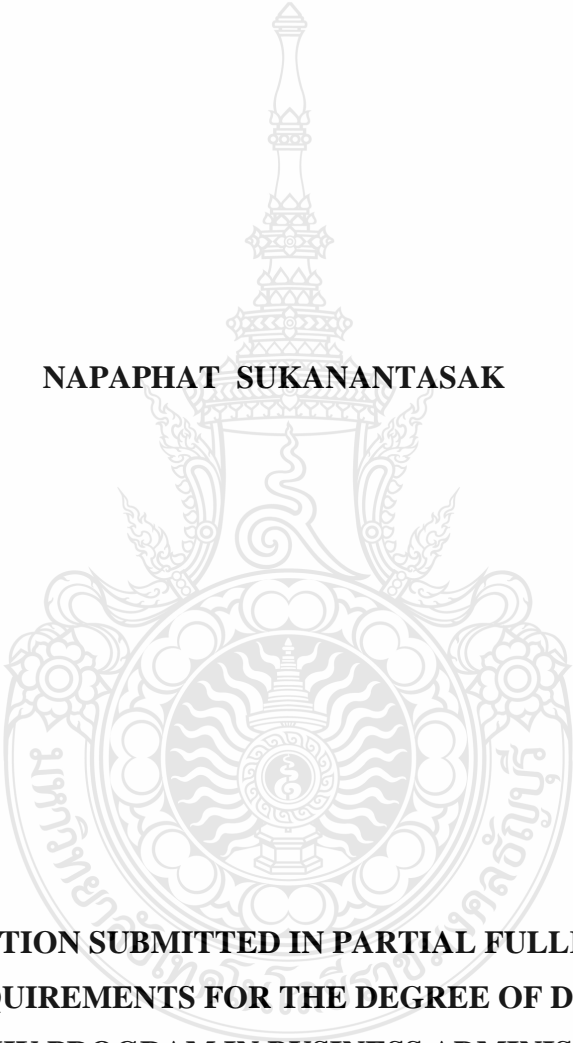


**THE EFFECT OF CORPORATE GOVERNANCE MECHANISMS ON
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EMPIRICAL EVIDENCE FROM THAILAND**

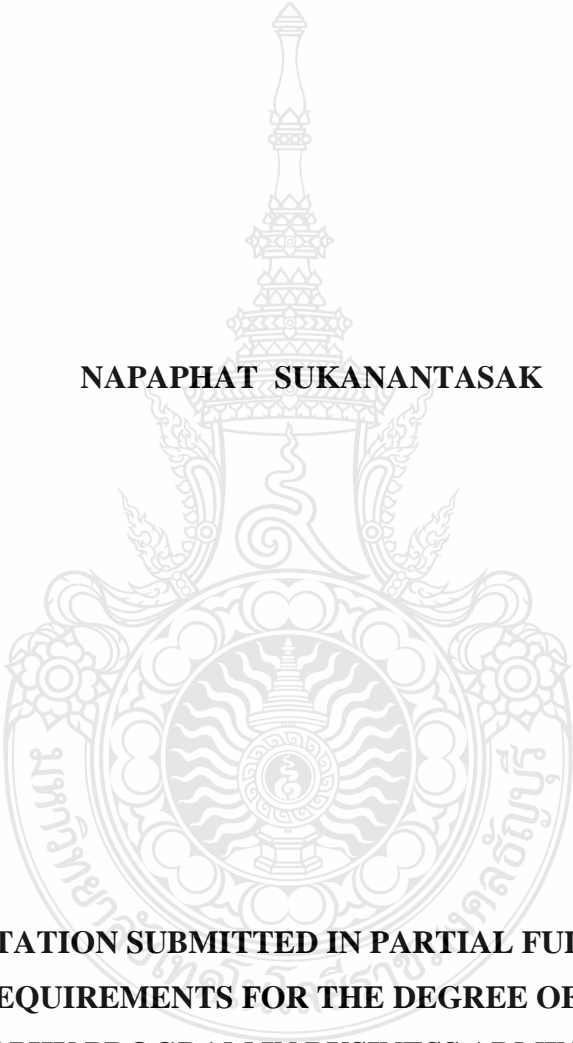
NAPAPHAT SUKANANTASAK



**A DISSERTATION SUBMITTED IN PARTIAL FULLFILLMENT
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FACULTY OF BUSINESS ADMINISTRATION
RAJAMANGALA UNIVERSITY OF TECHNOLOGY THANYABURI
ACADEMIC YEAR 2014
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Dissertation Title The Effect of Corporate Governance Mechanisms on Earnings Informativeness through Earnings Persistence: Empirical Evidence from Thailand

Name-Surname Miss Napaphat Sukanantasak


Program Business Administration

Dissertation Advisor Assistant Professor Wanchai Prasertsri, Ph.D.

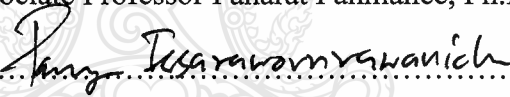
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Academic Year 2014


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.....Committee
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.....Committee
(Assistant Professor Panya Issarawornrawanich, Ph.D.)


.....Committee
(Assistant Professor Sillapaporn Srijunpetch, Ph.D.)


.....Committee
(Assistant Professor Wanchai Prasertsri, Ph.D.)

Approved by the Faculty of Business Administration, Rajamangala University of Technology Thanyaburi in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Business Administration


.....Dean of Faculty of Business Administration
(Assistant Professor Nartraphee Chaimongkol, Ph.D.)

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Dissertation Title	The Effect of Corporate Governance Mechanisms on Earnings Informativeness through Earnings Persistence: Empirical Evidence from Thailand.
Name Surname	Miss Napaphat Sukanantasak
Program	Business Administration
Dissertation Advisor	Assistant Professor Wanchai Prasertsri, Ph.D.
Dissertation Co-advisor	Assistant Professor Sillapaporn Srijunpetch, Ph.D.
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ABSTRACT

The concept of this study was developed on the basis of the agency theory. This research aimed to study the causal relationship between corporate governance mechanisms and earnings quality which were consisted of four main objectives including 1) to investigate the direct effect of corporate governance mechanisms on earnings persistence, 2) to explore the direct effect of corporate governance mechanisms on earnings informativeness, 3) to examine the direct effect of earnings persistence on earnings informativeness, and 4) to study whether corporate governance mechanisms had any indirect effect on earnings informativeness. In this study, corporate governance was measured by board characteristics, ownership structure and shareholding, executive compensation, transparency and disclosure whereas earnings quality was determined by earnings persistence and earnings informativeness.

The secondary data obtained from 418 listed companies on the Stock Exchange of Thailand during 2010-2012 with the accounting period beginning on 1st January and ending on 31st December were employed in this study. The samples were companies from all industrial groups except the companies in financial and securities businesses, banking and insurance businesses, and companies under rehabilitation. The data were analyzed by means of Multiple Linear Regression at the statistical significant level of 0.05.

The findings revealed that corporate governance mechanisms in the aspect of executive compensation and foreign ownership had negative direct effects on earnings persistence while institutional ownership had positive direct effect on earnings persistence. Transparency and disclosure, family's shareholding had positive direct effect on earnings persistence whereas board meeting had negative direct effect on earnings persistence. The earnings persistence had direct effect on earnings informativeness. Moreover, the results pointed out that corporate governance mechanisms had an indirect effect on earnings informativeness through earnings persistence. Therefore, corporate governance mechanisms had both direct and indirect effects on earnings informativeness. The study indicated that solid corporate governance mechanisms, especially high level of transparency and disclosure, could lead to increasing of earnings persistence and the increase of earnings persistence could significantly lead to high level of earnings informativeness.

Keywords: corporate governance mechanism, earnings quality, earnings persistence, earnings informativeness

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Napaphat Sukanantasak

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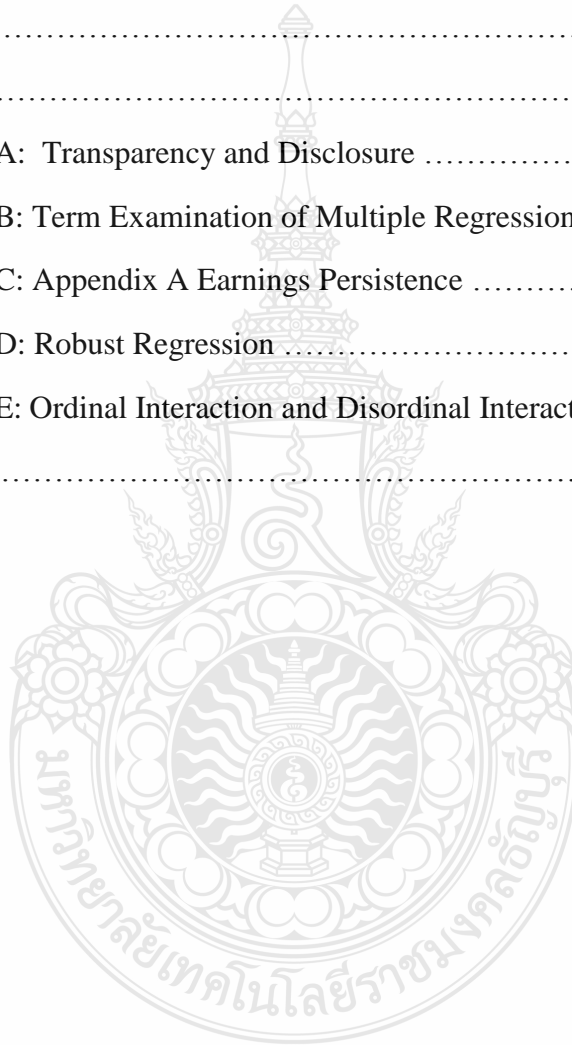
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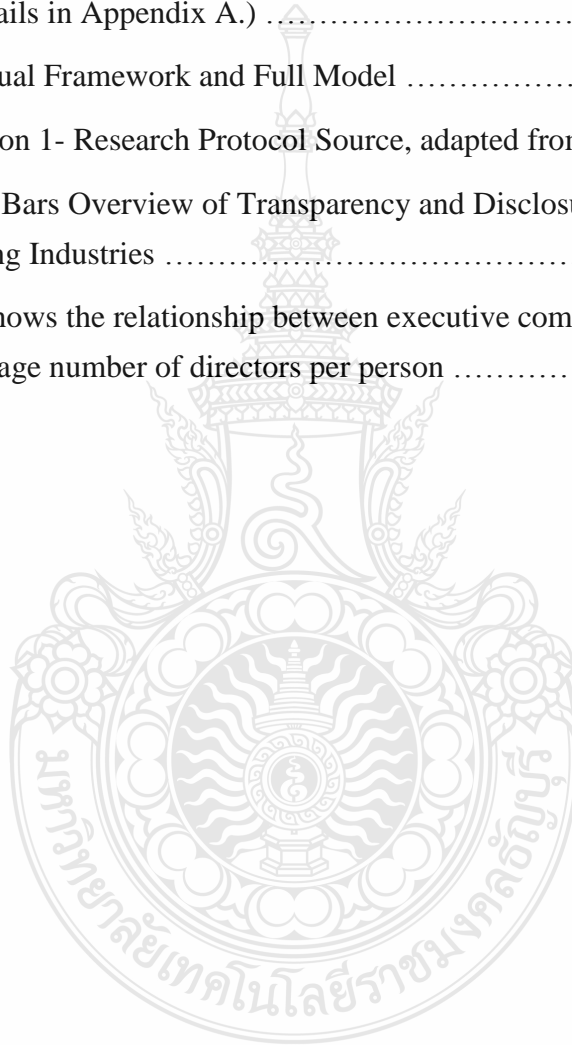


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List of Abbreviations

EAR_PER	Earnings Persistence
EAR_INF	Earnings Informativeness
CGM	Corporate Governance Mechanisms
BRDSIZE	Board Size
BRDMEET	Board Meetings
AUDITCOM	Audit Committee
CEODU	CEO Duality
BLOCKHD	Block Holding 5%
CBOD	Compensation for Board of Directors
INSOWN	Institutional Ownership
FOEIGNOWN	Foreign Ownership
FAMILYOWN	Family Ownership (25%)
TTD	Transparency and Disclosure
SIZEMVE	Firm Size
LE	Firm Leverage
AGE	Firm Age (years)
BIG 4	The large audit firm

CHAPTER 1

INTRODUCTION

1.1 Background and Statement of the Problem

The concept of Corporate Governance has been popular, with a slight increase in adoption, for over two decades. There are a variety of definitions of Corporate Governance Mechanisms. For example, the Organization for Economic Cooperation and Development (OECD, 2004) defines Corporate Governance Mechanisms as the principles that are considered essential for the development of good governance practices among the OECD member countries and are used to improve Corporate Governance in non-traded companies such as privately held and state owned enterprises.

There are also tools that OECD and non-OECD governments use to evaluate and improve legal, institutional, and regulatory frameworks for Corporate Governance in their countries.

Additionally, Corporate Governance Mechanisms are used to provide guidance and suggestions for stock exchanges, investors, corporations, and other parties with significant roles in developing processes of Corporate Governance. The principles focus on both financial and non-financial publicly traded companies. They must be concise, understandable, and accessible to the international community, but cannot substitute government, semi-government or private sector initiatives to develop detailed best practices in corporate governance (OECD, 2004.P.11).

Corporate Governance is necessary for listed companies as it refers to an efficiency and transparency of management which will create greater confidence of the shareholders, investors, and stakeholders in management.

In 2002, the Stock Exchange of Thailand (SET) had initiated a campaign to encourage the SET-listed companies to realize the importance of Corporate Governance with an introduction of fifteen principles. Later in 2004, the principles of Corporate Governance were amended to be in line with those of the OECD (OECD Principles of Corporate Governance, 2004).

SET has continued to promote not only the adoption and implementation of Corporate Governance (CG) among the SET-listed companies but also to make improvements of their current CG. The objectives of SET's Corporate Governance promotion are to upgrade the listed companies in Thailand to be on the same par with many international companies in order to increase their competitiveness, to promote the growth of the Thai Stock Market, and to conform to the rules of ASEAN Corporate Governance (ASEAN CG) Scorecard. This is an assessment tool of Corporate Governance levels of listed companies in ASEAN countries that has been used among the ASEAN member countries since 2012 (<http://www.set.or.th>).

The 11th National Economic and Social Development Plan (2012-2016), under the National Economic and Social Development Board (NESDB), pointed out the importance of Thailand's adaptation to the global multicenter economy. New industrial countries in this region, such as Hong Kong, South Korea, Singapore, Taiwan, and several ASEAN member countries, have placed great importance on being in the center of global industrial production and becoming the new economic powers. China, Russia,

and India, for example, are more open to foreign investors and middle-class populations with strong and rapidly growing purchasing power.

Moreover, in 2015 the AEC will transform ASEAN into a region with a free flow of goods, capital, and labor. This will definitely influence the direction of Thailand's economic and social development in the future. Thus, the country needs to prepare its human resources and upgrade various business mechanisms to accommodate upcoming cooperation and competition (NESDB, 2012).

These recent developments have both highlighted significant roles of Corporate Governance and increased interest of researchers in the fields of accounting and business management. Numerous studies on Corporate Governance are currently being conducted in companies around the world, mainly in the United States (Kang, Shivdasani, 1995; Niu, 2006; Dadgar & Nazari, 2012). Their research findings show positive associations between Corporate Governance implementation and its earnings.

The earnings or net profits are important financial figures that play significant roles in determining a company's stock price. According to Sloan (1996), earnings persistence must consider such variables. Similarly, Dechow, Ge, & Schrand (2010) clearly state that higher Earnings Quality gives more information about the significant character of corporate operations. That information is relative to decision making. Dechow, Ge and Schrand's (2010) significant characters of Earnings Quality can be summarized into 3 aspects as follows:

1. Earnings Quality depends upon decision making related to the information.

We cannot become informed about the quality of earnings based upon only one decision. Earnings Quality by itself is not meaningful.

2. The Quality of Earning's numbers reported depends upon whether such earnings give information regarding overall operation in the case of Corporate Finance.

3. Earnings Quality is specified as the involvement of overall financial operations to the decision and accounting capacity that assesses overall operations. However, Earnings Quality is useful not only for decisions involving stock valuation but can apply to any decision related to overall financial operations.

In literature reviews, research on Earnings Quality focused on measuring Earnings Quality by dividing Earnings Quality proxies for measurement (Francis, Wang, 2008; Sloan, 1996). To measure earnings persistence, a company that has more earnings persistence and sustainable earnings or cash flow finds it more beneficial to assess decision-making in investment by looking at the change in value both in the present and previous years.

Francis, La Fond, Olsson and Schipper (2004) identify seven measures of Earnings Quality (referred to as earnings attributes) that have been widely used in accounting research. Accounting-based earnings attributes are persistent.

1.2 Purposes of the Study

The purposes of this study are:

1. To investigate the effects of Corporate Governance Mechanisms, internal Corporate Governance: Board Structure, Ownership Structure and Shareholding, Executive Compensation, Transparency, and Disclosure, on earnings persistence of the firm.

2. To investigate the effects of Corporate Governance Mechanisms on the earnings informativeness of the firm.

3. To investigate the effects of earnings persistence on firms' earnings informativeness data.

4. To investigate whether Corporate Governance Mechanisms with direct influences on earnings persistence have any indirect effects on the earnings informativeness of the firm.

1.3 Research Questions and Research Hypotheses

Previous studies used Corporate Governance Mechanisms to control operational behavior of an agency, including figures such as essential accounting data that investors and analysts can use for investment decisions. The accounting data can reflect performance efficiency of a company, which influences financial reporting on earnings quality. Based upon the interested indicators and the study of professional organizations and financial analysts, accurate and reliable information is associated with Corporate Governance Mechanisms which partly influence earnings forecast and earnings quality.

The present research examines the measurement of Earnings Quality and discusses options for producing Earnings Quality Research in capital markets focusing on the following issues: 1) the method for an accurate check of financial data influencing performance evaluation, 2) the use of financial data based on business principles as indicators of the overall quality of financial reporting, earnings quality, and the context of capital markets with overall data quality, and 3) Earnings Quality's internal factors derived from the business model and the operating report environment.

The emphasis is also placed on: 1) factors created as a result of an operational decision, 2) problems of research design and research findings related to the effects of capital market on earnings quality, especially any linkage to the returns that are expected to be associated to the accounting data and accruals used at the executive's discretion measured by earnings quality. Such information in the financial reporting is interesting for stakeholders.

The research also examines the planning procedure and the auditor's standard of report preparation, regulatory agencies, and financial analysts. This is of interest for accounting education and the next generation of researchers.

Niu (2006) reported the effect of Corporate Governance on the quality of financial reporting. The study showed the connection between the characteristics of Corporate Governance and the quality of accounting earnings, focusing on appropriate operational outcomes. This is because the quality of accounting earnings is a measure of performance frequently mentioned in the literature. There is a need to review the control system and the reporting of critical operations through the following indicators.

Empirical test results indicated that the overall governance quality was negatively related to the level of abnormal accruals and positively influenced the association of returned earnings. In addition, the magnitude of abnormal accruals was negatively associated with the independence level of the board composition (the extent of the alignment of management compensation with the interests of shareholders and the strength of shareholder rights).

In addition, the returns and earnings analysis results were consistent with these findings:

1. An accounting-based measure of earnings persistence
2. A market-based measure of earnings informativeness (the association of returned earnings)

The empirical relations are:

Earnings Quality= f (earnings persistence, earnings informativeness)

This study aims to provide answers to these research questions and to test the following hypotheses.

Research Questions:

RQ 1: Are there any direct effects of Corporate Governance Mechanisms on earnings persistence of the firm?

RQ 2: Are there any direct effects of Corporate Governance Mechanisms on accounting data measured by earnings informativeness of the firm?

RQ 3: Are there any direct effects of earnings persistence on accounting data measured by earnings informativeness of the firm?

RQ 4: Do Corporate Governance Mechanisms, with direct influences on earnings persistence, have an indirect effect on accounting data measured by the earnings informativeness of the firm?

Hypothesis:

Hypothesis 1: Firms that have internal Corporate Governance Mechanisms are expected to have higher earnings persistence.

Hypothesis 2: Firms that have internal Corporate Governance Mechanisms are expected to have higher earnings informativeness.

Hypothesis 3: There is an association between the earnings persistence with direct influences and the earnings informativeness of a firm.

Hypothesis 4: There is an association between corporate governance mechanisms and earnings informativeness through the earnings persistence of a firm.

1.4 Theoretical Perspective

The Agency Theory (AT) was developed by Jensen and Meckling (1967) with the view that every human being shall have the motivation to do things in order to achieve personal gain. Therefore, the management who acts as agent of the company has given importance to personal gain rather than enhancing the company's stability by adding value to the business, which causes a conflict of interest between the two.

The agency theory in practice is considered to be the "Bible of Corporate Governance". A key factor (AT) is the relationship of the agencies in which either party has been assigned to work (principal) for another person (agent). The positive current is important to the concept of separation of ownership and internal control. Large companies, and those in this current role of principal are considered the major shareholders, while management is considered the agent.

The Agency Theory considers the relationship of all agents important. The concepts relating to the Agency Theory are discussed by Jensen and Meckling (1967). They discussed the relationship between the agent and the owner with the behaviors that serve their own needs the most and with the reason that the agent of the company, who

is a Director, may not manage the company to maximize benefits to the shareholders, causing agency costs.

Agency costs are those associated with directing work performance and behavior of the Directors by causing problems in the operation of the business or the form of rewards that can create motivation for the Board of Directors.

1.5 Contribution to Academics and Contribution to Practice

This study aims to examine the influence of Corporate Governance on the level of corporate net profit and total return considered as informativeness of accounting of turnover declaration in the Thai Capital Market.

Regarding the system of Corporate Governance Mechanisms based on the conflict of agent interest theory in 2010-2012; this study used an earnings persistence system as a proxy of corporate earnings level. It indirectly influences earnings informativeness essential to accounting informativeness of the firm and influences the decision making on investment.

Fama's study (1970) revealed that market efficiency influenced future earnings. Apart from academic benefits, this study can also provide a warning to corporate stakeholders to carefully inspect the investment behavior of the manager and/or executive. Their investment behavior can influence corporate values and stakeholder status, and enhance the Corporate Governance level.

The expected benefits of Corporate Governance varies due to different points of view. In this section, the researcher anticipated the expected results based on the

Stakeholder Theory which states that the business has to respect the rights and benefits of all parties inside and outside an organization, not only those of the shareholders.

According to Cadbury and Millstein (2005), good governance may refer to controls that affect the points of view from inside and outside the organization. The emphasis is on the benefits that follow.

The purpose of financial reporting is to provide information that is useful for business decisions. Schipper and Vincent (2003) focuses on decision usefulness of financial reporting information. They mention that quality of financial reporting is of interest to those who use it for contracting purposes. In addition, investment decision-making in financial reporting is the earnings quality.

Besides, Richardson, Sloan, Soliman, & Tuna (2005) also examined the relationship between the reliability of accruals and earnings persistence. It is predicted that less reliable accruals are a cause of lower accruals persistence. Through reliability-based accruals, accruals with components classified by the type of balance sheet, knowledge of the measurement applied to each category of accruals for assessing qualitatively the relative reliability of each type, this is different from the approach of Dechow and Dichev (2002). For finding the reliability of accruals, the quality of accruals is set to be the extent of accruals in cash flow. Jennifer Francis, Per Olsson, Katherine, & Schipper (2006) found 12 ways to measure earnings quality, namely Accruals Quality, Abnormal Accruals, Persistence, Predictability, Smoothness, Earnings Variability, Value Relevance, Earnings Informativeness, Earnings Opacity, Timeliness, Conservatism and E-Loadings. The researcher studied on the basis of two aspects used for performance evaluation, namely, accounting-based, i.e. reference to the

accounting performance that defines Earnings Persistence; On the other side, examination must be market-based with the addition of the perspective of investors that defines measurement of Earnings Informativeness for accounting earnings. A combination of these two bases supports the concept of earnings evaluation of Sloan (1996) as the definition of earnings quality, business performance appraisal. It also supports the work of Dechow, Ge, & Schrand (2010). "Higher quality earnings provide more information about the features of a firm's financial performance that is relevant to a specific decision made by a specific decision-maker".

The importance of corporate governance is clear in the twenty-first century. The agencies or organizations formed by fraud management and negligence can cause a great loss of wealth to shareholders, owners, and the companies (stakeholders). To protect and promote the value of investment in governance, Cadbury and Millstein (2005) cited corporate governance as a role of the company's board and executives in looking after the interests of all stakeholders. The researcher had a viewpoint on providing academic benefits. The beneficiaries are stakeholders in various groups defined by the stock exchange. Reference:http://marketdata.set.or.th/th/about/overview/setcg_p2.html). The Securities and Exchange Commission believes that the practices based on the principles of good corporate governance will support and strengthen the competitiveness of the capital market overall to build confidence of stakeholders. Consideration is based on the policy of corporate governance within the meaning of the Stock Exchange of Thailand with classification into two types: (1) direct stakeholders, namely the Securities and Exchange Commission; (2) other stakeholders, including listed companies, investors, employees, trading partners, customers, competitors,

government sector and other organizations in society. From guidelines based on the objectives, the research framework focuses on 3 major groups of stakeholders with impact on Benefits to Investors¹, Benefits to Organizations², and Benefits to Regulatory Agencies³. All the three parts can answer questions which are beneficial in practice as follows. **The first role** of accounting is being an important source of data for decisions of executives and investors. Or it can be stated that financial, accounting data affects the operations in economic terms. **The second role** is monitoring the company's internal audit in corporate governance. **The third role** is the use of financial, audit data and stock exchange corporate governance (explanation in the conclusions under Chapter 5).

1.6 Definitions of Terms

Earnings Quality refers to the ability of earnings that reflect the business profits on both accruals and cash basis. It can be said that the earning figure reflects the quality of earning level associated with the level of earnings stability and economic benefits arising from the business operations which can be effectively utilized in the future.

¹ *Benefits to Investors:* The study of the relationship between Corporate Governance and Earnings

Quality enables the use of forecast factors for investment through suggestions derived from research on earnings quality. As a result, investors can be informed of investment tendencies in the industrial groups and the developmental tendency of capital markets. In addition, its effect on investors will set the direction of desired investment.

² *Benefits to Organizations:* The relationship between Corporate Governance and Earnings Quality of listed companies in the Stock Exchange of Thailand and the importance Corporate Governance are used as reference data to support the financial decision-making of various investors and stakeholders, including executives, stock analysts, and financial institutions. It can help these people realize the importance of Earnings Quality through appropriate indicators for improvement and promotion of good governance in the future.

³ *Benefits to Regulatory Agencies:* The study is beneficial to regulatory agencies as it can be used as guidelines to establish policies to deal with various problems in compliance with corporate development plans. It can be used as a part of the strategic improvement to create equal free trade groups and to build confidence for both domestic and foreign investors.

Corporate Governance Mechanisms refers to Klapper and Love's (2002)

Good Corporate Governance relating to the building of investors' confidence and trust for the investment of their money in the business and/or to the transparency in management and operations in order to identify a suitable model to protect the rights of shareholders and investors in terms of performance evaluation.

Earnings Persistence refers to Lev's (1983) measurement of earnings stability for measuring the expected value of accounting profit, using the concept of variable determination as a component of the forecast model for decision making.

Earnings Informativeness refers to the accounting data associated with future earnings of the company. It is the determination of the company's stock price in a particular period that is relevant to decision making as shown in the financial reports presented to the investors for decision making.

1.7 Delimitations and Limitations of the Study

1.7.1 Data and Samples; There are two types of variables that are used in this study:

Independent and Dependent.

1. Independent Variables are the variables of interest which include:

1) Board of Directors Structure: Board Size, Board Meetings, CEO

Duality, and the Audit Committee

2) Ownership Structure and Shareholding: Block Holding 5%,

Institutional Ownership, Foreign Ownership, Family Ownership (25%)

3) Executive Compensation: Compensation to the Board of Directors

4) Transparency and Disclosure: Sum of Transparency and Disclosure.

2. Dependent Variables include:

1) Earnings Persistence (Mediated Variables)

2) Earnings Informativeness

Population- Listed companies in the Stock Exchange of Thailand; A total of 418 firms operating in the three-year study period (2010-2012) were included.

Sample Frame- Listed companies in the Stock Exchange of Thailand operating between 2010 and 2012 were selected. They must have submitted their financial statements to the Stock Exchange of Thailand and must have complied with the selection criteria.

The method of sampling was probability sampling (simple random sampling: SRS) which means that each possible sample has an equal chance of being selected. This method relies upon the existence of the list of the entire population. In this case, the entire population was the listed companies in the Stock Exchange of Thailand for the accounting period from 1 January to 31 December of each year.

This study investigated eight industrial and service business groups covering companies in all industrial sectors in the SET Index.

The study did not include companies with the following characteristics: Companies providing financial services for finance and securities groups, banking and insurance companies (because these industrial groups have distinctive asset and liability transactions that differ from other industries); Revoked companies or companies of similar status; Companies under restructuring process; and Companies with incomplete information in the database.

Study Period- for the financial year ending in 2010-2012, using cross-sectional data collection. The researcher also collected secondary data from the Stock Exchange and relevant departments using the SET Market Analysis and Reporting Tool (SETSMART). Information was gathered from annual reports and reliable books and journals. The sources of data used in this study are publicly available, including financial statements, daily closing prices of the securities, the SET Index, and other relevant information. This includes electronic information from the Stock Exchange of Thailand and relevant information from foreign countries

1.7.2 Conceptual Framework

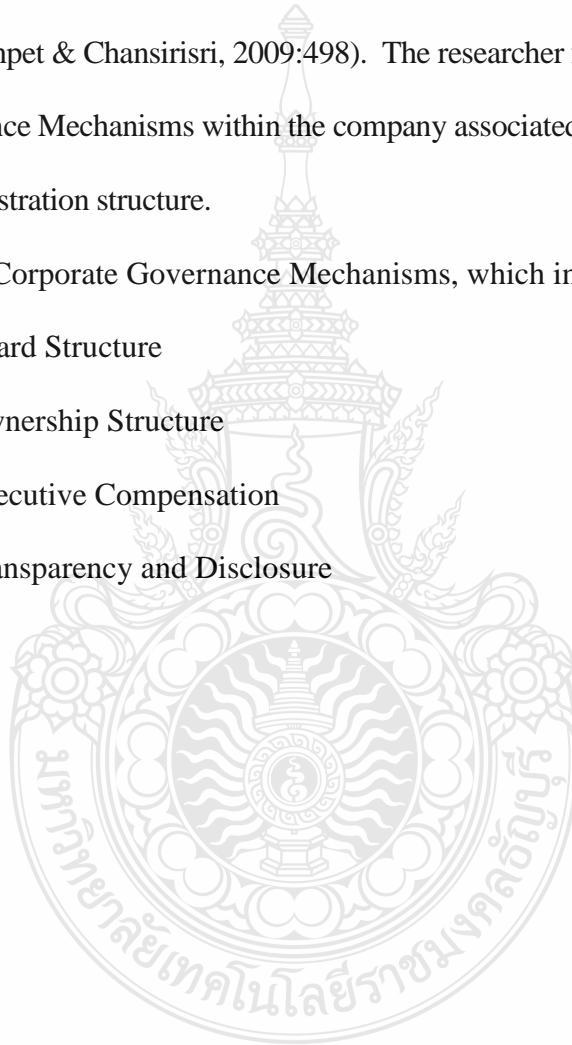
Conceptual Framework was derived from review of relevant literature and theories. Variables in this study were classified into two groups including independent variables, known as exogenous variables, and dependent variables, known as endogenous variables, under the Multiple Regression Analysis equation and presented in a Path model diagram (Hair, Black, and Anderson, 2010:766).

Briefly, a mediating effect is created when a third variable construct intervenes between two other related constructs. Based on the structural model, direct effects are the relationships that link two constructs with a single arrow, and indirect effects are the relationships that involve a sequence of relationships with at least one intervening construct. Thus, an indirect effect is a sequence of two or more direct effects (compound path) and is visually represented by multiple arrows. The following diagram shows both the direct effect (CGM→ EAR_PER) and the indirect effect of CGM on EAR_INF. This is shown as a CGM→ EAR_PER → EAR_INF sequence. (see Reference Table List of Abbreviations)

The independent variables are the variables of interest, explanatory variables, and control variables. Details of each variable are presented in the Research Methodology (Chapter 3). This section presents only the Conceptual Framework of the research. An exploration of governance mechanisms focuses on control systems within the organization in the context associated with an important effect on Earnings Quality to be discussed (Khanthavit, Srichanpet & Chansirisri, 2009:498). The researcher focused on examining Corporate Governance Mechanisms within the company associated to the following organization administration structure.

1. Internal Corporate Governance Mechanisms, which include

- 1) Board Structure
- 2) Ownership Structure
- 3) Executive Compensation
- 4) Transparency and Disclosure



Independent Variables

Dependent Variables

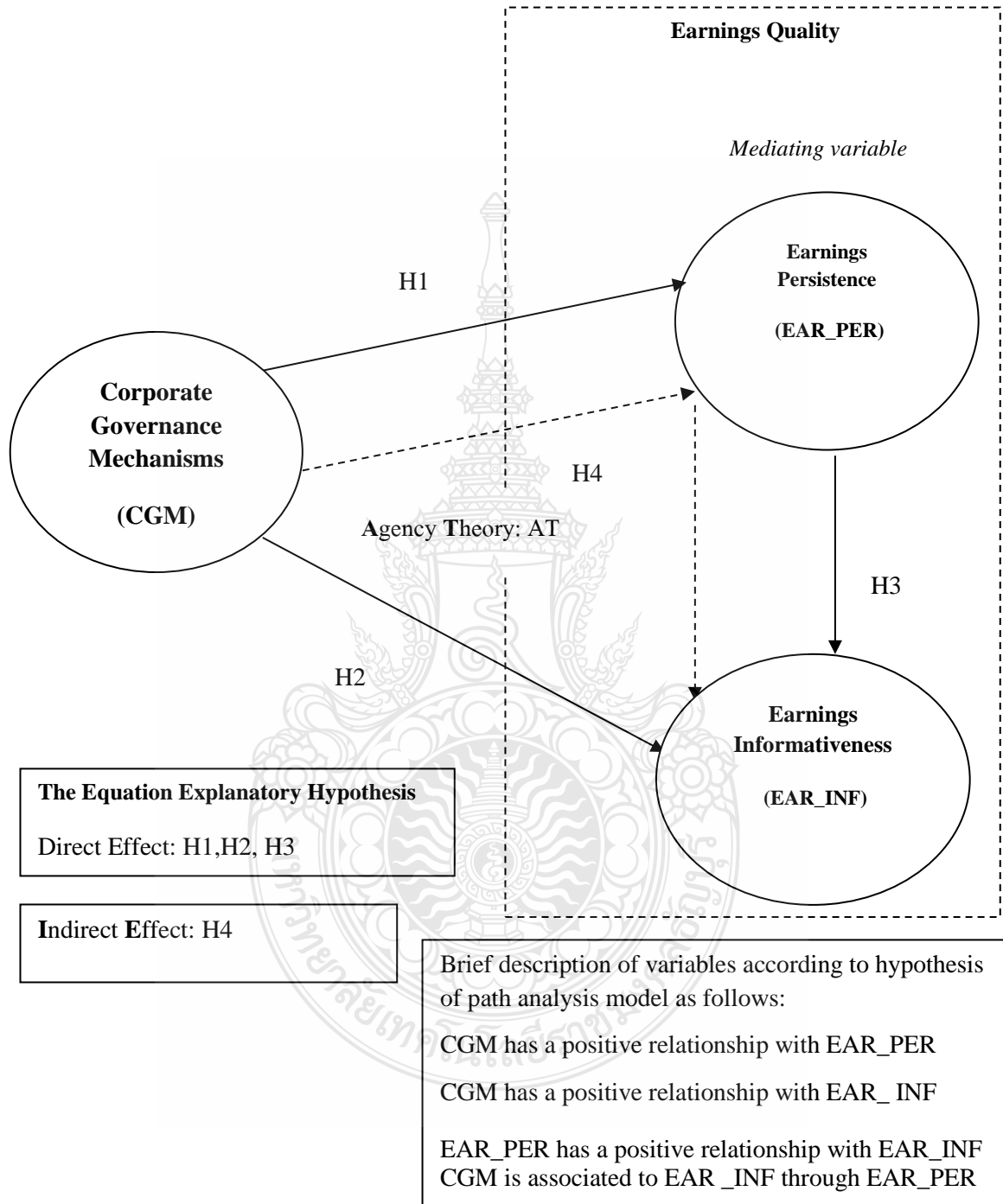


Figure 1.1 Conceptual Framework Overview

1.7.3 Research Methodology

The Research Methodology of this study will be explained in detail in Chapter 3. This chapter will briefly explain empirical research steps used to study the relationships between the Corporate Governance Mechanisms on earnings informativeness through earnings persistence of the companies listed in the Stock Exchange of Thailand and data on their manufacturing operations.

Data Analysis is divided into two parts: Data Analysis by explanatory statistics, and Data Analysis by deductive inferential statistics. Multiple Regression Analysis was used to test the relationships between the independent variables and dependent variables. This research shows the effect of Corporate Governance Mechanisms on earnings informativeness through earnings persistence. Each variable will be explained in the Research Methodology section (Chapter 3). The researcher also used information in the SET Stock exchange of Thailand as a calculation method to identify directions of changes that occurred between 2010 and 2012 through a comparison of earning measurements from secondary information.

1.8 Procedure Used to Present the Research Results

Chapter 1 covers the background and significance of problems, research objectives, research hypotheses, research scope, and conceptual framework, research limitations, definitions used in the research, expected benefits, research methodology, and presentation steps of the research results.

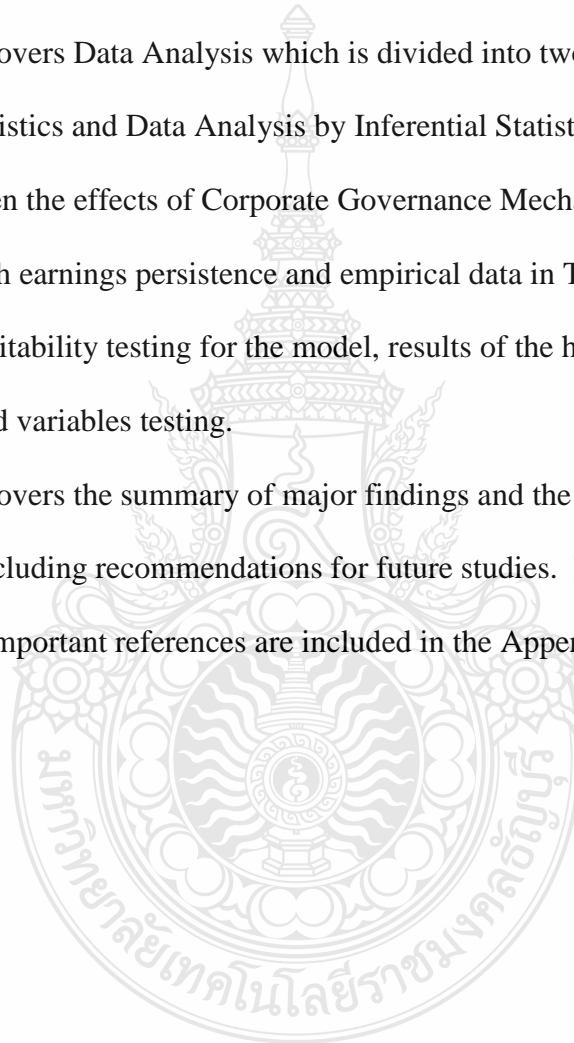
Chapter 2 covers the related concepts and theories of the research and survey and/or relevant documents and research. It is divided into two main parts: 1) Concepts

of Explanatory and Dependent Variables, and 2) Related Theories and Research Studies.

