research designs such as case studies to examine specific issues on voluntary disclosure.

REFERENCES

ABD-ELSALAM, O. H., (1999) The Introduction and Application of International Accounting Standards to Accounting Disclosure Regulations of a Capital Market in a Developing Economy: The Case of Egypt, Unpublished PhD Thesis, Heriot-Watt University, Edinburgh.

ABDELSALAM, M., (1990). The Use of Corporate Financial Reports by Investors in Saudi Arabia *Advances in International Accounting* 3: 25-39.

ABU-NASSAR, M., and RUTHERFORD, B. A., (1995). Preparers' Attitudes to Financial Reporting in Less Developed Countries with Moderately Sophisticated Capital Markets: the Case of Jordan. *International Journal of Accounting*, 30: 129-138.

ACCOUNTING STANDARDS BOARD (ASB), (1994). *Statements of Principles*, Accounting Standards Board, London.

ADAMS, M., and HOSSAIN, M., (1998). Managerial Discretion and Voluntary Disclosure: Evidence from the New Zealand Life Insurance Industry. *Journal of Accounting and Public Policy*, 17: 245-281.

AHMED, K., (1996). Disclosure Policy Choice and Corporate Characteristics: A Study of Bangladesh. *Asia-Pacific Journal of Accounting*, 3 (1): 183-203.

AHMED, K., and NICHOLLS, D., (1994). The Impact of Non-Financial Company Characteristics on Mandatory Disclosure Compliance in Developing Countries: The Case of Bangladesh. *International Journal of Accounting*, 29 (1): 62-77.

AKERLOF, G. A., (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanism. *Quarterly Journal of Economics*, 84 (3): 488-500.

AL-MODAHKI, J. S., (1995). An Empirical Study of Accounting Disclosure in the Kingdom of Saudi Arabia, Unpublished PhD Thesis, University of Exeter, Exeter.

ALBA, P., CLAESSENS, S., and DJANKOV, S., (1998). Thailand's Corporate Financing and Governance Structures: Impact on Firms' Competitiveness. *Policy Research Working Paper No.2003*. World Bank.

ANDERSON, R. C., and REEB, D. M., (2004). Board composition: balancing family influence in S&P 500. *Administrative Science Quarterly*, 49 (2): 209-237.

ANDERSON, R. H., (1981). The Usefulness of Accounting and Other Information Disclosed in Corporate Annual Reports to Institutional Investors in Australia. *Accounting and Business Research*, 11 (44): 259-265.

ARCHAMBAULT, J. J., and ARCHAMBAULT, M. E., (2003). A Multinational Test of Determinants of Corporate Disclosure. *The International Journal of Accounting*, 38: 173-194.

ARMSTRONG, P., (1991). Contradiction and Social Dynamics in the Capitalist Agency Relationship. *Accounting, Organizations and Society*, 16 (1): 1-25.

ARNOLD, B., and DE LANGE, P., (2004). Enron: An Examination of Agency Problems. *Critical Perspectives on Accounting*, 15 (6-7): 751-765.

ASHTON, D., (1991). Agency Theory and Contracts of Employment. In: ASHTON, D., HOPPER, T., SCAPENS, R. (Ed.) *Issues in Management Accounting.* Prentice Hall.

ASHTON, R. H., (1974). The Predictive-Ability Criterion and User Prediction Models. *The Accounting Review,* 49 (4): 719-732.

BAKER, M. J., (2003). *Business and Management Research: How to Complete Your Research Project Successfully,* Westburn, Helensburgh.

BALL, R., ROBIN, A., and WU, J. S., (2003). Incentives versus Standards: Properties of Accounting Income in Four East Asian Countries. *Journal of Accounting and Economics,* 36 (1-3): 235-270.

BALL, R., WU, J. S., and ROBIN, A., (1999). Incentives versus Standards: Properties of Accounting income in Four East Asian Countries and Implications for Acceptance of IAS. *Unpublished Working Paper.* University of Rochester and Rochester Institute of Technology.

BANK OF THAILAND (BOT), (2010). *Thailand's Economic Condition in 2010,* Bank of Thailand, Bangkok.

BAR-YOSEF, S., and LIVNAT, J., (1984). Auditor Selection: An Incentive Signalling Approach. *Accounting and Business Research,* 14 (56): 301-309.

BARAKO, D. G., HANCOCK, P., and IZAN, H. Y., (2006). Factors Influencing Voluntary Corporate Disclosure by Kenyan Companies. *Corporate Governance,* 14 (2): 107-125.

BARRETT, M. E., (1976). Financial Reporting Practices: Disclosure and Comprehensiveness in an International Setting. *Journal of Accounting Research,* 14 (1): 10-26.

BARRETT, M. E., (1977). The Extent of Disclosure in Annual Reports of Large Companies in Seven Countries. *International Journal of Accounting,* 12 (2): 1-25.

BARRY, C. B., and BROWN, S. J., (1985). Differential Information and Security Market Equilibrium. *Journal of Financial and Quantitative Analysis,* 20 (4): 407-422.

BAYSINGER, B. D., and BUTLER, H. N., (1985). Corporate Governance and the Board of Directors: Performance Effects of Changes in Board Composition. *Journal of Law, Economics and Organisations,* 1 (1): 101-124.

BEASLEY, M., (1996). An Empirical Analysis of the Relation Between the Board of Director Composition and Financial Statement Fraud. *Accounting Review* 71: 443-465.

BEAVER, W. H., (1981). *Financial Reporting: An Accounting Revolution,* Prentice-Hall, Englewood Cliffs.

BELKAOUI, A., and KAHL, A., (1978). *Corporate Financial Disclosure in Canada,* Research Monograph No. 1 of Canadian Certified General Accounting Association, Vancouver, Canada.

BELKAOUI, A., and KARPIK, P. G., (1989). Determinants of the Corporate Decision to Disclose Social Information. *Accounting, Auditing and Accountability Journal,* 2 (1): 36-51.

BENS, D. A., and MONAHAN, S. J., (2004). Disclosure Quality and the Excess Value of Diversification. *Journal of Accounting Research*, 42 (4): 691-730.

BENSTON, G. J., (1986). The Benefits and Costs to Managers of Voluntary Accounting Disclosure - A Discussion of: Current Cost Disclosers and Nondisclosers: Theory and Canadian Evidence. *Contemporary Accounting Research*, 3 (1): 35-44.

BERARDINO, J. F., (2001). Corporate Governance on the Agenda. *South China Morning Post*, Markets: 2.

BERGLÖF, E., and PAJUSTE, A., (2005). What Do Firms Disclose and Why? Enforcing Corporate Governance and Transparency in Central and Eastern Europe. *Oxford review of economy policy*, 21 (2).

BHOJRAJ, S., BLACCONIERE, W. G., and D'SOUZA, J. D., (2004). Voluntary Disclosure in a Multi-Audience Setting: An Empirical Investigation. *The Accounting Review*, 79 (4): 921-947.