Chapter 3 covers the Research Methodology regarding development of the Research Hypotheses, Research Population and Sample Groups, Research Measurement Tools, Data Collection Procedures, and Data Analysis.

Chapter 4 covers Data Analysis which is divided into two parts: Data Analysis by Descriptive Statistics and Data Analysis by Inferential Statistics that analyzes the relationship between the effects of Corporate Governance Mechanisms on earnings information through earnings persistence and empirical data in Thailand. Each part covers results of suitability testing for the model, results of the hypothesis testing, and results of controlled variables testing.

Chapter 5 covers the summary of major findings and the discussion of the research results, including recommendations for future studies. Extended research papers relating to important references are included in the Appendix.



CHAPTER 2

REVIEW OF THE LITERATURE

2.1 Introduction

This chapter presents a review of related literature and theories for this study from accounting literature, journals, textbooks, theses, local and international research reports, websites, and electronic databases. The review is divided into three parts, as follows:

1. The Concept of Corporate Governance Mechanisms: Agency Theory, Jensen and Meckling (1976).
2. The Concept of Earnings Quality: The Efficient Market Hypothesis, Fama, Fisher, Jensen and Roll (1969).

The two basic approaches used in this study are Agency Theory and Efficient Capital Market Theory. The underlying concept of research is to study the importance of corporate governance mechanisms in the capital market of Thailand through a study of the management behavior of an organization, the financial statements indicating long-term profits, and measurement of earnings persistence impact. Earnings informativeness is measured by the relationship between corporate governance mechanisms, which will be discussed in the context of the entity's internal control. The board of directors, ownership structure, executive compensation, transparency and disclosure are also reviewed. Assumptions on earnings persistence and its indirect effect on the overall development of accounting are derived from a review of literature and theories. This chapter employs the first approach.

1. The Concept of Corporate Governance Mechanisms: Agency Theory; Jensen and Meckling (1976).

2.1.1 The Theoretical Concept

The agency theory is a theory proposed by Jensen and Meckling (1976), who applied the theory to their study and emphasized that the activities of companies were governed by the role of contracts to facilitate voluntary exchanges. The agency theory explains that the best way to organize relationships is the one in which one party (the principal) determines the work, while another party (the agent) performs it. Problems for the agency occur when shareholders (principals) hire managers (agents) to make decisions that are in the best interests of the shareholders.

An Agency Problem is a problem occurring due to a separation between executives and business owners, as follows:

- 1) Adverse Selection is a problem occurring when an agent or business owner is not sure whether the selected committees can operate a business as expected and whether the selected committees are worth their income.
- 2) Moral Hazard is a problem occurring when an agent or business owner is not sure whether the selected committees have performed effectively.
- 3) Conflict of Interest is a problem occurring when people prioritize their own personal gain above performing their assigned responsibilities, resulting in benefit loss.

According to agency theory, when a manager (agent) has a competitive advantage of information within the company over that of the owners (executives), there will be information asymmetry, which results in the executives' inability to control the desired action of the agent. Inside information of an organization is important, and the

manager who monitors the company is in charge of essential information that can be manipulated to maximize their own interests at the expense of the principal (Godfrey, Hodgson and Holmes, 2003). Agency is the relationship that occurs from an agreement between two parties. One party is the agent, who agrees to operate as the representative of the other party, called the principal. This means if there is no device to monitor the executives' operations (the monitoring device), they tend to make decisions that create wealth for themselves regardless of the allocation of resources. They will choose this dishonest behavior over the interest that conforms to the contract. Owners and creditors can deny offering an agency financial assistance. The agency problem results from a discrepancy between the requirements of the shareholders and the executives because the shareholders require the executives to administrate the business with high efficiency and produce maximum interest for the shareholders. The discrepant requirements of such people will affect the shareholders.

Agency problems need to be solved by checking the performance of all sectors of the executive because there are many levels of shareholders in an organization: minor shareholders, major shareholders, institutional investors, and foreign investors who may be affected by the fraudulent administration. Hermalin and Weisbach (1991) stated that the board of shareholders has to select one person to examine the operations of all levels of the executive in order to create transparency and the good governance needed to take care of the benefits. The selected person focuses on the inspection of the board of directors.

Corporate governance can be considered as an environment of trust, ethics, moral values and confidence as a synergic effort of all the constituents of society that is,

the stakeholders, including government, the general public, etc.; professional/service providers and the corporate sector. One of the consequences of a concern with the actions of an organization, and the consequences of those actions, has been an increasing concern with corporate governance. Corporate governance is therefore a current buzzword the world over. It has gained tremendous importance in recent years. There is a considerable body of literature which considers the components of a good system of governance, and a variety of frameworks exist or have been proposed. This chapter examines and evaluates these frameworks while also outlining the cultural context of systems of governance.

Background: The Stock Exchange of Thailand has prepared the Code of Best Practice for Directors of Listed Companies to guide the operations of the directors. Later, in the year 2001, the Stock Exchange of Thailand appointed the "Good Corporate Governance Committee" comprising the representatives from a variety of professional organizations. The year 2002 was designated by the government as the start year of the good governance campaign by setting up the National Corporate Governance Committee. The Stock Exchange proposed 15-point principles of good corporate governance to listed companies for being practice guidelines in the initial stage. Besides, all listed companies were required to disclose compliance with 15-point principles of good corporate governance from the accounting period ending on 31 December 2002 onwards. For enabling the listed companies to apply the governance principles, the Stock Exchange established the Corporate Governance Center in July 2002 to serve as the center for providing advice. Examination is based on the results of international evaluation as follows:

Results of CG-Watch assessment for the year 2012 by ACGA. Thailand was ranked higher compared with the year 2010 from 4th to 3rd rank among all 11 of the Asian countries that were assessed (namely Thailand, Japan, Hong Kong, Singapore, India, Taiwan, Korea, China, Indonesia, Philippines and Malaysia).

Results of CG-ROSC evaluation of the year 2012 by World Bank were announced in 2013. Thailand got an average score of 83% and was ranked first among all 11 Asian countries that were assessed (i.e. Thailand, Bangladesh, Bhutan, Hong Kong, India, Indonesia, Malaysia, Nepal, Pakistan, Philippines and Vietnam).

Assessment of ASEAN CG Scorecard 2013-2014: Thailand got an average score of 75.39%, which was an increase by 7.73% from the previous years (for years 2012-2013, average score equaling 67.66%). Thailand was still ranked first among all 6 Asian countries that were evaluated (Thailand, Malaysia, Singapore, Indonesia, Philippines and Vietnam). (Reference http://www.set.or.th/th/regulations/cg/cg/history_p1.html)

The following reviews involve the findings of some important research into agent and agency problems.

Fama (1980) summarized an equation in the specific situation of a wage revision process, which is specified by shareholders using the current deviation. The extent to which the wage revision process is set up in any situation is, of course, an empirical issue. It is probably safe to say that the common phenomena that constitute important ingredients in the survival of a large corporation are characterized by diffuse security, financial security, and the operational control needed to evaluate the organization.

According to Jensen (1986), the differing interests and incentives of managers and shareholders cause conflicts in such cases as the size of the corporation and cash

payments to shareholders. These conflicts are severe in corporations with large free cash flows, those with more cash than profitable investment opportunities. The theory developed here can explain: 1) the benefits of debt in reducing agency costs of free cash flows, 2) how debt can be used to substitute for dividends, 3) why “diversification” programs are more likely to generate losses than takeovers or expansion in the same line of business, 4) the factors that lead to takeover activities in such industries, and 5) why bidders tend to perform abnormally.

Eisenhardt (1989) used the agency theory to emphasize the issues addressed by the agency theory and organizational theory, and examined the conflicts of interest of business agency. He supports the viewpoint that unethical agency may cause a risk to business and overall operations and that the information could be improperly used. He also mentioned that executives should use this type of consideration as their motivation to prevent corruption and abuse of power.

2.1.2 The Concept of Corporate Governance Mechanisms

Corporate governance is derived from legal and economic theories which separate ownership and governance. This diminishes conflicts of interests between shareholders and executives. There are several definitions of corporate governance as follows:

The Stock Exchange of Thailand refers to corporate governance mechanisms as a system that has a structure and a procedure of relationship among the committee, the management sector, and shareholders to build up competitive ability leading to long-term growth and value increase for shareholders. In a corporate governance system, shareholders appoint committees to operate businesses. The committees are in charge

of formulating and assigning policies for operators. Therefore, the committees' responsibilities are under shareholders while the management sector's responsibilities are under the committees accordingly (<https://www.innobizmatching.org/index.php/knowledge-station>).

Currently, the world mainly places importance on the financial issues occurring in the USA. There was financial failure and corruption in the Enron Company resulting in bankruptcy. Factual information was not usually reported, not even to the stakeholders who wanted information on corporate governance for financial decision making. Investors tend to expect this type of information, and concerned stakeholders want financial reports of companies from the 20th century to identify the financial strategies that would be important for financial management systems. To make the corporate governance system has been considered and reviewed.

In the United Kingdom, the Cadbury Committee was nominated in 1990 to draft regulations of corporate governance due to the behavior of some big financial companies. Sir Adrian Cadbury (1992) authored a report for the monitoring committee, entitled "The Financial Aspects of Corporate Governance", which referred to the principles of corporate governance.

Another meaning of corporate governance was defined by the Stock Exchange of Thailand, which stated that corporate governance must cover the management structure, committees, and shareholders in order to enhance strategic competitiveness to add value to the enterprise and benefit stakeholders (<http://www.cgthailand.org>).

The control of an enterprise is known as “corporate governance” and this term has various meanings depending on the following perspectives:

1

It is a relationship between the committee, management sector, shareholders and stakeholders which determines the operational direction and monitors the firm’s operation.



2

It is an inner process and structure which is set to make sure that the board is able to evaluate the operational team of the firm directly and effectively.

3

It is a system that sets the processes and structures of the leadership to ensure they carry out their responsibilities according to their duty, create competitive competence, maintain an investment fund, and add long term value for shareholders within a virtuous framework considered to benefit

Figure 2-1 Corporate Governance meanings//www.cgthailand.org

2.1.3 The Concept of Earnings Quality: (Schipper and Vincent, 2003; Dechow, & Dichev, 2002; Jennifer Francis, Francis, Olsson, & Schipper, 2006)

The measurement of earnings quality is intended for financial reporting to provide useful information for business decisions. Schipper and Vincent (2003) showed the differences between two types of abstract variables concerning earnings quality. First, the abstract variable: earnings quality depends on both accounting practices and

events and transactions behind them, such as earnings persistence. Second, the abstract variable: earnings quality all depends on accounting practices such as consistency and abnormality of accruals that are based on the management's discretion.

Earnings persistence is associated with the response of investors more than earnings reported. Earnings are a unique characteristic related to the value of earnings as prepared clearly in the assessment model of Ohlson (1995); Barth and Hutton (2004). Increased assessment is associated with earnings persistence. Easton and Zmijewski (1989) call the slope coefficient of regression of stock returns in relation to the level change of Earnings Response Coefficient (ERC). The response is reflected as dollar per share price no 1 Dollars of earnings which are not predicted reflect the earnings that investors (did not forecast).

Higher earnings persistence is considered by investors as sustainability, which supports the concept of Freeman et al. (1983). This shows that the rate of return based on the current book value provides the basis for earnings change forecasts. The low rate of return compared implicitly indicates decreased earnings. With information adjustment to include the book value of net assets, earnings are considered to be able to predict the return. Ou and Penman (1989) extended this analysis by showing that not only the rate of return from all assets determines future earnings, but greater financial statements also determine future earnings. Sloan (1996) examined the work of Ou and Penman (1989) concerning the financial statements audit, and future profitability. Sloan (1996) examined the role of cash flow and time-series earnings accruals. It was demonstrated that accruals of earnings are less stable than the cash of earnings. This is interpreted as an indication of a higher level of accruals related to cash flow, reflecting

the reversion of earnings, signaling earnings management, i.e. lower earnings quality. Thomas and Zhang (2002) showed that the changes in demand and earnings management are the causes of the reversion of earnings.

2.2 Corporate Governance Mechanisms and Earnings Persistence

The board of directors plays an important role in corporate governance for the maximum benefit of the company. The board structure in Clause 1 (Board Structure) was put into practice under the principles of good corporate governance for listed companies in 2006. The researcher studied companies' performance outcome in relation to their number on the board of directors, the proportion of independent directors, the independence of the chairman, and the separation of the functions of the chairman and chief executive officer.

The Earning Persistence: Accounting – Based; Concept and Earnings Performance (Sloan, 1996; Olsson, Katherine, & Schipper, 2006)

Another point examined by Sloan (1996) is the information contained in the components of cash flow and composition of earnings accruals. The research by Dechow et al. (2005) and Kraft et al. (2005) questions the assumption that the forecasts of investors about future earnings come from the share price. Dechow et al. (2005) showed that the higher stability of composition of cash of earnings arises from the distribution of net cash to shareholders. Besides, the investors' forecasts for lower stability of the composition of remaining cash of earnings are inconsistent with the hypothesis of Sloan.

As to the fact that investors naturally cling to earnings, the results show that earnings performance due to the composition of earnings accruals reflects lower persistence than the earnings performance from the components of cash flow. The hidden essence of this reasoning is that the composition of accruals and cash flow of current earnings have different implications for the assessment of future earnings, while the two components bring current earnings included.

Xie (2001) extended the work of Sloan (1996) by suggesting that the lack of persistence or the implications in one year ahead and the inflated price of accruals are caused by abnormal accruals. Thomas and Zhang (2002) discovered that the negative correlation between accruals and abnormal returns in the future shown by Sloan (1996) is mainly due to specific accruals called inventory. It was found that the change in inventory represents one component which is consistent and significant to future returns.

The study of Francis et al. (2004) contributes to the knowledge of earnings forecast literature. It identifies seven measures of Earnings Quality (which they refer to as earnings attributes) that have been widely used in accounting research. They characterized the seven earnings attributes as either accounting-based or market-based depending upon the underlying assumptions about the function of financial reporting.

They note that these assumptions will, in turn, influence the way the attributes are measured. The accounting-based by earnings indicates these attributes take cash or earnings.

The market-based attributes are earnings informativeness. These attributes take returns or prices as the reference constructs, and rely upon both accounting data and

returns data for their estimation. The market-based Earnings Quality measures assume that the function of earnings reflects economic income as represented by stock returns. It has been found from research studies that measurement of accounting and marketing principles are the basis for effectiveness of the earnings persistence measurement.

Dechow, Ge, and Schrand (2010) examined the importance of earnings persistence variables. They state that a company that has more earnings stability has stable cash flow, which results in an evaluation of the company's turnover.

Findings of exploration on the effect of earnings attributes on analysts' forecast accuracy in multiple settings have implications for analysts and regulators. That is, analysts focus on earning attributes that affect analysts' forecast investors and empirically examine effects of firm growth opportunities and Earnings Quality in the market. Jennifer Francis, Per Olsson, and Katherine Schipper (2006) found 12 ways to measure earnings quality, namely: Accruals Quality, Abnormal accruals, Persistence, Predictability, Smoothness, Earnings Variability, Value Relevance, Earnings informativeness, Earnings Opacity, Timeliness, Conservatism, and E-Loadings. The researcher studied on the basis of 2 aspects used for performance evaluation, namely accounting-based, i.e. reference to the accounting performance that defines Earnings Persistence. On the other side, examination must be market-based with the addition of perspective of investors that defines measurement of Earnings Informativeness, informativeness of accounting earnings. A combination of two bases supports the concept of earnings evaluation of Sloan (1996) as the definition of earnings quality, business performance appraisal. It also supports the work of Dechow, Ge, & Schrand (2010). Higher quality earnings provide more information about the features of a firm's

financial performance that is relevant to a specific decision made by a specific decision-maker.

2.2.1 Earnings persistence

There are several research studies which have explored the importance of earnings persistence. They raise interesting aspects relevant to earnings persistence. This study begins by focusing on earnings persistence. Sloan (1996) distinguishes the persistence of the accrual component and that of the cash flow component of earnings. Earnings persistence refers to the likelihood that a firm's earnings level will recur in future periods Nichols and Wahlen (2004). Headline earnings are often used as a summary measure of performance (Brooking, 2006). Specifically, items excluded from headline earnings do not relate to the operating activities of an entity because these items are associated with the platform (capital base) used to generate trading income. Headline earnings exclusions should exhibit lower persistence than headline earnings, leading to the following hypothesis, as follows.

Hypothesis 1: Firms that have good internal Corporate Governance Mechanisms are expected to have higher earnings persistence.

There are 4 corporate governance mechanisms.

From the review of literature on governance criteria (OECD, 2004) to which the Stock Exchange of Thailand adheres as guidelines for the development of international level, the researcher can study 4 aspects, as follows: Board of Directors Structure, Ownership Structure and Shareholding, Executive Compensation, and Transparency and Disclosure

Board Structure

The board of directors is in charge of a company's economic responsibility and practical legal matters; they represent the ordinary shareholders of the company. The variable of interest is the commission structure affecting the relationship in the financial statements and company's earnings quality, which investors are interested in (Fama, 1980; Fama & Jensen, 1983). The board of directors has a proportionately higher number of external independent directors to enhance the quality of management monitoring. The board is not directly associated with company officers or employees and is thus independent from the shareholders.

2.2.1.1 Board Size and Earnings Persistence

The appropriate number of members on the board of directors for each company is not easily determined. The operational performance will decrease if the company has too many members on the board as it will be more difficult to achieve agreement on any decision. On the other hand, the quantity of decisions will decrease if the company has too few members on the board, because the company's problems may not be solved in a timely manner. The size of the board of directors is one of the details contained in the recommendation for best practices in Clause 1.1, Section 5 of the corporate governance mechanisms.

A small board of directors may only consist of a few members who can provide better oversight of financial reporting. From this observation, it was found that a larger board of directors can result in a better monitoring of the company (Boone, Field, Karpoff, & Raheja, 2007). Using a unique panel dataset that tracks corporate board development from a firm's IPO through to 10 years later, it was found that: (i) board

size and independence increase as firms grow and diversify over time, (ii) board size but not board independence reflects a tradeoff between the firm-specific benefits and costs of monitoring, and (iii) board independence is negatively related to a manager's influence and positively related to constraints on that influence. These results indicate that economic considerations, in particular the specific nature of the firm's competitive environment and managerial team, help explain cross-sectional variations in corporate board size and composition. Nonetheless, much of the variation in board structures remains unexplained, suggesting that idiosyncratic factors affect many individual boards' characteristics.

A significantly positive correlation between the size of the board and the company's financial performance is found. The reason of this is that the large size of the board can utilize more resources in order to improve the committee audit. Xie (2003) found that the large sized boards had more power in terms of diversity and integration. This could be achieved with an independent director with expertise in finance who could prevent the expenses incurred in departments from resulting in the management of earnings through accruals. Ezat and El-Masry (2008) found that the number of board directors affected its ability to receive information, resulting in monitoring within the board and the exchange of knowledge. Mashayekhi and Bazaz (2008) found that when the size of the board is large, the manager auditing will be less efficient, which may cause problems in communication efficiency. Similarly, a small-sized board will have fewer problems. It may be more flexible, resulting in better performance by the company. This study assessed this variable through the collection of data on the total number of board directors.

However, as to relationship between board size and earnings management with impact on performance, typical knowledge indicates that the smaller board size is more efficient (Lipton and Lorsch, 1992; Jensen, 2000). And it is less likely to be controlled by the management (Dechow, Sloan, & Sweeney, 1996; & Jensen, 2000). Efficiency requires the availability of information with costs from the company to the directors. The smaller board size will lower such costs. For example, Blair (1995) argued that the large-sized board of over 15 people possibly causes a waste of time because one meeting of such board usually takes more than 4 hours. Lipton and Lorsch (1992) and Jensen (2000) suggested that the appropriate size of the board should not include more than seven or eight directors. The problem of administrative control of the agents may occur.

H1a: There is a significantly positive relationship between the **Board Size** and the earnings quality measured by Earnings Persistence.

2.2.1.2 Board Meetings and Earnings Persistence

Vafeas (2000) found that if the number of board meetings increases, the operating performance of the company improves. This suggested that the frequency of meetings is an important aspect of an effective board. A board that meets often should be able to assign more time to issues such as financial reporting quality. Hashim and Rahman (2010) found an inverse relationship with the duration of the conference committee on corporate governance and financial reporting. Through the data collected, this variable was measured as the number of board meetings held annually by the board of directors. Vafeas (2000) examined whether the frequency of board meetings is a remedy to the problem of limited director interaction. Initial tests on the determinants

of meeting frequency provided weak evidence that more appropriately structured boards were more active since board activity rose with the number of other directorships held by independent directors. Moreover, the level of inside ownership appeared to substitute for board monitoring activity. More efficient use of contact among directors may be achieved in smaller boards and in boards with more centralized structures.

Referring to the relationship between board meeting frequency and market value, the study showed that the boards that met more frequently were valued less by the market. This relation disappeared when prior stock performance was included in the model, suggesting that the relationship ran from poor performance to higher board activity, and not vice versa. This view was reinforced by event-time tests suggesting that years of abnormally high meeting frequency follow poor performance.

H1b: There is a significantly positive relationship between the **Board Meetings** and earnings quality measured by Earnings Persistence.

2.2.1.3 Audit Committee and Earnings Persistence

Klein (2002) found that the measurement of earnings was significant and positively associated with the presence of an audit committee, independence, and abnormal accruals. It was also found to be associated less with a board of directors and an audit committee than with an independent committee.

In a study by Liu Zhung (2011) in the United States and Hong Kong, an effective audit committee was shown to have an effect on the relationship between earnings predictability and management. The characteristics of the financial predictability of analysts were likely to have more influence on the audit committee as a result of their responsibility to monitor and disclose information voluntarily by the

effective measures of the audit committee. These effective measures are divided into four BRC factors as performance indicators. They are indicated in a previous study (Abbott et al., 2000-2004) as follows:

- 1) Adequacy of the size of the board of directors and its Independence
- 2) Financial expertise
- 3) Frequency of meetings
- 4) Size of the audit committee and number of committee responsibilities

compared to the size of the board of directors.

(Liu, Jic, & Yang, 2012) analyzed the factors associated with the formation of the audit committee and the effect of the board of directors in relation to the performance based on the Agency Theory, particularly regarding the research and investigation of the effect of the voluntary adoption of the audit committee in developing countries. The research findings indicated that voluntary adoption of the audit committee was a result of negotiations with the CEO. Demand for earnings and the behavior of earnings management did not have a significant effect on higher earnings than the effect on companies without an audit committee. This finding was based on research studies in China during 2001-2008.

Kamarudin, Ismail, and Samsuddin (2012) investigated (1) the relationship between audit committee independence and earnings quality, and (2) the influence of CEO duality on this relationship. The research findings showed that an independent audit committee was more effective in monitoring the quality of financial statements. Therefore, audit committee independence was related to higher earnings quality. Additionally, the dual role of CEO and chairman was likely to reduce the effectiveness

of independent audit committees. Using a sample of 3,017 non-financial companies listed on Bursa Malaysia from 2005-2010, the research findings showed that earnings quality was positively associated with audit committee independence, but the relationship was weakened by the existence of CEO duality. The findings also implied that when a CEO had excessive control over the decisions of the board of directors by holding the position of chairman, the monitoring function of independent audit committees was needed to assure high quality of earnings in financial statements.

Abernathy, Herrmann, Kang and Krishnan (2013) indicated that having an accounting expert on an audit committee improved financial reporting quality. The research findings showed that financial analysts' earnings forecast properties (such as more accurate and less dispersed forecasts) were associated with the accounting expertise of a company's audit committee. Moreover, there was no significant association between non-accounting financial expertise and the properties of analyst forecasts. These findings were of direct importance to investors in the capital markets since analyst earnings forecasts were primary inputs in equity valuation. The findings also showed that accounting expertise (and not non-accounting expertise) was associated with greater forecast accuracy by analysts and lower forecast dispersion. The results also had important implications for regulators, corporate boards, and others in defining requirements for financial expertise. In addition, the findings suggested that adopting a narrower definition of a financial expert as originally proposed by the SEC was likely to enhance the audit committees' effectiveness.

However, these findings were subject to the following limitations: the study focused on association rather than causation between accounting expertise on the audit

committee and attributes of analysts' earnings forecasts; the study cannot state conclusively that accounting expertise on the audit committee was directly attributable to improvements in forecast accuracy and forecast dispersion by analysts; the study cannot rule out the possibility that the results might be influenced by omitted correlated variables. Despite these limitations, this paper extended the literature regarding financial expertise on the audit committee while prior literature provided evidence of a link between accounting financial expertise and financial reporting quality.

A study by Woidtke and Yeh (2013) aimed to examine whether audit committee independence was associated with stronger earnings informativeness as measured by the earnings return relationship in East Asian companies. The results of the study showed that the negative relation between concentrated control and earnings informativeness, documented in Fan and Wong (2002) prior to the Asian financial crisis, persists in a more recent time period despite adoption of many corporate governance reforms to improve financial disclosure.

H1c: There is a significantly positive relationship between the **Audit Committee** and the earnings quality measured by Earnings Persistence.

2.2.1.4 CEO Duality and Earnings Persistence

The chairman of the board of directors is responsible for checking the performance of the executives. Jensen (1993) found that the executives who also served as the chairman of the board of directors had an influence on the board of directors that tended to lack independence between the management and administration. The research studies identified that in cases where the executive and the chairman of the board of directors is the same person, the internal corporate governance mechanism will be

possessed by the executive, affecting the role in corporate governance of the board of directors.

Research found that CEO duality in a company resulted in not having the best or optimal operation of the company. For instance, this was found in Rechner and Dalton (1991) which stated that CEO duality will have the level of shareholder compensation set quite low, because the company pays attention to the firm more than it does to its ownership. CEO duality between the chairman of the board and the management shows a balance of power in the administration of the chairman, by dividing their operational functions. Hashim and Devi (2009) point out that a significantly positive association was found between outside board ownership/family ownership and earnings quality. However, there was no significant relationship between the independence of the board of directors and earnings quality. They also examined the relationship between one of the internal corporate governance mechanisms, the board characteristics: namely, board independence, CEO duality, board size, frequency of board meeting and board tenure, and the ownership structure (such as managerial ownership, family ownership and institutional ownership) and the financial reported earnings quality in Malaysia. The results showed that the companies with a longer average tenure of independent directors had higher earnings quality. The study also revealed that outside board ownership and family ownership played significant roles in constraining the quality of reported earnings with an increase of substantial shareholdings by outside directors and a higher proportion of family members on the corporate board. Elsayed (2011) demonstrated that the board size had a positive effect on corporate performance in the presence of CEO non-duality (board leadership structure that splits the roles of the CEO and the

chairman). Moreover, the board size also had a negative influence on corporate performance in the presence of CEO duality (board leadership structure that assigns both the roles of CEO and chairman to the same person) based on the use of different measures of corporate performance, control variables, and econometric models. Thus, these findings cast doubt on most of the existing evidence positing that either a large or small board size was always the best alternative to be followed in all organizations. In addition, board size, board leadership structure, and managerial ownership can be considered as substitutive corporate governance mechanisms. This effect was more likely to vary not only with country and industry settings, but also with the cost, effectiveness, and availability of other corporate governance mechanisms.

H1d: There is a significantly positive relationship between the **CEO Duality** and earnings quality measured by Earnings Persistence.

2.2.2 Executive Compensation and Earnings Persistence

The mechanism for management share ownership in Jensen and Meckling (1976) provided the idea of creating motivation for the CEO through giving an ownership portion to the CEO which could be deducted from the costs of an agency. Its effect was to motivate the administration by paying staff salary or compensation in stock options. Giving staff the right to hold stock was called the Stock Option. But in this case it discussed only the payoffs giving staff the right to hold stock as Stock Options, which was measured using the Black-Scholes Model formula. Having an inadequate data set limits the research calculations (Chalevas, 2011). This variable was measured through data collection by the average (per head) cash compensation paid to staff. A study by Chen, Elder, and Yung in 2007 examined the connection between the

nature of corporate governance and earnings management, using a combination of the cross equation of the Jones model and additional factors ROA to control the operations of the company. Due to the limitations of the data, the researchers did not use performance-matched accrual basis on decision making. Srinivasan, Sayrak and Nagarajan (2004) measured executive compensation (TOTAL) as the logarithm of the sum of cash compensation (CASH such as salary plus cash bonus), and value of options and restricted stocks (NON-CASH) granted in a year. They collected cash and option compensation data from the proxy statements of the top five executives including the CEO.

Prior research similar to research in McGuire et al., (2003) on three different components of CEO compensation (salary, bonus, and stock options) was considered in this analysis. Salary was measured as the annual cash salary paid to an executive during the calendar year. Bonus was measured as the bonuses paid to an executive during the calendar year.

H1e: There is a significantly positive relationship between the **Executive Compensation** and earnings quality measured by Earnings Persistence.

2.2.3 Ownership Structure or Shareholding and Earnings Persistence

A study carried out by Darren Henry in 2010, based on the companies listed in the Australian Stock Exchange, examined the governance of costs and benefits for the organization. The findings revealed that the contract and voluntary amount of governance had an effect on the organization cost, and the governance rules that were independent from the ownership structure were significantly important for reducing these costs.

However, the study by Redhwan, Ahmed al-Dhamari and Ku Nor Izah Ku Ismail (2013) is different from previous research with the main emphasis on the relationship of corporate governance mechanisms to earnings management or earnings informativeness. The reason is that it investigates the relationships between governance structure, ownership structure and earnings predictability. With the use of a sample of 330 firms for the period from 2008 to 2009, the findings indicate that the predictive capability of earnings is high when the companies have small boards, an independent chairperson, and a great amount of shareholding by institutions. Nevertheless, what contradicts our expectation is the significant but negative impact of board independence on earnings predictability. Besides, the outcomes show that investors do not consider independent audit committees, efficient audit committees, more active audit committees and a high shareholding of management as good indicators of earnings numbers with a high predictive value.

2.2.3.1 Block Holding 5% and Earnings Persistence

The percentage whereby the major shareholder holds more than 5% of the stock is the regulation to open stock selling, which set the portion of holding at 5%. The mentioned portion has an important issue which fixes the variable of corporate governance performance that occurred from an agency problem. The major shareholder portion is measured by the holding value of the major shareholder who holds more than 5%, having a list of the major shareholders in the 56-1 form. According to Shleifer and Vishny (1986) and Bradbury et al. (2004), Block Holding = percentage of shareholding of major shareholders who hold a share over 5% according to the list of major shareholders as per form 56-1.

H1f: There is a significantly positive relationship between the **Block Holding 5%** and earnings quality measured by Earnings Persistence.

2.2.3.2 Institutional Ownership and Earnings Persistence

This research study used the percentage of the company's shares held by institutional investors as a measure of institutional ownership, which is similar to previous research carried out by other researchers (Wiwattanakantang, 2001; Gillan and Starks, 2003; Bushman et al., 2004; Sharma, 2004; Black, Jang, & Kim, 2006; Khanchel, 2007; Lee & Park, 2008). The reason for using the percentage of the company's shares held by institutional investors as a measure of institutional ownership, instead of a dummy variable, was that if the company has a controlling shareholder who is an institutional investor, it will reduce the non-normality problems (Hadani, Goranova & Khan, 2011). Earnings management affects the quality of financial reporting and can increase equality between owners and managers. In a current survey of shareholders, monitored by the largest institutional investors in earnings management, long-term analysis of the proposals received by the shareholders of companies were involved in a positive way to deal with it as gains, simultaneously monitored by the owner of the largest institutions was negatively related to earnings management. Further information on this can be found in Wiwattanakantang (2001), and Gan, Victoravich, and Xu (2012). The percentage of outstanding common shares owned by institutional investors was chosen for the study. Utama and Cready (1997) aimed to examine the relationship between institutional ownership and trading volume response to earnings announcements. It was found that if the institutional ownership was low, trading response would increase with institutional ownership. However, when

it was high, such as over 50%, the trading responses decreased with institutional ownership. This is consistent with Kim and Verrecchias (1991). They revealed that trading volume response to public information releases increased with the level of differential pre-disclosure precision among investors.

Xu and Wang (1999) aimed to investigate whether ownership structure significantly affected the performance of publicly listed companies in China within the framework of corporate governance. A typical listed stock company in China had a mixed ownership structure with three predominant groups of shareholders: the state, institutions, and individuals, with each holding approximately 30% of the stock. Ownership was heavily concentrated. The five largest shareholders accounted for 58% of the outstanding shares in 1995. This can be compared with 57.8% in the Czech Republic, 79% in Germany, and 33% in Japan. Empirical analysis showed that the mix and concentration of stock ownership does indeed significantly affect a company's performance. There was a positive and significant correlation between ownership concentration and profitability.

The positively supporting concept (Zobeideh, Mokhtari, Khosro, Faghani, & Makerani, 2013) for quality indicators, earnings persistence and earnings predictability were selected. Their association with institutional ownership for a sample of 50 listed companies on the TSE from 2009 to 2011 was tested. The outcomes of research show a significantly positive relationship between institutional ownership and earnings quality (earnings persistence and predictability). Nevertheless, no significant relationship was found between institutional ownership and firm value.

H1g: There is a significantly positive relationship between the **Institutional Ownership** and earnings quality measured by Earnings Persistence.

2.2.3.3 Foreign Ownership and Earnings Persistence

Many research studies have used the percentage of a company's shares held by foreign investors as a measure of foreign ownership, including Gillan et al. (2003, Zheka (2006), and Lee and Park (2008). However, Wiwattanakantang (2001) used a dummy variable to indicate whether or not the company had a controlling shareholder who is a foreign investor.

This study used the percentage of the company's shares held by foreign investors as a measure of foreign ownership in order to mitigate the non-normality problems of the data. Foreign investors in this study were defined as investors who had nationalities other than Thai either as an individual or as a group. Gurbuz and Aybars, (2010) and Kolasa, Rubaszek and Taglioni (2010) also used percentage of ownership held by foreign owners. This type of owner was mostly a foreign institutional investor.

H1h: There is a significantly positive relationship between the **Foreign Ownership** and earnings quality measured by Earnings Persistence.

2.2.3.4 Family Ownership¹ and Earnings Persistence

The researcher offers the idea of a family company's variable measurement used by Wang (2006), and Anderson and Reeb (2003), and defined by the International

¹ According to the Securities and Exchange Act of B.E. 2551, it determines that shareholders who own stock over 25% can oppose the conference vote for important issues. According to the definition of "family company", a family is able to control the corporate operational policy. So, the researcher has determined that a family has to directly and indirectly hold at least 25% of the corporate stock.

Finance Corporation (IFC). The IFC family company variable is a dummy variable. By this example, a family company has a dummy variable equal to one, otherwise it equals zero.

A company is considered to be a family company in cases where a family member holds more than 25% of the stock in the company and additionally serves as a member of the board of directors or the management team. There have been important research studies on family ownership, including: Maury (2006) and Chau and Gray (2010). In this study, FAM is a dummy variable where the sample that is a family company is equal to 1 and otherwise is equal to 0.

Villalonga and Amit (2006) used proxy data on all Fortune-500 companies during 1994-2000. The results of the study showed that family ownership created value only when the founder served as CEO of the family company or as Chairman with a hired premium. CEO dual share classes, pyramids, and voting agreements reduced the founder's premium. When descendants served as CEOs, the company value was destroyed.

The findings indicated that the classic owner-manager conflict in nonfamily companies was more costly than the conflict between family and nonfamily shareholders in founder-CEO companies. However, the conflict between family and nonfamily shareholders in descendant-CEO companies was more costly than the owner manager conflict in nonfamily companies.

H1i: There is a significantly positive relationship between the **Family Ownership** and earnings quality measured by Earnings Persistence.

2.2.3.5 Transparency and Disclosure Levels of S&P: T&D

According to the agency theory, shareholders or investors should be able to know the financial status and the firm's overall results from an unveiled financial report to the public issued by the minister and the agency. An imbalanced data statement by the CEO, who knows most about the financial situation of the firm, should not be expected by any investor. The stakeholder theory's presented data will be promulgated to the stakeholder. Disclosure and transparency can be divided into two types, as follows:

Mandatory Disclosure means an unveiling of data or the minimum list which the firm wants to disclose following the regulations that are related to an organization such as the Stock Exchange of Thailand. Voluntary Disclosure means an unveiling of data beyond those required by regulation, which includes the data that the firm has unveiled to make the decision.

Ho and Wong (2001) detected a relationship between the governance and boundary of voluntary disclosure for registered firms in Hong Kong; it concerns the qualifications of corporate governance and the portion of the committee that is made up by a liberal board. A study by Cheng and Courtenay (2006) also detected a relationship between detection and the voluntary disclosure board level. They discovered new evidence that the firm having an ascendant liberal board was associated with having the committee involved with ascendant voluntary disclosure of an outside controlling mechanism's regulatory aspect. This strengthens the relationship between a liberal board's portion and the level of voluntary disclosure.

Presently, the trend of investment in the securities of the registered companies in the Stock Exchange of Thailand follows the world's globalization and is becoming even more complicated every day. The group of investors in the stock market consists of both individual investors and institutional investors. Having the data of registered companies or securities in the market fund enables these investors to use the information to make more thoughtful investment decisions. The more readiness there is in the data, the less risk of investment there is in the stock market.

Generally, an investor is able to study the firm data from the disclosure which the Stock Exchange of Thailand has legislated in the 2010 Securities and Stock Market Act 56th. It addresses the unveiling of the data and the overall results, and provides for:

- 1) Quarterly financial statements that an auditor has already audited.
- 2) Accounting period financial statements that an auditor has already audited and commented on.
- 3) An annual report.
- 4) Disclosure of other data that is related to the firm, following what the Board of Securities and Stock Exchange has prescribed.
- 5) Showing the quantitative data in the financial statements that is reflected to an image following the prescribed requirements of the Board of Securities and Stock Exchange (BSSE), issue 38/2012.

It has been referred to as the approach that the BSSE has used to support Thai registered companies, and gives importance to the data disclosure in the document and reports that are clear and complete. This is in order to be ready for an ASEAN Corporate Governance (CG) Scorecard, an idea initiated by the ASEAN Capital

Markets Forum. ACFM wanted to upgrade the well-run corporate enterprise of registered companies in ASEAN, following the connection plan in the market fund to dampen the effects of an ASEAN Economic Community. It has employed consultants and specialists from four countries: Singapore, Malaysia, Indonesia, and Thailand, who adhere to the global corporate governance principle of OECD. As was initially mentioned about the well-run corporate governance, the principle was divided into two parts. These are the basic principles and the part dealing with bonuses and penalties. An estimated result will be used in 2013. (See Figure 2.2; reference website www.or.th)

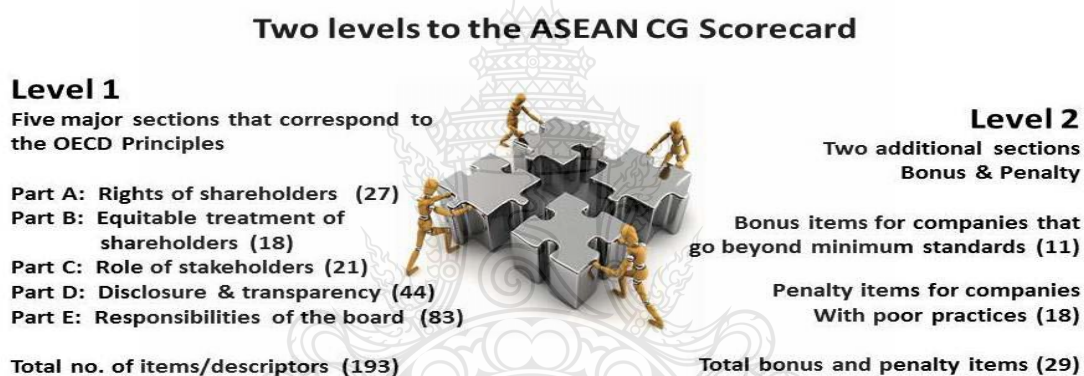


Figure 2.2 Two Levels to the ASEAN CG SCORECARD <http://capital.sec.or.th/> (See details in Appendix A.)

2.2.4 Transparency, Disclosure, and Earnings Persistence

The details that should be disclosed in the management report, and similar analysis of management, are the company's management reporting and analysis of changes in the critical current event, including the trends that are expected to occur in the future. For this research, information should be disclosed according to the practice guidelines of the Securities and Exchange Commission (SEC). The information

disclosure using Standards and Poor's in verifying 98 questions that are associated with research and corporate governance is as follows.

Alia, Chen, and Radhakrishnan (2007) examined the corporate disclosures of US family and non-family companies in the S&P 500 by taking into consideration the following aspects of corporate disclosures: quality of reported earnings, voluntary disclosure of bad news through management earnings forecasts, and voluntary disclosure of corporate governance practices in regulatory filings. The findings of the study showed that the family companies faced less severe agency problems from the separation of ownership and management than non-family companies, but more severe agency problems from conflicts between controlling and non-controlling shareholders. These agency problem differences may influence certain corporate disclosure practices across family and non-family companies.

The results of Mitchell (2011), a study regarding understanding the differences in the mechanisms by which disclosure-based and education-based transparency policies operate, implied that both scholars and practitioners should use caution in understanding why, and predicting when, the policies will work. When transparency was used as a tool for global environmental governance, such as to induce targeted actors to reduce environmentally-harmful behaviors, it can operate via disclosure or education. Disclosure-based policies improve public information about targeted actors' behavior, while education-based policies improve the information that targeted actors have about their own behavior, whether the information is based on consequences, alternatives, or social norms. Various social and political forces shaping the type of transparency policies were adopted. Disclosure-based and education-based

transparency policies were effective under different conditions and operated through different mechanisms. Both often operated through the mechanisms that reflected an instrumental logic of consequences but can also be operated through the mechanisms that reflected a normative logic of appropriateness. This was achieved by increasing the legitimacy in accordance with global environmental norms and the social accountability that targeted actors felt regarding their behaviors.

Al-Refae, Siam, and Khatib (2012) showed the importance of such disclosure of accounting information increased after adding in the economy and finance. The accounting information was considered an important resource for decision making and was the attention of experts in the development of accounting standards to be in line with international standards. This is to increase the responsibility of the management, due to the distortion of the facts in the report that the executives must be responsible for on the basis of objective assumptions of financial information. It has come to include future recognition, which has resulted in an increase in the perception of management's confidence in the importance of information in the future. Such information was based on the assumptions of an event that may or may not happen in the future, and may have potential for the organization in terms of the standard form of economic forecasts:

- 1) Disclosure of financial information in the future
- 2) Auditor's role in promoting the disclosure of financial information in the future

Such information was based on the assumptions of an event that may or may not happen in the future, and may have potential for the organization in terms of the standard form of economic forecasts.

- 3) Disclosure of financial information in the future
- 4) Auditor's role in promoting the disclosure of financial information in the future
- 5) Transparency in the disclosure of financial information in the future, and the effect on corporate governance that has already happened and will happen in the future.

H1j: There is a significantly positive relationship between the **Transparency and Disclosure** and earnings quality measured by Earnings Persistence.

2.3 Earnings Informativeness: Return Earnings Concept and Earnings Performance; (Warfield, Wild, and Wild, 1995).

Board Structure and Earnings Informativeness

Niu (2006) conducted empirical tests which demonstrated that overall governance quality is negatively related to the level of abnormal accruals, and positively influences the return-earnings association. In addition, the magnitude of abnormal accruals is negatively associated with the level of independence of board composition, the extent of alignment of management compensation with interests of shareholders and the strength of shareholder rights. The results from the returns and earnings analysis are consistent with these findings.

Cronbach and Meehl (1955) reported the creation of latent modeling with a 360-degree view, which has divided the earnings quality agents into three broad categories: the characteristics of the earnings, the response to the profits of investors, and the external indicators of an abnormal earnings statement. Type 1 consists of the characteristics of the earnings, includes earnings persistence, accruals quality, earnings

smoothness, asymmetric timeliness, loss recognition, and conquering goals. The indicators and management of the earnings are regarded as the erosion of the quality of earnings. Type 2 consists of the response to the profits of investors includes the Earnings Response Coefficient (ERC). Type 3 consists of the external indicators of abnormal earnings statements, which include the Accounting and Auditing Enforcement Releases (AAERs), the improvement of the restatement, and the shortcomings of internal control reporting under the Sarbanes Oxley Act, which is an indicator of the error in earnings management.

Hypothesis 2: Firms that have good internal Corporate Governance Mechanisms are expected to have higher scores on earnings informativeness.

2.3.1 The Board Size and the informativeness of earnings

Vafeas (2000) studied the importance of the committee structure in earnings in explaining stock returns. The board of directors and committee structure were used with the external dimensions of the board. The test results showed that the general components of the board of directors were not associated with the composition of the board's profits. On the contrary, the empirical evidence suggested that the investors paid attention to the high earnings and small size of the committee as the alternative of the samples.

H2a: There is a significantly positive relationship between the **Board Size** and earnings quality as measured by Earnings Informativeness.

2.3.2 The Board Meetings and the informativeness of earnings

Regarding a control of income informativeness factors, the limitations were the large-size population and the governance structures at different levels of the company.

A study by Woidtke and Yeh (2013) revealed that complete informativeness had two strengths. Audit committee independence had an effect on the importance of the audit committee that was not enough to make a profit. The suggestion was to focus on finding indicators, such as the expertise of the independent directors who were appointed the internal auditors, which could result in increased profits.

H2b: There is a significantly positive relationship between the **Board Meetings** and earnings quality as measured by Earnings Informativeness.

2.3.3 The Audit Committee and the informativeness of earnings

Ferreira and Raposo (2011) developed and tested the hypothesis that stock price informativeness affects the structure of corporate boards. They found a negative relationship between price informativeness and board independence. This finding is robust to the inclusion of many firm-level controls, including firm fixed effects, and to the choice of the measure of price informativeness. Consistent with the hypothesis that price informativeness and board monitoring are substitutes, this relationship is particularly strong for firms more exposed to both external and internal governance mechanisms and for firms in which firm-specific knowledge is relatively unimportant. The findings of this study suggested that firms with more informative stock prices have less demanding board structures. To identify the effect of price informativeness on the structure of corporate boards, it is necessary to control other possible determinants of board structure. The literature provides many suggestions in this regard (Boone, Field, Karpoff, & Raheja, 2007; Coles, Daniel, & Naveen, 2008; Linck, Netter, & Yang, 2008). The goal for this paper was not to replicate these works, but to make sure that these findings are not driven by the omission of variables that have been found to

correlate with board structure. Determinants of board structure can be classified into three broadly defined hypotheses: the scope of operations hypothesis, the monitoring hypothesis, and the negotiation hypothesis.

The findings of the Brick and Chidambaran (2010) study indicate that the decision to have a fully independent audit committee was not statistically related to whether the company restated their earnings or acquired a company in the previous year. Besides, it was also not related to prior stock performance. These findings implied that the regulatory pressure had been the prime drivers of change in the audit committee. In addition, the findings also showed that the coefficient on committee size was negative and significant. These results could imply that companies found it easier to make the committees more independent when the board was more independent or when the committees were smaller. Alternatively, these findings also implied that boards and committees that were less beholden to entrenched management had a higher likelihood of making committees more independent.

Salleh and Stewart (2012) studied the perceptions external auditors had of the influence of financial expertise and industry expertise on the mediating role of the audit committee and the effect of the two types of expertise. It also looked at the importance of the audit committee role in resolving disputes and the audit committee concern for the truth and fairness of the financial statements. The findings of the study showed that both financial expertise and industry expertise were perceived by external auditors to influence the mediating role of the audit committee. However, external auditors did not perceive any effect of either financial expertise or industry expertise on the final outcome of the mediation process. The findings have implications for regulators and

corporations by demonstrating the importance of both financial and industry expertise on the audit committee. In addition, the findings also indicated that the audit committee mediator's role was strengthened not only by the committee members' accounting and auditing expertise, but also by their industry knowledge.

H2c: There is a significantly positive relationship between the **Audit Committee** and earnings quality measured by Earnings Informativeness.

2.3.4 CEO duality and earnings informativeness

Kim, Shammari, and Lee (2009) focused on examining the relationship between CEO duality and corporate diversification based on the data collected from Fortune-1000 U.S. companies. The results of the study indicated that CEO duality was positively associated with corporate diversification into unrelated industries. Moreover, this relationship was moderated by a number of corporate governance mechanisms. The findings of this study showed that board equity ownership and institutional ownership concentration weaken the initially positive relationship between CEO duality and unrelated diversification, while CEO tenure and board independence strengthen this relationship.

Rashid (2013) studied whether Chief Executive Officer (CEO) duality reduces the agency cost of companies in Bangladesh. The agency costs were measured as two efficiency ratios, namely expense ratio and asset utilization ratio. The findings of the study showed that there was no significant relationship between CEO duality and agency costs, implying that duality may have given the CEOs enormous powers. It may have reduced checks and balances, or the board's ability to exercise the governance function, which was not helpful in enhancing company efficiency.

H2d: There is a significantly positive relationship between the **CEO Duality** and earnings quality measured by Earnings Informativeness.

2.3.5 Executive Compensation and Earnings Informativeness

A study by Shunto (2007) aimed to investigate the relationship between discretionary accounting choices and executive compensation in Japanese firms. This study contributed to the literature on earnings quality from an international comparative perspective since most past studies on earnings quality and executive compensation focused on US companies. The results of the study showed that the use of discretionary accruals increased executive compensation. It also indicated that managers receiving no bonus adopted income-decreasing accruals and extraordinary items. The negative extraordinary items were strongly associated with no bonus payment. In addition, the association between discretionary accruals and executive bonus variances depended on the circumstances of the company. The compensation contracts may include agreements for the level and type of compensation.

H2e: There is a significantly positive relationship between the **Executive Compensation** and earnings quality measured by Earnings Informativeness.

2.3.6 Ownership Structure or Shareholding and Earnings Informativeness

2.3.6.1 Block Holding 5% and Earnings Informativeness

Jung and Kwon (2002) examined the relationship between earnings informativeness and ownership structure, the roles of major shareholders, and how ownership by the founder shareholders or family members involved in the direct or indirect management of the company influences corporate decisions in Korea.

The findings of the study showed that the behavior of the company's management reflected the earning informativeness, indicating that the operational results provided more information for shareholders. The roles of institutional investors and block holders were significantly associated with an increase in the holdings of institutional stock and profits.

H2f: There is a significantly positive relationship between the **Block Holding** and earnings quality measured by Earnings Informativeness.

2.3.6.2 Institutional Ownership and Earnings Informativeness

Velury and Jenkins (2006) examined the broader effect of institutional ownership on overall earnings quality and provided evidence on whether the quality of earnings improves as investment by institutions increases, based on the FASB's conceptual framework to more broadly define earnings quality and include proxies for four qualitative characteristics of accounting information. The findings indicated that there was a positive association between institutional ownership and earnings quality, and a negative association between concentrated ownership and earnings quality. The findings of the study also suggested that there was a generally positive association between institutional ownership and earnings quality that was negatively affected by increased ownership concentration.

Asquith, Pathak and Ritter (2005) used data on both short interest and institutional ownership. The findings of the study showed that constrained stocks underperformed during 1988-2002 by a significant 215 basis points per month on an equally-weighted basis, although by only an insignificant 39 basis points per month on a

value-weighted basis. The overwhelming majority of stocks, short interest and institutional ownership levels made short selling constraints unlikely.

Fernando, Gatchev and Spindt (2012) examined the mutual relationships between institutional ownership, analyst following, and share prices. The pressure on companies to set lower share prices to attract analysts was attenuated by institutional monitoring. The findings showed empirically that share prices and institutional ownership were positively related after controlling for liquidity. In addition, this study also provided a rationale for why better companies generally maintain higher share price levels, and offered new insights into the puzzling empirical linkages observed between nominal share price levels and company fundamentals.

H2g: There is a significantly positive relationship between the **Institutional Ownership** and earnings quality measured by earnings informativeness.

2.3.6.3 Foreign Ownership and Earnings Informativeness

Lin and Shiu (2003) investigated foreign ownership in the Taiwan stock market from 1996 to 2000. The findings showed that foreign investors appeared to favor large companies and low book-to-market stocks. Foreign investors strongly preferred companies with high export ratios with which they were more familiar on account of their higher foreign sales. Foreign investors held more shares of high beta stocks than of low beta stocks for small firms. However, this finding did not hold for large companies, implying that large companies had lower investment barriers than small companies. In addition, foreign investors may also hold slightly more stocks with low dividend yield.

Hou, Kuo, and Lee (2012) examined the effect of state ownership on share price informativeness using the unique setting of the Split Share Structure Reform in China. This reform abolished the trading restriction on shares held mainly by state shareholders. It rendered state shareholders' wealth more sensitive to share price movements and decreased their conflict of interests with private shareholders. This change was expected to strengthen the corporate governance incentives of state shareholders and reduce the information asymmetry in Chinese listed companies. This prediction was confirmed through empirical evidence of increased share price informativeness among companies that were more sensitive to the effect of this reform, such as those with more state ownership or restricted shares. These findings implied that this reform benefited the information environment and minority shareholders in the Chinese stock market.

H2h: Presence of a significantly positive relationship between the **Foreign Ownership** and earnings quality measured by Earnings Informativeness.

2.3.6.4 Family Ownership and Earnings Informativeness

A study by Wong (2006) was conducted on the hypothesis that threat of expropriation by controlling owners in East Asian corporations lowered the credibility of accounting earnings and hence the stock price informativeness of those earnings. The complicated share ownership structure of East Asian corporations, characterized by a voting control that was highly concentrated in the hands of families, and a large separation of their voting rights from cash flow rights, provided controlling owners with both the ability and incentive to expropriate minority shareholders. The results of the study showed that the informativeness of earnings decreased with the level of an

ultimate owner's voting control, and the extent to which the owner's voting rights exceed their cash flow rights. The findings also indicated that family control did not lower the informativeness of earnings per se. Earnings became less informative when the controlling family maintained high voting power and large separation of voting from cash flow rights.

Wu and Chrisman (2007) examined the effects of family ownership and management on two dimensions of small business equity financing: the use of equity financing and the use of public equity financing within the agency theory of financing. The results of the study showed that family involvement and agency issues interactively and separately influenced equity financing in small businesses. Equity financing was important in financing growth, but its special features in small businesses have not been well addressed in finance or entrepreneurship literature. The findings also showed that family companies had both advantages and disadvantages in managing agency costs. How family involvement and agency issues interact to affect equity financing in small businesses was also an important topic of research.

Gul, Kim, and Qiu (2010) aimed at investigating whether and how stock price synchronicity was associated with company-level and institutional-level corporate governance characteristics unique to China. The company-level governance variables included ownership concentration for the largest shareholder and the institution-level governance characteristic disparity in investor protection between the Hong Kong market and the domestic Shanghai and Shenzhen markets. The findings showed that there was an association between synchronicity and ownership concentration. As concentration increases, synchronicity increased at a decreasing rate up to its maximum

threshold, after which it begins to decrease. Besides, synchronicity was higher when the largest shareholder was government related. Moreover, foreign-investor ownership enhanced capitalization of company-specific information into stock prices, thereby mitigating synchronicity. In addition, the appointment of international Big 4 auditors was associated with lower synchronicity, suggesting that they played an important role in disseminating reliable and company-specific information to the market by lending credibility to a company's financial reports.

H1i: There is a significantly positive relationship between the **Family Ownership** and earnings quality measured by Earnings Informativeness.

2.3.6.5 Transparency and Disclosure and Earnings Informativeness

Lin, Huang, Chang, and Tseng (2007) looked at the issue of transparency and disclosure in corporate governance and the effect it has had on companies in the Transparency and Disclosure Ranking System (ITDRS) in the Taiwan Stock Exchange since 2003. This research examined the relationship between information transparency and the informativeness of accounting earnings, and the empirical test of financial statements for the years ending in 2003 and 2004. The results of the test showed that the Transparency and Disclosure Ranking System (ITDRS) had lower informativeness of accounting profit. However, if information transparency is measured by the ratio of long-term investments in stocks, the performance should be higher than the earnings response coefficient (ERC). The results showed that the company with greater transparency or greater value was more useful from the perspective of investors, indicating a good variable ranking for financial transparency.

Yu (2010) highlighted the economic impact of the disclosure of corporate governance. The comprehensive disclosure of corporate governance, and improved forecast performance, reduced the asymmetry between investors and beliefs about future trends. This research has had an effect on corporate executives, who have decided on the disclosure of corporate governance. This study also alerted investors to look at the information disclosure about corporate governance policies of the company they are invested in. In addition, Yu also highlighted the importance of the proposal to the agency, accounting standards setting, and the improvement of corporate governance disclosures in the financial report. The study had the following limitations: Firstly, before applying the S&P index, the scores for transparency and disclosure were not the measures of information governance disclosure; secondly, cross-sectional analysis was used to examine the research question, because T&D scores were only available for the past year; thirdly, this research will be used as empirical evidence for large-sized companies.

Internal controls within an organization are described and linked to governance mechanisms. The roles and responsibilities of the company's board of directors are defined by the legal requirements of the Stock Exchange Commission (SEC). There are two types of legal responsibilities for companies in Thailand, consisting of private companies and public limited companies. A private company is a limited company established under the Civil and Commercial Code. A public limited company is established by the Public Limited Company Act B.E. 2535. The study used the information from the Stock Exchange of Thailand regarding limited companies as a reference (SET) for the consideration of key elements of corporate governance

mechanisms. Fama and Jensen (1983) discussed that a proper control system was associated with the following: an independent committee; co-assignment with management; a report presented to the public prescribed by law as well as the Management Discussion and Analysis (MD&A) in the annual report; and in disclosure of the Information of the Stock Exchange of Thailand¹.

The guidelines for the presentation of management reports and analysis by the Stock Exchange of Thailand's management consist of two parts. The first part is the report and analysis of operational results of the company, describing and analyzing various factors affecting the business of the company that had already occurred and is expected to occur in the future. The second part is the report and analysis of the financial position of the company, describing and analyzing capital structure, monetary policy and changes in financial position of the business.

Refaee, Siam and Khatib (2012) showed the importance of such disclosure of accounting information increased after adding in the economy and finance. The accounting information is considered an important resource for decision making and attracts the attention of experts in the development of accounting standards, which is in line with international standards, to increase the responsibility of the management. This is due to the distortion of the facts in the report that the executives must be responsible on the basis of objective assumptions of financial information, including future recognition, which has resulted in an increase in the perception of management's confidence in the importance of information in the future. Such information is based on the assumptions of an event that may or may not happen in the future, which reflects an organizations potential in terms of the standard form of economic forecasts.

The details that should be disclosed in the management report and similar analysis of the management are the company's management reporting and analysis of changes in the critical current event, including the trends that are expected to occur in the future. For this research, this information should be disclosed according to the practice guidelines of the Securities and Exchange Commission (SEC).

The primary purpose of the study by Ho and Wong in 2001 was to study the scope of voluntary disclosure of a four-core Corporate Governance Committee. The company was registered in Hong Kong and had a proportion of directors on the Board of Directors.

Cheng and Courtenay (2006) examined the relationship between the audit committee and the level of voluntary disclosure. The level of voluntary disclosure of new evidence was higher with companies that had a higher proportion of independent directors on the board. Regulatory mechanisms of the regulatory environment, the strength of the relationship between the proportion of independent directors and the level of voluntary disclosure, also affected the level of voluntary disclosure.

Standard and Poor's has a Transparency and Disclosure system (S&P: T&D). Its corporate governance scoring process systematically assesses corporate governance disclosure with 98 binary (yes/no) questions. They utilize a portion of the unveiled financial statement data; the portion with which T&D is calculated uses an estimate questionnaire of Standard & Poor by using a checklist. The validity and reliability of the financial statement data was approved by five specialists as stated in Appendix A. It is divided into two parts by adding the conceptual framework, calculated and divided into three dimensions: 1) ownership structure and investor rights, 2) financial

transparency and information disclosure, and 3) board and management structure and processes. They reflect the relationship of clearer disclosure data and profit quality in the financial statement used in making decisions by stakeholders. The following related research was found about this topic and is displayed in (Alia, Chenb, & Radhakrishnan, 2007; Chau and Gray, 2010; Gul, & Leung, 2004; Reface, Siam, & Khatib, 2012).

Where:

The equation used to measure **Transparency and Disclosure** is:

Formula for calculating

$$T\&D = \sum_j \sum_k S_{jk}$$

Transparency and Disclosure Measurement

$T\&D$ = S&P transparency and disclosure score

% T&D = % of S&P transparency and disclosure score (total score)

j = the attribute category subscript, $j = 1,2,3$

k = the attribute subscript, $k = 1, \dots, 98$

S_{jk} = the number of info items disclosed (answered 1 "yes") by the firm in each level

1.3 The Earnings Informativeness: Market-Based; Concept Return Earnings and Earnings Performance (Warfield, Wild, and Wild, 1995)

From the research work of Warfield, Wild and Wild (1995): According to the hypothesis of this article, the level of managerial ownership has impact on both the

informativeness of earnings and the magnitude of discretionary accounting accrual adjustments. The hypothesis applies the theory of the firm and exploits: (1) separation of ownership from supervision of economic decisions, (2) the extent and effects of accounting-based contractual constraints, and (3) managers' incentives to select and apply accounting techniques. The outcomes indicate that managerial ownership is positively connected with earnings' explanatory power for returns and inversely associated with the magnitude of accounting accrual adjustments. Furthermore, ownership is less significant for regulated corporations, indicating that regulation monitors managers' accounting choices. The said article is valuable earnings informativeness. Thus, earnings decisions use the variable: Earnings Informativeness for consideration as follows:

H2j: There is a significantly positive relationship between the **Transparency and Disclosure** and earnings quality measured by Earnings Informativeness.

2.4 Earnings Persistence and Earnings Informativeness

Net profit is the figure in a financial report that company executives are most interested in, and financial institution, securities analysts, and investors give precedence to it. The overall operation index is what most organizations use to determine return to employees and executives, and the effects on the dividend that shareholders receive. Net profit can have a significant effect on the operational assessment of an organization as well as its stock price.

It is known that net profit that shows financial figures including sales volume, costs, and expenses, may be distorted by pressure from the previous study; for example,

WorldCom, Enron, Tyco International, Xerox, Picnic Public Company Limited. The example of earnings management occurs both locally and internationally, and can have an effect on stakeholders, corporations and investors, shareholders, financial institutions, and auditors. The profit figure from operations occurs from the operational capacity, which reflects various financial statements presented to public.

According to an important definition of earnings persistence defined in accounting, which explains the preparation and presentation of financial statements of companies listed in the Stock Exchange in Thailand (as cited from Henchokchaichana & Seechanpet, Principles of Accounting, pg.4-13), the researcher made assumptions about the preparation and presentation of financial statements from the qualitative characteristics of the financial statements, mentioning their relevance. Information will be relevant to decision making when it helps estimate, the present and the future of financial statements. Moreover, guidelines from the principles of accounting reveal the benefits of research focusing on 3 aspects, as follows: The benefit is for investment decision making based on the relevant variables of an economic aspect. The second is for executives who prepare presentations of financial statements. The third is for regulatory agencies which are in charge of information disclosure for investors. Modern research studies have aimed at examining the response of investors (Fama, 1969). Apart from financial accounting, financial market research data can be used to examine how the stock price responds to the announcements of the government and the company's stock price. However, for good management, the market research focused on the stock price response and the disclosure of financial information, which are the main concerns of this chapter. The disclosure of financial information includes information

about: the board of directors; financial accounting standards; information related to the income and components of the primary objectives of financial reporting and benefits to the shareholders who are major users of financial statements; analysis and forecasts by analysts; the security and reliability of available performance data; differences between the capital market and behavioral research; and the market research on investors collected during the research period to examine decisions by other types of financial statement users, such as bankers, loan officers or auditors. The research on the capital market is based on the assumption of efficient capital markets as defined by the Efficient Market Hypothesis (EMH) and stock price information (Fama, Fisher, Jensen, & Roll, 1969). The market research on accounting also assumes an efficient stock market, which means all the information is available to the public, including financial statements and other financial disclosures. The efficient market theory states that the current price of securities reflects all of the existing information, historical data and current data.

The Efficient Market Hypothesis (EMH) states that stock prices reflect the intrinsic value of the company. Investors have both public and non-disclosed internal information that can be used to make decisions on securities trading or holding to achieve maximum profits. Therefore, the direction of moves in stock prices will depend on investor reactions to the information. Besides, the level of information disclosure affects market performance differently. The degree of market efficiency is based on the level of information disseminated to investors. Disclosure of information to the Stock Exchange of Thailand affects securities investment decisions in accordance with the assumptions of an efficient capital market proposed in Fama, Fisher, Jensen, and

Roll (1969). The primary role of the capital market is the allocation of rights in capital stocks in economic sectors. A proper market should provide accurate signals for resources allocation so that companies can make decisions on production and investment. Investors can choose the securities that represent the company's activities under the assumption that trading prices of securities will reflect all available information in the market, in which case the available information is called "efficient". The level of response to information can be classified into three levels as follows:

1) Weak Form: This level of response to changes in stock prices in the current year is the result of stock price information from previous periods. Current trading prices of securities are calculated on the basis of past stock prices only. Predicted changes in stock prices are based on the stock prices from past periods only. The efficient capital market hypothesis test at this level of response will tell us about the responses of stock prices to prices in the past, with abnormal return equal to zero. It reflects low capital market efficiency.

2) Semi-Strong Form: This level of response to changes in stock prices is caused not only by changes in previous stock prices but also by information related to current securities prices. Securities prices are determined by published information in the stock market and business economic status available in public financial statements or accounting data. Investors test the efficient capital market hypothesis at this level from the returns of the securities after disclosure of relevant financial statements and accounting data. It reflects moderate capital market efficiency.

3) Strong Form: This level of response to changes in current stock prices is a reflection of information reported in the market and business information. The

information is available to everyone. Therefore, the determined stock prices will not make above average profits because internal information is not easily disclosed.

Examinations of theoretical and empirical information on the types of efficient markets will be discussed after the theoretical discussion on the adjustment of the three types of securities prices which is based on continuous time series analysis.

Fan and Wong (2002) examined the ownership structure associated with the earnings and returns of 977 companies in East Asia. They found conflicts between agencies, reporting control, and accounting information to satisfy their own ownership which had adverse effects on reporting. Performance reliability of external investors was associated with decreased informativeness, profits, and the protection of personal interests. The findings of this study also revealed that the volatility of earnings management, and share values, were associated with a higher market value for shareholders. Gradual control of volatility as well as profits and losses affects securities values. In addition, long-term strategy of earnings management indicates that the quality of earnings accrued affects total returns.

Habib, Hossain and Jiang (2011) found that environmental influences and uncertainties were induced by diversified operations, earnings and income earned from the monitoring of the response to the stock market investment, and earnings from company performance. When uncertainty is high, earnings will be negatively correlated with the changes in accruals and the on-earnings management decision making. Tucker and Zarowin (2006) used future earnings response coefficient (FERC) to measure the informativeness. Two measures were associated with the current stock prices, which

included the information about future income performance in an environment with high uncertainty, support the views on smoothness.

Hypothesis 3: There is an association relationship between the earnings persistence with the earnings informativeness of a firm.

According to the concept of profit in association with financial reporting, earnings persistence is a measure of a company's earnings in each year. This suggests that the concept of accounting-based valuation affects the market-based total returns and economic growth opportunities based on the following literature: Ball and Brown (1968) extensively studied the roles of accounting earnings in trading and price formation in the equity market. A study in 2010 by Hong-Bok and Gee-Jung aimed to investigate earnings persistence and market reaction in the Korean stock markets between 2000 and 2008. The findings of this study showed that the Korean stock market had a high level of earnings persistence. This was attributed more to cash flows than accruals. The study also indicated that investors in the Korean stock market usually reacted to cash flows more than accruals. Habib (2012) examined the effects of company growth opportunities and earnings quality on the market valuation of free cash flow. Defined as the difference between operating cash flows and capital expenditures, equity valuation theory states that free cash flow should not be associated with stock returns because it did not add to the stock value.

Truong, Corrado and Chen (2012) examined the reaction of equity options market to accounting earnings announcements during 1996–2008. Changes in implied volatility were used to measure the options market response to earnings news. The findings of this study revealed that positive earnings surprises and positive profit

announcements produced a larger uncertainty resolution than negative earnings surprises and loss announcements. They demonstrated an inverse relation between the changes in implied volatility and earnings news during a three-day window immediately after an earnings announcement.

Hypothesis 4: There is an association between corporate governance mechanisms and earnings informativeness through the earnings persistence of a firm.

Consideration of indirect effect data H4: CGM is associated with EAR_PER and influences EAR_INF by considering the control system of internal organization that reflects corporate overall operation. This effect will improve the value of an organization in the context of principal forward-looking performance.

2.5 Proxies for Control variables Economic Firm Characteristics

This study looks at the public companies in the Stock Exchange of Thailand with the corporate governance mechanism that affects earnings quality, taking into consideration control variables. These variables are: Firm Size: $SIZE_{MVE}$; Firm Leverage: LE, the total debt over total assets; Firm Age (years), firm age is the number of years since the first trading date on SET; type of large audit department (Big 4) dummy variable: 1 if the auditor is a Big 4 auditor, 0 otherwise; Firm Market to Book ratio .

2.5.1 Measure of Firm Size

There are many measures of firm size, including the natural logarithm of a firm's market value of equity. Ferreira and Laux (2007) found that since larger firms tend to be more in the news, their market price tends to aggregate more publicly known

information about the firm than smaller firms. This publicly-known information includes accounting as well as non-accounting information. Collins and Kothari (1989) found that expanding the window over which security returns were measured substantially improved the relationship between earnings and returns for large firms. This is consistent with the market anticipating changes in a firm's earnings sooner for large firms. Accordingly, the informativeness of earnings is related to the size of the firm. The size of the firm is measured by the natural log of the firm's market value of equity.

2.5.2 Measurement of Firm Leverage

There are two popular measures of firm leverage. First, firm leverage is measured as the debts to equities ratio of the firm (Wiwattanakantang, 2001; Gillan et al., 2003; Zahra & Sharma, 2004). Second, firm leverage is measured as the ratio of total debts to total equities that the firm has (Lee & Park, 2008). This study used the ratio of the firm's total debts to total assets, instead of the ratio of total debts to total equities, as a measure of firm leverage (Wild, 1996; Wiwattanakantang, 2001; Barako, 2007).

2.5.3 Measure of the Large Audit Firm

Gul et al. (2003), Barako, Hancock, and Izan (2006), and Chalaki, Didar and Riahinezhad (2012) looked at measures of large audit firms. Big 4 is the dummy variable for auditor firms of different types. The type of auditor (AUDIT) was measured by a dummy variable that was set to 1 for the large auditors (the Big 4), like PricewaterhouseCoopers ABS Company Limited, Deloitte Touche Tohmatsu Jaiyos

Company Limited, KPMG Phoomchai Audit Limited, and Ernst & Young Office Limited. 0 is equal to the smaller audit firms.

2.5.4 The Measure of Firm Age (in years) (AGE)

The measurement of a listed company with a long record of establishment may involve the issue of stability. Security, which comes from a firm's age, can influence the continuous business operation as mentioned in the accounting framework of continuous operation. This study measures the firm's age with the natural logarithm of the total number of years that the company has been registered on the Stock Exchange of Thailand. Based on this concept, companies that have been recently established, or are in the process of obtaining registration in the stock exchange, are being evaluated for performance efficiency and are exposed to risks (Brown and Caylor, 2006; Connelly, Limpaphayom & Nagarajan, 2012). Under the study's data collection method, firm age is treated as the number of years since the first trading date on the SET.

The earnings mentioned in the review are the agency or indicator of earnings quality generally used and variables specification. The certain specification of this measure can be different according to each study. We summarize the theory used as a quality indicator and we briefly summarize the strong points and weak points of specific documents that support these summarizations.

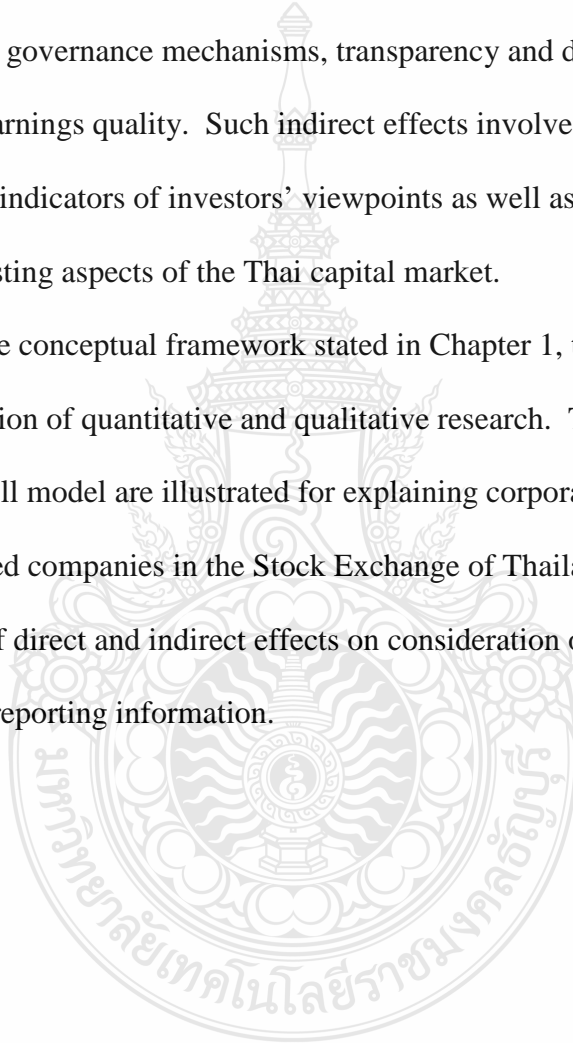
CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This research aims to examine the relationships and find the causes as well as effects of corporate governance mechanisms, transparency and disclosure with influences on the earnings quality. Such indirect effects involve the operational procedures and the indicators of investors' viewpoints as well as expectation, which reflect many interesting aspects of the Thai capital market.

Based on the conceptual framework stated in Chapter 1, the methodology of this study is a combination of quantitative and qualitative research. The conceptual framework and a full model are illustrated for explaining corporate governance mechanisms of listed companies in the Stock Exchange of Thailand. In addition, there was a study of direct and indirect effects on consideration of earnings stability based on financial reporting information.



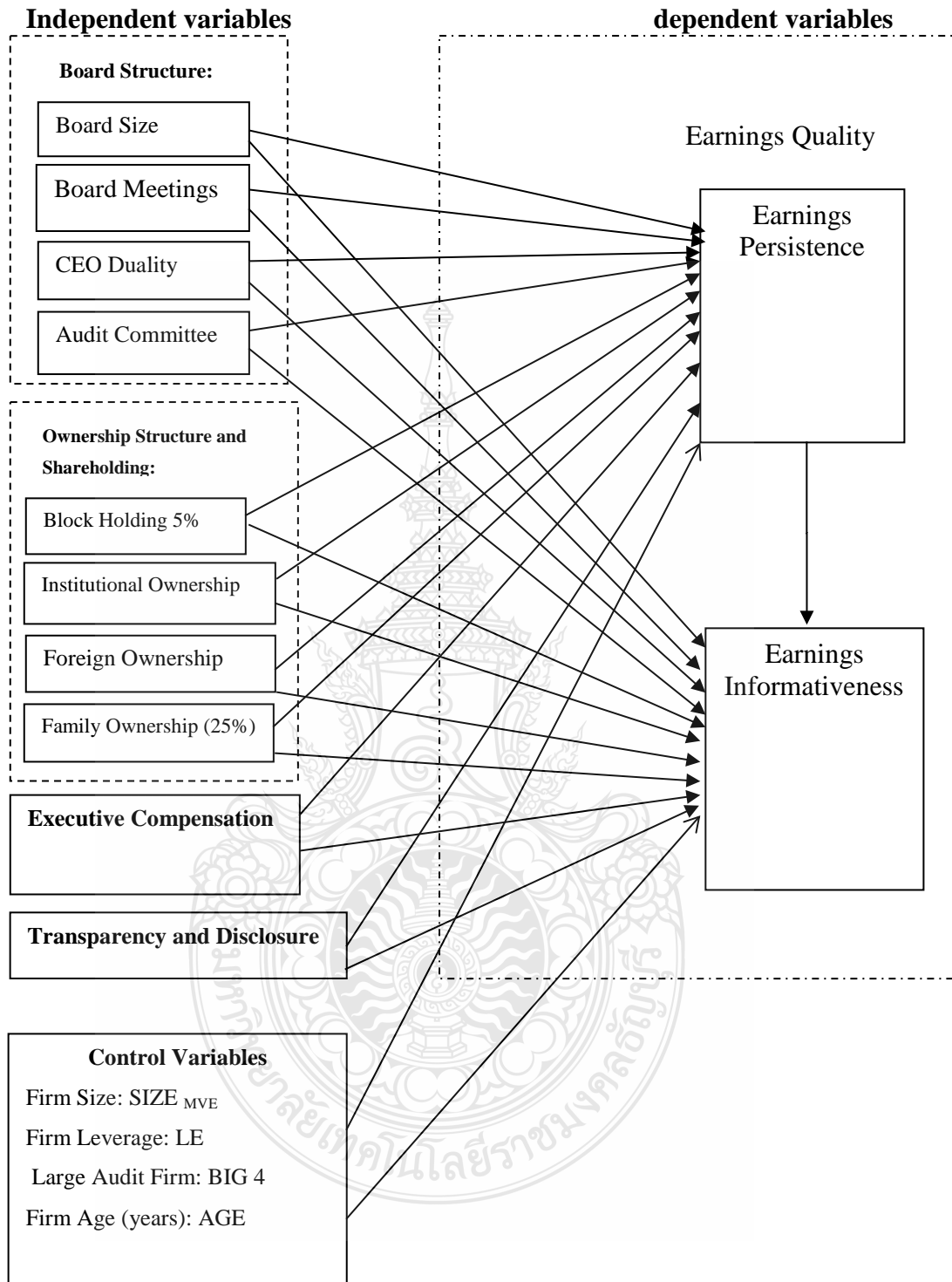


Figure 3.1 Conceptual Framework and Full Model

(Remark: Explanations of variables, cooperate governance mechanisms affecting earnings stability based on financial reporting information are shown in Table 3.1)

3.2 Methods for Determining Stock Prices

Based on the capital market efficiency hypothesis, the information is believed to correlate with stock prices. There are three methods for the valuation of stock prices:

1. Asset Valuation. There are two practice guidelines: valuation of total assets and net assets or shareholders' equity which are consistent with the agency theory.

2. Earnings Valuation

3. Discounted Cash Flow Valuation. This method requires the estimation of business cash flow.

Regarding the relationship between accounting earnings and stock prices or returns on the securities, Ball and Brown (1968) found that the above-average returns will change in the same direction as the above-average earnings or accounting earnings.