BHUSHAN, R., and LESSARD, D. R., (1992). Coping with International Accounting Diversity: Fund Managers Views on Disclosure, Reconciliation and Harmonisation. *Journal of International Financial Management and Accounting*, 4 (2): 149-163.

BIRD, R. G., and LOCKE, S. M., (1981). Financial Accounting Reports: A Market Model of Disclosure. *Journal of Business Finance and Accounting*, 8 (1): 27-44.

BOESSO, G., and KUMAR, K., (2007). Drivers of Corporate Voluntary Disclosure. *Accounting, Auditing and Accountability Journal*, 20 (2): 269-296.

BOTOSAN, C. A., (1997). Disclosure Level and the Cost of Equity Capital. *Accounting Review*, 72 (3): 323-349.

BRADBURY, M. E., (1992). Voluntary Disclosure of Financial Segment Data: New Zealand Evidence. *Accounting and Finance*, 32 (1): 15-26.

BUZBY, S. L., (1972). An Empirical Investigation of the Relationship between the Extent of Disclosure, Unpublished PhD Thesis, Pennsylvania State University.

BUZBY, S. L., (1974a). Selected Items of Information and Their Disclosure in Annual Reports. *The Accounting Review*, 49 (3): 423-435.

BUZBY, S. L., (1974b). The Nature of Adequate Disclosure. *Journal of Accountancy*, 137 (4): 38-47

BUZBY, S. L., (1975). Company Size, Listed Versus Unlisted Stocks, and the Extent of Financial Disclosure. *Journal of Accounting Research*, 13 (1): 16-37.

BYRD, J., PARRINO, R., and PRITSCH, G., (1998). Stockholder-Manager Conflicts and Firm Value. *Financial Analysts Journal*, 54 (3): 14-30.

CAHAN, S. F., (1992). The Effect of Antitrust Investigations on Discretionary Accruals: A Refined Test of the Political Cost Hypothesis. *The Accounting Review*, 67: 77-95.

CAMFFERMAN, K., and COOKE, T. E., (2002). An analysis of Disclosure in the Annual Reports of UK and Dutch Companies. *Journal of International Accounting Research*, 1: 3-30.

CAPULONG, V., EDWARDS, D., WEBB, D., and ZHUANG, J., (2000). *Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea,* *Malaysia, Philippines, and Thailand, Volume one,* Asian Development Bank, Manila.

CERF, A. R., (1961). *Corporate Reporting and Investment Decision,* University of California, Berkeley.

CHAIYASOOT, N., (1993). Commercial Banking. In: WARR, P. G. (Ed.) *The Thai Economy in Transition.* Cambridge University Press, Cambridge.

CHANDRA, G., (1974). A Study of the Consensus on Disclosure among Public Accountants and Security Analysts. *Accounting Review,* 49: 733-742.

CHANG, L. S., MOST, K. S., and BRIAN, C. W., (1983). Utility of Annual Reports: An International Study. *Journal of International Business Studies* 14 (1): 63-84.

CHAU, G. K., and GRAY, S. J., (2002). Ownership Structure and Corporate Voluntary Disclosure in Hong Kong and Singapore. *The International Journal of Accounting,* 37: 247-265.

CHEN, C. J. P., and JAGGI, B., (2000). Association between Independent Non-Executive Directors, Family Control and Financial Disclosures in Hong Kong. *Journal of Accounting and Public Policy,* 19: 285-310.

CHOI, F. D. S., (1973a). Financial Disclosure in Relation to a Firm's Capital Costs. *Accounting and Business Research,* 3 (11): 282-292.

CHOI, F. D. S., (1973b). Financial Disclosure and Entry to the European Capital Market. *Journal of Accounting Research,* 11 (2): 159-175.

CHOI, F. D. S., FROST, C. A., and MEEK, G. K., (2002). *International Accounting,* (4th edition), Prentice Hall.

CHOI, F. D. S., and LEVICH, R. M., (1990). *The Capital Market Effects of International Accounting Diversity,* Dow Jones Irwin, Home wood, Illinois.

CHOI, F. D. S., and MUELLER, G. G., (1992). *International Accounting,* (2nd edition), Prentice Hall, New York.

CHOW, C. W., and WONG-BOREN, A., (1987). Voluntary Financial Disclosure by Mexican Corporation. *The Accounting Review,* 62 (3): 533-540.

CIA, (2011). The World Factbook:Thailand[online].Washington, D.C.:Central Intelligence Agency. Available at:<https://www.cia.gov/library/publications/the-world-factbook/geos/th.html> [Accessed 1 March 2011].

CLAESSENS, S., and FAN, J., (2002). Corporate Governance in Asia: A Survey. *International review of finance,* 3 (2): 71-103.

CONNELLY, P., (2004). Corporate Governance in Thailand. In: ANANDARAJAH, K. and BARHAM, S. (Eds.) *The Practitioner's Guide to Corporate Governance in Asia.* ISI Publications, Hong Kong.

COOKE, T. E., (1989a). Voluntary Corporate Disclosure by Swedish Companies.. *Journal of International Financial Management Accounting* 1(2): 171-195.

COOKE, T. E., (1989b). Disclosure in the Corporate Annual Reports of Swedish Companies. *Accounting and Business Research,* 19 (74): 113-124.

COOKE, T. E., (1991). An Assessment of Voluntary Disclosure in the Annual Reports of Japanese Corporations. *International Journal of Accounting,* 26 (3): 174-189.

COOKE, T. E., (1992). The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Corporations. *Accounting and Business Research*, 22 (87): 229-237.

COOKE, T. E., (1996). The Influence of the Keiretsu on Japanese Corporate Disclosure. *Journal of International Financial Management Accounting*, 7 (3).

COOKE, T. E., (1998). Regression Analysis in Accounting Disclosure Studies. *Accounting and Business Research*, 28 (3): 209-224.

COOKE, T. E., and WALLACE, R. S. O., (1989). Global Surveys of Corporate Disclosure Practices and Audit Firms: A Review Essay. *Accounting and Business Research*, 20 (77): 47-57.

COPELAND, T., and GALAI, D., (1983). Information Effects on the Bid-Ask Spread. *Journal of Finance*, 38 (5): 1457-1469.

CORE, J. E., (2001). A Review of the Empirical Disclosure Literature: Discussion. *Journal of Accounting and Economics*, 31 (1-3): 441-456.

COURTIS, J. K., (1976). Relations between Timeliness of Corporate Reporting and Corporate Attributes. *Accounting and Business Research*, 6 (25): 45-56.

COURTIS, J. K., (1978). Annual Report Disclosure in New Zealand: Analysis of Selected Corporate Attribute. *New England Accounting Research Study No.8.*

CRAIG, R., and DIGA, J., (1998). Corporate Accounting Disclosure in ASEAN. *Journal of International Financial Management and Accounting*, 9 (3): 246-274.

CRASWELL, A. T., and TAYLOR, S. L., (1992). Discretionary Disclosure of Reserve by Oil and Gas Companies: An Economic Analysis. *Journal of Business Finance and Accounting*, 19 (2): 295-308.

CRESWELL, J. W., and PLANO-CLARK, V. L., (2007). *Designing and Conducting Mixed Methods Research*, SAGE, Thousand Oaks.

DARROUGH, M. N., (1993). Disclosure Policy and Competition: Cournot vs. Bertrand. *The Accounting Review*, 68: 534-562.

DARROUGH, M. N., and STOUGHTON, N. M., (1990). Financial Disclosure Policy in an Entry Game. *Journal of Accounting and Economics*, 12 (1-3): 219-243.

DATAR, S., FELTHAM, G., and HUGHES, J., (1991). The Role of Auditor and Audit Quality in Valuing New Issues. *Journal of Accounting and Economics*, 14: 3-49.

DECHOW, P., SLOAN, R., and SWEENEY, A., (1996). Causes and consequences of earnings manipulation: an analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research* 13: 1-36.

DEMB, A., and NEUBAUER, F. F., (1992). *The Corporate Board: Confronting the Paradoxes*, Oxford University Press, Oxford.

DEPOERS, F., (2000). A Cost-Benefit Analysis of Voluntary Disclosure: Some Empirical Evidence from French Listed Companies. *The European Accounting Review*, 9 (2): 245-263.

DHALIWAL, D. S., (1980). Improving the Quality of Corporate Financial Disclosure. *Accounting and Business Research*, 10 (40): 385-391.

DIAMOND, D., and VERRECCHIA, R., (1991). Disclosure, Liquidity, and the Cost of Capital. *Journal of Finance,* 46 (4): 1325-1360.

DIXON, C., (1999). The Developmental Implications of the Pacific Asian Crises: the Thai Experience. *Third World Quarterly,* 20 (2): 439-452.

DIXON, C., (2001). The Causes of Thai Economic Crisis: the Internal Perspective. *Geoforum,* 32 (1): 47-60.

DYE, R. A., (1986). Proprietary and Nonproprietary disclosures. *Journal of Business* 59 (2): 331-366.

DYE, R. A., (2001). An Evaluation of "Essays on Disclosure" and the Disclosure Literature in Accounting. *Journal of Accounting and Economics,* 32 (2001): 181-235.

EASTERBY-SMITH, M., THORPE, R., and JACKSON, P. R., (2008). *Management Research,* (3rd edition), Sage, London.

ECCLES, R., G., and MAVRINAC, S., C., (1995). Improving the Corporate Disclosure Process. *Sloan Management Review,* 36 (4): 11-25.

EISENHARDT, K. M., (1989). Building Theories from Case Study Research. *Academy of Management Review,* 14 (4): 532-550.

ELLIOTT, R. K., and JACOBSON, P. D., (1994). Costs and Benefits of Business Information Disclosure: A Commentary. *Accounting Horizons,* 8: 80-96.

ENG, L. L., and MAK, Y. T., (2003). Corporate Governance and Voluntary Disclosure. *Journal of Accounting and Public Policy,* 22: 325-345.

EPSTEIN, M., FLAMHOLTZ, E., and MCDONOUGH, J. J., (1976). Corporate Social Accounting in the United States of America: State of the Arts and Future Prospects. *Accounting, Organizations and Society,* 1 (1): 23-42.

ERNST&YOUNG, (2009). Thailand on the Road to IFRS Conversion[online].Available at:<http://www.ey.com/Publication/vwLUAssets/Thai_GAAP_comparison_GL_IFRS/$FILE/Thai_GAAP_comparison_GL_IFRS.pdf> [Accessed 2 October 2010].

ERRUNZA, V. R., and LOSQ, E., (1985). The Behaviour of Stock Prices on LDC Markets. *Journal of Banking and Finance,* 9 (4): 561-575.

FAMA, E., and JENSEN, M., (1983). Separation of ownership and control. *Journal of Law and Economics* 26: 301-326.

FAN, J., and WONG, T., (2002). Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia. *Journal of Accounting and Economics,* 33 (3): 401-425.

FAN, J., and WONG, T., (2005). Do External Auditors Perform a Corporate Governance Role in Emerging Markets? Evidence from East Asia. *Journal of Accounting Research,* 43 (1): 35-72.

FELDMAN, R. A., and KUMAR, M. S., (1995). Emerging Equity Markets: Growth, Benefits, and Policy Concerns. *The World Bank Research Observer,* 10 (2): 181-200.

FERGUSON, M. J., LAM, K. C. K., and LEE, G. M., (2002). Voluntary Disclosure by State-owned Enterprises Listed on the Stock Exchange of Hong Kong. *Journal of International Financial Management and Accounting,* 13 (2): 125-152.

FIELD, A., (2009). *Discovering Statistics Using SPSS*, (3rd edition), SAGE, London.

FIELDS, T. D., LYS, T. Z., and VINCENT, L., (2001). Empirical Research on Accounting Choice. *Journal of Accounting and Economics*, 31: 255-307.

FINANANCIAL ACCOUNTING STANDARDS BOARD (FASB), (2001). Improving Business Reporting Insights into Enhancing Voluntary Disclosure. Steering Committee Report, Business Reporting Research Project.

FIRER, C., and METH, G., (1986). Information Disclosure in Annual Reports in South Africa. *Omega International Journal of Management Science*, 14 (5): 373-382.

FIRTH, M., (1979). The Disclosure of Information by Companies. *Omega International Journal of Management Science*, 7 (2): 129-135.

FIRTH, M., (1980). Raising Finance and Firms' Corporate Reporting Policies. *ABACUS*, 16 (2): 100-115.

FISCHER, S., (1998). The Asian Crisis: a View from the IMF. *Journal of International Financial Management and Accounting*, 9 (2): 167-176.

FISHMAN, M. J., and HAGERTY, K. M., (1989). Disclosure Decisions by Firms and the Competition for Price Efficiency. *Journal of Finance*, 44 (3): 633-646.

FORKER, J. J., (1992). Corporate Governance and Disclosure Quality. *Accounting and Business Research*, 22 (86): 111-124.

FOSTER, G., (1986). *Financial Statement Analysis*, (2nd), Prentice-Hall, Englewood Cliffs, New Jersey.

FRANCIS, J., HANNA, J., and PHILBRICK, D., (1998). Management Communications with Securities Analysts. *Journal of Accounting and Economics* 24: 363-394.

FRANCIS, J., PHILBRICK, D., and SCHIPPER, K., (1994). Shareholder Litigation and Corporate Disclosures. *Journal of Accounting Research*, 32: 137-164.

FRANKEL, R., MCNICHOLS, M., and WILSON, P., (1995). To Warn or Not To Warn: Management Disclosures in the Face of an Earnings Surprise. *The Accounting Review*, 70 (1): 135-150.

FREEBODY, P., (2003). *Qualitative Research in Education: Interaction and Practice*, Sage, London.

FROST, S., and WATKINS, G., (2009). Business in Thailand. In: ANDREWS, T. G. And SIENGTHAI, S. (Eds.) *The Changing Face of Management in Thailand*. Routledge, Oxon.

GLOSTEN, L. R., and MILGROM, P. R., (1985). Bid, Ask and Transaction Prices in a Specialist Market with Heterogeneously Informed Traders. *Journal of Financial Economics*, 14 (1): 71-100.