Easton and Harris (1991) discovered that the accounting earnings and changes in accounting earnings can explain the returns of securities. Current accounting earnings can better explain changes in the returns of securities than past changes in earnings and accounting earnings.

Dechow (1994) found accounting earnings to affect investment decisions of investors in such a way that the accounting earnings have more influence on a company's future performance than on cash flows and operating cycle.

Francis, La Fond, Olsson, and Schipper (2004) measured the quality of earnings and accounting-based earnings persistence, and found that they reflect the future profits that can satisfy the performance of company's share prices associated with seven measures of earnings quality.

3.3 Market Reactions to Unexpected Earnings

The researcher examined the relationship between stock returns and earnings since the publication of Ball and Brown's study (1968). The nature of the works that have been conducted to study this relationship has changed considerably, with more recent works focusing increasingly on earnings response coefficients. An earnings response coefficient is a measure of how investors respond to earnings news. When earnings are more value relevant, one would expect a stronger investor response. Thus, the earnings response coefficient can be viewed as a measure of earnings quality. Investors' reactions to earnings are not solely influenced by the value relevance of earnings, but are also influenced by other factors.

The researcher has considered the evidence of cross-sectional differences in earnings response coefficients, examining how investors perceive various components of earnings and perceive earnings of different types of companies. The researcher has implemented the following model to estimate investors' response to earnings:

$$\text{Stock return}_t = \alpha + \delta(\text{Earnings surprise}_t) + \varepsilon_t,$$

Where δ is the earnings response coefficient (ERC), the stock return is measured either over a few days around the earnings announcement or over the same period as the earnings. ERC measures how investors react to earnings surprises. A larger ERC indicates that a dollar of earnings surprise has greater valuation implications.

ERC as Proxies for the Quality of Earnings: Imhoff (2003) suggested that a strong earnings response coefficient was an indication of higher-quality earnings. To measure earnings quality, Imhoff used judgments obtained from security analysts who were members of the Financial Analysts Federation in 1983. The analysts were

specialists in particular industries and were asked to rank companies in each industry on the basis of their accounting quality. Inhofe found that companies of higher rankings had larger ERCs.

The findings of a study by De Fond and Park (2001) were also consistent with the interpretation of ERC as a measure of earnings quality. They argued that if the market anticipates the reversing nature of abnormal working capital accruals, ERCs will depend on whether abnormal accruals are positive (income increasing) or negative (income decreasing). Moreover, they found higher ERCs when abnormal accruals suppressed the magnitude of earnings surprises and lower ERCs when abnormal accruals exaggerated the magnitude of earnings surprises. They concluded that investors deem high accruals to be an indication of low earnings quality and lower their response to earnings accordingly.

Hypothesis 4: There is an association between corporate governance mechanisms and earnings informativeness through the earnings persistence of a firm.

3.4 Earnings Properties

According to the literature review of this research, it was found that most research studies focused mainly on five main features of earnings quality, namely: 1) Earnings persistence, 2) Abnormal accrual, 3) Earnings smoothness, 4) Asymmetric timeliness and timely loss recognition, and 5) target beating. However, this study emphasized earnings persistence with the notion that it could reflect the responses to stock prices better than other methods.

Past research studies showed that the valuation of relationship between earnings quality, cash flows and accruals can demonstrate clear earnings quality based on accrual basis. As a result, the net profit shown in the profit and loss statement will comprise the incurred cash and non-cash transactions in which separation of the components of earnings quality is better than no separation of the earnings quality components. In this way, financial statement users can identify the actual net profit. The focus on index of cash flows from the operations which reflect business revenue and accruals is considered to be a more appropriate method than others. Sloan (1996) found that companies with high profit but low cash flows from the operations have often adorned themselves with embedded profits by trying to show higher profits. This action results in lower earnings quality.

The concept of earnings persistence valuation has evolved from a time series analysis of econometric earnings by using a Higher-Order ARIMA Model. Most research works measured the earnings persistence from external expectations related to investors and analysts with a wish to speculate on future earnings Lev (1983). The studies on the initial stage of the accounting earnings valuation for decision-making applied the time series in the long-term by using economic factors associated with the predictive approach. Baginski, Lorek, Willinger, and Branson (1999) found that earnings persistence can be tested by economic factors with the use of the ARIMA Model. The ability to predict earnings persistence may also be measured by the correlation coefficient time series. Riahi-Belkaoui (2002). subsequently discovered the importance of the ARIMA Model, which was developed from the use of multinational companies variants to test the correlation with original factors. They found that

earnings persistence affects the size of business. Feltham and Ohlson (1995) applied the concept of market value to earnings persistence valuation by using equations of additional models without including any external factors (the Clean Surplus Model). They discovered that calculation of values required for the decisions should take into account the financial statements relating to the assessment of performance through earnings. Therefore, the earnings persistence clearly depends on the stability of financial statements of a company.

3.5 Information Content of Earnings

This research examined the reaction of the capital market to an organization performance. When the company announced the operation results that affected stock prices, the study looked at changes in stock prices around specific events such as the disclosure of accounting information.

According to Kothari (2001), the announcement of operating results will provide new information, which can be used to reflect the changes in the level of security or trading volume in the short term. However, the conclusion of a relationship between indicators of new information and the profits in the financial statements as well as the incident occurred. That is what most researchers pay attention to (Foster, 1977; Wilson, 1986; Ball & Kothari, 1991).

3.6 Return Concept that Reflects Stock Prices

Deegan (2010, p. 468) proposed that the dividend payment function from the accounting profit can be used to measure past and present performance of the business by using the statement of cash flows associated with the indicator of the accounting earnings function and the stock prices. The researcher has applied the concept that operating results reflect investors' perception of expected earnings per share (E). A discounted value can be calculated from an adjusted risk discount rate (k_i).

$$P_i = \sum_{t=1}^{\infty} \bar{E}_t / (1 + k_i)^t \quad (\text{Equation 1})$$

Equation 1 shows the relationship between stock prices and expected profits. Adjusting the risk of future income, which is expected to rise, will result in a higher stock price. These expectations are based on records of the company's past performance. However, all of the information currently available will be considered when predicting future revenues and expectations about future earnings per share, including the earnings expected from new information contained in the announcement of the company's performance in the current year. This measure will reflect the changes in stock prices and returns to investors (R_{it}), in addition to dividends received (D_{it}) for an investment in firm I for one holding period (t-1 to t), since returns are the functions of capital gains or losses.

For the adjusted risk discount rate, it must be equivalent to the level of uncertainty associated with an estimation of current earnings.

$$R_{it} = \frac{(P_{it} - P_{it-1}) + D_{it}}{P_{it-1}} \quad (\text{Equation 2})$$

Returns are a function of the change in stock prices (from equation 2), while stock prices are a function of future income (from equation 1). The returns are correlated with changes in expected income. This relationship is often called a profit in the future.

Stock prices are likely to change with times following all or some of the effects on the market, which will in turn affect the economy and eventually affect investors' activities.

Sharpe (1963) discussed theories relating to the Market Model or Single-Index Market Model (SIMM), which is the concept that perceives the return of a security as linearly related to the returns of Market Index. Market Model concept is used as a model to test for abnormal returns to securities. An easy way to simplify the calculation of regression is by determining the relationship between variables R_{it} and R_{mt} ; an estimation for the parameters α_i and β_i is done by taking the equation obtained to show a line graph called a Characteristic Line.

$$R_{it} = \alpha_{it} + \beta_{it}R_{mt} + \mu_{it} \quad (\text{Equation 3})$$

3.7 Measuring Return-Earnings Association

The abovementioned theories have been used as guidelines for evaluating the operating results caused by recognition of the effect of corporate governance in the financial reports. The yield gains are used as indicators of earnings quality that is reflected in the reports of each company. The scope of the system of governance will be effective in the management system through management's ability, transparency, and reliability of the company's operational system. The financial reporting and accounting

data of revenue will increase. Thus, a positive relationship between the quality of governance and expected future return on profits of investors is shown in the following equations.

The testing of model 3 was conducted to find the change between current earnings and expected earnings in the EMH theory. Market response was also tested to detect market responses to expected investment returns.

3.8 Relationship between Earnings Persistence and Investment Decisions

Earnings persistence is generally defined by the quality of earnings, which is useful for decision making. However, most research studies have focused on the benefits of profits for the investors for a decision on when to invest in the stocks. The research has been divided into two parts. The first part is motivated by the assumption that earnings with more stability will improve the inputs. Hence, the quality of earnings with more stability will be higher than the quality of earnings with less stability.

Factors affecting earnings persistence are accruals that are a component of earnings. It is one of the factors often used in many studies. According to the research studies conducted before the implementation of regulations on reporting cash flows, accruals had been mentioned frequently as non-cash working capital and depreciation. These numbers are indicated in the working capital or the balance sheet data (Sloan, 1996; Jones, 1991; Healy 1985). The statement on cash flows was applied at a later date, but accruals are often defined as the difference between profits and cash flows, which is often the difference between revenue and cash flows. The meaning of accruals is still being developed by the recognition that every account in the balance sheet

(excluding cash) is the outcome of relevant accounting accruals. Richardson et al, (2006) has provided guidelines for a more comprehensive measure of accruals, which is defined as the changes in net operating assets in addition to changes in the fair value of cash flows reflecting the cash profits.

Earnings persistence emphasizes significant effects on the stability of the stock market, stock market and prices in the stock market. The second concept covers the impacts of differing stability on the stock market. The first prediction is that earnings with more stability will cause higher stock valuation. Therefore, an increase in the estimation of stability will provide positive returns to the stock market. Kormendi (1987), Collins and Kothari (1989), and Easton and Zmijewski (1989) provided evidence that more stable earnings will result in stronger stock prices.

The second prediction is about the effects of market efficiency on the stock market. Financial analysts try to identify the variables that can help to predict earnings persistence and to determine whether investors are aware of the effects of different variables on earnings persistence. Richardson, Tuna, and Wysocki (2010) focused on detecting anomalies in accounting and major causes of earnings persistence. However, the purpose of this research is to discover the results of Sloan's suggestion (1996) that investors are not generally aware of different levels of stability, accruals and cash flows of profit. Sloan (1996) implied this notion in his examination of trade protection strategies. Companies with short-term low and high accruals will get low returns due to investors' concerns over the risk of accruals or their reliability for investors.

3.9 Theories and Models for the Study of Governance Mechanisms Influences on Earnings Quality

From the agency theory's viewpoint, governance mechanism is an interesting research topic for the study of control systems. Jensen and Mekling (1976) considered the relationship between agency and ownership as the behavior conducted mainly to satisfy the demands of each party. In this respect, business agents and corporate directors may not manage the companies for maximum benefit to shareholders. There is a need to examine this problem in order to identify proper ways to manage the behavior of business agents. However, Kothari (2001) regarded the capital market hypothesis as an effective means to discover the effects of market responses to accounting information. Singh (2003) stressed the importance of additional study on the emerging markets where the organizational and governance structure, legal system and capital market development differ from the developed markets. This led to the development of a suitable model to study various variables, which is presented in the equations below. In this model, Sloan (1996) found current year earnings to be positively related to future earnings when last year earnings were compared to current year earnings. Sloan's model equation is used to determine β proxy earnings persistence that the firm used for calculating the earnings of a corporate agent over a period of 5 years on the accounting basis, as shown in Equation (1).

$$\text{Earnings}_{t+1} = \alpha_0 + \alpha_1 \text{Earning}_t + v_{t+1} \quad (1)$$

Model Specification

Model 1

$$\begin{aligned} \text{EAR_PER} = & \beta_0 + \beta_1 \text{BRDSIZE} + \beta_2 \text{BRDMEET} + \beta_3 \text{AUDIT}_{\text{COM}} + \beta_4 \text{CEO}_{\text{DU}} \\ & + \beta_5 \text{BLOCK}_{\text{HD}} + \beta_6 \text{CBOD} + \beta_7 \text{INS}_{\text{OWN}} + \beta_8 \text{FOREIGN}_{\text{OWN}} \\ & + \beta_9 \text{FAMILY}_{\text{OWN}} + \beta_{10} \text{TTD} + \beta_{11} \text{SIZEMVE} + \beta_{12} \text{LE} \\ & + \beta_{13} \text{AGE} + \beta_{14} \text{BIG 4} + \beta_{15} \text{Y10i, t} \\ & + \beta_{16} \text{y11i, t} \\ & + \varepsilon_{t+1} \end{aligned} \quad (2)$$

Where:

EAR_PER = the determination of equation (1) that measures the earnings persistence of each company in order to find proxy with β of business during the period of three years (See the calculation in Appendix A).

ε_{t+1} = the error of estimate in Year t + 1

(Governance Proxies, Transparency and Disclosure Proxies) = Variables used to measure governance mechanisms in Chapter 3. Table 3.1

Model 2

$$\text{EAR}_{\text{INF}} = \delta_0 + \delta_1 \left(\frac{E_{it}}{P_{it-1}} \right) + \delta_2 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{EAR_PER} + \delta_3 \text{Y10i, t} + \delta_4 \text{Y11i, t} + \varepsilon_{it} \quad (3)$$

Where:

EAR_INF = the stock return of Firm i for the 12 months period from nine months before to three months after the fiscal year-end.

EAR_PER = the measurement from equation (1) which determines earnings persistence of each firm in order to find proxy with β of the firm during the accounting period of 5 years. Ahsan Habib (2012). The rolling data contains articles that are relevant to research process and the duration is 5 years. (See the calculation in Appendix A)

P_{it} = the stock price of Firm i at Time t.

D_{it} = the dividend of Firm i in Year t.

E_{it} = earnings per share (before extraordinary item) of Firm i for Year t.

ε_{it} = the error of estimate in Year t.

(Governance Proxies, Transparency and Disclosure Proxies) = variables used for measuring governance mechanisms in Chapter 3: **Table 3.1**

The empirical analysis was carried out according to the following procedure. The first step is the information analysis of governance mechanisms with influences on accounting information in the form of stock prices. According to Warfield, Wild and Wild (1995), the factor, which influences the motivation for earnings quality investigation of stakeholders, is market-based. This study is an expansion of previous investigation by observing the structure management of ownership and external unrelated block holdings which affect earnings informativeness (Yeo, Tan, Ho, & Chen, 2002). The findings of this study are contrary to that of the previous one as it was found that the management structure relates to informativeness from the management at a high

level, and corresponds with earnings management or income. The roles of block holding in pyramid-form and externality are not connected with shareholding. Such findings support the income earned from accruals by executive discretion, earnings management with influences on earnings quality measured by earnings informativeness. These issues are related to governance mechanisms which influence the reported financial statements. Warfield, Wild and Wild (1995) focused on the prototype equation for determining the value of governance quality and return-earnings association. The following pooled cross-sectional time series is estimated:

$$R_{it} = \alpha_0 + \alpha_1 E_{it}/P_{it-1} + e_{it} \quad (4)$$

Model 3

$$\begin{aligned} EAR_INF = & \gamma_0 + \gamma_1 \left(\frac{E_{it}}{P_{it-1}} \right) + \gamma_2 BRDSIZE + \gamma_3 BRDMEET + \gamma_4 AUDIT_{COM} + \gamma_5 CEO_{DU} + \\ & \gamma_6 BLOCK_{HD} + \gamma_7 CBOD + \gamma_8 INS_{OWN} + \gamma_9 FOREIGN_{OWN} + \gamma_{10} FAMILY_{OWN} + \gamma_{11} TTD + \\ & \gamma_{12} \left(\frac{E_{it}}{P_{it-1}} \right) * BRDSIZE + \gamma_{13} \left(\frac{E_{it}}{P_{it-1}} \right) * BRDMEET + \gamma_{14} \left(\frac{E_{it}}{P_{it-1}} \right) * AUDIT_{COM} + \gamma_{15} \left(\frac{E_{it}}{P_{it-1}} \right) * \\ & CEO_{DU} + \gamma_{16} \left(\frac{E_{it}}{P_{it-1}} \right) * BLOCK_{HD} + \gamma_{17} \left(\frac{E_{it}}{P_{it-1}} \right) * CBOD + \gamma_{18} \left(\frac{E_{it}}{P_{it-1}} \right) * INS_{OWN} + \gamma_{19} \left(\frac{E_{it}}{P_{it-1}} \right) * \\ & FOREIGN_{OWN} + \gamma_{20} \left(\frac{E_{it}}{P_{it-1}} \right) * FAMILY_{OWN} + \gamma_{21} \left(\frac{E_{it}}{P_{it-1}} \right) * TTD + \gamma_{22} SIZEMVE + \gamma_{23} LE + \\ & \gamma_{24} AGE + \gamma_{25} BIG\ 4 + \gamma_{26} Y10_{i,t} + \gamma_{27} Y11_{i,t} + \\ & \varepsilon_{it} \end{aligned} \quad (5)$$

EAR_INF = the stock return of Firm i for the 12 months period from nine months before to three months after the fiscal year-end.

P_{it} = the stock price of Firm i at Time t.

D_{it} = the dividend of Firm i in Year t.

E_{it} = earnings per share (before extraordinary item) of firm i for year t.

ε_{it} = the error of estimate at year t.

Model 3 was tested to find the change in current earnings which reflects future earning according to the EMH theory. Market response to expected investment return was also tested.

Indirect effect data H4: CGM is associated with EAR_PER and influences EAR_INF. The internal organization control system that reflects corporate overall operation was considered and the value of organization in the context of principal forward looking performance was identified. Interaction of growth opportunities and permanence of earnings is as follows:

3.10 Research Design and Data Collection Method

3.10.1 Population and Representative Sample

Population: As to this research on the relationship between corporate governance mechanisms, transparency and disclosure, the population of study consisted of listed companies on the Stock Exchange of Thailand with list of stock in the SET index. They were selected because of being the target group companies for both local and foreign investors. They are the target source of public financing since their stocks have high market capitalization. For this reason, investors and managers of large organizations directly gain from this research because the population of this research is

the companies of their interest. This research classified the population into two groups by the calculated periods on the list of stocks in the SET index.

The population of this study was the companies on the Stock Exchange of Thailand, which have been listed in the SET between 2010 – 2012, except for the financial businesses in the Finance and Securities, Banking and Insurance sectors (because the property and debts of these businesses differ from other businesses), delisting companies, possible delisting companies, companies undergoing rehabilitation plan, and newly listed companies during the years 2010-2012, as well as those companies with incomplete data in the database. Data were also collected from the holding proportion of the 56-1 Annual Report, texts, and reliable reference journals. The total research population was 418 firms. Information about all listed companies on the Stock Exchange of Thailand is declared on www.set.co.th website dated 31 March 2012.

3.10.2 Population Frame

The sampling method used in this research was probability simple random sampling; SRS technique. Each unit or member of the population had an equal opportunity to be selected. This type of sampling needs the list of the entire population's names and numbers. The consideration principles are: population of companies listed on the Stock Exchange of Thailand during the years 2010-2012; companies with accounting period beginning on 1st January and ending on 31st December; companies in 8 industrial groups: Agro & Food Industry, Industrial, Property & Construction, Resources, Services, Technology, and Reserved Securities in the SET Index. Companies in the Financial and Securities, Banking and Insurance businesses were excluded because of having different property and debts from other businesses.

3.10.3 Research Tools

The research investigated the relationship between corporate governance mechanisms with influences on earnings quality of the companies listed on the Stock Exchange of Thailand and their effects on the evaluation of organizational operations. The empirical research methodology, which is the type of research based on reasons (Reasoning-Based), was preferable to the statistical technique and used for testing the theoretical context from the data directly and indirectly collected. There are two kinds of empirical research, including inductive reasoning and deductive reasoning 418 listed companies in the Stock Exchange of Thailand were studied in the present research. Data analysis was divided into two main parts, namely: (1) Descriptive statistics were used for analyzing primary data in order to present the initial research results regarding the sample group and/or collected variables in various aspects; (2) Inferential statistics were used for analyzing primary data through the use of multiple regression analysis of quantitative dependent variables. The variables in this research included independent variables consisting of: (1) explanatory variables and (2) control variables.

The variables examined in this study were: independent variables characteristics, corporate governance mechanisms, transparency and disclosure with influences on the expected earnings quality for investors.

Table 3.1 Variables relating to governance mechanisms and earnings quality measured within the research Framework, Where:

Meaning	Abbreviation	Measurement	Sources of Data	Researcher(s)
Dependent Variables:				
Earnings Persistence	EAR_PER	$\text{Earnings}_{t+1} = \alpha_0 + \alpha_1 \text{Earning}_t + v_{t+1}$ <p>“Earnings” is defined as operating income scaled by total assets.</p>	56-1 , Annual reports on statement of comprehensive, Financial statement	Beaver (1970); Freeman et al.(1987), Richard G. Sloan (1996). Dechow, Ge, & Schrand (2010)
Earnings Informativeness	EAR_INF	$R_{it} = \alpha_0 + \alpha_1 E_{it}/P_{it-1} + e_{it}$ <p>E_{it} = earnings per share (before extraordinary items) of firm i in year t P_{it} = shock price of firm i at time t means a measurement of earnings information that shows the component of business total return.</p>	56-1 , Annual reports on statement of financial position, statement of comprehensive, Financial statement	Francis, Schipper and Vincent (2005), Warfield, Wild and Wild (1995) and Wang (2006), Fan and Wong (2002)

Table 3.1 Variables relating to governance mechanisms and earnings quality measured within the research framework (cont.)

Meaning	Abbreviation	Measurement	Sources of Data	Researcher
Independent Variables:				
Board Size	BRDSIZE	Total number of directors on the board	Report 56-1 : Mmanagement	Boone, Field, Karpoff & Raheja, (2007); Xie et al (2003); Ezat and El-Masry (2008); Mashayekhi (2008)
Board Meetings	BRDMEET	Number of board meetings held annually by the board of directors	Report 56-1 : Management	Vafeas (2000), Hashim and Rahman (2010)
Audit Committee	AUDIT _{COM}	Number of audit committee meeting held annually	Report 56-1 : Management	Defond & Jiambalvo, (1991); McMullen & Raghunandan, (1996); Colliera & Gregory, (1999); Beasley & Salterio, (2001); Vafeas, (2005); Jaggi and Leung (2004)

Table 3.1 Variables relating to governance mechanisms and earnings quality measured within the research framework (cont.)

Meaning	Abbreviation	Measurement	Sources of Data	Researcher
CEO Duality	CEO _{DU}	1 = CEO is not chairman of the board, 0 otherwise. Chairman of the board and CEO are the same person or dummy measurement is not used.	Report 56-1 : Management	Jensen (1993), Rechner and Dalton (1991)
Block Holding 5%	BLOCK _{HD}	Block = percentage of shareholding of major shareholders who hold share over 5% according to the list of major shareholder as form 56-1.	Report 56-1 : CAPITAL	Shleifer and Vishny (1986)
Institutional Ownership	INS _{OWN}	Percentage of outstanding common shares owned by institutional investors Means top 10 shareholding in financial statements of firm, in part of ownership/ 56-1	Report 56-1 : CAPITAL	Wiwattanakantang (2001), Gillan et al. (2003), Bushman et al. (2004), Sharma (2004), Khanchel (2007), and Lee and Park (2008)

Table 3.1 Variables relating to governance mechanisms and earnings quality measured within the research framework (cont.)

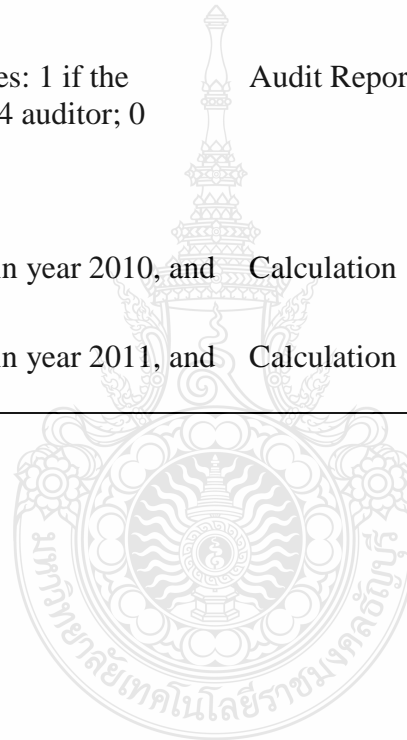
Meaning	Abbreviation	Measurement	Sources of Data	Researcher
Foreign Ownership	FOEIGN _{OWN}	Percentage of ownership held by foreign owners. This type of owners is mostly foreign institutional owners.	Report 56-1 : CAPITAL	Gillan et al. (2003), Back et al. (2004), Zheka (2006), and Lee and Park (2008)
Family Ownership (25%)	FAILY _{OWN}	FAM is a dummy variable where the sample that is family company equal to 1, others equal to 0. One company is considered as family company in case that the member of family holds firm stock more than 25% and works as board of directors or management team.	Report 56-1 : CAPITAL	Wang (2006), and Anderson and Reeb (2003)
Compensation for Board of Directors	CBOD	The average (per head) cash compensation, paid to executives, estimated as the ratio of executive compensation to the total number of executives.	Report 56-1 : CAPITAL	Ashley and Yang (2004), Chaleras (2011), Shuto (2007)

Table 3.1 Variables relating to Governance Mechanisms and earnings quality measured within the research framework (cont.)

Meaning	Abbreviation	Measurement	Sources of Data	Researcher
Transparency and Disclosure	TTD	Financial statement data, the portion with which T&D is calculated uses an estimate questionnaire of Standard & Poor by using the <u>checklist</u> . The validity and reliability of the financial statement.	Financial statement in which TTD conducted a survey on Standard & Poor by using validity and reliability of financial statement, statement of financial position and statement of comprehensive income in the areas of Management and Capital.	Lin, Huang, Chang, and Tseng (2011); Yu (2010); Al-Refae, Zakaria Siam, and AlKhatib (2012); Alia, Chenb and Radhakrishnan (2007)
Control Variables				
Firm Size	SIZE _{MVE}	Natural logarithm of firm market value of equity	Financial statement : Balance sheet	Ferreira and Laux (2007); Chen, Cheng, & Chih (2010).
Firm Leverage	LE	Total long-term debt over total asset	Calculate figures in Balance sheet	Wiwattanakantang, (2001); Gillan et al., (2003); Sharma, (2004)
Firm Age (years)	AGE	Firm age is the number of years since the first trading date on SET.	Company profile excel and perform calculation	Brown and Caylor, (2006); Connelly, Limpaphayom & Nagarajan (2012)

Table 3.1 Variables relating to Governance Mechanisms and earnings quality measured within the research framework (cont.)

Meaning	Abbreviation	Measurement	Sources of Data	Researcher
The large audit firm	BIG 4	Dummy variables: 1 if the auditor is a Big 4 auditor; 0 otherwise.	Audit Report page	Gul et al. (2003); Barako, Hancock, and Izan (2006); Chalaki , Didar and Riahinezhad (2012)
Years 2010	Y10 _{i,t}	One if firm I is in year 2010, and Zero otherwise.	Calculation	
Years 2011	Y11 _{i,t}	One if firm I is in year 2011, and Zero otherwise.	Calculation	



3.11 Research Methodology

3.11.1 Collected Data

The research used primary data and secondary data obtained from various sources of reviews, documents, textbooks, research reports, websites and electronic media. The key secondary data of this study comprised the information in the financial report from the database of the Stock Exchange of Thailand, or SETSMART, on the websites www.sec.co.th, www.deqp.co.th, <http://www.iod.com> and www.csr.imageplus.co.th/csr_history. Disclosure information was obtained from the annual report or the data disclosure report (Form 56-1) of the companies and additional information in the production industry from 2010 to 2012.

3.11.2 Statistical Design and Data Analysis

The data used in this study was collected from the financial budget, annual report and report Form 56-1 by using the accounting information for the accounting period during the years 2010-2012 of 418 companies listed on the Stock Exchange of Thailand in SET Index. Information on these listed companies as well as data on the production and service industries was derived from the websites of the Securities and Exchange Commission Thailand and the Stock Exchange of Thailand. The summary of data analysis procedures is as follows:

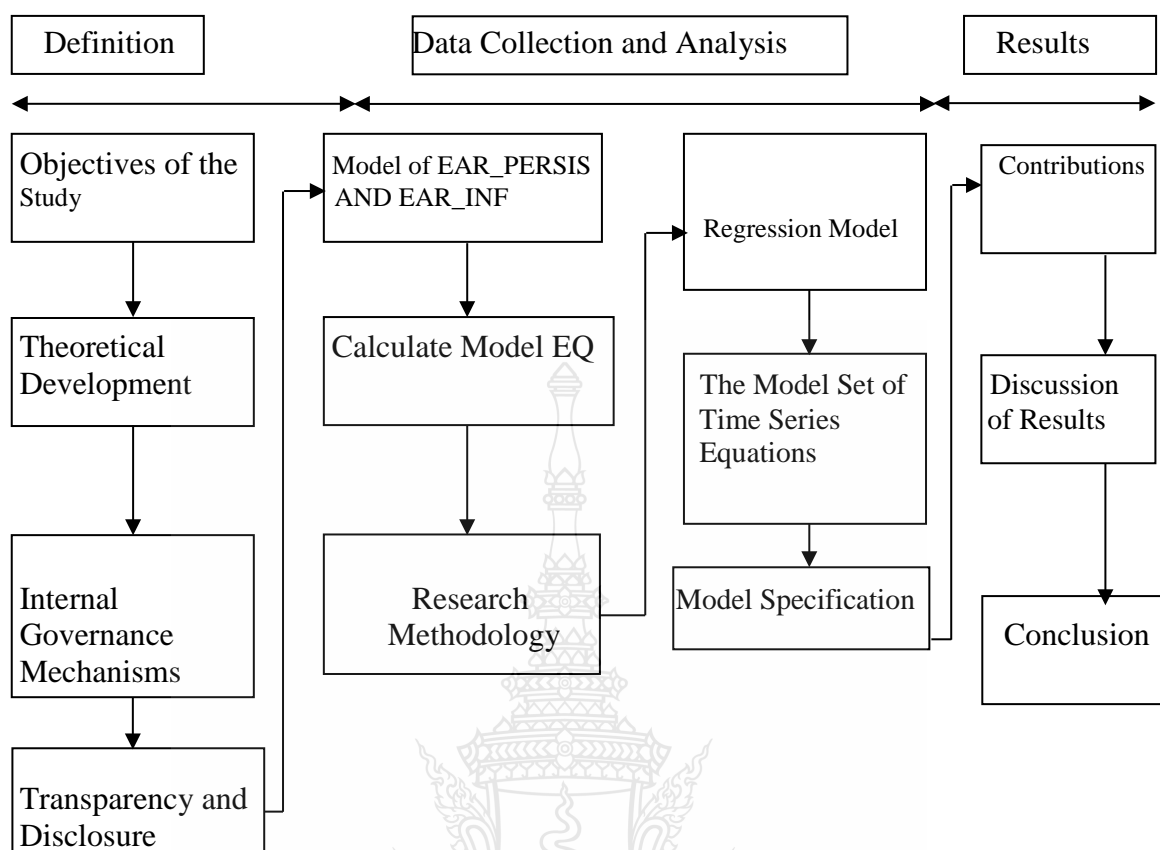


Figure 3.2 Illustration 1 - Research Protocol Source, adapted from Yin (2005)

When the data collection was completed, the researcher assigned them a code and processed the data with the SPSS program for Windows. The statistics used for data analysis were divided into two characteristics according to Vanichbuncha (2011), as follows:

Descriptive statistics are the statistical techniques that present the information in order to recapitulate the variables of representative samples. The methods used for recapitulation consist of:

1. Presentation in pattern of frequency distribution table in the forms of tables, graphs and figures
2. Position arrangement such as ratio, percentage, and percentile

Measures of central tendency: Favorite central values such as mean, median and mode, which can be selected to present as proxy, are favored. Measures of dispersion can be carried out by several methods such as range, variance, standard deviation and coefficient of variation (Karnchanawasri, 2009).

Inferential Statistics

Data analysis with inferential statistics is an analysis method used to test the well-known hypotheses in order to analyze and evaluate the model for describing the relation of variables. This research aimed to find the relation and causes of multiple independent and dependent variables. All variables were quantitative data and were analyzed with Multiple Regression Analysis. Data analysis was presented within the framework of this research.

3.12 Reasons for the Use of Multiple Regression Analysis

Since the conditions regarding the independence of errors were unrealistic, it could lead to wrong results.

According to Vanichbuncha (2010: 292), the pattern of multiple regression equation: If the amount of k independent variables (X_1, X_2, \dots, X_k) is related to dependent variable Y as a linear relationship, the multiple regression equation that exhibits the relationship between Y and X_1, X_2, \dots, X_k will be obtained.

$$y = \beta_0 + \beta_1x_1 + \beta_2x_2 + \dots + \beta_nx_n + \varepsilon$$

Where: β_0 = intercept when determining $x_1 = x_2 = \dots x_k = 0$

β_i is the value that exhibits the change of dependent variable y when independent variable x_i changes at 1 unit, whereas the other independent variable, x , remains constant.

3.13 Transparency and Disclosure Measurement Tools Check

Tool quality was verified by an expert committee through content validity testing and determining reliability of the referable questionnaire of S&P, totaling 98 issues. The researcher tested content validity of the questionnaire with 5 experts (Appendix A) using the 3-level scoring system where 1= conforms, 0 = not sure, -1 = does-not-conform. Experts recommended adjustment to the text of some items to be in line with the accounting standard and the context of the main corporate governance. The questionnaire was subsequently improved. It was used in conjunction with the determination of the Index of Item Object Congruence (IOC) to examine the data of Form 56 -1 financial statements on the Stock Exchange of Thailand.

$$IOC = \frac{\sum R}{n}$$

IOC = Index of congruence

$\sum R$ = Sum of scores from the experts

n = Total number of experts

Questionnaire evaluation by experts involved the examination of language use and content consistency between the questionnaire and the definitions used. Content

validity was examined with the use of Index of Item Objective Congruence- IOC. Items with a score value of over .50 were kept.

Reliability testing was carried out by using the questionnaire that had been created, tested and improved on the experts' recommendations to collect data from the Form 56-1 financial statements of 40 companies that were not the representative samples. The test results were then analyzed in order to examine the questionnaire quality and tool quality. The results were analyzed to determine Cronbach's Alpha coefficient and obtain the questionnaire reliability. The tested questionnaire was then used for collecting data from the target population. Questionnaire data were later used for testing the hypotheses.

3.13.1 Collection Procedures for Transparency and Disclosure

The examination of measuring tool quality was verified by accuracy testing on content and reliability determination of the total 98-item referred questionnaire of S&P. This questionnaire was checked and selected by the specialist committee until the remaining 81-item questionnaire was used for collecting data of the financial report, financial statement 56-1 of 418 companies listed on the Stock Exchange of Thailand. The following procedures have been derived:

1. Collecting data from the questionnaire according to the disclosure topic. In case of disclosure, put 1; if not, put 0
2. Collecting data from the questionnaire of each year by separating as years 2010-2012
3. Arranging the total data collected in the form of percentage to be representative of independent variables of transparency and disclosure

3.14 Steps to Implement Rolling Data of Earning Persistence

Moderator variable was specified by studying the literature from Richard G. Sloan (1996), in the equation as used in evaluating profits in the category of future profit quality vies according to the referred formula below

$$\text{Earnings}_{t+1} = \alpha_0 + \alpha_1 \text{Earning}_t + v_{t+1}$$

Measurement method from the original equation states that “Earnings” is defined as operating income scaled by total assets so α_1 measures the persistence of the accounting rate of return on assets.

Step 1

Collect operating income variable by total assets, which are the company’s only financial statements as listed in the stock market 56-1 or annual report during 2005-2012 at the end of the year.

Step 2

Example of implementation of Rolling Data (Appendix B) by calculating to find the representative of the companies during the year 2010-2012 by using Standardized Coefficients.

Step 3

Consider the changes in profit by studying from the data that are consistent with the fact that there are changes in accounting standards to be universal which began in the year 2008. Also, study the literature for the period when profits have been measured in 5 years in order to observe the change in profit to obtain Standardized Coefficients from the original equation, where α_1 represents studied companies in each year.

Table 3.2 Summary of the samples selection,

	Observation of a sum total
All companies listed on the Stock Exchange of Thailand companies	534
Companies in the financial industry	58
Companies under rehabilitation	18
Property fund	40
Remainder	418
During the years 2010 - 2012 from 56-1 and SET SMART	1,254
Remove the data that does not exist in Persistence list	59
Remove the data that does not exist in Informativeness list	99
Deduct the companies of which information is not provided in SET during the years 2010-2012	10
Shutdown or merger	
Shutdown or merger	
Remainder	1,086
Outlier error	43
Final sample	1,043

There are several methods for handling missing data. Such methods were adopted according to the characteristics of the missing data that happened. Methods for handling missing data, which are frequently used, included:

-Mean substitution is the method of replacing missing data with data average, which is the known value in each subgroup of other variables. This method has been developed from replacing missing data with data average that is a known value. This is because of the assumption that the value of missing data should depend on the

characteristics of the sample unit. Similar characteristics of sample should have interesting data likewise. This has not been mentioned herein for handling missing data. Further studies can investigate the effects from the research works of Little and Rubin (1987), Little (1992), and Afifi and Clark (1996).



CHAPTER 4

RESEARCH RESULTS

4.1 Introduction

This chapter addresses an analysis of a proposed model in Chapter 3 which analyzes variables of corporate governance mechanisms and data on corporate governance which correlates to earnings persistence through accounting data. Independent variables include board of directors, board of shareholders and their holdings, executive compensation, transparency and information disclosure. Controlled variables include sizes of the firms, total debt to total asset ratio of the firms, the firms' age and audit firms (Big 4). The analysis is divided into 2 parts as follows.

Part 1 deals with research hypothesis testing. It focuses on testing whether independent variables concerning corporate governance are correlated to earnings persistence through accounting data of listed companies in the Stock Exchange of Thailand.

Part 2 illustrates the results of correlation analysis. It consists of a model derived from multiple regression analysis, testing on forecast abilities of the model and examining conditions of variable analysis.

Part 1: Research hypothesis testing. It focuses on testing whether independent variables concerning corporate governance are correlated to earnings persistence through accounting data of listed companies in the Stock Exchange of Thailand.

Hypothesis 1: Firms that have internal Corporate Governance Mechanisms are expected to have higher on earnings persistence.

Research hypothesis 1 was tested to explore whether corporate governance had direct effects on earnings persistence based on research about earnings continuity (Dechow, Ge & Schrand ,2010). Higher quality earnings provide more information about the features of a firm's financial performance that is relevant to a specific decision made by a specific decision-maker. Sloan (1996) states that earnings persistence is the test of hypothesis 1 that includes basic accounting principles to estimate earnings in the future.

In a contextual summary of the chapter 4, the research results were presented in its aforementioned objectives to study association with decision on investment in relationship to the effect of corporate governance mechanisms on earnings informativeness through earnings persistence: empirical evidence from Thailand by presenting good data able to classify them into: qualitative data and quantitative ones which the researcher presented both of them suitable for the research, showing statistical component parts divided into 2 :-

The first part uses descriptive statistics and the second one uses inferential statistics

The first part presents descriptive statistics gathering derived from data collection. So, in its study, it would present basic statistics consisting of rudimentary data of statistical figures.

- 1) Minimum, Maximum, Mean, median and standard deviation
- 2) Presentation of qualitative data by classifying its types with Bar chart and Pie chart.