GRAHAM, R., and KING, R., (2000). Accounting Practices and the Market Valuation of Accounting Numbers: Evidence from Indonesia, Korea, Malaysia, the Philippines, Taiwan, and Thailand. *The International Journal of Accounting*, 35 (4): 445-470.

GRAHAM, R., KING, R., and BAILES, J., (2000). The Value Relevance of Accounting Information during a Financial Crisis: Thailand and the 1997 Decline in the value of Baht. *Journal of International Financial Management and Accounting*, 11 (2): 84-107.

GRAY, S. J., CAMPBELL, S. G., and SHAW, J. C., (1984a). *International financial reporting: A comparative survey of accounting requirements and practices in 30 countries.*, Macmillan, London.

GRAY, S. J., MCSWEENEY, L. B., and SHAW, J. C., (1984b). *Information Disclosure and the Multinational Corporation,* John Wiley and Sons, Great Britain.

GRAY, S. J., MEEK, G. K., and ROBERTS, C. B., (1995). International Capital Market Pressures and Voluntary Annual Report Disclosures by US and UK Multinationals. *Journal of International Financial Management and Accounting,* 6 (1): 43-68.

GRAY, S. J., OWEN, D., and MAUNDERS, K., (1987). *Corporate Social Reporting: Accounting and Accountability,* Prentice-Hall International.

GRAY, S. J., and ROBERTS, C. B., (1989). Voluntary Information Disclosure and British Multinationals: Corporate Perceptions of Costs and Benefits. In: HOPWOOD, A. G. (Ed.) *International Pressures for Accounting Change.* Prentice Hall, Hertford.

GRIFFITHS, D., (1980). A Pragmatic Approach to Spearmans's Rank Correlation Coefficient. *Teaching Statistics,* 2 (1): 10-13.

GROSSMAN, S. J., (1981). The Informational Role of Warranties and Private Disclosure about Product Quality *Journal of Law and Economics,* 24: 461-489.

GUJARATI, D. N., (2003). *Basic Econometrics,* (4th edition), McGraw-Hill, New York.

GUL, F. A., and LEUNG, S., (2004). Board Leadership, Outside Directors' Expertise and Voluntary Corporate Disclosures. *Journal of Accounting and Public Policy,* 23 (2004): 351-379.

GUTHRIE, J., and PARKER, L. D., (1989). Corporate Social Reporting: A Rebuttal of Legitimacy Theory. *Accounting and Business Research,* 19 (76): 343-352.

HAGERMAN, R. L., and ZMIJEWSKI, M. E., (1979). Some Economic Determinants of Accounting Policy Choice. *Journal of Accounting and Economics,* 1 (2): 141-161.

HALEY, U. C. V., (2000). The Hair of the Dog that Bit You: Successful Market Strategies in Post-crisis South-East Asia. *Marketing Intelligence and Planning,* 18 (5): 236-246.

HANIFFA, R. M., (1999) Culture, Corporate Governance and Disclosure in Malaysian Corporations, Unpublished PhD Thesis, University of Exeter, Exeter.

HANIFFA, R. M., and COOKE, T. E., (2002). Culture, Corporate Governance and Disclosure in Malaysian Corporations. *ABACUS,* 38 (3): 317-349.

HARVEY, M., and KEER, F., (1978). *Financial Accounting Theory,* Prentice-Hall International.

HASSAN, O. A. G., GIORGIONI, G., and ROMILLY, P., (2006). The Extent of Financial Disclosure and its Determinants in an Emerging Capital Market: the Case of Egypt. *International Journal of Accoumting, Auditing, and Performance Evaluation,* 3 (1): 41-67.

HAYS, W. L., (1973). *Statistics for the Social Sciences,* (2nd edition), Holt, Rinehart and Winston, New York.

HEALY, P. M., HUTTON, A. P., and PALEPU, K. G., (1999). Stock Performance and Intermediation Changes Surrounding Sustained Increases in Disclosure. *Contemporary Accounting Research* 16 (3): 485-520.

HEALY, P. M., and PALEPU, K. G., (1993). The Effects of Firms' Disclosure Strategies on Stock Prices. *Accounting Horizons*, 7: 1-11.

HEALY, P. M., and PALEPU, K. G., (2001). Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature. *Journal of Accounting and Economics*, 31 (2001): 405-440.

HEWISON, K., (1989). *Bankers and Bureaucrats: Capital and Role of the State in Thailand*, Yale University Press, New Haven.

HEWISON, K., (2001). Thailand's Capitalism: Development through Boom and Bust. In: RODAN, G., HEWISON, K. and ROBISON, R. (Eds.) *The political Economy of South-East Asia: Conflicts, Crises, and Change.* Oxford University Press, Oxford.

HEWISON, K., (2002). Thailand: Boom, Bust, and Recovery. *Perspectives on Global Development and Technology*, 1 (3-4): 225-250.

HO, S. S. M., and WONG, K. S., (2001a). A Study of the Relationship between Corporate Governance Structures and the Extent of Voluntary Disclosure. *Journal of International Accounting, Auditing & Taxation*, 10: 139-156.

HO, S. S. M., and WONG, K. S., (2001b). A Study of Corporate Disclosure Practice and Effectiveness in Hong Kong. *Journal of International Financial Management and Accounting*, 12 (1): 75-102.

HOLTHAUSEN, R. W., and LEFTWICH, R. W., (1983). The Economic Consequences of Accounting Choice: Implications of Costly Contracting and Monitoring. *Journal of Accounting and Economics*, 5: 77-117.

HOLZER, H. P., and TREMBLAY, D., (1973). Accounting and Economic Development: The Case of Thailand and Tunisia. *The International Journal of Accounting*, 9 (1): 67-80.

HORNGREN, C. T., (1957). Disclosure:1957. *Accounting Review*, 32 (4): 598-603.

HOSSAIN, M., and ADAMS, M., (1995). Voluntary Financial Disclosure by Australian Listed Companies. *Australian Accounting Review*, 5 (2): 45-55.

HOSSAIN, M., PERERA, M. H. B., and RAHMAN, A. R., (1995). Voluntary Disclosure in Annual Reports of New Zealand Companies. *Journal of International Financial Management and Accounting*, 6 (1): 69-87.

HOSSAIN, M., TAN, M. L., and ADAMS, M. B., (1994). Voluntary Disclosure in an Emerging Capital Market: Some Empirical Evidence from Companies Listed on the KLSE. *The International Journal of Accounting*, 29 (4).

HOSSAIN, M., and TAYLOR, P. J., (2007). The Empirical Evidence of the Voluntary Information Disclosure in the Annual Reports of Banking Companies: The Case of Bangladesh. *Corporate Ownership and Control*, 4 (3): 111-125.

HUAFANG, X., and JIANGUO, Y., (2007). Ownership Structure, Board Composition and Corporate Voluntary Disclosure. *Managerial Auditing Journal*, 22 (6): 604-619.

INCHAUSTI, B. G., (1997). The Influence of Company Characteristics and Accounting Regulation on Information Disclosed by Spanish Firms. *The European Accounting Review,* 6 (1): 45-68.

INTERNATIONAL ACCOUNTING STANDARDS COMMITTEE (IASC), (1997). *International Accounting Standards,* International Accounting Standards Committee London.

INTERNATIONAL MONETARY FUND (IMF), (2000). Recovery from the Asian Crisis and the Role of the IMF[online].Washington DC:IMF. Available at: <http://www.imf.org/external/np/exr/ib/2000/062300.htm > [Accessed 5 March 2011].

JAGGI, B., (1975). The Impact of the Cultural Environment on Financial Disclosures. *The International Journal of Accounting Education and Research,* 10 (2): 75-84.

JAGGI, B., and LOW, P. Y., (2000). Impact of Culture, Market Forces, and Legal System on Financial Disclosures. *International Journal of Accounting,* 35 (4): 495-519.

JAIKENGKIT, A., (2002). The Development of Financial Reporting, The Stock Exchange and Corporate Disclosure in Thailand. *Research in Accounting Regulation,* 15: 239-258.

JENSEN, M. C., and MECKLING, W. H., (1976). Theory of the Firm: Managerial behaviour, Agency Costs and Ownership Structure. *Journal of Financial Economics,* 3 (3): 305-360.

KAHL, A., and BELKAOUI, A., (1981). Bank Annual Report Disclosure Adequacy Internationally. *Accounting and Business Research,* 11 (43): 189-196.

KEANE, S., (1993). *Emerging Markets - The Relevance of Efficient Market Theory,* The Chartered Association of Certified Accountants, Occasional Research Paper, 15.

KESBOONCHOO-MEAD, K., and WANASATHOP, A., (2009). Political backdrop: 1997-2008. In: ANDREWS, T. G. and SIENGTHAI, S. (Eds.) *The Changing Face of Management in Thailand.* Routledge, Oxon.

KIM, O., and VERRECCHIA, R., (1994). Market Liquidity and Volume Around Earnings Announcements. *Journal of Accounting and Economics* 17: 41-68.

KING, R., POWNALL, G., and WAYMIRE, G., (1990). Expectations Adjustment via Timely Management Forecasts: Review, Synthesis and Suggestions for Future Research. *Journal of Accounting Literature,* 9: 113-144.

KLAUSNER, W. J., (2002). *Thai Culture in Transition,* The Siam Society, Bangkok.

KNUTSON, P., (1992). *Financial Reporting in the 1990's and Beyond,* Association for Investment Management and Research, New York.

KOHLER, E. L., (1975). *A Dictionary for Accountants,* Prentice Hall, New Jersey.

KUASIRIKUN, N., (1998). Accounting Disclosure in Thailand: An Appraisal of Mainstream Financial Accounting Practices and the Prospects for Social, Green and Broader Forms of External Accounting, Unpublished PhD Thesis, University of Essex, Essex.

KUASIRIKUN, N., and SHERER, M., (2004). Corporate Social Accounting Disclosure in Thailand. *Accounting Auditing and Accountability Journal,* 17 (4): 629-660.

LA PORTA, R., LOPEZ-DE-SILANES, F., SHLEIFER, A., and VISHNY, R., (1998). Law and finance. *Journal of Political Economy* 106 (1998): 1113-1155.

LAKHAL, F., (2005). Voluntary Earning Disclosures and Corporate Governance: Evidence from France. *Review of Accounting and Finance,* 4 (3): 64-85.

LANG, M., and LUNDHOLM, R., (1993). Cross-Sectional Determinants of Analysts Ratings of Corporate Disclosures. *Journal of Accounting Research,* 31 (2): 246-271.

LANG, M. H., and LUNDHOLM, R. J., (2000). Voluntary Disclosure and Equity Offerings: Reducing Information Asymmetry or Hyping the Stock? *Contemporary Accounting Research,* 17 (4): 623-662.

LEE, T. A., (1987). Accounting, Infrastructure and Economic Development. *Journal of Accounting and Public Policy,* 6: 75-85.

LEE, T. A., and TWEEDIE, D. P., (1975). Accounting Information: An Investigation of Private Shareholder Usage. *Accounting and Business Research,* (Autumn): 280-291.

LEFTWICH, R., R.L., W., and J.L., Z., (1981). Voluntary Corporate Disclosure: The Case of Interim Reporting *Journal of Accounting Research,* 19 (Supplement): 50-77.

LEV, B., (1992). Information Disclosure Strategy. *California Management Review,* 34 (4): 9-32.

LEVENTIS, S. N., and WEETMAN, P., (2000). Exploring and Explaining Variations in Voluntary Disclosure in a European Emerging Capital Market: Evidence from the Athens Stock Exchange. *British Accounting Association 2000 Regional Conference.* University of Aberdeen.

LEVENTIS, S., and WEETMAN, P., (2004). Voluntary Disclosures in an Emerging Capital Market: Some Evidence from the Athens Stock Exchange. *Advances in International Accounting,* 17: 227-250.

LEWIS, A., and COLLINS, J., (1990). Ethical Investments: Preferences and Morality. *The Journal of Behavioural Economics,* 19: 395-411.

LIAO, G. M., and LU, C., (2009). Ownership Structure and Corporate Voluntary Disclosure Evidence from Taiwan. *Corporate Ownership and Control,* 6 (4): 128-134.

LIM, S., and MCKINNON, J., (1993). Voluntary Disclosure by NSW Statutory Authorities: the Influence of Political Visibility. *Journal of Accounting and Public Policy,* 12 (3): 189-216.

LIMPAPHAYOM, P., (2001). Thailand. In: ZHUANG, J., EDWARDS, D. and CAPULONG, V. A. (Eds.) *Corporate Governance and Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines, and Thailand, Volume Two.* The Asian Development Bank, Manila.

LIMPAPHAYOM, P., and CONNELLY, J. T., (2004). *Review of Corporate Governance in Asia,* Thai Institute of Directors Association, Bangkok.

LUTFI, M. M., (1989) Voluntary Financial Disclosure and the Unlisted Securities Market Companies: An Empirical Investigation, Unpublished PhD Thesis, University of Glasgow, Glasgow.

MACDONALD, S. B., (1998). Transparency in Thailand's 1997 Economic Crisis: The Significance of Disclosure. *Asian Survey*, 38 (7): 688-702.

MALONE, D., FRIES, C., and JONES, T., (1993). An Empirical Investigation of the Extent of Corporate Financial Disclosure in the Oil and Gas Industry. *Journal of Accounting and Finance*, 8 (3): 249-273.

MANGOS, N. C., and LEWIS, N. R., (1995). A Socio-Economic Paradigm for Analysing Managers' Accounting Choice Behaviour. *Accounting, Auditing and Accountability Journal*, 8: 38-62.

MARSTON, C. L., and SHRIVES, P. J., (1991). The Use of Disclosure Indices in Accounting Research: A Review Article. *British Accounting Review*, 23: 195-210.