The second part presents inferential statistics which the researcher presented 2 types as tested to be popular in general researches:-

4.2 Multiple Linear Regression Analysis and Testing Statistic

That are taken as variables studied to analyze a dependent variable (x), each having a linear relationship to the dependent with a dependent variable (y) or meeting its objective according to the research framework of chapter I with the following steps :-

4.2.1 Inference Statistic

Linear in assessing the linear regression assumptions

This research has made an analysis of the plural national linear regressions for using in the analysis of Inference Statistic by monitoring the conditions of the regression analysis which are the criteria involved with tolerances (Error or Residual) by applying the equation $Y=a+ bx$ to apply for 5 items audit criteria as follows:

1. The average of the tolerance value = 0 ($E(e) = 0$).
2. The error must have a normal distribution.
3. Tolerance must be independents.
4. The variance of e is σ^2 which must be maintained at all value of X.
5. Independent variables X_i and X_j must be free.

Five questions to evaluate a condition are true. Then, using F and t in testing the relationship between the variables x and y in monitoring before calculating the regression coefficients (a and b) have to verify that relationship of x and y in a linear or not and check for unusual (Outliers) by the distribution diagram is Graphs or Scatter or using Cook's distance in an unusual value check (Outlier).

From the assumption of linear regression, most accounting information may be violated the assumption because of endogeneity, that is, the error is associated to independent variable (testing with determination of robustness) e.g. Becketti (2013), Mitchell (2012).

However, OLS estimates are no longer BLUE. That is, among all the unbiased estimators, OLS does not provide the estimate with the smallest variance. Depending on the nature of the heteroscedasticity, significance tests can be too high or too low. As Allison puts it: “The reason OLS is not optimal when heteroskedasticity is present is that it gives equal weight to all observations when, in fact, observations with larger disturbance variance contain less information than observations with smaller disturbance variance.” Primary test used to determine statistical robustness is in line with initial condition as follows.

4.2.2 Robust Statistics

Robust statistics means the efficiency of testing in case that breaking primary agreement with high robust gives same efficient statistical test result. But if it is non-robust statistics in case that there is a primary agreement breaking, it will cause lower efficiency of statistical test result.

Many researches measure the robustness tests in order to test the robust statistics. White (2014) mentioned, we discuss how critical and non-critical core variables can be properly specified and how non-core variables for comparison regression can be chosen to ensure that robustness checks are indeed structurally informative. We provide a straight forward new Hausman (1978) type test of robustness for the critical core coefficients, additional diagnostics that can help to explain why

robustness tests rejection. (Wooldtke, & Yeh,2013). we include the character of corporate governance that may be related to earnings. The relation between independent variables and efficient earnings is the accounting information that investors consider to making the investment decision. However, there are some researchers focus on the various design to test the robust statistics.

Pearson Addison Wesley 2007; See Hamilton (2013) and Cameron and Trivedi (2010) for an introduction to linear regression using Stata. (Dohoo, Martin, & Stryhn,2012) discuss linear regression using examples from, and Stata datasets and do-files used in the text are available.

For such hypothesis test, if the information is not accordance with primary agreement, researcher can test by selecting the nonparametric statistics that has several test statistics such as Kolmogonov-Smirnov test. From the research mentioned above, for the distinctness of such issue, researcher studies the robustness, and parametric statistics and nonparametric statistics of difference test with test statistics studied as the condition of Robust test of Equity Means, replacing one-way ANOVA.

Table model 1 Basic linear regression: chapter 4 uses Multiple Regression Analysis to calculate robust regression test. The solution of abnormal information distribution can be done in many options, i.e. 1) data transformation, 2) using of large size sample, 3) changing to analyze with nonparametric method. In case that require to test by parametric statistics, called Robust Tests of Equality of Means, there is the calculation detail like the condition of Multiple Regression Analysis as shown the result in chapter 4.

Testing the model for misspecification and robustness assumption

1. Linearity

Matrix graphs are shown above (See the table of appendix D)

From the table, VIF value is not over 10 by measuring each variable from robust method with the conditions of assumption measurement. An important assumption for the multiple regression model is that independent variables are not perfectly multicollinear. One regressor should not be a linear function of another.

Misspecification tests

Regression: Testing for homoscedasticity

Non-graphical way to detect heteroskedasticity is the Breusch-Pagan test (Munger, Jacob, Waldman, & Hoffmann, (1983)). The null hypothesis is that residuals are homoskedastic. In the example below, we fail to reject the null at 95% and concluded that residuals are homogeneous. However, at 90% we reject the null and conclude that residuals are not homogeneous.

The graphical and the Breusch-Pagan test suggest possible presence of heteroskedasticity in our model. The problem in this regard is that we may have wrong estimates of the standard errors for the coefficients and therefore their t-values. There are two ways of dealing with this problem. One method is using heteroskedasticity-robust standard errors, the other way is use of weighted least squares (See Stock and Watson, 2003, chapter 5). WLS requires knowledge of the conditional variance on which the weights are based. If this is known (rarely the case), then use WLS. In practice, it is recommended to use heteroskedasticity-robust standard errors to deal with heteroskedasticity. (For the method used graph, see the

table of appendix D at the back.) (Table 4.3: Summary of the testing method for homoscedasticity model; see the table of appendix D)

4.2.3 Summary of descriptive statistics:

Analytical results of overall descriptive statistics consist of:

Introductory Characteristic of Sampling

It is summarized that this study pertains to the sampling, 418 industrial and service groups, listed on the Stock Exchange of Thailand during the years 2010-2012 except financial groups consisting of finance and securities, banking and insurance, including companies under restructuring process, the companies of total stock and MAI industry that such industries have their assets and debts different from the other industrial and service groups effective to the ratio of money spent on analysis; so, they are not included in industrial groups mentioned to be gathered for this calculation, with numbers of companies summarized according to the sampling.

Summary of descriptive statistical analysis consisting of mean, median and standard deviation of the variable interested to study can be presented as follows:

4.3 Findings

Table 4.1 Descriptive Statistic For the periods 2010-2012 (n = 1043)

Abbreviation	The Number	Minimum	Maximum	Mean	Median	Std. Deviation
EAR_PER	Amount of Baht per years	-2.0523	2.1660	.0828	.0605	.5586
EAR_INF	Amount of Baht per years	-1.0000	4.2174	.3338	.2063	.6245
E_{it} / P_{it-1}	Earnings per share (before extraordinary item) of firm i for year t.	-5.3103	2.3000	.0640	.0867	.2931
BRDSIZE	Total number of directors on the board	5.0000	21.0000	10.5072	10.0000	2.6299
BRDMEET	The number of board meetings held annually by the board of directors	2.0000	42.0000	7.5722	6.0000	3.8118
AUDIT _{COM}	The number of audit committee meeting held annually.	3.0000	21.0000	6.0568	6.0000	2.4872
CEO _{DU}	Dummy variables	0.0000	1.0000	.7692	-	.4209
BLOCK _{HD}	Percentage of shareholding of major shareholders who hold share over 5% .	0.0000	97.8700	52.4026	54.5000	19.8905
CBOD	The average (per head) cash compensation, paid to executives, estimated as the ratio of executive compensation to the total number of executives.	.0043	7.8384	.6921	.3656	.9557

Table 4.1 Descriptive Statistic For the periods 2010-2012 (n = 1043) (Cont.)

Abbreviation	The Number	Minimum	Maximum	Mean	Median	Std. Deviation
INS _{OWN}	Percentage of outstanding common shares owned by institutional investors.	0.0000	97.9000	33.8608	28.3600	28.9437
FOREIGN _{OWN}	Percentage of ownership held by foreign owners.	0.0000	96.8091	12.7375	3.4600	19.2205
FAMILY _{OWN}	FAM is a dummy variables.	0.0000	1.0000	.3946	-	.4881
TTD	Financial statement data, the portion with which T&D calculated uses an estimate questionnaire of Standard & Poor by using the <u>check list</u> . Total percent per item	42.0000	73.0000	62.2065	62.0000	5.3022
LE	Amount of Baht per years .	-11.6439	96.0097	1.0514	.6551	4.4410
BIG4	Dummy variables	0.0000	1.0000	.5418	-	.4980
AGE	Firm age is the number of years since the first trading date on SET.	1.0833	37.6667	16.4108	17.5833	8.1013
SIZE _{MVE}	Amount of Baht per years .	3.8628	13.7624	8.1005	7.9929	1.5829

Note : EAR_PER = “Earnings” is defined as operating income scaled by total assets., EAR_INF = the stock return of Firm i for the 12 months period from nine months before to three months after the fiscal year-end ,calculated as $(P_{it}-P_{it-1}+D_{it}) / P_{it-1}$, E_{it}/P_{it-1} ; E_{it} = earnings per share (before extraordinary item) of firm i for year t. , P_{it} = the stock price of Firm i at Time t., BRDSIZE =Total number of directors on the board., BRDMEET = The number of board meetings held annually by the board of directors., AUDIT_{COM} = The number of audit committee meeting held annually., CEO_{DU} = 1 ; CEO is not chairman of the board, 0 otherwise. Chairman of the board and CEO are the same person or dummy measurement is not used., BLOCK_{HD} = percentage of shareholding of major shareholders who hold share over 5% according to the list of major shareholder as form 56-1., CBOD = The average (per head) cash compensation, paid to executives, estimated as the ratio of executive compensation to the total number of executives., INS_{OWN} =Percentage of outstanding common shares owned by institutional investors., FOREIGN_{OWN} = Percentage of ownership held by foreign owners. This type of owner is mostly foreign institutional owners. FAMILY_{OWN} = FAM is a dummy variable where the sample that is family company equal to 1, others equal to 0. One company is considered as family company in case that the member of family holds firm stock more than 25% and works as board of directors or management team., TTD = Financial statement data, the portion with which T&D calculated uses an estimate questionnaire of Standard & Poor by using the checklist. The validity and reliability of the financial statement., LE = The total debt over total assets., BIG 4 = Dummy variable: 1 if the auditor is a Big 4 auditor; 0 otherwise., AGE = Firm age is the number of years since the first trading date on SET., SIZE_{MVE} = Natural logarithm of firm market value of equity.

Table 4.1 shows descriptive statistics based on observation, including basic statistics, namely minimum value, maximum value, mean, median and standard deviation of all variables according to Earnings Persistence (EAR_PER). Earnings persistence with minimum value of earnings quality data indicates that decreased earnings persistence lowers turnover and corporate governance mechanisms at the minimum of -2.0523 million baht. Earnings persistence with maximum value of earnings quality data indicates that increased earnings maximize turnover and corporate governance mechanisms at a maximum of 2.1660 million baht. The mean of earnings quality data on earnings persistence affecting turnover and corporate governance

mechanisms was 0.0828 million baht. Earnings persistence variables illustrated the median of earnings at 0.0605 million baht. In addition, the standard deviation of variables of earnings quality data on earnings persistence affecting turnover and corporate governance mechanisms was at 0.5586 million baht. It can be summarized that decreased or increased earnings persistence based on descriptive statistics should be taken into consideration when making decisions.

Earnings Informativeness (EAR_INF) with minimum value of decreased earnings quality data on accounting data lowers turnover and corporate governance mechanisms at the minimum of -1.0000 million baht. Also, the maximum value of earnings informativeness data with the maximum of earnings quality data indicates that increased accounting data maximizes turnover and corporate governance mechanisms at the maximum of 4.2174 million baht. The mean of earnings quality data on accounting data affecting turnover and corporate governance mechanisms was at 0.3338 million baht. Variables on earnings informativeness (EAR_INF) illustrated the median of earnings at 0.2063 million baht. The standard deviation of variables on earnings quality data related to earnings persistence affecting turnover and corporate governance mechanisms was at 0.6245 million baht. It can be summarized that decreased or increased accounting data based on descriptive statistics should be considered when making decisions.

According to internal corporate governance mechanisms, the researcher presents descriptive information of each aspect below.

Board of directors covers descriptive statistics as follows. The minimum number of directors affecting corporate governance mechanisms at the minimum rate of earnings was 5 persons per firm while the maximum number of directors was 21 persons per firm. The mean number of directors was 10.5072 persons per firm. The median, that is to say the middle value representing the number of directors for corporate governance mechanisms was 10.0000 and the standard deviation of number of directors was 2.6299 respectively. The minimum value of data on board meetings affecting corporate governance mechanisms had the minimum frequency of 2 times per firm or the maximum frequency of 42 times per firm. The mean frequency of the board meetings was 7.5722 times per firm. The median frequency of the board meetings for corporate governance mechanisms was 6.0000 times per firm and the standard deviation of frequency of the board meetings was 3.8118 times per firm respectively. The minimum value of data on the board chairman and CEO being the same person with impact on corporate governance mechanisms at the minimum rate of earnings was 0 or the maximum value was 1.000 person per firm respectively. The mean was 0.7692 person per firm. The standard deviation of frequency was 0.4209 person per firm. The median representing audit committee meeting, that is to say the middle value of corporate governance mechanisms was 6.0568 and the standard deviation of audit committee meeting was 2.4872 persons per firm, respectively. The minimum value of data indicating that audit committee meeting are the same person affecting corporate governance mechanisms with the minimum frequency of earnings at 3 persons per firm or with the maximum frequency of earnings at 21 persons per firm. The mean of data indicating that audit committee meeting are the same person was

6.0568 persons per firm. The standard deviation data which indicated that the board chairman and CEO are the same person was 2.4872 times per firm respectively.

Board of shareholders and their holdings cover descriptive statistics as follows. The minimum value of data on 5% shareholdings group affected corporate governance mechanisms at the minimum rate of earnings at 0.000 percent of major shareholders with over 5% of shareholdings or at the maximum rate of earnings at 97.87 percent of major shareholders with over 5% of shareholdings. The mean of 5% shareholding group was 52.4026 percent of major shareholders with over 5% of shareholding group. The median of 5% shareholding group, that is to say the middle value of corporate governance mechanisms was 54.5000. The standard deviation of 5% shareholding group was 19.8005 respectively.

The minimum value of data on executive compensation affecting corporate governance mechanisms was 0.0043 persons per number of directors or the maximum value was 7.8384 persons per number of directors. The mean of executive compensation was 0.6921 persons per number of directors. The median of executive compensation, that is to say the middle value of corporate governance mechanisms was 0.3656 persons per number of directors. The standard deviation of executive compensation was 0.9557 persons per number of directors. The minimum value of data on shareholdings of institutions affecting corporate governance mechanisms at the minimum rate of earnings was 0.0000 or at the maximum rate of earnings was 97.9000. The mean shareholding of institutions was 33.8608. The median of shareholdings of institutions, i.e. the middle value of corporate governance mechanisms was 28.3600 and

the standard deviation of variables was 28.9437 percent of ordinary shares possessed by shareholding of investors respectively.

The minimum value of data on shareholdings of foreigners affecting corporate mechanisms at the minimum frequency was 0 percent of shareholdings possessed by foreigners or the maximum value was 96.8091 percent of shareholdings possessed by foreigners. The mean frequency of shareholdings possessed by foreigners was 12.7375 times per firm, the median of frequency of shareholdings possessed by foreigners, i.e. the middle value of corporate governance mechanisms was 3.4600 times per firm and the standard deviation of shareholdings possessed by foreigners was 19.2205 percent respectively. The minimum value of data on transparency and information disclosure affecting corporate governance mechanisms at the minimum rate of earnings was 42 points or at the maximum rate of earnings was 73 points. The mean was 62.2065, the median representing proportion of disclosure was 62.0000 and the standard deviation of variables was 5.3022 points respectively.

In the issue of transparency and information disclosure, it is mostly interested in the research both in domestic and in foreign countries regarded as a dominant part of ASEAN governance up to an international level which the analysts, investors and organization executives realize its importance because in disclosure are divided into industrial groups between production industry and service one in descriptive presentation.

From the questions considered by the checking Board, there are still the rest (of them) about disclosure score of companies numbering 81 ones from total consequences

of all the Stock Exchange of Thailand., (Table 4.2 Firm overall image from 81 questions)

From total 81 questions of transparency and disclosure; 1 means disclosure question in service group on average of total SET companies. There is disclosure on 61.34 items or accounting for 75.74% of service group that is less than industry group. For disclosure question in industry group on average of total SET companies, there is disclosure on 63.09 items or accounting for 77.89%, overall image of market is 76.29%

0 means no disclosure. From 81 questions in service group, on average, total SET companies have disclosure of 7.97 or accounting for 9.85%. For no-disclosure question in industry group on average of total SET companies, there is no-disclosure question of 7.28 items or accounting for 8.99%, overall image of market is 9.63%

-1 means no information/ uncertain. On average of total SET companies in service group, there is no information of 11.67 or accounting for 14.41% that is more than industry group. On average of total SET companies in industry group, there are no-information questions of 10.62 or accounting for 13.11%, overall image of is 14.08%. From overall image of market, we can conclude regarding transparency and disclosure issue from 81 questions that have answer on 1 item, meaning disclosure in the high ratio of 76.29%, industry group is more than service group, no information/ uncertain accounts for 14.08%.

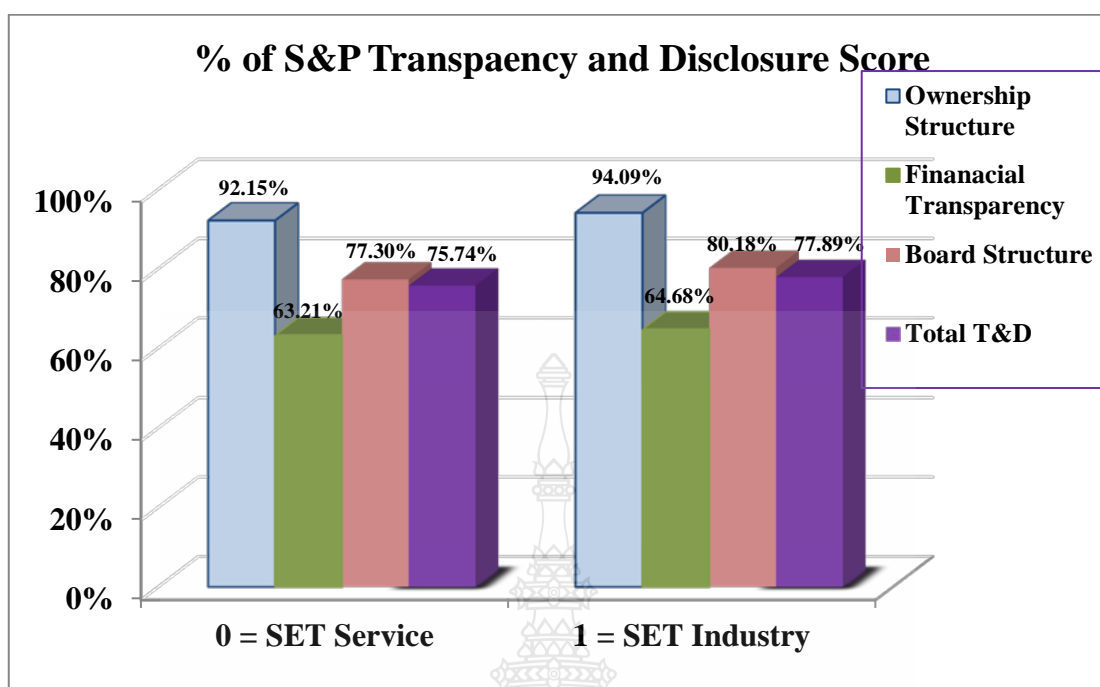


Figure: 4.1 Graphic Bars Overview of Transparency and Disclosure Score, excluding Industries

From overview on the Stock Exchange of Thailand, the researcher divided industries into service and production. From figure 4.1, percentage factor of S&P transparency and disclosure score is separated from the dimension of shareholders 'rights and ownership structure, tending to a high level of disclosure score because such a structure is important to be revealed at 94.09 percent in the industrial group. Service industry equals 92.15%. And in next step pertaining to Board structure, industrial overview equals 80.18% and service industry does 77.30%. In final dimension of financial transparency, industrial sector equals 64.68% and co-service industry does 63.21%. In overall summary of the Stock Exchange of Thailand, disclosure score is important and in accordance with the research (Al-Refae, Zakaria Siam,& Al Khatib ,2012). They mentioned importance of accounting disclosure score regarded as

significant data sources of decision and intention made by the experts of accounting standard development according to an international standard in order to increase responsibility of executives. (Ali, Chen, & Radhakrishnan, 2007). studied to check disclosure score of the family company and non-family one in the United States of America in S&P 500, considering disclosure score of the family, earnings quality reported. And in disclosure score willingly done for corporate governance practice, the study signified that the family company had faced the critical agent problem in separation from share ownership and execution less than non-family one.

According to controlled variables of dummy variables of BIG 4, the minimum value of data affecting corporate governance mechanisms was the minimum of 0 or the maximum of 1. The mean was 0.5418, the median representing BIG 4 of firms which is the standard deviation of 0.4980 respectively.

The natural logarithm log of the firm's market value of equity ($SIZE_{MVE}$) representing the minimum value of sizes of the firms affecting corporate governance mechanisms at the minimum rate of earnings was 3.8628 or at the maximum rate of earnings was 13.7624. The mean was 8.1005, the median representing sizes of the firms, i.e. the middle value was 7.9929 and the standard deviation of variables was 1.5829 respectively.

For variables on ability to pay (LE), the minimum of data on variables on ability to pay (LE) affecting corporate governance mechanisms at the minimum rate of earnings was -11.6439 or the maximum rate of earnings was 96.0097. The mean was 1.0514, the median, namely the middle value representing ability to pay (LE) was 0.6551 and the standard deviation was 4.4410 respectively.

Firms' ages (years) (AGE) of variables representing the minimum of data on variables of firms' ages affecting corporate governance mechanisms had a minimum rate of earnings at 1.0833 or a maximum rate of earnings at 37.6667. The mean was 16.4108, the median, that is to say the middle value representing firms' ages (years) (AGE) was 17.5833 and standard deviation of variables was 8.1013 respectively.

Values	Column Labels		Grand Total
	Not exceeding 13 persons	More than 13 persons	
Average of CBOD	0.642666465	0.959004372	0.692103741
Average of EAR_PER	0.08886798	0.049857927	0.08277149

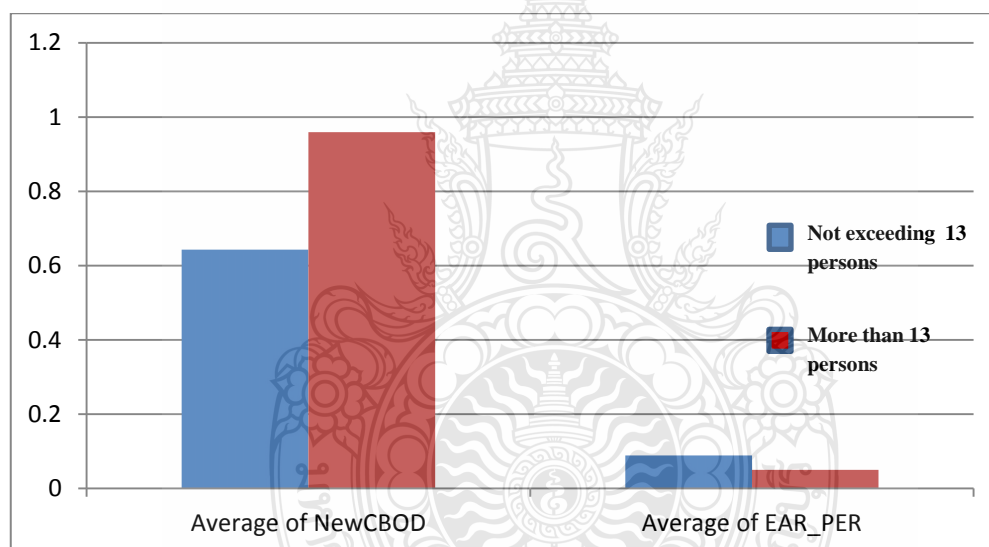


Figure 4.2 Graph shows the relationship between executive compensation and the average number per person of directors.

(Reference Notes: The Stock Exchange of Thailand: Requirement: The board of directors shall not be less than 5-12 people).

Explanation: Variable CBOD = The average (per head) cash compensation, paid to executives, estimated as the ratio of executive compensation to the total number of executives. EAR-PER = "Earnings" is defined as operating income scaled by total assets. BRDSIZE = Total number of directors on the board

The researcher found that the variable: executive compensation has the average negatively associated with the number of directors. From research literature, paying compensation with lower average, variable: size of the board of directors per head causes earnings persistence to increase. Administration of a small board is better than a larger board with more flexibility. This is consistent with the literature of (Ashley, Yang 2004, Farrell, Hersch, & Netter, 2001).

Part 2 illustrates the results of correlation analysis. It consists of a model derived from multiple regression analysis, testing on forecast abilities of the model and examining conditions of variable analysis.

4.4 Empirical results

4.4.1 Multiple Linear Regression Analysis and Correlation Matrix

Table 4.4 explains Pearson Correlation Coefficient between dependent variable and independent one; and control corporate governance which is explained in relationship to governance mechanism variable affects the relationship to accounting data on corporate compensation. In this research, it is an empirical research that the researcher selected to use a form to measure relationship between independent variable

and dependent one. Apart from these, the results in the table also indicate that corporate governance variable in major public company limited has its relationship between earnings persistence and accounting data, measuring total business compensation on significant level of confidence related.



Table 4.2 Correlation Matrix For the periods 2010-2012 (n =1043)

	EAR_PER	EAR_INF	E _{ij} /P _{i,t}	BRDSIZE	BRDMEET	AUDITCOM	CEO _{DU}	BLOCK _{ID}	CBOD	INS _{OWN}	FOREIGN _{OWN}	FAMILY _{OWN}	TTD	LE	BIG 4	AGE	SIZE _{MVE}	Y10 _{it}	Y11 _{it}
EAR_PER	1																		
EAR_INF	0.001	1																	
E _{ij} /P _{i,t}	-0.129***	0.191***	1																
BRDSIZE	0.023	-0.029	0.084***	1															
BRDMEET	-0.049	-0.018	-0.032	0.053*	1														
AUDITCOM	-0.024	-0.039	-0.004	0.170***	0.236***	1													
CEO _{DU}	-0.024	0.015	0.016	0.083***	-0.005	-0.019	1												
BLOCK _{ID}	0.047	-0.023	0.079***	0.001	-0.111***	0.022	-0.048	1											
CBOD	-0.047	-0.0547*	0.057*	0.135***	0.085***	0.173***	0.145***	-0.023	1										
INS _{OWN}	0.065**	-0.003	0.028	0.270***	-0.008	0.107***	0.024	0.476***	0.141***	1									
FOREIGN _{OWN}	0.014	-0.046	-0.024	0.087***	-0.106***	-0.003	-0.039	0.183***	-0.099***	0.469***	1								
FAMILY _{OWN}	-0.031	0.020	0.054*	-0.128***	-0.093***	-0.031	-0.152***	0.129***	-0.070**	-0.407***	-0.201***	1							
TTD	-0.031	0.039	0.073**	0.145***	0.138***	0.232***	0.061**	-0.039	0.148***	0.147***	-0.030	-0.016	1						
LE	0.018	-0.013	-0.025	-0.056*	0.010	0.000	-0.020	0.022	-0.010	-0.001	0.038	-0.035	-0.021	1					
BIG 4	-0.003	0.003	0.041	0.199***	0.013	0.109***	0.073**	0.104***	0.108***	0.357***	0.315***	-0.137***	0.239***	-0.041	1				
AGE	0.037	0.007	0.037	0.252***	0.063**	0.004	-0.028	-0.059*	0.078***	0.191***	0.012	-0.128***	0.015	-0.073**	0.083***	1			
SIZE _{MVE}	0.052*	0.087***	0.039	0.322***	0.131***	0.280***	0.065**	0.055*	0.398***	0.350***	0.276***	-0.042	0.407***	-0.041	0.389***	0.027	1		
Y10 _{it}	0.062**	0.089***	0.002	0.020	-0.001	0.004	0.002	0.017	-0.029	-0.002	-0.020	0.010	-0.034	0.001	-0.030	-0.079***	-0.053*	1	
Y11 _{it}	-0.003	-0.263***	-0.011	0.001	-0.012	-0.021	0.012	0.014	0.024	0.009	0.007	-0.008	0.001	0.031	-0.008	-0.003	-0.058*	-0.498***	1

table presents Pearson correlations of different pairs of dependent and explanatory variables.

** Correlation is significant at the 0.05 level (2-tailed).

*** Correlation is significant at the 0.01 level (2-tailed).

4.4.2 Multiple Regression Results:

The association between corporate governance mechanisms and earnings persistence

Table 4.5 signifies that model 1 with equations comprising the variables of corporate governance mechanism and control ones is able to forecast/estimate earnings persistence (EAR_PER) with significance at reliability level of 95% ($\alpha = 0.05$)**. Such independent variable explains (EAR_PER) significantly at 4.6 % level (R Square = 0.046). Upon consideration, it was found that 2 variables out of all influential in (EAR_PER) with statistical significance are compensation paid to executives H1e: one having negative correlation that is significant at the level between compensation for executives and earnings quality measured by earnings persistence.

For calculating β -0.877 coefficient, there is a negative relationship with consequence. A reduction in the value of β causes earnings persistence (EAR_PER) to increase. Or it means that compensation paid to executives / CEOs is motivation for them to create tactics of making additional value for the business connected with earnings; and otherwise, it is compensation paid rackingly, making earnings persistence increase. Besides, there is the literature saying that the control system negatively affects earnings in policy, making compensation variable negative. This is in line with the agency theory or agency problem. According to this, a person follows one's requirements rather than the system Core, Holthausen, & Larcker (1999). We find that the measures of board and ownership structure explain a significant amount of cross-sectional variation in CEO compensation after controlling standard economic determinants of pay. Moreover, the signs of coefficients on the board and ownership structure variables suggest that CEOs earn greater compensation when governance structures have less

coefficients. We also found that the predicted component of compensation arising from these characteristics of board and ownership structure has a statistically significant negative relation with subsequent firm operating and stock return performance. Overall, our results suggest that firms with weaker governance structures have greater agency problems; that CEOs at firms with greater agency problems receive greater compensation; and that firms with greater agency problems perform worse.

Later, there were the researchers who found the results consistent with the agency theory Ryan, & Wiggins (2001). We analyzed the influence of firm and managerial characteristics on executive compensation. In consistency with the theory, we found that the monitoring difficulties result in greater use of options while CEO and block holding ownership result in less. Risky investment is positively related to options and negatively associated with cash bonus and restricted stock, suggesting that firms use options to encourage managers to take risks. We find a negative positive relation between options and leverage convertible debt consistent with minimizing the agency costs of debt. Finally, we provide new evidence on managerial horizon and incentives, documenting a concave relation between cash bonus and CEO age. q 2001 Elsevier Science B.V. All rights reserved.

Table 4.5:1% significant value of model 1 has its control variable in calculation of β coefficient. For company size variable: $SIZE_{MVE}$ has positive correlation. When β value increases, effectiveness of earnings persistence (EAR_PER) increases more. This signifies that the company's compensation is paid to lower business executives, making total earnings high with increasing persistence connected with business size in the same overall direction. Equation model and regression are related with statistical significance

at reliability level of 99% ($\alpha = 0.01$) *** with statistical significance at reliability level of 95% ($\alpha = 0.05$)** This indicates that the equation explaining independent variable of governance mechanisms was impact on earnings persistence in model 1. Summary on basis of R Square value shows influence over all independent variables relative to dependent one.

Remark: Here, the researcher intends to explain relationship with statistical significance at reliability level of 99-95% only. See the table: ANOVA; sig value ($F = \text{Sig } t = 0.000$) is less than 0.05, showing that such a model can forecast at the statistical reliability level.

According to the table 4.5, there is still evidence of relationship between earnings persistence and corporate governance mechanism; and coefficient of corporate governance mechanisms (CGM) explaining the variables. It is at significant value level of 5% and 1% which is certified by hypothesis about figures as shown in the table 4.5

It signifies coefficient correlation of earnings persistence variable (EAR_PER) of which value is related positively to closed price per share (E_{it}/P_{it-1}) equal to - 0.4008*** or at statistical significance of 0.000***. About ownership variable of institution, (INS_{OWN}) a positive relationship equals 0.1208** or at statistical significance of 0.05. For variable of business size (SIZE_{MVE}), a positive relationship equals 0.1762***, $Y_{10_{i,t}}$, $Y_{11_{i,t}}$; One if firm I is in year 2010, 2011 equal to 0.0977**, 0.0869**, and Zero otherwise. or it is at the statistical significance of 0.05***

Table 4.5 shows correlation coefficient of earnings informativeness variables (EAR_INF) and has its value related to closed price per share (E_{it}/P_{it-1}). Its positive relationship equals 0.336*. Later, the variable of compensation paid to the company

board (CBOD) has its negative relationship equal to -0.037^* or at statistical significance of 0.05. The variable of company size ($SIZE_{MVE}$) has its positive relationship equal to 0.052^* , $Y_{10,t}$, $Y_{11,t}$; One if firm I is in year 2010, 2011 equal to 0.0123^{**} , -0.384^{**} , and Zero otherwise. or at the statistical significance of 0.01^{***} . Such variables have their relationship with total returns.

From the table 4.5, Multiple Regression Results found that structure variable of compensation paid to the company board (CBOD) has its relationship with earnings persistence in the opposite direction with β coefficient equal to -0.0877 ; and it has no statistical significance. ($FOREIGN_{OWN}$) has its relationship with earnings persistence in the opposite direction with β coefficient equal to -0.0822 . And it is at statistical significance of 1% and 5%.

From the table 4.5: Multiple Regression Results, it was found that structure variable of size has its relationship with earnings persistence in the opposite direction with β coefficient equal to 0.1762 and it has statistical significance. Company size positively affects the equation 1 in a statistically significant way. The results are in line with Collins and Kothari (1989) who found that compensation measures the relation between earnings and return for large companies. This accords with forecasts of market of change in turnover of large companies and business profit variable.

4.5 Multiple Regression Results

Multiple Regression of Persistence on Corporate Governance Mechanisms for the periods 2010-2012 (n =1043)

Model 1

$$\begin{aligned} \text{EAR_PER} = & \beta_0 + \beta_1 \text{BORDSIZE} + \beta_2 \text{BRDMEET} + \beta_3 \text{AUDIT}_{\text{COM}} + \beta_4 \text{CEO}_{\text{DU}} \\ & + \beta_5 \text{BLOCK}_{\text{HD}} + \beta_6 \text{CBOD} + \beta_7 \text{INS}_{\text{OWN}} + \beta_8 \text{FOREIGN}_{\text{OWN}} \\ & + \beta_9 \text{FAMILY}_{\text{OWN}} + \beta_{10} \text{TTD} + \beta_{11} \text{SIZEMVE} + \beta_{12} \text{LE} \\ & + \beta_{13} \text{AGE} + \beta_{14} \text{BIG 4} + \beta_{15} \text{Y10}_{i,t} + \beta_{16} \text{Y11}_{i,t} + \varepsilon_{t+1} \end{aligned}$$

Table 4.3 Multiple Regression Results

Variables	Expected Sign	Coefficients (Standardized Coefficients)	t-statistic P-value
Intercept	None	-0.0651	-0.2784 0.7808
BRDSIZE	(+)	-0.0080	-1.1011
BRDMEET	(+)	-0.0378 -0.0086	0.2711 -1.8251
AUDIT _{COM}	(+)	-0.0587 -0.0106	0.0683 -1.4184
CEO _{DU}	(+)	-0.0470 -0.0445	0.1564 -1.0595
BLOCK _{HD}	(+)	-0.0336 0.0003	0.2896 0.2726
CBOD	(+)	0.0109 -0.0513	0.7852 -2.5759
INS _{OWN}	(+)	-0.0877 0.0023	0.0101** 2.3877
FOREIGN _{OWN}	(+)	0.1208 -0.0024	0.0171** -2.2436
FAMILY _{OWN}	(+)	-0.0822 -0.0512	0.0251** -1.1803
		-0.0448	0.2382

Table 4.3 Multiple Regression Results (Cont.)

Variables	Expected Sign	Coefficients	t-statistic
		(Standardized Coefficients)	P-value
TTD	(+)	-0.0024	-0.6645
		-0.0230	0.5065
SIZE _{MVE}	None	0.0622	4.1829
		0.1762	0.0000***
LE	None	0.0006	0.1647
		0.0051	0.8692
AGE	None	0.0000	-0.0084
		-0.0003	0.9933
BIG4	None	-0.0603	-1.5365
		-0.0538	0.1247
Y10 _{i,t}	None	0.1156	2.7409
		0.0977	0.0062**
Y11 _{i,t}	None	0.0828	1.9618
		0.0698	0.0501
F-Value	3.111		
P-Value	0.000**		
R ²	.046		
Adjust R ²	.031		

Remark: four decimal place

** Correlation is significant at the 0.05 level (2-tailed).

*** Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression results and Stock Returns:

It was found that variable of standardized coefficients or beta value $\delta 1\left(\frac{E_{it}}{P_{it-1}}\right)$ is related in the same direction with accounting informativeness estimating stock returns of the firms (stock return : R) which β coefficient equals to 0.4008 and is at statistical significance on confidence level of 99% ($\alpha = 0.01$) Sig value of 0.000*** that can explain all variables on basis of R^2 0.2684. But, variable of total returns multiplied by

earnings persistence is related in otherwise direction of stock returns on basis of β coefficient equal to -0.1448 and has statistical significance. But; variable of $Y_{10,i,t}$, $Y_{11,i,t}$; One if firm I is in year 2010, 2011 equal to -0.0865, -0.4057, and Zero otherwise.

Model 2 signifies mediating variables measuring that of earnings which reflects accounting principle overview to measure earnings change of viewpoint based on equation of Richard G. Sloan (1996) and Riahi-Belkaoui (2004). found responsibility level of the society effective to revenue and positive decision scale, relationship between responsibilities of organizational society, stake return company and motivation of executives by making decision on use of accounting criterion adaptation accrued, outcome associated with income earned which could explain total returns.

Equation 2 has mediating variable. Earnings Persistence predicts Earnings Informativeness by means of Multiple Regression of Earnings Informativeness on Earnings Persistence for the periods 2010-2012 (n = 1043).

Model 2

$$EAR_INF = \delta_0 + \delta_1 \left(\frac{E_{it}}{P_{it-1}} \right) + \delta_2 \left(\frac{E_{it}}{P_{it-1}} \right) * EAR_PER + \delta_3 Y_{10i,t} + \delta_4 Y_{11i,t} + \varepsilon_{it}$$

Table 4.4 Multiple Regression results and Stock Returns

Variables	Expected	Coefficients	t-statistic
	Sign	(Standardized Coefficients)	P-value
Intercept	None	0.4907	16.7883 0.000**
E_{it}/P_{it-1}	(+)	0.8538 0.4008	12.3276 0.000**
$E_{it}/P_{it-1} * EAR_PER$	(+)	-0.3796 -0.1448	-4.4475 0.000**
$Y10_{i,t}$	None	-0.1144 -0.0865	-2.8174 0.0049**
$Y11_{i,t}$	None	-0.5383 -0.4057	-13.2227 0.000**
F-Value	95.188		
P-Value	0.0000**		
R^2	0.2684		
Adjust R^2	0.2656		

Remark: four decimal place

** Correlation is significant at the 0.05 level (2-tailed).

*** Correlation is significant at the 0.01 level (2-tailed).

Equation 3 takes the variable price per share and the closing price to be multiplied by CG variable by means of Multiple Regression of Earnings Informativeness on Corporate Governance Mechanisms for the periods 2010-2012 (n = 1043), Warfield, Wild and Wild (1995).