MAUTZ, R. K., and MAY, W. G., (1978). *Financial Disclosure in a Competitive Economy*, Financial Executive Research Foundation, New York.

MCBURNEY, D. H., and COLLINS, V. B., (1984). *Introduction to Sensation/Perception*, Prentice Hall, New Jersey.

MCNALLY, G. M., ENG, L. H., and HASSELDINE, C. R., (1982). Corporate Financial Reporting in New Zealand: An Analysis of User Preferences, Corporate Characteristics and Disclosure Practices for Discretionary Information. *Accounting and Business Research*, 13 (49): 11-20.

MEEK, G. K., ROBERTS, C. B., and GRAY, S. J., (1995). Factors Influencing Voluntary Annual Report Disclosures by U.S., U.K. and Continental European Multinational Corporations. *Journal of International Business Studies*, 26 (3): 555-572

MENKHOFF, L., and SUWANAPORN, C., (2007). 10 Years after the Crisis: Thailand's Financial System Reform. *Journal of Asian Economics*, 18 (1): 4-20.

MILGROM, P. R., (1981). Good News and Bad News: Representation Theorems and Applications. *The Bell Journal of Economics*, 12 (2): 380-391.

MITTON, T., (2002). A Cross-firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis. *Journal of Financial Economics*, 64: 215-241.

MOHD GHAZALI, N. A., and WEETMAN, P., (2006). Perpetuating Traditional Influences: Voluntary disclosure in Malaysia following the Economic Crisis. *Journal of International Accounting, Auditing & Taxation*, 15 (2006): 226-248.

MOLZ, R., (1988). Managerial Domination of Boards of Directors and Financial Performance. *Journal of Business Research*, 16: 235-249.

MONTREEVAT, S., (2006). *Corporate Governance of Listed Companies in Thailand*, ISEAS Publication, Singapore.

MORRIS, R. D., (1987). Signalling, Agency Theory and Accounting Policy Choice. *Accounting and Business Research*, 18: 47-56.

MUELLER, G. G., (1967). *International Accounting*, Macmillan Company.

MYERS, S. C., (1977). Determinants of Corporate Borrowings. *Journal of Financial Economics*, 5 (1).

NAGAR, V., (1999). The Role of the Manager's Human Capital in Discretionary Disclosure. *Journal of Accounting Research*, 37 (Supplement): 167-181.

NAIR, R. D., and FRANK, W. G., (1980). The Impact of Disclosure and Measurement Practices on International Accounting Classification. *The Accounting Review,* 55: 426-450.

NAKORNTHAB, D., (2007). *Thai Commercial Banks One Decade after the Crisis: Assessment of Risk to Financial Stability: Bank of Thailand Discussion Paper,* Bank of Thailand, Bangkok.

NASER, K., AL-KHATIB, K., and KARBHARI, Y., (2002). Empirical Evidence on the Depth of Corporate Information Disclosure in Developing Countries: The Case of Jordan. *International Journal of Commerce and Management,* 12 (3&4): 122-155.

NATIONAL STATISTICAL OFFICE THAILAND, (2010). Statistical Year Book of Thailand 2007[online].Available at: <http://web.nso.go.th/eng/en/syb/syb2007/syt07.zip> [Accessed 1 October 2010].

NDUBIZU, G. A., (1992). Accounting Disclosure Methods and Economic Development: A Criterion for Globalising Capital Markets. *International Journal of Accounting,* 27: 151-163.

NG, E. J., and KOH, H. C., (1994). An Agency Theory and Probit Analytic Approach to Corporate Non-Mandatory Disclosure Compliance. *Asia-Pacific Journal of Accounting,* 1 (1): 29-44.

NICHOLLS, D., and AHMED, K., (1995). Disclosure Quality in Corporate Annual Reports of Non-Financial Companies in Bangladesh. *Research in Accounting in Emerging Economics,* 3: 149-170.

NIMANANDH, K., and ANDREWS, T. G., (2009). Socio-cultural Context. In: SIENGTHAI, S. And ANDREWS, T. G. (Eds.) *The Changing Face of Management in Thailand.* Routledge, Oxon.

NOETHER, G. E., (1981). Why Kendall tau? *Teaching Statistics,* 3 (2): 41-43.

OGDEN, S. G., (1993). The Limitations of Agency Theory: The Case of Accounting Based Profit Sharing Schemes. *Critical Perspectives on Accounting,* 4 (2): 179-206.

OPPENHEIM, A. N., (1992). *Questionnaire Design, Interviewing and Attitude Measurement,* Continuum, London.

OWUSU-ANSAH, S., (1998a) The Adequacy of Corporate Mandatory Disclosure Practices on Emerging Markets: A Case Study of the Zimbabwe Stock Exchange, Unpublished PhD Thesis, Middlesex University, London.

OWUSU-ANSAH, S., (1998b). The Impact of Corporate Attributes on the Extent of Mandatory Disclosure and Reporting by Listed Companies in Zimbabwe. *The International Journal of Accounting,* 33 (5): 605-631.

PAE, S., (2002). Discretionary disclosure, efficiency, and signal informativeness. *Journal of Accounting and Economics,* 33 (2002): 279-311.

PARK, D., SHIN, K., and JONGWANICH, J., (2009). *The Decline of Investment in East Asia since the Asian Financial Crisis: An Overview and Empirical Examination: Working paper,* Asian Development Bank.

PATELLI, L., and PRENCIPE, A., (2007). The Relationship between Voluntary Disclosure and Independent Directors in the Presence of a Dominant Shareholder. *European Accounting Review,* 16 (1): 5-33.

PATTEN, D. M., (1991). Exposure, Legitimacy, and Social Disclosure. *Journal of Accounting and Public Policy,* 10: 297-308.

PATTON, A., and BAKER, J. C., (1987). Why Won't Directors Rock the Boat? *Harvard Business Review,* 65 (6).

PATTON, J., and ZELENKA, I., (1997). An Empirical Analysis of the Determinants of the Extent of Disclosure in Annual Reports of Joint Stock Companies in the Czech Republic. *The European Accounting Review,* 6 (4): 605-626.

PELTZMAN, S., (1976). Toward a More General Theory of Regulation. *Journal of Law and Economics* 19: 211-240.

PENMAN, S. H., (1980). An Empirical Investigation of the Voluntary Disclosure of Corporate Earnings Forecasts. *Journal of Accounting Research,* 18 (1): 132-160.

PERERA, M. H. B., (1989). Accounting in Developing Countries: A Case for Localised Uniformity. *British Accounting Review,* 21 (2): 141-158.

PHONGPAICHIT, P., and BAKER, C., (1996). *Thailand's Boom!,* Silkworm Books, Chiang Mai.

PHUVANATNARANUBALA, T., (2005). Globalisation, Financial Markets and the Operation of Monetary Policy: the Case of Thailand[online].Basel:Bank for International Settlements. Available at: <http://www.bis.org/publ/bppdf/bispap23w.pdf> [Accessed 15 February 2011].

PIOTROSKI, J., (1999). The Impact of Reported Segment Information on Market Expectations and Stock Prices. Working paper, University of Chicago.