Model 3

$$\begin{aligned}
 \text{EAR_INF} = & \gamma_0 + \gamma_1 \left(\frac{E_{it}}{P_{it-1}} \right) + \gamma_2 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{BORDSIZE} + \gamma_3 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{BRDMEET} \\
 & + \gamma_4 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{AUDIT}_{\text{COM}} + \gamma_5 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{CEO}_{\text{DU}} \\
 & + \gamma_6 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{BLOCK}_{\text{HD}} + \gamma_7 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{CBOD} + \gamma_8 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{INS}_{\text{OWN}} \\
 & + \gamma_9 \left(\frac{E_{it}}{P_{it-1}} \right) * \text{FOREIGN}_{\text{OWN}} + \gamma_{10} \left(\frac{E_{it}}{P_{it-1}} \right) * \text{FAMILY}_{\text{OWN}1} \\
 & + \gamma_{11} \left(\frac{E_{it}}{P_{it-1}} \right) * \text{TTD} + \gamma_{12} \text{SIZEMVE} + \gamma_{13} \text{LE} + \gamma_{14} \text{AGE} + \gamma_{15} \text{BIG 4} \\
 & + \gamma_{16} Y_{10i,t} + \gamma_{17} Y_{11i,t} + \varepsilon_{it}
 \end{aligned}$$

Table 4.5 Multiple Regression Results

Variables	Expected Sign	Coefficients (Standardized Coefficients)	t-statistic P-value
Intercept	None	0.2159	2.1266 0.0337**
E_{it}/P_{it-1}	(+)	-1.9949	-4.3384 0.000***
$E_{it}/P_{it-1} * BRDSIZE$	(+)	0.0742	2.5544
		0.3104	0.0111**
$E_{it}/P_{it-1} * BRDMEET$	(+)	-0.0336	-1.9042
		-0.1347	0.0571
$E_{it}/P_{it-1} * AUDIT_{COM}$	(+)	-0.0300	-0.7313
		-0.0774	0.4647
$E_{it}/P_{it-1} * CEO_{DU}$	(+)	0.3268	1.9962
		0.1366	0.0462**
$E_{it}/P_{it-1} * BLOCK_{HD}$	(+)	-0.0014	-0.3099
		-0.0333	0.7567
$E_{it}/P_{it-1} * CBOD$	(+)	-0.1697	-1.2612
		-0.0433	0.2075
$E_{it}/P_{it-1} * INS_{OWN}$	(+)	0.0157	3.5391
		0.1811	0.000***
$E_{it}/P_{it-1} * FOREIGN_{OWN}$	(+)	-0.0124	-2.4764
		-0.0965	0.0134**
$E_{it}/P_{it-1} * FAMILY_{OWN}$	(+)	0.4042	2.1622
		0.1186	0.0308**
$E_{it}/P_{it-1} * TTD$	(+)	0.0743	4.8120
		2.0220	0.0000***
$SIZE_{MVE}$	None	0.0264	2.2620
		0.0669	0.0239**
LE	None	0.0051	1.3678
		0.0360	0.1717

Table 4.5 Multiple Regression Results (Cont.)

Variables	Expected Sign	Coefficients (Standardized Coefficients)	t-statistic P-value
AGE	None	0.0011 0.0137	0.5140 0.6074
BIG4	None	-0.0227 -0.0181	-0.6350 0.5256
Y10 _{i,t}	None	-0.1084 -0.0820	-2.7038 0.0070**
Y11 _{i,t}	None	-0.5215 -0.3931	-13.0489 0.000***
F-Value	27.557		
P-Value	0.000***		
R ²	.314		
Adjust R ²	0.302		

Remark: four decimal place

** Correlation is significant at the 0.05 level (2-tailed).

*** Correlation is significant at the 0.01 level (2-tailed).

Table 4.7: From Multiple Regression Results, it was found that it was dual company chairman and CEO ($E_{it}/P_{it-1} * CED_{DU}$). Jensen (1993) found that CEO who acted as a chairman influential in the company board has tendency towards lack of freedom between execution and management. The research studied also signified that in case CEO and chairman are same, corporate governance mechanisms will be under power of CEO which impairs a checking system affecting the role of corporate governance in conformity to the agency theory of Jensen and Mekling (1976). And there is also a research backing up viewpoint of corporate agency problem highly, causing a negative effect to companies. Such research studies belonged to (Rechner, Dalton, 1991, Yermack, 1996, Brown, & Caylor, 2004). Their studies found a problem of

agency theory. Afterwards, it could be found that variable of shareholding of the institute ($E_{it}/P_{t-1} * INS_{OWN}$), shareholding of the family (25%) ($E_{it}/P_{it-1} * FAMILY_{OWN}$), transparency and disclosure score ($E_{it}/P_{it-1} * TTD$), the company size ($SIZE_{MVE}$) have not relative values in the same direction with variable of earnings informativeness. Beta coefficient γ equals to 0.1366, 0.1811, 0.1186, 2.0220, 0.0669 respectively; and it is at statistical significance on confidence level of 99% or ($\alpha = 0.01$)*** that can explain and forecast the variables. From table 4.7 the analytical results can also forecast the variables; and it is found that earnings price per share (E_{it}/P_{it-1}), board size ($E_{it}/P_{it-1} * BRDSIZE$), board meeting ($E_{it}/P_{it-1} * BRDMEET$), share ownership of foreigners ($E_{it}/P_{it-1} * FOEIGN_{OWN}$), $Y10_{i,t}$, $Y11_{i,t}$; One if firm. I is in year 2010, 2011, and Zero otherwise are of relative values in otherwise direction with variable of earnings informativeness. Beta coefficient γ equals to -1.9949, -0.1347, -0.0965, -0.377, respectively that are at statistical significance on confidence level of 99% ($\alpha = 0.01$)*** and 95% ($\alpha = 0.05$)**. This is summarized that model 3 can explain all variables on basis of R^2 0.314 or 31.40% and Sig value equals 0.000.***

From the operating table of OLS, ROBUST of equation 1, equation 2, and equation 3 where the equations significantly have P-value or sig value at the confidence level of 95% ($\alpha = 0.05$)**. The observation is that equation 1 and equation 2 have the variables with coefficient from the OLS and ROBUST analysis. Variables of compensation for Board of Directors (CBOD) should be especially considered. It has the opposite relation, that is, Beta is negative, meaning the compensation for board of directors is reduced, causing earnings persistence and profit per share are significantly increased that does not conform to the hypothesis .

H1e Presence of a significantly positive relationship between the **Executive Compensation** and earnings quality measured by earnings persistence. The coefficient of CBOD variable is negative may be caused by several reasons. Researcher herein means the cessation of compensation of some firms (pay as cash), or pay as non-cash or means the payment as common stock or stock option (herein, writing as the research limitation at the end of chapter 5). This section has foreign literature (Mc Guire et al., 2003, Srinivasan, Sayrak, Nagarajan, 2004, & Chalevas, 2011) that collect total executive compensation in form of cash and stock option and may be the observation that in Thailand, large firms turn to pay the compensation to the employees in form of option more.

However, there is another observation that business size is a controller that has an effect on equation 1 and equation 2. It is important since the result conforms to the hypothesis and literature. (Ferreira, Laux, 2007, Collins, & Kothari, 1989), large firms tend to involve to the information of investors who consider the firms that are more secure and have more efficient governance mechanisms by increasing the investment in the firms with sufficient disclosure, 1 has control variable with β - coefficient calculation. Firm size variable: $SIZE_{MVE}$, the relation is positive when β increases, causing Earnings Persistence (EAR_PER) increases that shows business size is more persistent with the relation to overall image of firm size in the same direction at the confidence level of 95% ($\alpha = 0.05$)** when, showing that Signifitnit.

Researcher also finds the robust method in Model 3 that causes the variable of corporate governance mechanisms conform to previous literature (Velury, Jenkins, 2006, Fernando, Gatchev, & Spindt, 2012). For the variable of Ownership Structure

and Shareholding, i.e. variables of Institutional Ownership ($E_{it}/P_{it-1} * INS_{OW}$) Family Ownership (25%) ($E_{it}/P_{it-1} * FAMILY_{OWN}$) with supporting literature (Wu and Chrisman, 2007), for Transparency and Disclosure ($E_{it}/P_{it-1} * TTD$) (Fama and Jensen, 1983, Cheng, Courtenay, 2006, & Yu, 2010). conforms to the agency theory of Jensen and Mekling (1976). There are some researches that support the concept of business agency problem that conform to the hypothesis **H2g**, **H2h**, **H2i** by (Rechner and Dalton, 1991, Yermack, 1996, Brown, & Caylor, 2004) that has the same direction as variable of Earnings Informativeness, coefficient γ equals to .02460, .5658, .0320, respectively and statistical significantly has confidence level of 95% can describe and forecast the variables from Table 4.3

Hypothesis 4: There is an association between corporate governance mechanisms and earnings informativeness through the earnings persistence of a firm. From Chapter 2, we can measure the variable that transmits the persistence as follows.

Consideration of indirect effect data H4: CGM is associated with EAR_PER and influences EAR_INF by considering the control system of internal organization that reflects corporate overall operation. This effect will improve the value of an organization in the context of principal forward-looking performance.

However, measurement method with Standardized Coefficients in the equation 2 that is corporate agency, considering the variable multiplied by each independent variable.

Corporate governance mechanisms are an indirect measurement of hypothesis 4 with related literature such as Ismail (2012).

4.4.1 Hypotheses and Test of Significance

Statistical Test by means of Multiple Regression Analysis

The purposes of this study are:

1. To investigate the effects of Corporate Governance Mechanisms, i.e. internal Corporate Governance; Board Structure, Ownership Structure and Shareholding, Executive Compensation, Transparency and Disclosure on Earnings Persistence of the firm.
2. To investigate the effects of Corporate Governance Mechanisms i.e. on the Earnings informativeness of the firm.
3. To investigate the effects of Earnings Persistence on firms' Earnings informativeness data.
4. To investigate whether Corporate Governance Mechanisms with direct influences on Earnings Persistence have any indirect effects on the Earnings informativeness of the firm.

Examination of hypothesis according to the topic in Equation 1 by testing the Corporate Governance Mechanisms related to Earnings Persistence through testing equation HO 1. The objective is to determine the relationship between Corporate Governance Mechanisms and Earnings Quality measured by Earnings Persistence with the details of testing sub-hypotheses H1a, H1b, H1c, H1d, H1e, H1f, H1g, H1h, H1i, H1j. Such test is aimed at answering the first objective. The consideration of increased Earnings Persistence affects the control of Corporate Governance Mechanisms with the test as follows.

Hypothesis 1: Firms that have internal Corporate Governance Mechanisms are expected to have higher on Earnings Persistence.

Table 4.6 Model 1 summarizes the hypothesis that is performed OLS

Hypothesis	Description	OLS
		P-value
H1a	There is a significantly positive relationship between the Board Size and the earnings quality measured by Earnings Persistence.	0.2711
H1b	There is a significantly positive relationship between the Board Meetings and earnings quality measured by Earnings Persistence.	0.0683
H1c	There is a significantly positive relationship between the Audit Committee and the earnings quality measured by Earnings Persistence.	0.1564
H1d	There is a significantly positive relationship between the CEO Duality and earnings quality measured by Earnings Persistence.	0.2896
H1e	There is a significantly positive relationship between the Executive Compensation and earnings quality measured by Earnings Persistence.	0.0101**
H1f	There is a significantly positive relationship between the Block Holding 5% and earnings quality measured by Earnings Persistence.	0.7852
H1g	There is a significantly positive relationship between the Institutional Ownership and earnings quality measured by Earnings Persistence.	0.0171

Table 4.6 Model 1 summarizes the hypothesis that is performed OLS (Cont.)

Hypothesis	Description	OLS
		P-value
H1h	There is a significantly positive relationship between the Foreign Ownership and earnings quality measured by Earnings Persistence.	0.0251**
H1i	There is a significantly positive relationship between the Family Ownership and earnings quality measured by Earnings Persistence.	0.2382
H1j	There is a significantly positive relationship between the Transparency and Disclosure and earnings quality measured by Earnings Persistence.	0.5065
SIZE _{MVE}	Firm Size; Natural logarithm of firm market value of equity	0.0000***
LE	Firm Leverage; Total long-term debt over total Asset	0.8692
AGE	Firm Age (years); Firm age is the number of years since the first trading date on SET.	0.9933
BIG 4	The large audit firm; Dummy variables: 1 if the auditor is a Big 4 auditor; 0 otherwise.	0.1247

To examine the relationship between Corporate Governance Mechanisms and Earnings Quality measured by Earnings Informativeness to test hypothesis 2 equation 3 with the details of testing sub- hypotheses H2a, H2b, H2c, H2d, H2e, H2f, H2g, H2h, H2i, H2j. The testing of such hypothesis is aimed at answering the objective no. 2. The consideration of controlling Corporate Governance Mechanisms affects the Earnings Informativeness with the test as follows.

Hypothesis 2: Firms that have internal Corporate Governance Mechanisms are expected to have higher on Earnings Informativeness.

Table 4.7 Model 3 summarizes the hypothesis that is performed OLS

Hypothesis	Description	OLS P-value
H2a	There is a significantly positive relationship between the Board Size and earnings quality as measured by Earnings Informativeness.	0.0572
H2b	There is a significantly positive relationship between the Board Meetings and earnings quality as measured by Earnings Informativeness.	0.000***
H2c	There is a significantly positive relationship between the Audit Committee and earnings quality measured by Earnings Informativeness.	0.4647
H2d	There is a significantly positive relationship between the CEO Duality and earnings quality measured by Earnings Informativeness.	0.0462**
H2e	Presence of a significantly positive relationship between the Executive Compensation and earnings quality measured by Earnings Informativeness.	0.2075
H2f	There is a significantly positive relationship between the Block Holding and earnings quality measured by Earnings Informativeness.	0.7567

Table 4.7 Model 3 summarizes the hypothesis that is performed OLS (Cont.)

Hypothesis	Description	OLS P-value
H2g	There is a significantly positive relationship between the Institutional Ownership and earnings quality measured by earnings informativeness.	0.000***
H2h	There is a significantly positive relationship between the Foreign Ownership and earnings quality measured by Earnings Informativeness.	0.0134**
H2i	There is a significantly positive relationship between the Family Ownership and earnings quality measured by Earnings Informativeness.	0.0308**
H2j	There is a significantly positive relationship between the Transparency and Disclosure and earnings quality measured by Earnings Informativeness.	0.000***
SIZE_{MVE}	Firm Size; Natural logarithm of firm market value of equity	0.0239**
LE	Firm Leverage; Total long-term debt over total Asset	0.1717
BIG 4	The large audit firm; Dummy variables: 1 if the auditor is a Big 4 auditor; 0 otherwise.	0.5256
AGE	Firm age is the number of years since the first trading date on SET.	0.6074
H3a	There is a significantly positive relationship between the Earnings Persistence with direct influences on Earnings Informativeness with the firm.	0.194

** . Correlation is significant at the 0.05 level (2-tailed).

*** . Correlation is significant at the 0.01 level (2-tailed).

From **Table 4.8** the researcher wants to answer the hypothesis 4 by considering variables multiplied together or called **Interaction effects**. This means that the simultaneous appearance of 2 groups of independent variables will affect the differences

of dependent variable equations. Two types can be divided Hair (2010). Ordinal Interaction and Disordinal Interaction.

From equation 3, there are variables sig and the characteristics of variables can be explained as follows.

Calculating and displaying the results of matching variables in the group-oriented manner. In this place, the axis Y is the average of dependent variable Earnings Informativeness and the axis X represents earnings per share (E_{it}/P_{it-1}). The graph shows the averages displaying variable type Disordinal Interaction with difference of graph picture.

Characteristic of crossing lines. The variables sig are described in order as follows: Variables Board Size (BRDSIZE), CEO Duality (CEO_{DU}), Institutional Ownership (INS_{OWN}), Family Ownership (25%), Transparency and Disclosure (TTD). The variables with values less than the average X affect Earnings Informativeness more. The averages of variables are 0.0597, 0.0377, 0.1203, -0.0081, 0.0593. The group of earnings per share (E_{it}/P_{it-1}) with low values affect both 2 groups of independents variables, affecting the dependent variables 0.0173, -0.0209, 0.0615, 0.0150, respectively.

The graph shows that the averages display variable type Ordinal Interaction with the difference of graph. The characteristic of parallel lines with the variable sig is described as follows: variable Foreign Ownership ($FOEIGN_{OWN}$). The variables with values less than the average X affect Earnings Informativeness more, the average of this variable .0429. Earnings per share (E_{it}/P_{it-1}) with low values affect both groups of independent variables, affecting the dependent variables 0.0148. (Appendix E, Figure

4.1 Average of (BRDSIZE), Figure 4.2 Average of (CEO_{DU}), Figure 4.3 Average of (INS_{OWN}), Figure 4.4 Average of (FOEIGN_{OWN}), Figure 4.5 Average of (FAMILY_{OWN}), Figure 4.6 Average of (TTD))



Table 4.8 The Association between Corporate Governance Mechanisms and Earnings Informativeness Through Earnings Persistence

Model : Multiple Regression of	Table	Variable		(Standardized Coefficients)	t-statistic p-value
<u>Mediating Variable</u>					
Earnings Informativeness effect on Earnings Persistence	4.8	$\left(\frac{E_{it}}{P_{it-1}}\right) * EAR_PER$	δ_2	-0.0448	-4.4475 0.000**
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	BRDSIZE	γ_2	0.3104	2.5544 0.0572
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	BRDSIZE	β_1	-0.0378	-0.1011 0.2711
The product of simple correlation			$\beta_1 * \delta_2$	0.0016	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	BRDMEET	γ_3	-0.1347	-1.9042 0.000***
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	BRDMEET	β_2	-0.0587	-1.8251 0.0683
The product of simple correlation			$\beta_2 * \delta_2$	0.0026	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	AUDIT _{COM}	γ_4	-0.0774	-0.7313 0.4647

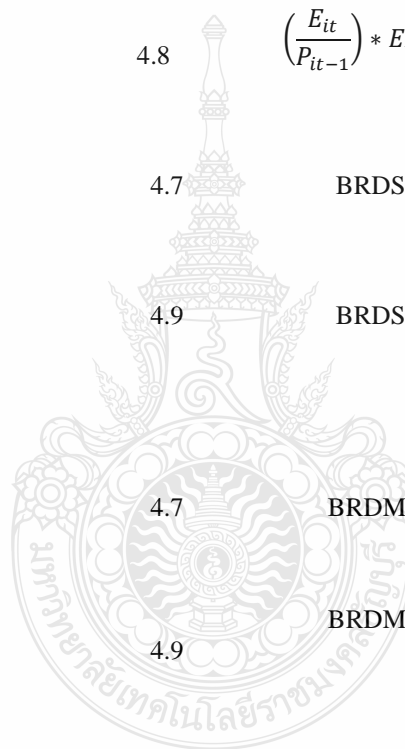


Table 4.8 The Association between Corporate Governance Mechanisms and Earnings Informativeness Through Earnings Persistence (Cont.)

Model : Multiple Regression of	Table	Variable		(Standardized Coefficients)	t-statistic p-value
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	AUDIT _{COM}	β_3	-0.0470	-1.4184 0.1564
The product of simple correlation			$\beta_3 * \delta_2$	0.0021	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	CEO _{DU}	γ_5	0.1366	1.9962
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	CEO _{DU}	β_4	-0.0336	-1.0595 0.2896
The product of simple correlation			$\beta_4 * \delta_2$	0.0015	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	BLOCK _{HD}	γ_6	-0.0333	-0.3099 0.7567
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	BLOCK _{HD}	β_5	0.0109	0.2726 0.7852
The product of simple correlation			$\beta_5 * \delta_2$	-0.0004	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	CBOD	γ_7	-0.0433	-1.2612 0.2075

Table 4.8 The Association Between Corporate Governance Mechanisms and Earnings Informativeness Through Earnings Persistence (Cont.)

Model : Multiple Regression of	Table	Variable		(Standardized Coefficients)	t-statistic p-value
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	CBOD	β_6	-0.0877	-2.5759 0.0101**
The product of simple correlation			$\beta_6 * \delta_2$	0.0039	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	INS _{OWN}	γ_8	0.1811	3.5391 0.000***
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	INS _{OWN}	β_7	0.1208	2.3877 0.0171
The product of simple correlation			$\beta_7 * \delta_2$	-0.0054	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	FOREIGN _{OWN}	γ_9	-0.0965	-2.4764 0.0134**
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	FOREIGN _{OWN}	β_8	-0.0822	-2.2436 0.0251
The product of simple correlation			$\beta_8 * \delta_2$	0.0036	

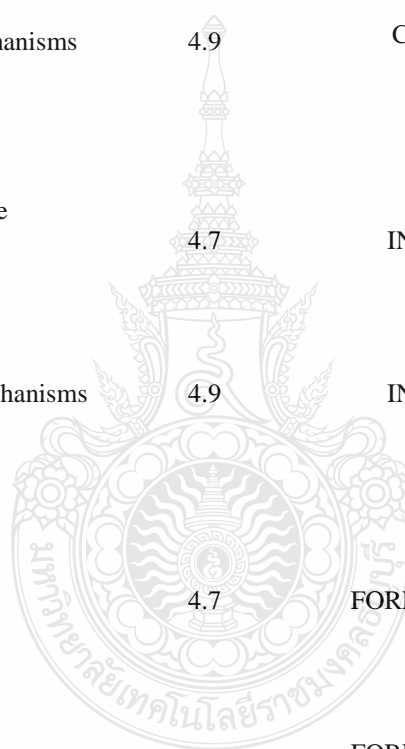


Table 4.8 The Association between Corporate Governance Mechanisms and Earnings Informativeness Through Earnings Persistence (Cont.)

Model : Multiple Regression of	Table	Variable		(Standardized Coefficients)	t-statistic p-value
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	FAMILY _{OWN}	γ_{10}	0.1186	2.1622 0.0308**
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	FAMILY _{OWN}	β_9	-0.0448	-1.1803 0.2382
The product of simple correlation			$\beta_9 * \delta_2$	0.0020	
<u>Direct Effects</u>					
Earnings Informativeness effect on Corporate Governance Mechanisms	4.7	TTD	γ_{11}	2.0220	4.8120 0.000***
<u>Indirect Effects</u>					
Earnings Persistence effect on Corporate Governance Mechanisms	4.9	TTD	β_{10}	-0.0230	-0.6645 0.5065
The product of simple correlation			$\beta_{10} * \delta_2$	0.0010	

From Table 4.10, the results of multiplying the equations 1, 2 and 3 together to get the outcome of each CG variable through changing beta or coefficients values can be concluded as follows. Variables in the equation 2 $\left(\frac{E_{it}}{P_{it-1}}\right) * EAR_PER$ which represent the equation 2: The value of beta or Standardized Coefficients to be represented in company is -0.1448 and the P-value is equal to 0.0000 *** Direct effect of variable Corporate Governance Mechanisms on Earnings Informativeness. The variable BRDMEET has Standardized Coefficients γ_3 equal to -0.1347, t-statistic equal to -1.9042, p-value equal to 0.0000 **.

Direct effect of variable Corporate Governance Mechanisms on Earnings Informativeness The variable CEO Duality (CEODU) has Standardized Coefficients γ_5 equal to 0.1366, t-statistic value equal to 1.9962, p-value equal to 0.0462**

Indirect effect of variable Corporate Governance Mechanisms on Earnings Persistence The variable Compensation for Board of Directors (CBOD) has Standardized Coefficients β_6 equal to -0.0877, t-statistic equal to -2.5759, p-value equal to 0.0101.**

Direct effect of variable Corporate Governance Mechanisms on Earnings Informativeness The variable Institutional Ownership(INS_{OWN}) has Standardized Coefficients γ_8 equal to 0.1811, t-statistic value equal to 3.5391, p-value equal to 0.000.

Direct effect of variable Corporate Governance Mechanisms on Earnings Informativeness The variable Foreign Ownership ($FOREIGN_{OWN}$) has Standardized Coefficients equal to γ_9 0.0965, t-statistic value equal to -2.4764, p-value equal to 0.0134. **

Direct effect of variable Corporate Governance Mechanisms on Earnings

Informativeness The variable Family Ownership (25%) ($FAMILY_{OWN}$) has Standardized Coefficients γ_{10} equal to 0.1186, t-statistic value equal to 2.1622, p-value equal to 0.0308.*

Direct effect of variable Corporate Governance Mechanisms on Earnings

Informativeness The variable Transparency and Disclosure (TTD) has Standardized Coefficients equal to γ_{11} 2.0220, t-statistic value equal to 4.8120, p-value equal to 0.000.



CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

5.1 Conclusion

This research aimed to study the causal relationship between corporate governance mechanisms and earnings quality which were consisted of four major objectives:

- 1) To investigate the direct effect of corporate governance mechanisms on earnings persistence;
- 2) To explore the direct effect of corporate governance mechanisms on earnings informativeness;
- 3) To examine the direct effect of earnings persistence on earnings informativeness;
- 4) To determine whether corporate governance mechanisms had any indirect effect on earnings informativeness.

In this study, corporate governance was measured by board characteristics, ownership structure and shareholding, executive compensation, transparency and disclosure whereas earnings quality was determined by earning persistence and earning informativeness. The board structure consisted of size of the board, board's meeting, board chairman and CEO who was the same person, and audit committee. The ownership structure and shareholding included block holding (5%), institutional ownership, foreign ownership, and family ownership (25%). Executive compensation referred to compensation paid to the board of directors while transparency and

disclosure was the substantial material on the transparency and disclosure of information. The variable of earnings quality consisted of the stability of earnings (earnings persistence) as the mediating variable, by considering the fact that earnings quality would reflect earnings persistence in the manner of stable and persistent earnings.

This study was based on the financial statements of the listed companies on the Stock Exchange of Thailand during 2010-2012. The sample included 418 registered companies which operated business and submitted financial statements to the Stock Exchange of Thailand and must have the accounting period of 1 January to 31 December. The samples were companies from all industrial groups except the companies in financial and securities businesses as well as banking and insurance businesses since these industrial groups have distinctive asset and liability that differ from other industries. Moreover, the companies under rehabilitation or under constructing process and companies with incompleting information were also excluded from this study. The data were analyzed by means of Multiple Linear Regression at the statistical significant level of 0.05.

Financial statements should provide information useful for business decision making. The purpose which is at the heart of financial reporting system is the accrual accounting which changes or adjusts recognition of cash flow so that the adjusted figures such as earnings persistence can better measure the company performance. Thus, earnings quality is important for enhancing utilization of information in the financial statements.

This research dealt with questions that examined the roles of corporate governance mechanisms affecting accounting for earnings quality. The research questions and the results are as follows.

RQ 1: Are there any direct effects of corporate governance mechanisms on earnings persistence of the firms?

RQ 2: Are there any direct effects of corporate governance mechanisms on accounting data measured by earnings informativeness of the firms?

RQ 3: Are there any direct effects of earnings persistence on accounting data measured by earnings informativeness of the firms?

RQ 4: Do corporate governance mechanisms with direct influences on earnings persistence have any indirect effects on accounting data measured by the earnings informativeness of the firms?

According to the data analysis, mean, median, and standard deviation of earnings persistence equal to 0.0828, 0.0605, and 0.5586 respectively. And for mean of earning informativeness equals to 0.3338; and median and standard deviation are to 0.2063 and 0.6245 respectively. The summary of findings were presented in Table 5.1: the effect of corporate governance mechanisms on earnings quality.

Table 5.1 Summary of the effect of corporate governance mechanisms on earnings quality

Variable of CG	P-value	Standardized Coefficients	R Square
Model Specification 1			4.6%
Board Structure:			
No variable has significant			
Executive Compensation:			
CBOD	0.0101**	-0.0877	
Ownership Structure and Shareholding:			
INS _{OWN}	0.0171**	0.1208	
FOREIGN _{OWN}	0.0251**	-0.0822	
Transparency and Disclosure:			
TTD : No variable has significant			
Control Variables:			
SIZE _{MVE}	0.0000**	0.1762	
Model Specification 2			26.84%
E_{it}/P_{it-1}	0.0000**	0.4008	
$E_{it}/P_{it-1} * EAR_PER$	0.0000**	-0.1448	
Model Specification 3			31.40%
E_{it}/P_{it-1}	0.0000**	-1.9949	
Board Structure:			
$E_{it}/P_{it-1} * BRDSIZE$	0.1110**	0.3104	
$E_{it}/P_{it-1} * CEO_{DU}$	0.0462**	0.1366	
Ownership Structure and Shareholding:			
$E_{it}/P_{it-1} * INSOWN$	0.0000**	0.1811	
$E_{it}/P_{it-1} * FOREIGN_{OWN}$	0.0134**	-0.0965	
$E_{it}/P_{it-1} * FAMILY_{OWN}$	0.0308**	0.1186	
Transparency and Disclosure:			
$E_{it}/P_{it-1} * TTD$	0.0000**	2.0220	
SIZE _{MVE}	0.0239**	0.0669	

** indicates significant at the 0.05 level

*** indicates significant correlation at the 0.10 level.

In relation to the research question 1, it was found that corporate governance mechanisms in the Stock Exchange of Thailand directly affected earnings persistence in terms of executive compensation and ownership structure and shareholding. It indicated a significantly negative relationship between executive compensation and earnings quality measured by earnings persistence. The executive compensation with the coefficient β (-0.0877) or -8.7% had direct effect to earnings persistence with negative relationship. According to the interpretation of the results, when the executive compensation decreased, earnings persistence (EAR_PER) would increase. The direction of beta value yielded contrasting effect with the hypothesis. That is, paying less compensation increased earnings persistence. The findings also indicated that paying executive compensation in the monetary form decreased. However, other features of compensation were paid to executives, such as granting rights to executives to purchase common shares (Stock Options) or rights to hold common stocks. The findings also indicated that foreign ownership had a significantly negative relationship to earnings quality as measured by earnings persistence. The foreign ownership (β coefficient -0.0822 or -8.22%) had direct effect to earnings persistence (EAR_PER) with negative relationship. The interpretation of the results was that when the foreign ownership structure decreased, the earnings persistence would increase. This result corresponded to the research conducted by (Chihuang, Lin, Cheng & Shiu, 2003; Ghon, Rhee, Jianxin, & Wang, 2009; Anil & Mishra, 2013) who found that foreign ownership had the negative impact on liquidity of earnings persistence.

Additionally, the findings specified that institutional ownership had a positive relationship to earnings persistence. The institutional ownership (INS_{OWN}) with β

coefficient of 0.1208 or 12.08% had direct positive effect to earnings persistence. The interpretation of the results was that when the institutional ownership structure increased, the earnings persistence would increase. This was consistent with the literature on institutional ownership conducted by Xu and Wang (1999), Rasiah (2003), Uma, Velury, David & Jenkins (2006), Fernando, Gatchev & Spindt (2012).

This study introduced company size ($SIZE_{MVE}$) measured by the market value of equity as the control variable. The finding pointed out that company size had a positive correlation to earnings persistence. Larger firms have greater earnings persistence. This demonstrated that overall earnings persistence would increase as a consequence if the company size increases. It can be concluded that the executives would probably need to consider the business size associated with the market value at that time and the number of shares affecting the company's growth with relation to total returns that reflect the share price.

According to the research question 2, it was found that corporate governance mechanisms in terms of board structure, ownership structure and shareholding as well as transparency and disclosure had direct effect on earnings informativeness. The board structure was measured by board size and board meetings ($E_{it}/P_{it-1} * BRDMEET$). The findings indicated that board meetings had negative relation to earning informativeness with the γ coefficient of -0.1347 or -13.47%. When the number of board meetings reduced, the total return would increase. The result was consistent with Hashim and Rahman (2010) who revealed an inverse correlation with duration of the board meetings related to corporate governance and financial statements through data collection. This variable was measured in terms of the number of meetings held

annually by the board. On the contrary, Vafeas (1999) found that if the number of board meetings increased, the company's operating performance would improve. This suggested that meeting frequency was one important issue for board effectiveness. The board with frequent meetings should be able to allocate more time to different issues such as quality of financial statements. Additionally, it was found that board chairman and CEO being the same person ($E_{it}/P_{it-1} * CEO_{DU}$) had positive effect on earnings informativeness and yielded the γ coefficient of 0.1366 or 13.66%. This showed that corporate governance management followed the strategic policy. That is, if the two positions were the same person, the decision power would be centralized to the same person and independent directors would decrease. This results in lack of sufficiently effective check which affects the business performance. The positive relationship indicated the merger on management with ownership structure.

According to ownership structure and shareholding, it was found that institutional ownership ($E_{it}/P_{it-1} * INS_{OWN}$) had positive relationship in line with the earnings informativeness with the γ coefficient equal to 0.1811 or 18.11%. This finding of a positive correlation was consistent with the agency theory. It was also found that the variable referring to foreign ownership ($E_{it}/P_{it-1} * FOREIGN_{OWN}$) yielded a correlation in the opposite direction to earnings informativeness with the γ coefficient was equal to -0.0965 or -9.65%. In relation to the family ownership (25%) ($E_{it}/P_{it-1} * FAMILY_{OWN}$), the relationship was in the same direction to the earnings informativeness. The coefficient γ was equal to 0.1186 or 11.86%. The result was consistent to the agency theory. Concentrated ownership structure that was characterized by a few major shareholders concentrated and entitled to vote for business control. That is, if family

ownership increased, total returns would increase. This was in line with the explanation of the agency theory. Moreover, it was found that the transparency and information disclosure ($E_{it}/P_{it-1} * TTD$) were correlated in the same direction with earnings informativeness. The γ coefficient was equal to 2.022 or 202.2%. The finding was consistent with the agency theory stating that enough transparency and information disclosure lead to increase in total returns.

According to the research question 3, the results indicated that earnings persistence had negatively correlated with the earnings informativeness or stock returns. The coefficient β was equal to -0.1448 or -14.48%. Ayres (1994) mentioned about factors affecting earnings quality and pointed out that executives should make decision on selecting accounting policy affecting earnings of their business that reduced value per share. The principles of accounting point out that the analysis of income statement should focus on financial structure and liquidity.

Along with research question 4 the determination of the indirect effect of corporate governance mechanisms on earnings informativeness through earnings persistence, it was found that corporate governance mechanisms had an effect on earnings informativeness through earnings persistence at statistically significant level of 0.05. The results of the hypothesis testing were summarized as shown in table 5.2.

Table 5.2 Summary of hypothesis testing

Hypothesis No.	Variable	Expected Sign	Results	Level of Significant
H1a	BRDSIZE	+	Not Supported	-
H1b	BRDMEET	+	Not Supported	-
H1c	AUDIT _{COM}	+	Not Supported	-
H1d	CEO _{DU}	+	Not Supported	-
H1e	CBOD	+	Not Supported	**
H1f	BLOCK _{HD}	+	Supported	-
H1g	INS _{OWN}	+	Supported	-
H1h	FOREIGN _{OWN}	+	Not Supported	-
H1i	FAMILY _{OWN}	+	Not Supported	-
H1j	TTD	+	Not Supported	-
H2a	$E_{it}/P_{it-1} * BRDSIZE$	+	Supported	-
H2b	$E_{it}/P_{it-1} * BRDMEET$	+	Not Supported	***
H2c	$E_{it}/P_{it-1} * AUDIT_{COM}$	+	Not Supported	-
H2d	$E_{it}/P_{it-1} * CEO_{DU}$	+	Supported	***
H2e	$E_{it}/P_{it-1} * BLOCK_{HD}$	+	Not Supported	-
H2f	$E_{it}/P_{it-1} * CBOD$	+	Not Supported	-
H2g	$E_{it}/P_{it-1} * INS_{OWN}$	+	Supported	***
H2h	$E_{it}/P_{it-1} * FOREIGN_{OWN}$	+	Not Supported	***
H2i	$E_{it}/P_{it-1} * FAMILY_{OWN}$	+	Supported	***
H2j	$E_{it}/P_{it-1} * TTD$	+	Supported	***
H3a	E_{it}/P_{it-1}	+	Supported	***
H3b	$E_{it}/P_{it-1} * EAR_PER$	+	Not Supported	***
H4	EAR_PER	-	?	-

*** indicates significant correlation at the 0.10 level.

** indicates significant correlation at the 0.05 level.

5.2 Discussion of the Findings

According to the research results, it was found that corporate governance mechanisms were control mechanisms for companies listed on the Stock Exchange of Thailand as found from direct analysis and indirect influences in the models. The research results showed that the equation 1 directly affected executive compensation, ownership structure, and shareholding with statistically significance.

It was found from Table 5.1 that the model in equation 3 had a significant relationship with corporate governance variables, which directly affected the dependent variable referring to earnings informativeness at a significance level of 0.314 or 31.40%. Also, the results reveal that the equation 3 directly affected board structure, ownership structure and shareholding as well as transparency and disclosure. The empirical research needs standards for financial reporting which can be assessed. Situations affecting the company are reflected in the company's total market value being shown in the share price. The share price reflects the payment of all dividends to shareholders in the future. According to the equation of Warfield, Wild and Wild (1995), the discussed empirical evidence showed that earnings were an optimal indicator of future cash flows.

An overview of research results showed that the hypothesis including the variable of corporate governance mechanisms (CGM) was related to compensation paid to executives (CBOD). These findings revealed that the companies with corporate governance paid less compensation to their executives. Paying compensation was related to the business's operating results, reflecting earnings with higher quality. Such findings are consistent with the studies of (Murphy, 1999; Conyon & Sadler, 2001; Chalevas, 2011) which mentioned about the sensitivity of the relationship of executive

compensation in the United States to the company's operating results. The three factors are involved and discussed as follows.

The researchers formed a hypothesis that may relate to equity ownership and right to purchase common shares (stock options) which grew very fast in the US. According to the findings, measuring executive compensation was different in each country. In Thailand, compensation may be paid differently. That is, payment is paid in monetary form rather than offering common shares of the companies with disclosure. However, this was applied to the companies with large capital only. Meeting of the board of directors (BRDMEET) had a significant relationship in the opposite direction to the total returns. The coefficient β was equal to -0.1347 or 13.47%. Based on the concept concluded from the board size, the decision capability of small-sized boards had an effect on the increase of total returns. Likewise, the board meeting (BRDMEET) was inversely associated with earnings persistence. If the number of board meetings increased, the company's performance would be better. On the other hand, if the operating results were not good, the frequency of meetings would decrease.

According to the agency theory, the concentrated ownership structure under the influence of shareholders with control power had both positive and negative effects. Ding, Zhang and Zhang (2007) conducted a study to investigate the relationship between ownership of shareholders with control power and earnings. It was found that the high ratio of ownership yielded a relationship in the opposite direction to earnings. This is because most shareholders owned their business due to institutional investors or family shareholders with concentrated ownership ratio and control power. Furthermore,

the foreign investors from the countries using an Anglo-American corporate governance system recognized shareholdings of institutional investors.

Earnings quality analysis contributes a warning signal which is an indicator that demonstrates changes. This reflects stock prices, financial status and company performance. Relationship of earnings at maximum or minimum level is caused by change in policy and accounting policy.

Key findings

1. Key findings were about the impact of the 4 variables of corporate governance mechanisms on earnings quality, which reflected the changes in stock price and earnings persistence.
2. Findings were also about the impact of board size on executive compensation, which affected earnings quality reflecting the stock price and earnings persistence.
3. Findings were also about the correlation of corporate governance mechanism variables with the company size and earnings quality reflecting the stock price and earnings persistence.
4. Findings were about the variable including earnings quality measured by earnings persistence transmitting the independent variables to earnings informativeness. This resulted in considering earnings through indirect outcomes essential to investors.
5. Findings were about the variable including earnings quality measured by earnings persistence with impact on stakeholders. This is utilized by the auditors especially who should consider earnings based on accounting transmitted on the marketing basis called earnings informativeness.

5.3 Contributions

Under the corporate governance policy defined in the Stock Exchange of Thailand; (1) direct stakeholders including the Securities and Exchange Commission, referring to the regulatory agency would obtain benefits from deployment of work results as a guideline for policy promotion on development of regulatory mechanisms and to make it become universal which fills the gaps of Thai financial and capital market development by applying the principles of governance mechanisms of ASEAN CG SCORECARD; (2) other stakeholders including listed companies, investors, employees, trading partners, customers, competitors, government sector and other organizations would also gain benefits.

However, the objective of this study focused on three major stakeholder groups that had impact on benefits to investors, benefits to organizations and benefits to regulatory agencies. All the three parts can answer questions which can be applied as a practice guideline as follows.

First Role in Accounting: Being an important source of data for the decision making of executives and investors, it can be stated that financial accounting data affects the operating results in economic terms. Data is very important and is used by the executives and investors to make decisions to invest in various projects, such as investment in ordinary shares, to increase the channel of common stock investment of the company. The consideration is based on indicators of accounting data in the past to forecast the alternative of investment from the research's equation with earnings informativeness. It directly affected movement of the company's share value. This concept supports a study by Bushman and Smith (2001) who discussed the use of

financial accounting data for corporate governance for executives to make investment decisions. According to the overall results, the hypothesis with corporate governance mechanisms (CGM) that had statistical significance correlated to executive compensation (CBOD) showed that the companies with corporate governance in terms of less compensation paid to executives were related to the operating results. It reflected higher earnings quality. These findings are consistent with research conducted by Murphy (1999) and Conyon & Sadler (2001) who pointed out the sensitivity of the relationship of executive compensation in the United States and the company performance related to the three factors mentioned. The researchers made a hypothesis that may relate to equity ownership and the right to purchase common stock (stock options) that grew very fast in the United States. The findings about measuring executive compensation differ from country to country.

Second Role: Monitoring internal audit of a company for corporate governance

The use of financial accounting data, accounting disclosure and transparency in quantitative or qualitative ways enhanced company transparency (Ho & Wong, 2001; Alia, Chen & Radhakrishnan, 2007; Mitchell, 2011; Refaee, Siam & Khatib, 2012). According to the agency theory, moral hazard arises from inequality of information between the executives and shareholders. Thus, access to data on a company's performance through variables affects earnings quality with earnings persistence to the total return reflecting the stock price from accounting data and performance measurement in the past. Accounting earnings are important data used by investors to make investment decisions. This is because accounting earnings are the figures reflecting such operating results, causing earnings persistence and depending on the

composition of earnings in the current year. Earnings in the current year consist of accruals and cash flow from operations. This research aimed to study the relationship between corporate governance mechanisms and the total return or earnings informativeness. If the investors have more concerns on earnings persistence, effectiveness of using net operating assets which reflects marketing basis of earning informativeness will increase. The research findings indicated that the variables including board meetings, CEO duality, institutional ownership, foreign ownership, family ownership, transparency and disclosure directly and significantly affected earnings informativeness.

Third Role: Use of accounting data for investment decisions making and seeking investment opportunities

Since executives had operating results of current stock price, the research findings indicated that the proportion of directors affected executive compensation. This could be a performance indicator of board size in the stock exchange through earnings quality. Board structure, results, board size (BRDSIZE), board meetings (BRDMEET) were inversely related to earnings informativeness. The conclusions can be drawn from board size that an ability to make a decision by small-sized board had positive impact on increased earnings informativeness. Likewise, board meetings (BRDMEET) were inversely associated with earnings persistence with the negative coefficient β , causing increased earnings informativeness (EAR_INF). As a result, the company's operating results could improve. This research investigated corporate governance mechanisms affecting earnings quality that reflected earnings from operations on the basis of transmitting earnings by earnings persistence to total returns

and explored the stock price from accounting data and performance measurement in the past to forecast the future in terms of cross sectional concept. The purpose was to study accounting earnings as important information used by investors to make investment decisions since accounting earnings are the figures reflecting the operating results. Earnings persistence depends on the composition of earnings in the current year because earnings in the current year consist of accruals and cash flow derived from operations. This research aimed to study the relationships between corporate governance mechanisms affecting total returns (earnings informativeness) through mediating variables, earnings persistence and to monitor whether earnings persistence declined or not. The earnings calculated according to accrual basis enabled the executives to use discretion to determine recognition of various items. Also, this study revealed the fact that investors in the Stock Exchange of Thailand focused on earnings in the current year to make investment decisions. That is, if investors take earnings persistence into account, the efficient use of net operating assets reflecting marketing basis of earnings informativeness will increase in accordance with turnover. The foregoing characteristics of quality, important earnings are interesting for academic terms and practice guidelines. The indications of Francis et al. (2004) showed seven ways to measure earnings quality based on characteristics of earnings that have been widely used. The accounting research explains special characteristics of earnings in seven respects consisting of "accounting-based" or "market-based", which depend on the major hypothesis of financial reporting. Observations influence the way that characteristics of earnings are measured. Earnings are based on accounting such as quality of accruals, persistence, ability to forecast, and steady growth. These

characteristics use cash or earnings (or other measurement methods derived from these characteristics such as accruals) as reference abstract variables. Also, they are evaluated by using accounting data (not market data). The characteristics based on market are associated with the value, timeliness and the quality of being conservative. The researcher raised these characteristics in research questions by using earnings persistence based on accounting and earnings informativeness based on the market. The perspectives of investors to measure the movement of the company's stock price from the academic approach are consistent with the agency theory. Examination of corporate governance mechanisms still plays an important role in financial statements in each aspect related to benefits of investors. Earnings items were checked for earnings persistence. The impact on forecasting the future cash flows of total accruals was checked through total earnings. For net operating assets of the company, the results show that earnings quality predicted cash flow at present in order to forecast future earnings per share. Such results could be explained by the fact that earnings persistence with accounting principles had significant value. In relation to the result analysis, it had a role in transmitting relationship between the ways to measure earnings quality from indicators. Besides, earnings persistence was a way to measure earnings quality. Earnings from the main contributions of research hypotheses are beneficial to companies for making investment decisions and support benefits of investors and advantages of companies. This also benefits the regulatory agencies that take demands of investors and companies to adjust policy structure to comply with international governance standards according to evaluation results of ASEAN CG SCORECARD (<http://capital.sec.or.th>).

5.4 Limitations of the Study

1. According to the foreign literature, collecting data on variables of corporate governance mechanisms was difficult. The measurement method was different in each country, so it was fairly difficult to gather some data which cannot be collected.

2. Measuring payment of executive compensation was possible for payment in monetary terms only. Data about paying executive compensation as rights to buy ordinary shares of the company (Employee Stock Option Plan: ESOP) could not be collected. This is because strategic payment of compensation as stocks is established only in large companies where the executives manage large-scale work and where company performance is high.

3. Collecting data with the exception of financial groups in the Stock Exchange of Thailand is limited because earnings data gathered in different periods could not be combined.

5.5 Recommendations

Measuring operations of the public companies in The Stock Exchange of Thailand by the variable mechanism of corporate governance has been the focused issue among ASEAN countries. Thailand is the committee that initiated the practice and established the principles. This research studied the internal effects of corporate governance which control the operations in the capital market of Thailand from the effects of earning informativeness and earnings quality. This information showed the financial statement which is attributed to the economy from different variables, such as accounting data, investment opportunities, reduction of inequity of data, information

asymmetry from the results affecting the stakeholders from the direct stakeholders , which referred to the Securities and Exchange Commission affecting the business policy, other stakeholders such as registered companies, investors, employees, business partners, customers, government sector, and other organizations. The suggestions on relations about stakeholders that responded to the research framework could be summarized as follows. The stakeholders in the Securities and Exchange Commission should adjust control of each aspect. Corporate governance mechanisms in terms of board structure consisted of the variables to be considered as follows.

1. Regulatory Agencies

The company's board size is associated with compensation and earnings.

Restructuring the company's board to have the right size, i.e. not too big or too small; streamlining administration of work in each department. The regulatory policy of the Stock Exchange requires a minimum of 5-12 people.

Governance mechanism related to Executive Compensation.

Payment of executive compensation should be disclosed clearly, including paying in forms of numerical amount and the right or company shares. The reason is because of impact on earnings associated with earnings quality. The terms of stock exchange standards should be issued as clear regulations.

Governance mechanism related to Ownership Structure and Shareholding

The institutional investors holding shares are the proportion that needs attention due to being major investors with high marketing value.

1) For shareholding structure, the emphasis should be placed on Institutional Ownership. Major investors affect the company and the market. It is advisable to

disclose in accordance with reality in the company's report separate from the investment topic.

2) For percentage of shareholding by foreigners, these typical holders are mainly foreign institutions. The emphasis should be placed on shareholding typical of Foreign Ownership. The more or less extent of foreign investment may depend on the internal factors, including corporate governance mechanisms, practice guidelines by the rules of the Stock Exchange and other external factors that have not yet been studied by the researcher with impact on Earnings Informativeness.

Governance mechanism related to Transparency and Disclosure

Data should be clearly disclosed in the financial reports by analysis and taking into account measuring disclosure scoring fully both internally and externally.

The above is effective determination of a policy about balance of power on performance. Especially, it shows inspection of executives and benefits of the companies and stakeholders.

2. Organizations

Internal control management is executive's responsibility which enables the company to achieve objectives and ensures systematic and effective business operation. According to the results, executive compensations yielded a negative relationship with earnings persistence. As a result, registered companies should frame a policy to pay compensation to executives which relates to their performance so this can encourage effective performance. In terms of corporate governance mechanisms about ownership structure and shareholding, institutional ownership had a positive relationship with earnings informativeness. This reflected large shareholders' decisions. That is, it

affected investment of company's earnings. In addition, foreign ownership had a negative relationship with earnings informativeness. A majority of foreign ownership is held by investors who speculate on the company's profits. A control of company management affects earnings. Therefore, a company should disclose and provide information that supports quick decision making. Transparency and disclosure affects earnings informativeness. A positive relationship establishes reliability. It is recommended to provide sufficient disclosure as a resource for investors and to focus on financial reports.

3. Investors and other users of financial statements

The results show that corporate governance mechanisms in terms of a guideline under the Stock Exchange of Thailand had a positive relationship with earnings persistence. Furthermore, current earnings persistence reflected price per share and dividend. Therefore, investors and other users of financial statements can use variables of earnings informativeness with other factors or variables to assess company's performance for making decision about investment.

5.6 Future Research

1. For future studies, the equations to study can be used with financial groups, which affect operations, the movement with impact on overall returns. This will be useful for financial analysts.

2. The study on measuring the results of operations related to corporate governance mechanisms that affect earnings quality measured by other methods to reflect quality earnings and decision to use information appropriately.

3. For further studies, it is advisable to consider the levels of risk from major investments which impact on investment decisions and assessing the company's operating results.



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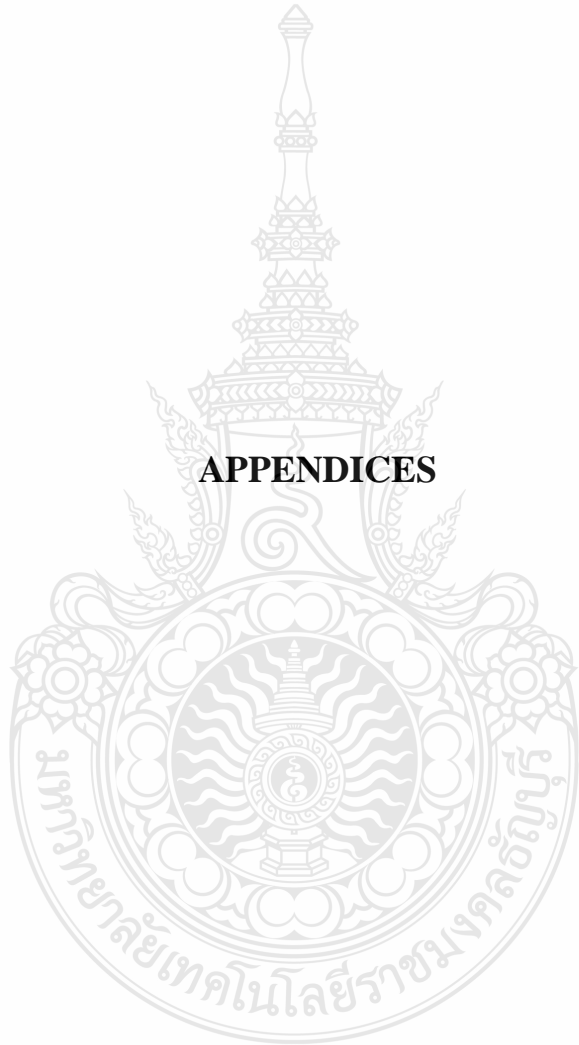
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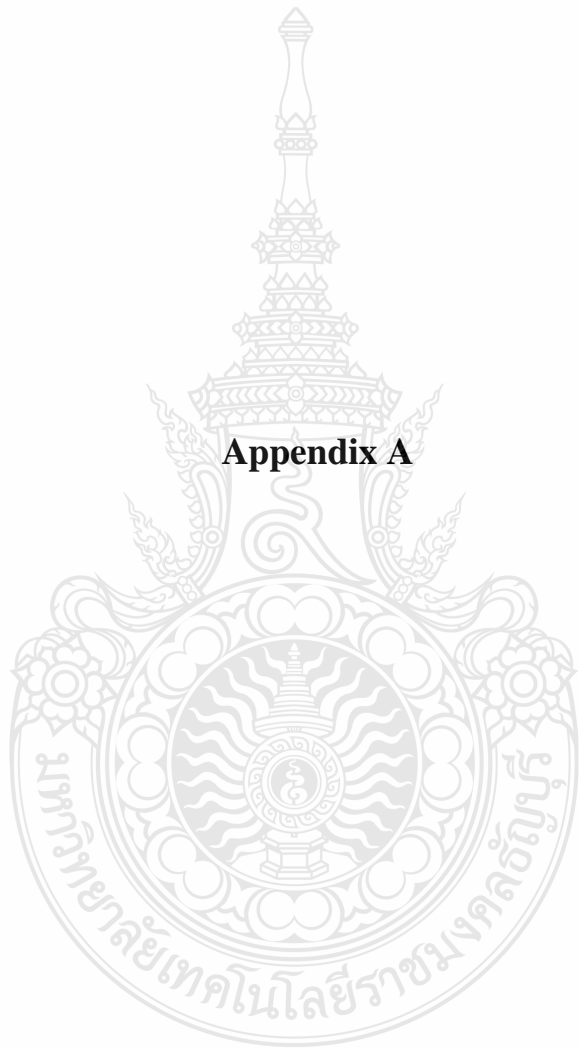
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APPENDICES





Appendix A

S&P's Transparency and Disclosure Scorings Methodology

S&P: T&D scorings are developed from analysis of the latest available annual reports, and assess the levels of transparency and disclosure of companies in emerging markets (Asia, Latin America, Central and Eastern Europe, and Africa) as well as developed markets (Europe, developed Asia, and the U.S.).

S&P: T&D is evaluated by searching company annual reports (both English and local language) for the 98 possible attributes broadly divided into the following three broad categories:

- Ownership structure and investor rights (28 attributes)
- Financial transparency and information disclosure (35 attributes)
- Board and management structure and process (35 attributes)

The S&P: T&D scorings will eventually cover about 1,500 companies from the S&P Global 1200 Index and an additional 300 leading companies in the S&P / IFCI emerging markets index. The S&P Global 1200 represents leading global companies and includes the S&P 500, 150 companies in Japan, and 350 companies in Europe. These 1,500 companies cover more than 40 markets and represent about 75% of the world's tradable market capitalization.

Categories in S&P : T&D Scoring System

Total Transparency and Disclosure

Three Categories of Transparency and Disclosure

1. Transparency and disclosure in ownership structure and investors rights.
2. Financial transparency and information disclosure.
3. Transparency and disclosure in board and management structure and process.

Twelve Subcategories of Transparency and Disclosure

1. Transparency of ownership
2. Concentration of ownership
3. Voting and shareholder meeting procedures
4. Business focus
5. Accounting policy review
6. Accounting policy detail
7. Related party structure and transactions
8. Information on auditors
9. Board structure and composition
10. Role of the board
11. Director training and compensation
12. Compensation & evaluation of executive

Criteria in S&P: T&D Scoring System (98 questions)

Ownership Structure and Investor Rights

Transparency of ownership

1. Provide a description of share classes?
2. Provide a review of shareholders by type?
3. Provide the number of issued and authorized ordinary shares?
4. Provide the number of authorized but non-issued ordinary shares?
5. Provide the par value of issued and authorized ordinary shares?
6. Provide the par value of authorized but non-issued ordinary shares?
7. Provide the number of issued and authorized preferred nonvoting and other classes?
8. Provide the number of authorized but non-issued shares of preferred, nonvoting, and other classes?
9. Provide the par value of issued and authorized of preferred, non-voting, and other classes?

10. Provide the par value of authorized but non-issued shares of preferred, non-voting, and other classes?
11. Does the company disclose the voting rights for each class of shares?

Concentration of ownership

12. Top 1 shareholder disclosed?
13. Top 3 shareholders disclosed?
14. Top 5 shareholders disclosed?
15. Top 10 shareholders disclosed?
16. Shareholders owning more than 10 percent are disclosed?
17. Shareholders owning more than 5 percent are disclosed?
18. Shareholders owning more than 3 percent are disclosed?
19. Does the company disclose percentage of cross-ownership?

Voting and shareholder meeting procedures

20. Is there a calendar of important shareholder dates?
21. Review of shareholder meetings (could be minutes)?
22. Describe procedure for proposals at shareholder meetings?
23. How shareholders convene an extraordinary general meeting?
24. How shareholders nominate directors to board?
25. Describe the process of putting inquiry to board?
26. Does the annual report refer to or publish Corporate Governance Charter?
27. Does the annual report refer to or publish Code of Best Practice?
28. Are the Articles of Association or Charter Articles of Incorporation Published?

Financial Transparency and Information Disclosure

Business focus

29. Is there a discussion of corporate strategy?
30. Report details of the kind of business it is in?
31. Does the company give an overview of trends in its industry?
32. Report details of the products or services produced /provided?

33. Provide a segment analysis, broken down by business line?
34. Does the company disclose its market share for any or all of its businesses?
35. Does the company report basic earnings forecast of any kind?
36. Does the company report basis earnings forecast of any kind in detail?
37. Disclose output in physical terms?
38. Does the company give an output forecast of any kind?
39. Does the company give characteristics of assets employed?
40. Does the company provide efficiency indicators (ROA, ROE, etc.)?
41. Does the company provide any industry-specific ratios?
42. Does the company disclose its plans for investment in the coming years?
43. Does the company disclose details of its investment plans in the coming years?

Accounting policy review

44. Provide financial information on a quarterly basis?
45. Does the company discuss its accounting policy?
46. Does the company disclose accounting standards it uses for its accounts?
47. Does the company provide accounts according to the local accounting standards?
48. Does the company provide accounts in alternate internationally recognized accounting method?
49. Does the company provide each of the balance sheets by internationally recognized methods?
50. Does the company provide each of the income statement by internationally recognized methods?
51. Does the company provide each of the cash flow statement by internationally recognized methods?
52. Does the company provide a reconciliation of its domestic accounts to internationally recognized methods?

Accounting policy details

- 53. Does the company disclose methods of asset valuation?
- 54. Does the company disclose information on method of fixed assets depreciation?
- 55. Does the company produce consolidated financial statements?

Related party structure and transactions

- 56. Provide a list of affiliates in which it holds a minority stake?
- 57. Does the company disclose the ownership structure of affiliates?
- 58. Is there a list/register of related party transactions?
- 59. Is there a list/register of group transactions?

Information on auditors

- 60. Does the company disclose the name of its auditing firm?
- 61. Does the company reproduce the auditors' report?
- 62. Disclose how much it pays in audit fees to the auditor?
- 63. Disclose any non-audit fees paid to auditor?

Board Structure and Process

Board structure and composition

- 64. Is there a chairman listed?
- 65. Detail about the chairman (other than name/title)?
- 66. Is there a list of board members (names)?
- 67. Are there details about directors (other than name/title)?
- 68. Details about current employment/position of directors provided?
- 69. Are details about previous employment/positions provided?
- 70. Disclose when each of the directors joined the board?
- 71. Classifies directors as an executive or an outside director?

Role of the Board

- 72. Details about role of the board of directors at the company?
- 73. Is there disclosed a list of matters reserved for the board?
- 74. Is there a list of board committees?
- 75. Review last board meeting (could be minutes)?

76. Is there an audit committee?
77. Disclosure of names on audit committee?
78. Is there a remuneration/compensation committee?
79. Names on remuneration/compensation committee)?
80. Is there a nomination committee?
81. Disclosure of names on nomination committee?
82. Other internal audit-functions besides audit committee?
83. Is there a strategy/investment/finance committee?

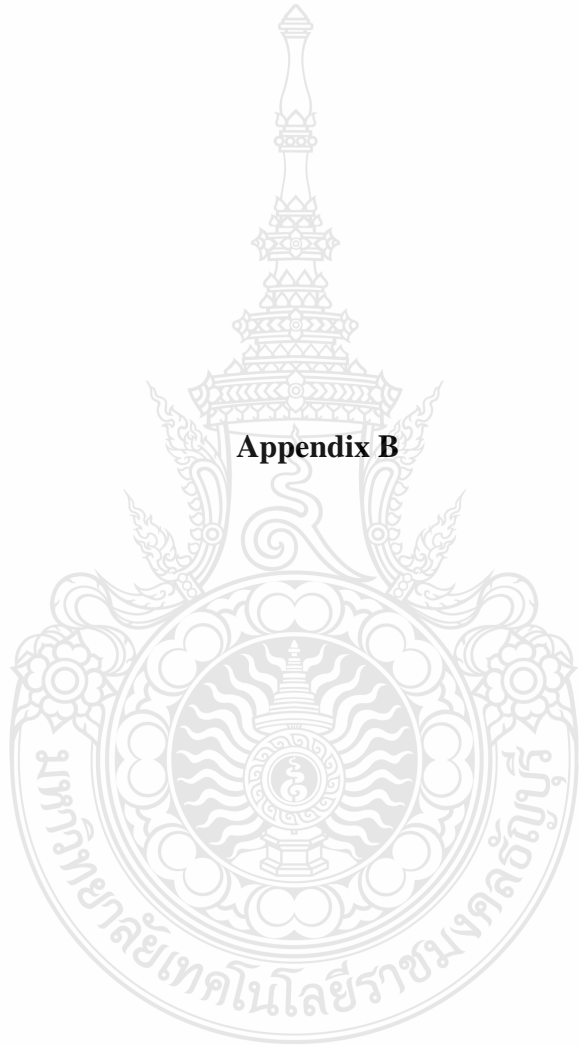
Director training and compensation

84. Disclose whether they provide director training?
85. Disclose the number of shares in the company held by directors?
86. Discuss decision-making process of directors' pay?
87. Are specifics of directors' salaries disclosed (numbers)?
88. Form of directors' salaries disclosed (Cash, shares, etc.)?
89. Specifics disclosed on performance-related pay for directors?

Executive compensation and evaluation

90. List of the senior managers (not on the board of directors)?
91. Backgrounds of senior managers disclosed?
92. Number of shares held by the senior managers disclosed?
93. Disclose the number of shares held in other affiliated companies by managers?
94. Discuss the decision-making of managers' (not board) pay?
95. Numbers of managers' (not on board) salaries disclosed?
96. Form of managers' (not on board) salaries disclosed?
97. Specifics disclosed on performance-related pay for managers?
98. Details of the CEO's contract disclosed?

Appendix B



Introduction

Good Corporate Governance is the internationally accepted principle that allows the organization to operate effectively and efficiently, and more importantly is transparent, reliable and fair to all parties. Therefore, it is the principle that has been respected by many organizations in the implementation to achieve their goals and mission that have been determined. What office of the securities and exchange Commission was established on 16 May 1992 and it is governed by the Securities and Exchange Act B.E. 2535 and is responsible for the supervision and development of the capital market in the country both the primary market and the secondary market, including personnel and institutions in the capital market for (1) the issuance and sale of securities to the public (2) the securities business and related business (3) Stock Exchange and the Stock Dealing Center (4) to hold securities for acquisition and (5) to prevent actions on unfair trading of securities.

In addition to the Securities and Exchange Act, there are also other laws that are related to the capital market and have the authority to control the actions which are the Provident Fund Act B.E. 2530, the Derivatives Act B.E.2546 Act, 2546 Act, the Trust for Transactions in Capital Market Act B.E 2550 and the Juristic Person for the Securitization Act B.E. 2540. During past operations, the office has focused on the principles of the application of good corporate governance into practice for the governing parties and in the organizations thoroughly (Reference; Publications, the Office of the Securities and Exchange Commission (2nd edition 2012)).

Background

(Khalil Mahmoud Al-Refaee, Ahmad Zakaria Siam, & Khalid Al Khatib, 2012). The importance of accounting information disclosure has increased after an increase in the economic and financial which accounting information is considered an important resource for decision-making. The attention of experts in the development of accounting and auditing standards, the collapse of financial institutions has led to an increase in the responsibility of the company's management due to the distortion of the facts in the report which the executives need to take responsible based on the basic assumptions, objectives, perceived financial information including in the future which have resulted in an increase in the perception of the executives on confidence, the importance of information in the future. Such information is based on the assumption of the events that may occur or may not occur in the future with the potential to the organization in terms of economic entity by the standard model of the predictions and the use of stakeholders' data. The disclosure of this information is considered the first responsibility of the executives and the auditor is held as an individual's confidence in the data.

1. Disclosure of financial information in the future.
2. Auditor's role in promoting the disclosure of financial information in the future.
3. Transparency in the disclosure of financial information in the future and the impact on corporate governance.

(Patel, S. A., Balic, A., & Bwakira, L. (2002). Measuring transparency and disclosure at firm-level in emerging markets. *Emerging Markets Review*, 3(4), 325-337.

. transparency and disclosure are parts of the corporate governance. The context of the score analysis of the transparency and disclosure (T&D score) in the new market in Asia and South Africa had been analyzed the difference between transparency and disclosure which was high when compared to emerging markets in the countries in Latin America, Eastern Europe and Middle East. The gap between emerging markets in Asia and South Africa has increased over the past three years.

Referring to the disclosures of information in foreign countries, it found that there is an alignment with the corporate governance in Thailand that the SEC stated in the regulations of the Organization for Economic Co-operation and Development (2004) (OECD) which was proposed to various countries in order to have the basic rules and regulations to strengthen corporate governance and Thailand has held to the OECD principles on corporate governance to be the key mechanism to create transparency and disclosure that the stakeholders have assigned to the committee to be management in order to maximize value to the shareholders. Firstly, the law and regulations related to the determination of the roles and responsibilities of the committee and significant penalties for shareholders' benefits.

Secondly, the law and regulations have defined that the company is required to disclose information to shareholders and other stakeholders to have been informed of the shareholders structure, committee and financial statements. Thirdly, the law and regulations have allowed a basic right to shareholders and stakeholders to comply with the Public Limited Companies Act B.E. 2535.

Key Characteristics of Standard & Poor's Transparency and Disclosure
Benchmark Objective

Standard & Poor's provides a range of corporate governance analyses and services, the crux of which is the Corporate Governance Score (CGS). CGSs are based on an assessment of the qualitative aspects of corporate governance practices of a company. T&D rankings provide an objective assessment that complements, but does not replace, the CGS in an overall corporate governance evaluation of an individual company.

Methodology for Standard & Poor's Transparency and Disclosure Rankings

T&D rankings are developed from analysis of the latest available annual reports, and assess the level of T&D of companies in emerging markets (Asia, Latin America, Central and Eastern Europe, and Africa) as well as developed markets (Europe, developed Asia, and the U.S.A.). T&D is evaluated by searching company annual reports (both English and local language) for the 98 possible attributes broadly divided into the following three broad categories:

- Ownership structure and investor rights (28 attributes)
- Financial transparency and information disclosure (35 attributes)
- Board and management structure and process (35 attributes)

Each question is evaluated on a binary basis to ensure objectivity, and rankings for the three broad categories and an overall ranking is developed from the answers to individual questions. The following are some examples of questions:

Ownership Structure and Investor Rights

Does the annual report contain?

- A description of the share classes?
- A review of shareholders by type?
- A description of the voting rights?

Financial Transparency and Information Disclosure

Does the annual report contain information on?

- The company's accounting policy?
- Consistency of company accounting with the international accounting standards (IAS or U.S. GAAP)?
- Efficiency indicators (return of assets, return on equity, etc.)?

Board and Management Structure and Process

Does the annual report contain?

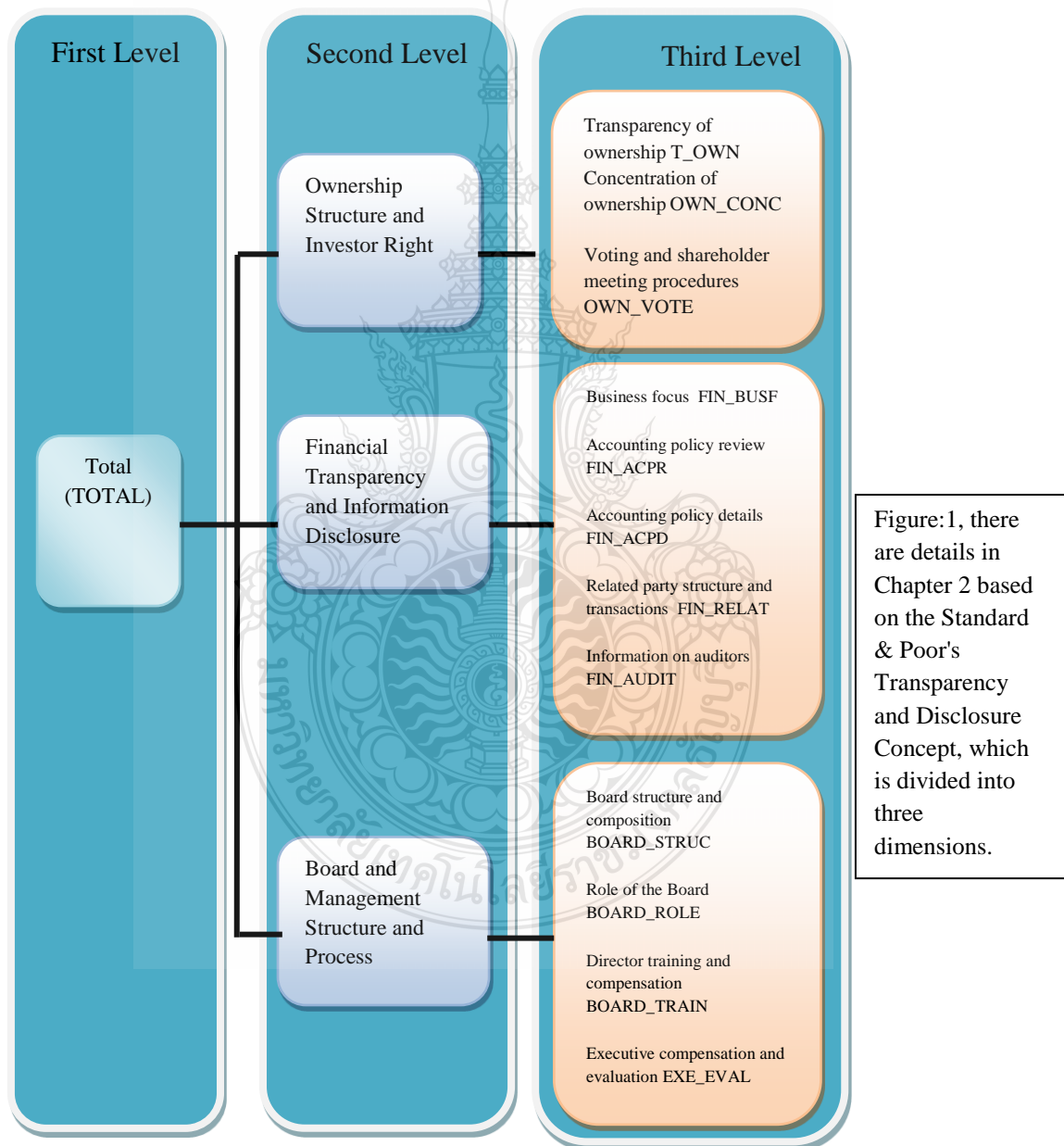
- A list of board members?
- A list of board committees?
- A list of audit committee members?
- Details of directors' remuneration and performance related pay?
- Related party transactions?

The Standard & Poor's T&D rankings will eventually cover about 1,500 companies from the S&P Global 1200 Index and an additional 300 leading companies in the S&P/IFCI emerging markets index. The S&P Global 1200 represents leading global companies and includes the S&P 500, 150 companies in Japan, and 350

companies in Europe. These 1,500 companies cover more than 40 markets and represent about 75% of the world's tradable market capitalization.

Framework for Consideration of the Transparency and Disclosure in 3 Dimensions.

Figure 1 Transparency and Disclosure Questions



Objectives for Questionnaire Verification (Checklist)

To verify the quality of the tool used in the research study, to create and develop the effective tool used in this study that can be used for data collection. The data will be analyzed to answer the research problems properly which it must have a systematic process to create and develop. After the construction of the tool, the data will be tested and analyze to determine the index that indicates the quality of each tool which is the process of "The verification of the quality of the tools used in research"

Validity

Definition of Validity.

Validity has a feature called "Measure What to Measure" which refers to the measuring tool for what you want to measure. Does not mean that if you want to measure this thing but you have got another instead. Validity is the consistency or suitability of the measurement result with the content or criteria or theory related to the features of the intended measure Sirichai Kanchanawasi, (2011: 73).

Validity is the quality of the tool that was created efficiently in forecasting the correlation of the tool that was created and the elements that you want to measure. Each tool has a specific purpose. Thus, the tool with the validity on one purpose is not necessarily accurate in all purposes Wainer and Braun,(1988: 20).

It concluded that the validity is defined as the quality of the tool used in the study that was created to measure the desired feature/behavior/content accurately, comprehensively, efficiently, accurately and truthfully.

Verification of the Quality of the Tool used in the Research Study .

To verify the reliability of the instruments used in the study, it was divided into two parts.

In this study, there was the Validity test and Reliability test as follows.

Part 1

1. Validity, the researcher has brought the questionnaire which was derived from the related literature and research studies to the advisors to consider and verify the accuracy of the contents (Content validity) and the appropriateness of the language used (Wording) and to be consistent with the objectives of the research study. To improve and determine the IOC: Index of Item - Objective Congruence before being asked to store the actual data.

To determine the IOC, the researcher has brought the questionnaire to be verified the validity of the contents by five experts. Then, determine the IOC using the formula of Rovinelli and Hambleton (Rovinelli and Hambleton, 1977: 49-60).

The formula as follows:

Formula

$$IOC = \frac{\sum R}{N}$$

IOC means IOC (Index of Item – Objective Congruence), R means the experts' opinions.

+1 means it is sure that the questions comply with the content.

0 means it is not sure that the questions comply with the content.

-1 means it is sure that the questions do not comply with the content.

N is the number of experts.

However, the researcher has chosen the questions with IOC over 0.5 from 5 experts which are as follows.

Table 1: List of experts and quality auditors of the tools used in the research study

	Name-Surname	Position
1.	Assoe. Prof. Nipan Henchokechaichanan	Lecturer at Sukhothai Thammathirat Open University
2.	Dr. Pailin Trongmateerut	Lecturer at Thammasat University
3.	Assoe. Prof. Dr. Kanibhatti Nitirojntanad	Lecturer at Chulalongkorn University
4.	Dr. Krisada Chianwatanasook	Lecturer at Rajamangala University of Technology Thanyaburi
5.	Assoe. Prof. Sookjit Na Nakorn	Lecturer at Ramkhamhaeng University

To be used as questions which have been verified that all the questions have been referred to the standard of transparency and the disclosure of corporate governance with the validity of the content, cover each aspect and cover the purposes of this research study which contains the reference literature for the use of related S&P research questions and research literature as follows.

Reference

- Ashiq Alia, Tai-Yuan Chenb, Suresh Radhakrishnan (2007),Corporate disclosures by family firms,Journal of Accounting and Economics 44 (2007) 238–286.
- Gerald Chua, Sidney J. Gray,(2010),Family ownership, board independence and voluntary disclosure:Evidence from Hong Kong, Journal of International Accounting, Auditing and Taxation 19 (2010) 93–109.

Transparency and Disclosure (2010),by Russian Companies 2010:Moderate Improvement in Transparency Led by Power Utilities Supported by RTS Stock Exchange.

Minna Yu (2010),Analyst forecast properties, analyst following and governance disclosures: A global perspective, Journal of International Accounting, Auditing and Taxation 19 (2010) 1–15.

Gul, F. A., & Leung, S. (2004). Board leadership, outside directors’ expertise and voluntary corporate disclosures. Journal of Accounting and Public Policy, 23, 351–379.

The criteria for determining the level of the IOC of the questions that were calculated from formulas will be valued between 0.00 and 1.00. The criteria is described as follows.

The IOC is 0.5 and above, it will be selected to be used. If the IOC is less than 0.5, it should be revised or eliminated by determining the verification form of the content validity of the test.

Table 2 For the Consideration of the Ratings and Symbols

Table 2.1

abbreviation /Symbols used to explain:	
√	Correlated
X	No correlated

Table 2.2

Description of abbreviation:
LAW, Relevant regulations/rules of the Stock Exchange of Thailand, (SET 100).
56-1, Annual Report
FS, financial statements refer to the financial position statement, statement of comprehensive income, statement of cash flows and notes to the financial statements
MD&A , the presentation of the quarterly financial statements , is it considered “voluntary” disclosure.
N/A (Penalty) refers to the proportion of questions that may or may not be used to disclose to adjust the level of the score that the company do not disclose information relevant to the transparency and disclosure of information which is useful to stakeholders.