PRIEBJRIVAT, A., (1991) Corporate Disclosure: A Case of Securities Exchange of Thailand Unpublished PhD Thesis, New York University, New York.

RADEBAUGH, L. H., and GRAY, S. J., (1997). *International Accounting and Multinational Enterprises,* John Wiley & Sons.

RAFFOURNIER, B., (1995). The Determinants of Voluntary Financial Disclosure by Swiss Listed Companies. *The European Accounting Review,* 4 (2): 261-280.

RAHMAN, A. B. A., (1998). Disclosure of Corporate Financial Information in Malaysia, Unpublished PhD Thesis, University of Newcastle upon Tyne, Newcastle.

RICHARDSON, A. J., and WELKER, M., (2001). Social Disclosure, Financial Disclosure and the Cost of Equity Capital. *Accounting, Organizations and Society,* 26: 597-616.

ROBBINS, W. A., and AUSTIN, K. R., (1986). Disclosure Quality in Governmental Financial Reports: An Assessment of the Appropriateness of a Compound Measure. *Journal of Accounting Research,* 24 (2): 412-421.

ROBERTS, C. B., (1991). Environmental Disclosures: A Note on Reporting Practices in Mainland Europe. *Accounting, Auditing and Accountability Journal,* 4 (3): 62-71.

ROSS, S. A., (1979). Disclosure Regulation in Financial Markets: Implications of Modern Finance Theory and Signalling Theory. In: EDWARD, F. R. (Ed.) *Issues in Financial Regulation of American Business and Industry.* McGraw-Hill, New York.

SARPONG, K. K., (1999). Financial Reporting in Emerging Capital Markets: A Case Study of Ghana, Unpublished PhD Thesis, University of Warwick, Coventry.

SAUDAGARAN, S. M., and DIGA, J. G., (1997). Financial Reporting in Emerging Capital markets: Characteristics and Policy Issues. *Accounting Horizons*, 11 (2): 41-64.

SAUNDERS, M., LEWIS, P., and THORNHILL, A., (2003). *Research Methods, for Business Students*, (3nd ed.), Prentice Hall.

SCHADEWITZ, H. J., and BLEVINS, D. R., (1998). Major Determinants of Interim Disclosures in an Emerging Market. *American Business Review*, 16 (1): 41-55.

SCHIPPER, K., (1981). Discussion of Voluntary Corporate Disclosure: The Case of Interim Reporting. *Journal of Accounting Research*, 19 (Supplement).

SCHOLZ, J. T., (1984). Voluntary Compliance and Regulatory Enforcement. *Law and Policy*, 6: 385-404.

SEDAGHAT, A. M., SAGAFI-NEJAD, T., and WRIGHT, G., (1994). Economic Development and Securities Markets in Developing Countries: Implications for International Accounting. *International Journal of Accounting*, 29 (4): 297-315.

SENGUPTA, P., (1998). Corporate Disclosure and the Cost of Debt. *The Accounting Review*, 73 (4): 459-474.

SHAW, K. W., (2003). Corporate Disclosure Quality, Earnings Smoothing, and Earnings' Timeliness. *Journal of Business Research*, 56 (2003): 1043-1050.

SHOCKER, A. D., and SETHI, S. P., (1974). An approach to incorporating social preferences in developing corporate action strategies. In: SETHI, S. P. (Ed.) *The Unstable Ground: Corporate Social Policy in a Dynamic Society*. Melville Publishing, Los Angeles.

SINGHVI, S. S., (1968). Characteristics and Implications of Inadequate Disclosure: A case Study of India. *International Journal of Accounting Education and Research*, 3 (2): 29-43.

SINGHVI, S. S., and DESAI, H. B., (1971). An Empirical Analysis of the Quality of Corporate Financial Disclosure. *The Accounting Review*, 46 (1): 129-138.

SKINNER, D. J., (1994). Why Firms Voluntarily Disclose Bad News. *Journal of Accounting Research*, 32 (1): 38-60.

SPENCE, M., (1973). Job Market Signalling. *Quarterly Journal of Economics*, 87 (3): 355-374.

SPENCE, M., (1976). Informational Aspects of Market Structure: An Introduction. *Quarterly Journal of Economics*, 90 (4): 591-597.

SPERO, L. L., (1979) The Extent and Causes of Voluntary Disclosure of Financial Information in Three European Capital Markets: An Explanatory Study, Unpublished doctoral dissertation, Harvard University, Boston.

STANGA, K., (1976). Disclosure in Published Annual Reports. *Financial Management*, Winter: 42-52.

STERLING, R. R., (1970). *The Theory and Measurement of Income*, University Press of Kansas, Lawrence, USA.

STIGLER, G. J., (1971). The Theory of Economic Regulation. *The Bell Journal of Economics and Management Science*, 2 (1): 3-21.

STOCK EXCHANGE OF THAILAND (SET), (2002). *The Principles of Good Corporate Governance*, The Stock Exchange of Thailand, Bangkok.

STOCK EXCHANGE OF THAILAND (SET), (2004). *A Survey Report Audit Committee in Thailand: Problems and Practices*, The stock exchange of Thailand, Bangkok.

STOCK EXCHANGE OF THAILAND (SET), (2008). *Fact Book 2007*, The Stock Exchange of Thailand, Bangkok.

STOCK EXCHANGE OF THAILAND (SET), (2010). The Stock Exchange of Thailand History and Role[online].Bangkok:The Stock Exchange of Thailand. Available at:<http://www.set.or.th/en/about/overview/history_p1.html> [Accessed 1 October 2010].

STOCK EXCHANGE OF THAILAND (SET), (2011). Listing Information[online]. Bangkok:The Stock Exchange of Thailand. Available at: <http://www.set.or.th/en/products/listing/criteria_p1.html > [Accessed 13 March 2011].

STOCKEN, P. C., and VERRECCHIA, R. E., (2004). Financial Reporting System Choice and Disclosure Management. *The Accounting Review*, 79 (4): 1181-1203.

SUEHIRO, A., and WAILERDSAK, N., (2004). Family Business in Thailand: Its Management, Governance, and Future Challenges. *ASEAN Economic Bulletin*, 21 (1): 81-93.

SUPHAKASEM, J., (2008) An Evaluation of Corporate Governance Disclosure: Evidence from Malaysia, Singapore and Thailand, Unpublished PhD Thesis, University of Strathclyde, Glasgow.

SUTTHACHAI, S., and COOKE, T. E., (2009). An Analysis of Thai Financial Reporting Practices and the Impact of the 1997 Economic Crisis. *ABACUS*, 45 (4): 493-517.

SUWAIDAN, M. S., (1997). Voluntary Disclosure of Accounting Information: The Case of Jordan, Unpublished PhD Thesis, University of Aberdeen.

TAI, B. Y. K., AU-YEUNG, P. K., KWOK, M. C. M., and LAU, L. C. W., (1990). Non-Compliance with Disclosure Requirements in Financial Statements: The Case of Hong Kong Companies. *International Journal of Accounting*, 25 (2): 99-112.

TALERNGSRI, P., and VONKHORPORN, P., (2005). Trade policy in Thailand: Pursuing a Dual Track Approach. *ASEAN Economic Bulletin*, 22 (1): 60-74.

TAURINGANA, V., (1997). The Impact of Listing Status and Selected Company Characteristics on Voluntary Disclosure in the United Kingdom, Unpublished PhD Thesis, Napier University Edinburgh, Edinburgh.

TEDDLIE, C., and TASHAKKORI, A., (2003). Major Issues and Controversies in the Use of Mixed Methods in the Social and Behavioural Sciences. In: TASHAKKORI, A., and TEDDLIE, C. (Ed.) *Handbook of Mixed Methods in social and behavioural research*. Sage, Thousand Oaks.

THANAPORNPUN, R., (2002). *The Thai Economy after the 1997 Financial Crisis*, Kobfai Publishing, Bangkok.

TINKER, A. M., MERINO, B. D., and NEIMARK, M. D., (1982). The Normative Origins of Positive Accounting Theories: Ideology and Accounting Thought. *Accounting, Organizations and Society,* 7 (2): 167-200.

TINKER, T., and OKCABOL, F., (1991). Fatal Attractions in the Agency Relationship. *British Accounting Review,* 23 (4): 329-354.

TRICKER, R. I., (1984). *Corporate Governance: Practices, Procedures and Powers in British Companies and Their Boards Directors,* Gower Publishing.

TRUEMAN, B., (1986). Why do Managers Voluntarily Release Earnings Forecasts? *Journal of Accounting and Economics,* 8: 53-72.

ULLMAN, A., (1985). Data in Search of a Theory: A Critical Examination of the Relationships among Social Performance, Social Disclosure, and Economic Performance of US Firms. *Academy of Management Review*: 540-557.

VERGOOSSEN, R. G. A., (1993). The Use and Perceived Importance of Annual Reports by Investment Analysts in the Netherlands. *European Accounting Review,* 2 (2): 219-244.

VERRECCHIA, R. E., (1983). Discretionary Disclosure. *Journal of Accounting and Economics,* 5 (3): 179-194.

VERRECCHIA, R. E., (2001). Essays on disclosure. *Journal of Accounting and Economics,* 32 (2001): 97-180.

WAGENHOFER, A., (1990). Voluntary Disclosure with a Strategic Opponent. *Journal of Accounting and Economics,* 12: 341-364.

WAILERDSAK, N., (2008). Companies in Crisis. In: PHONGPAICHIT, P. and BAKER, C. (Eds.) *Thai Capital After the 1997 Crisis.* Silkworm Books, Chiang Mai.

WALLACE, R. S. O., (1987). Disclosure of Accounting Information in Developing Countries: A Case Study of Nigeria. Unpublished PhD Thesis, University of Exeter, Exeter.

WALLACE, R. S. O., and NASER, K., (1995). Firm-specific Determinants of the Comprehensiveness of Mandatory Disclosure in the Corporate Annual Reports of Firms Listed on the Stock Exchange of Hong Kong. *Journal of Accounting and Public Policy,* 14: 311-368.

WALLACE, R. S. O., NASER, K., and MORA, A., (1994). The Relationship between the Comprehensiveness of Corporate Annual Reports and Firm Characteristics in Spain. *Accounting and Business Research,* 25 (97): 41-53.

WANG, X., and TANG, J. C. S., (2009). Credit Risk Management Practices of Thai Commercial Banks pre and post Asian Crisis. In: SIENGTHAI, S. and ANDREWS, T. G. (Eds.) *The Changing Face of Management in Thailand.* Routledge, Oxon.

WATANAGASE, T., (2007). "Changes in Thailand's economic dynamism after the 1997 crisis", speech given at The International Symposium "Ten Years after the Asian Currency Crisis: Future Challenges for the Asian Economies and Financial Markets", 22 January 2007. [online].Basel:Bank for International Settlements. Available at:<http://www.bis.org/review/r070511d.pdf > [Accessed 28 September 2010].

WATTS, R., and ZIMMERMAN, J., (1981). The Markets for Independence and Independence Auditors. New York, University of Rochester.

WATTS, R., and ZIMMERMAN, J., (1990). Positive Accounting Theory: a ten year perspective. *Accounting Review*, 65 (1): 131-156.

WATTS, R. L., (1977). Corporate Financial Statements, a product of the market and political process. *Australian Journal of Management*, 2: 53-75.

WATTS, R. L., and ZIMMERMAN, J. L., (1978). Towards a Positive Theory of the Determination of Accounting Standards. *The Accounting Review*, 53 (1): 112-143.

WATTS, R. L., and ZIMMERMAN, J. L., (1986). *Positive Accounting Theory*, Prentice Hall, Englewood Cliffs.

WAYMIRE, G., (1984). Additional Evidence on the Information Content of Management Earnings Forecasts. *Journal of Accounting Research*, 22: 703-718.

WEBER, R. P., (1990). *Basic Content Analysis*, (2nd edition), Sage, California.

WELKER, M., (1995). Disclosure Policy, Information Asymmetry and Liquidity in Equity Markets. *Contemporary Accounting Research*, 11 (2): 801-827.

WHITTINGTON, G., (1987). Positive Accounting: A Review Article. *Accounting and Business Research*, 17 (68): 327-336.

WHITTRED, G. P., (1980). The Timeliness of Australian Annual Reports: 1972-1977. *Journal of Accounting Research*, 18 (2): 623-628.

WHITTRED, G. P., and ZIMMER, I., (1990). *Financial Accounting, Incentive Effects and Economic Consequences*, Harcourt Brace Jovanovich.

WILLIAMS, S. M., (1999). Voluntary Environmental and Social Accounting Disclosure Practices in the Asia-Pacific Region: An International Empirical Test of Political Economic Theory. *The International Journal of Accounting*, 34 (2): 209-238.

WILLIAMS, S. M., (2001). Is Intellectual Capital Performance and Disclosure Practices Related? *Journal of Intellectual Capital*, 2: 192-203.

WILLIAMSON, O. E., (1985). The Modern Corporation: Origins, Evolution, Attributes. *Journal of Economic Literature*, 19: 1537-1568.

WILMSHURST, T. D., and FROST, G. R., (2000). Corporate Environmental Reporting: A Test of Legitimacy Theory. *Accounting, Auditing and Accountability Journal*, 13 (1): 10-26.

WIWATTANAKANTANG, Y., (2001). Controlling Shareholders and Corporate Value: Evidence from Thailand. *Pacific-Basin Finance Journal*, 9: 323-362.

WONG, J., (1988). Political Costs and an Intraperiod Accounting Choice for Export Tax Credits. *Journal of Accounting and Economics*, 10 (1): 37-52.

WORLD BANK, (1998). *East Asia: The Road to Recovery*, World Bank, Washington DC.

ZARZESKI, M. T., (1996). Spontaneous Harmonization Effects of Culture and Market Forces on Accounting Disclosure Practices. *Accounting Horizons*, 10 (1): 18-37.