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (1)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/ Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Ownership Structure and Investor Rights :											
Transparency of ownership	1. Provide a description of share classes?	√	√	√			√				
	2. Provide a review of shareholders by type?	√	√	√	√		√				
	3. Provide the number of issued and authorized but non-issued ordinary shares? (2questions)	√	√	√			√				
	4. Provide the par value of issued and authorized but non-issued ordinary shares? (2questions)	√	√	√	√		√				
	5. Provide the number of issued and authorized but non-issued shares of preferred, nonvoting, and other classes? (2 questions)					√		√			
	6. Provide the par value of issued and authorized but non-issued shares of preferred, non voting,and other classes? (2 questions)					√		√			
	7. Does the company disclose the voting rights for each class of shares?	√	√	√			√				

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (Cont.)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/ Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Ownership Structure and Investor Rights :											
Concentration of Ownership	1. Top 1, 3, 5, or 10 shareholders disclosed? (4 questions)	√	√	√			√				
	2. Shareholders owning more than 10, 5, or 3 percent is disclosed? (3 questions)	√	√	√			√				
	3. Does the company disclose percentage of cross-ownership?					√		√			
Voting and Shareholder Meeting Procedures	1. Is there a calendar of important shareholder dates?					√			√		
	2. Review of shareholder meetings (could be minutes)?					√		√			
	3. Describe procedure for proposals at shareholder meetings?	√	√	√			√				
	4. How shareholders convene an extraordinary general meeting?					√		√			
	5. How shareholders nominate directors to board?		√	√			√				
	6. Describe the process of putting inquiry to board?		√	√			√				
	7. Does the annual report refer to or publish Corporate Governance Charter or Code of Best Practice? (2 questions)	√	√	√	√		√				
	8. Are the Articles of Association or Charter Articles of Incorporation published?					√		√			
Financial Transparency and Information Disclosure :											
Business Focus	1. Is there a discussion of corporate strategy?		√				√				
	2. Report details of the kind of business it is in?		√				√				
	3. Does the company give an overview of trends in its industry?		√				√				
	4. Report details of the products or services produced/provided?		√				√				
	5. Provide a segment analysis, broken down by business line?		√	√			√				
	6. Does the company disclose its market share for any or all of its businesses?		√				√				

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (Cont.)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/ Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Financial Transparency and Information Disclosure : Business Focus	7. Does the company report basic earnings forecast of any kind? In details? (2 questions)					√		√			
	8. Disclose output in physical terms?					√			√		
	9. Does the company give an output forecast of any kind?					√		√			
	10. Does the company give characteristics of assets employed?	√	√	√	√		√				
	11. Does the company provide efficiency indicators (ROA, ROE, etc.)?	√	√	√	√		√				
	12. Does the company provide any industry-specific ratios?					√		√			
	13. Does the company disclose its plans for investment in the coming years?		√			√			√		
	14. Does the company disclose details of its investment plans in the coming years?		√			√			√		
Accounting Policy Review	1. Provide financial information on a quarterly basis?	√	√	√			√				
	2. Does the company discuss its accounting policy?	√		√			√				
	3. Does the company disclose accounting standards it uses for its accounts?	√		√			√				
	4. Does the company provide accounts according to the local accounting standards?	√		√			√				
	5. Does the company provide accounts in alternate internationally recognized accounting method?			√		√	√				
	6. Does the company provide each of the <u>statement of financial position, statement of comprehensive income, and statement of cash-flow</u> by internationally recognized methods? (3 questions)			√		√	√				
	7. Does the company provide a reconciliation of its domestic accounts to internationally recognized methods?			√		√	√				
Accounting Policy Details	1. Does the company disclose methods of revenue recognition asset valuation?			√			√				
	2. Does the company disclose information on method of property plant and equipment depreciation?			√			√				

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (Cont.)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/ Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Financial Transparency and Information Disclosure :											
Accounting Policy Details	3. Does the company produce consolidated financial statements?			√			√				
Related party Structure and Transactions	1. Provide a list of affiliates in which it holds NCI ?	√		√			√				
	2. Does the company disclose the ownership structure of affiliates?					√		√			
	3. Is there a list/register of related party transactions?	√	√	√							
	4. Is there a list/register of group transactions?	√	√	√							
Information on Auditors	1. Does the company disclose the name of its auditing firm?	√	√	√	√		√				
	2. Does the company reproduce the auditors' report?	√	√	√	√		√				
	3. Disclose how much it pays in audit fees to the auditor?	√	√	√	√		√				
	4. Disclose any non-audit fees paid to auditor?	√	√	√			√				
Board Structure and Process :											
Board Structure and Composition	1. Is there a chairman listed?	√	√	√			√				
	2. Detail about the chairman (other than name/title)?	√	√	√			√				
	3. Is there a list of board members (names)?	√	√	√			√				
	4. Are there details about directors (other than name/title)?	√	√	√			√				
	5. Details about current employment/position of directors provided?	√	√	√			√				
	6. Are details about previous employment/positions provided?	√	√	√			√				
	7. Disclose when each of the directors joined the board?	√	√	√			√				
	8. Classifies directors as an executive or an outside director?	√	√	√			√				

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (Cont.)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Board Structure and Process :											
Role of the Board	1. Details about role of the board of directors at the company?	√	√	√			√				
	2. Is there disclosed a list of matters reserved for the board?	√	√	√			√				
	3. Is there a list of board committees?	√	√	√			√				
	4. Review last board meeting (could be minutes)?					√		√			
	5. Is there an audit committee?	√	√	√	√		√				
	6. Disclosure of names on audit committee?	√	√	√			√				
	7. Is there a remuneration/compensation committee?	√	√	√			√				
	8. Names on remuneration/compensation committee)?	√	√	√			√				
	9. Is there a nomination committee?	√	√	√			√				
	10. Disclosure of names on nomination committee?	√	√	√			√				
	11. Other internal audit functions besides audit committee?	√	√	√			√				
	12. Is there a strategy/investment/finance committee?					√		√			
Director training and compensation	1. Disclose whether they provide director training?		√	√			√				
	2. Disclose the number of shares in the company held by directors?		√	√			√				
	3. Discuss decision-making process of directors' pay?		√	√			√				
	4. Are specifics of directors' salaries disclosed (numbers)?		√	√			√				
	5. Form of directors' salaries disclosed (cash, shares, etc.)?		√	√			√				
	6. Specifics disclosed on performance-related pay for directors?		√	√			√				

Table 1.2 Verification Form used by the Experts to determine the content validity of the tool used in the research study (Cont.)

Objectives/ Contents	Question Criteria in S&P : T&D Scoring System (98 questions)	SEC/Legal Provision					Result of the Consideration			Pass	Not pass
		LOW	56-1	FS	MD&A	N/A	1	0	-1		
Board Structure and Process :											
Executive Compensation and Evaluation	1. List of the senior managers (not on the board of directors)?		√	√			√				
	2. Backgrounds of senior managers disclosed?		√	√			√				
	3. Number of shares held by the senior managers disclosed?		√	√			√				
	4. Disclose the number of shares held in other affiliated companies by managers?	√	√	√		√		√			
	5. Discuss the decision-making of managers' (not board) pay?		√	√			√				
	6. Numbers of managers' (not on board) salaries disclosed?		√	√			√				
	7. Form of managers' (not on board) salaries disclosed?		√	√			√				
	8. Specifics disclosed on performance-related pay for managers?		√	√			√				
	9. Details of the CEO's contract disclosed?		√	√		√		√			



Table 1.3: Determination of the consistency between questions and the aims of five experts for the consideration of the S&P's 98 questions and objectives as follows

Question No.	The 1 st Person			The 2 nd Person			The 3 rd Person			The 4 th Person			The 5 th Person			Total ΣR	IOC = $\frac{\Sigma R}{N}$	Analysis Result
	1	0	-1	1	0	-1	1	0	-1	1	0	-1	1	0	-1			

Source: Standard & Poor's Transparency and Disclosure

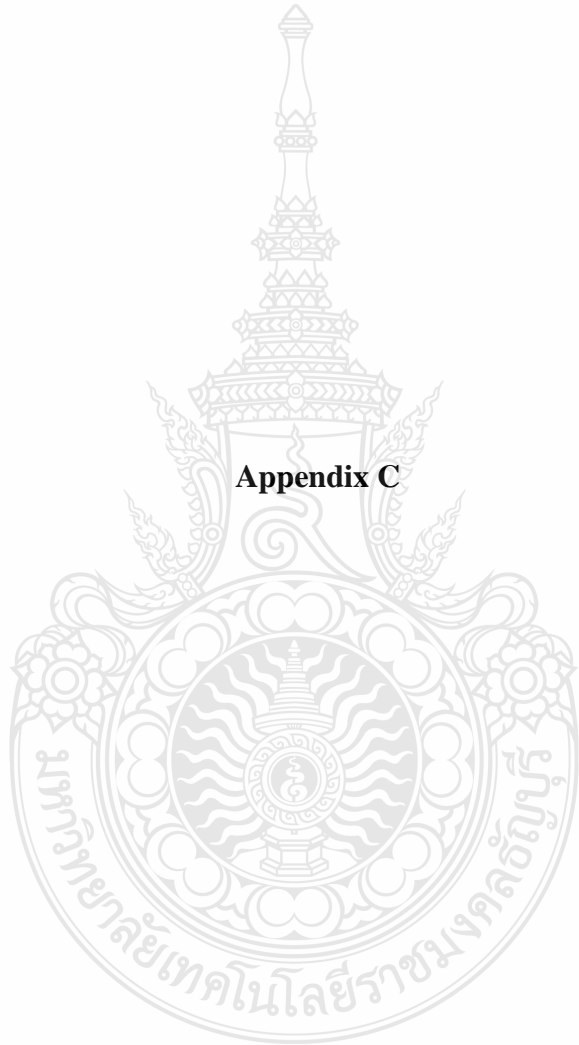
✓ Mark for rating

X Mark for not rating

Part 2

2. Reliability, the researcher has adjusted the questionnaire as recommended by the advisor and tried out with a total of 30 samples that had similar qualifications to the study samples. Then, the questionnaires were collected to test the reliability using SPSS PC Windows program to find confidence using the Alpha Coefficient. The result showed that the confidence level of the questionnaire was 0.91 which was higher than 0.70 and was considered as a reliable questionnaire and can be used with the actual samples.

Appendix C



Example of running Earnings Persistence

From the equation of the prediction of earnings contiguous enterprise of Sloan equation (1996), the measured values of persistence resulted in the parameter level, which represented the high value profit to be the efficacy of profit level that had persistently represented the company from the calculation as follow.

$$\text{Earnings}_{t+1} = \alpha_0 + \alpha_1 \text{Earning}_t + \epsilon_{t+1} \quad (1)$$

Company: A

unit: billion

company	Number of year	Early year profit	End year profit
A	1	100	80
A	2	80	120
A	3	120	100
A	4	100	130
A	5	130	150

From the calculation to get the value of β to represent a company from the yearly unit, it has been researched.

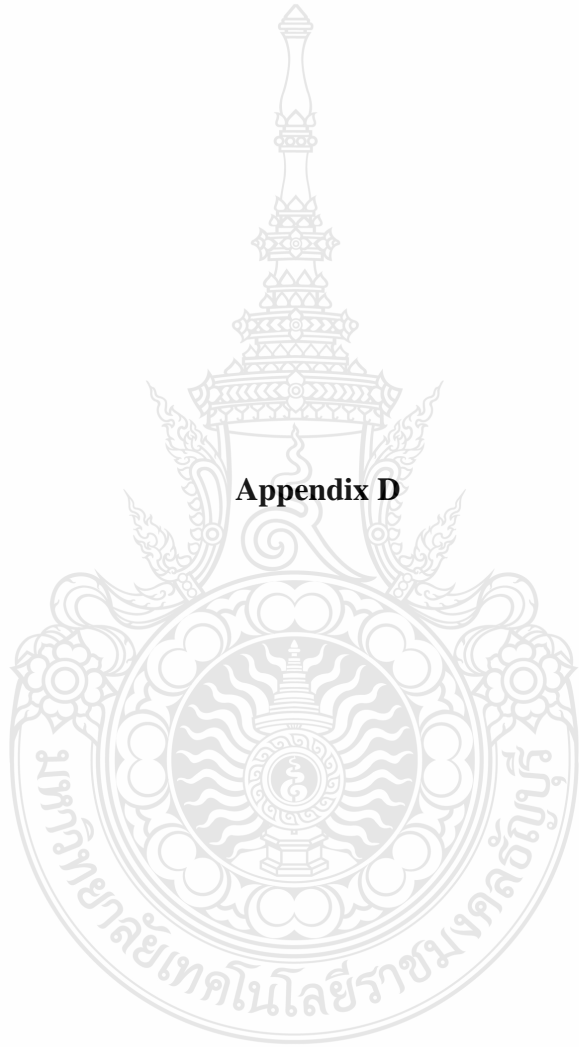
For measuring the value of Persistence, if the profit is stable, the turnover is good or the turnover is better, and the Persistence will be at higher level as follows. By “Earnings” is defined as operating income scaled by total assets.

Appraisal of β , for example, when company A is higher than company B, means profit of company A which has more Persistence than profit of company B. This means that company A has more stable profit flow. If which the present year’s profit of company A is used to estimate the stock value, it will cause the Valuation error less than company B. Therefore, we consider that the Persistence of profit is one of the representatives that

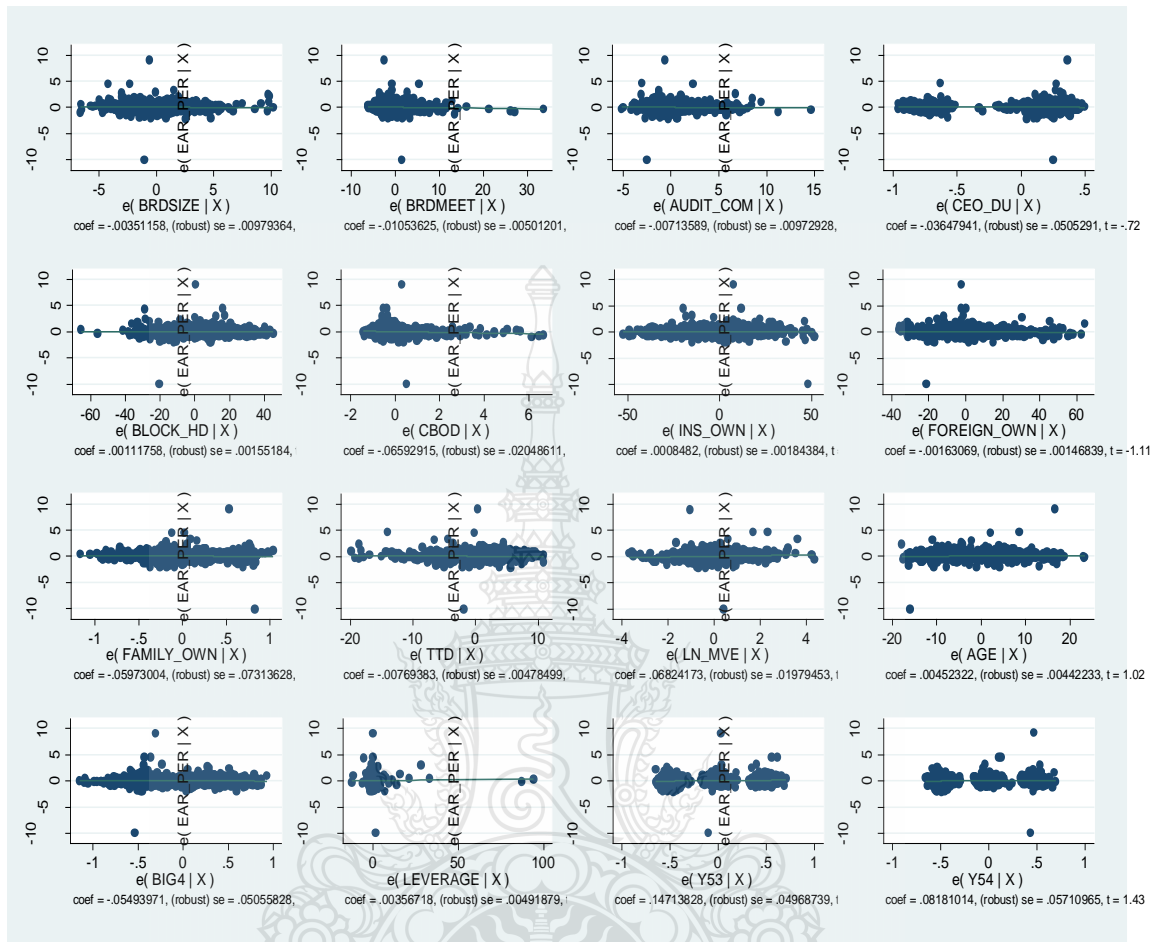
indicates the quality of the profit because the profit data is related to the stock value for the investment decision.



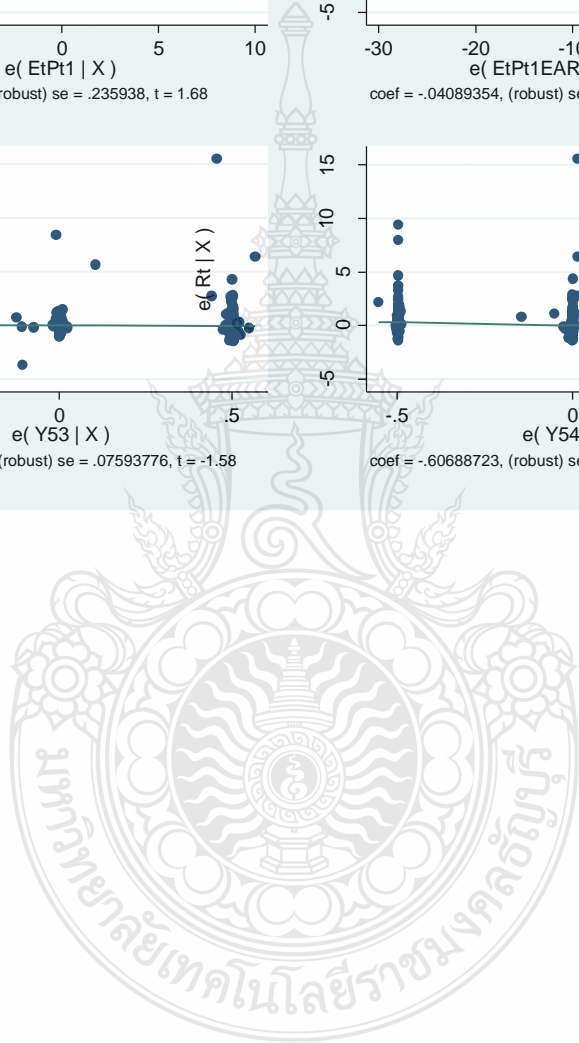
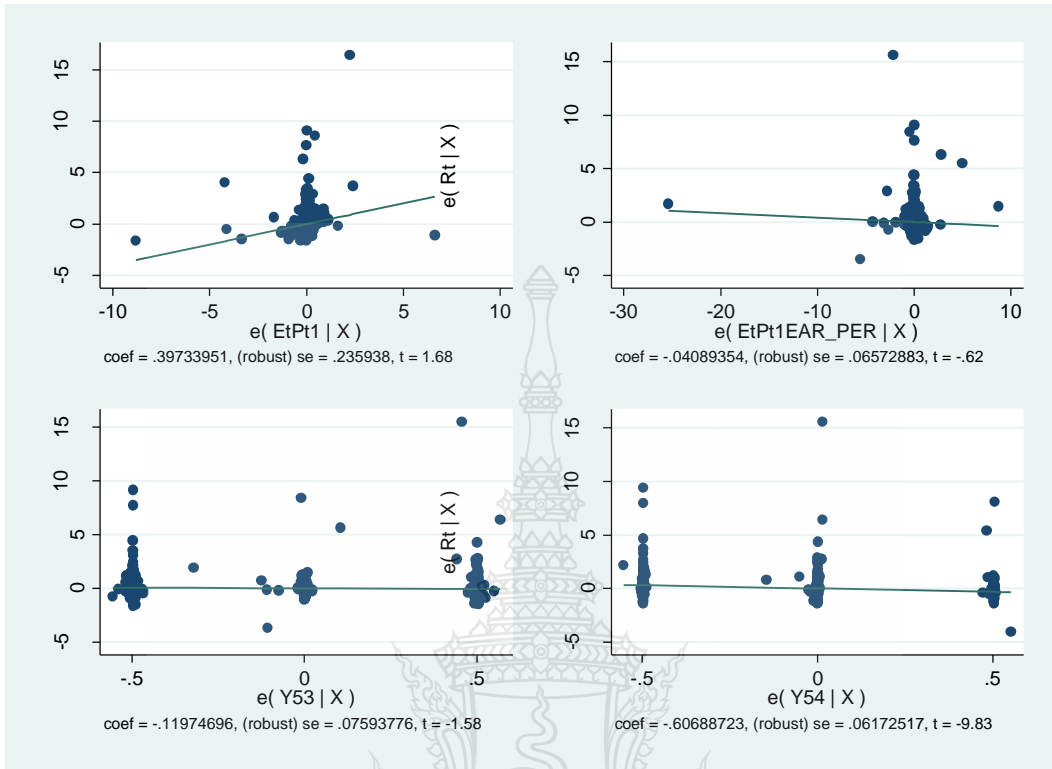
Appendix D



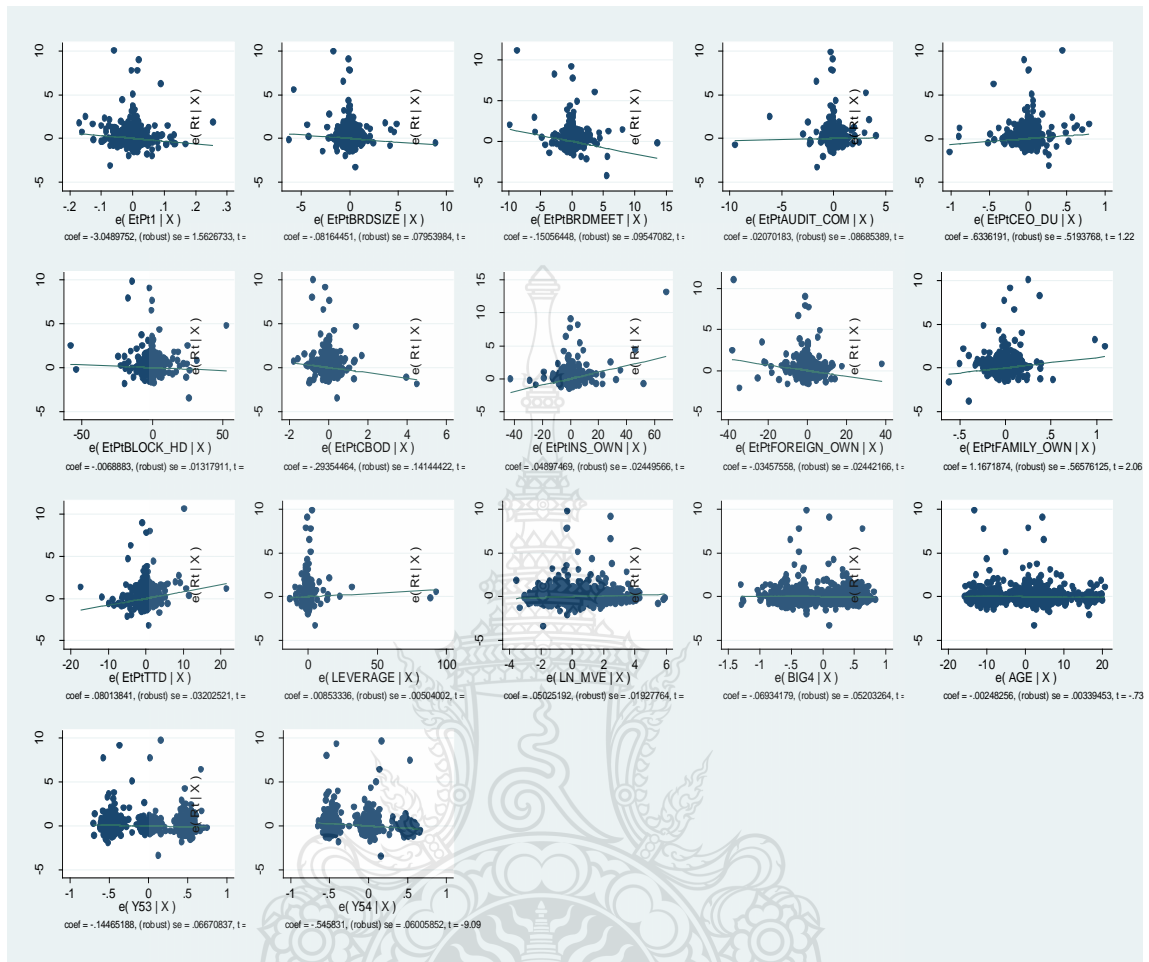
Robust Regression



Model 2



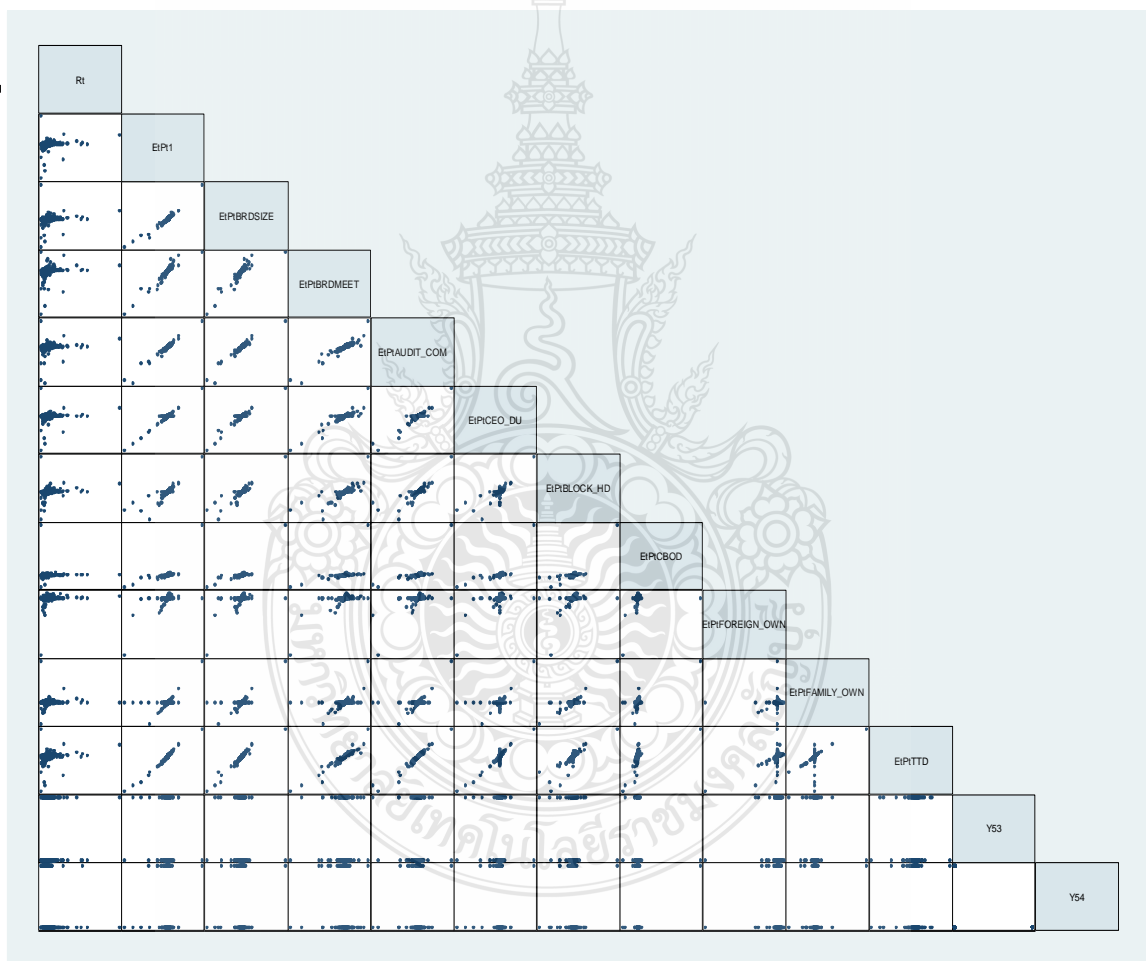
Model 3



Regression: graph matrix

Command graph matrix produces a graphical representation of the correlation matrix by presenting a series of scatterplots for all variables. Type:

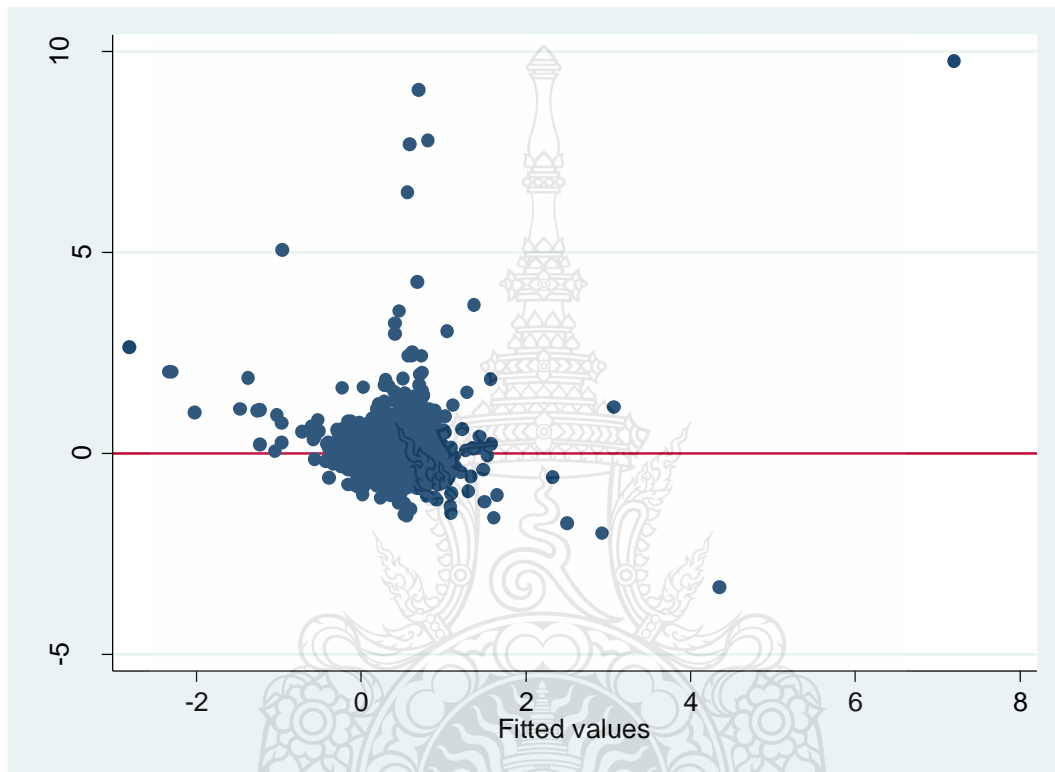
```
graph matrix EAR_INF, Eit/Pit-1, Eit/Pit-1 BRDSIZE , Eit/Pit-1 BRDMEET, Eit/Pit-1  
AUDITCOM, Eit/Pit-1 CEODU, Eit/Pit-1 BLOCKHD, Eit/Pit-1 CBOD , Eit/Pit-1 FOREIGNOWN,  
Eit/Pit-1 FAMILYOWN , Eit/Pit-1 TTD, Y10 , Y11, half maxis (ylabel (none) xlabel (none))
```



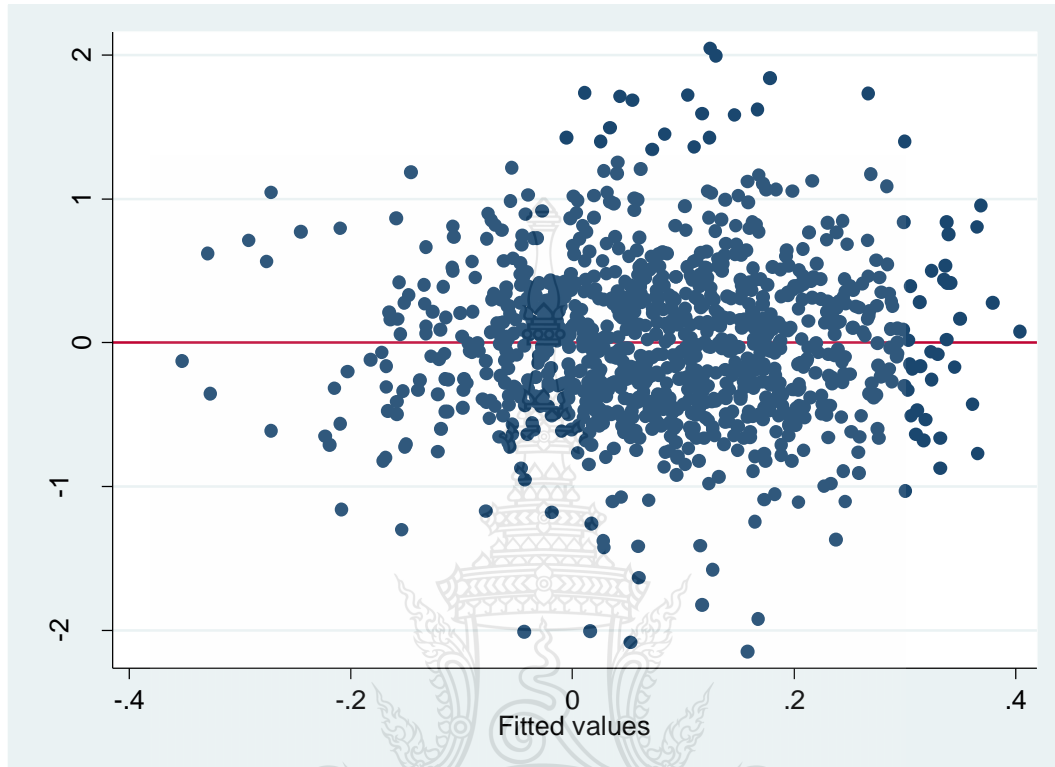
Regression: testing for homoscedasticity

“The error term $[e]$ is homoskedastic if the variance of the conditional distribution of $[e_i]$ given $X_i[\text{var}(e_i|X_i)]$, is constant for $i=1 \dots n$, and in particular does not depend on x ; otherwise, the error term is heteroskedastic” (Stock and Watson, 2003, p.126)

Model 3



Model 1



Model 1

```
. reg EAR_PER NewBRDSIZE BRDMEET AUDIT_COM CEO_DU BLOCK_HD NewCBOD INS_OWN FOREIGN_OWN FAMILY
> _OWN LEVERAGE BIG4 AGE LN_MVE TTD Y53 Y54,robust
```

Linear regression

Number of obs = 1043
 F(16, 1026) = 3.35
 Prob > F = 0.0000
 R-squared = 0.0463
 Root MSE = .54972

EAR_PER	Robust		t	P> t	[95% Conf. Interval]	
	Coef.	Std. Err.				
NewBRDSIZE	-.0080302	.0074559	-1.08	0.282	-.0226608	.0066004
BRDMEET	-.0086009	.0042253	-2.04	0.042	-.0168921	-.0003097
AUDIT_COM	-.0105659	.0072327	-1.46	0.144	-.0247584	.0036266
CEO_DU	-.0445212	.0413481	-1.08	0.282	-.1256577	.0366154
BLOCK_HD	.0003061	.0011362	0.27	0.788	-.0019235	.0025357
NewCBOD	-.0512817	.0188504	-2.72	0.007	-.0882713	-.014292
INS_OWN	.0023317	.0010449	2.23	0.026	.0002814	.004382
FOREIGN_OWN	-.0023893	.0011978	-1.99	0.046	-.0047398	-.0000388
FAMILY_OWN	-.0512188	.0447391	-1.14	0.253	-.1390094	.0365719
LEVERAGE	.0006367	.0023058	0.28	0.782	-.003888	.0051614
BIG4	-.0602961	.0382314	-1.58	0.115	-.1353168	.0147246
AGE	-.0000191	.0022534	-0.01	0.993	-.0044409	.0044026
LN_MVE	.0621914	.0141148	4.41	0.000	.0344943	.0898886
TTD	-.0024232	.0037202	-0.65	0.515	-.0097233	.0048769
Y53	.1156378	.0432194	2.68	0.008	.0308293	.2004464
Y54	.0827804	.0435826	1.90	0.058	-.0027408	.1683015
_cons	-.0651482	.2430865	-0.27	0.789	-.5421517	.4118552

2. Multicollinearity

```
. vif
```

Variable	VIF	1/VIF
INS_OWN	2.75	0.362989
LN_MVE	1.91	0.523643
BLOCK_HD	1.72	0.581531
FAMILY_OWN	1.55	0.646489
FOREIGN_OWN	1.44	0.692169
Y53	1.37	0.731106
Y54	1.36	0.735069
BIG4	1.32	0.759342
TTD	1.29	0.775854
NewBRDSIZE	1.27	0.788377
NewCBOD	1.25	0.801146
AUDIT_COM	1.18	0.844831
AGE	1.16	0.859646
BRDMEET	1.11	0.898760
CEO_DU	1.08	0.926920
LEVERAGE	1.02	0.984051
Mean VIF	1.42	

```
. rvfplot, yline(0)
```

```
. graph save Graph "C:\Users\Administrator\Desktop\·ÉÍ°\stata 8 ¼¼ 58\Graph per.gph"  
(file C:\Users\Administrator\Desktop\·ÉÍ°\stata 8 ¼¼ 58\Graph per.gph saved)
```

```
. estat hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of EAR_PER

chi2(1) = 0.49

Prob > chi2 = 0.4840

. summarize

Variable	Obs	Mean	Std. Dev.	Min	Max
no	1043	207.4909	118.3134	1	417
Year	1043	2554	.8184532	2553	2555
Company	0				
BV	1043	8.61e+09	3.77e+10	-9.16e+08	7.32e+11
BRDSIZE	1043	10.51438	2.632348	5	21
NewBRDSIZE	1043	10.50719	2.62987	5	21
BRDMEET	1043	7.572209	3.811778	2	42
AUDIT_COM	1043	6.056828	2.487211	3	21
CEO_DU	1043	.7692275	.4209205	0	1
BLOCK_HD	1043	52.4026	19.89054	0	97.87
NewCBOD	1043	.6921037	.9556914	.004321	7.838407
CBOD	1043	.6992541	.9539181	.004321	7.838407
INS_OWN	1043	33.86082	28.94367	0	97.9
FOREIGN_OWN	1043	12.73753	19.22052	0	96.8091
FAMILY_OWN	1043	.3946373	.4880629	0	1
SIZE	1041	1.90e+10	8.47e+10	8.67e+07	1.63e+12
ROA	1041	7.931614	10.72049	-64.4	62.16
LEVERAGE	1043	1.051362	4.441035	-11.6439	96.00967
BIG4	1043	.5417705	.4980118	0	1
AGE	1043	16.41076	8.101272	1.083333	37.66667
MVE	980	17016.5	66801.79	47.6	948290.2
LN_MVE	1043	8.10049	1.582855	3.862833	13.76242
TTD	1043	62.20652	5.302241	42	73
PCT_TTD	1035	.7679967	.0657123	.5185185	.9012346
TTD_1	1043	17.69059	1.592048	10	19
PCT_TTD_1	1035	.9310959	.0841154	.5263158	1
TTD_2	1043	18.51195	1.55037	9	24
PCT_TTD_2	1035	.6383475	.0536674	.3103448	.8275862
TTD_3	1043	26.00399	3.755875	14	31
PCT_TTD_3	1035	.7880252	.1142535	.4242424	.9393939
EAR_PER	1043	.0827715	.558558	-2.052339	2.165976
Rt	1043	.3338318	.6244576	-1	4.217391
EtPt1	1043	.0640425	.2931148	-5.310345	2.3
Informativ~s	0				
EtPt1EAR_PER	1043	-.012624	.2381678	-5.215929	.9540615
EtPtBRDSIZE	1043	.7267349	2.612841	-42	18.4
NewEtPtBRD~E	1043	.726188	2.6126	-42	18.4
EtPtBRDMEET	1043	.4524116	2.505737	-28	23
EtPtAUDIT_~M	1043	.3906905	1.610133	-21.24138	13.89086
EtPtCEO_DU	1043	.0565868	.2609309	-5.310345	2.3
EtPtBLOCK_HD	1043	3.474821	15.08254	-278.495	106.628
EtPtCBOD	1043	.0551798	.1597751	-1.099138	1.591984
NewEtPtCBOD	1043	.0547122	.1593188	-1.099138	1.591984
EtPtINS_OWN	1043	2.47067	7.180545	-65.30455	42.67972
EtPtFOREIGN~N	1043	.8228353	4.848565	-80.41906	25.00547
EtPtFAMILY~N	1043	.0290472	.1832981	-3.5	2.3
EtPtTTD	1043	4.078379	16.99733	-292.069	140.3
Y53	1043	.3346117	.4720809	0	1
Y54	1043	.3307766	.4707185	0	1

Model2

```
. reg Rt EtPt1 EtPt1EAR_PER Y53 Y54,robust
```

Linear regression

Number of obs = 1043
 F(4, 1038) = 78.29
 Prob > F = 0.0000
 R-squared = 0.2684
 Root MSE = .53516

Rt	Coef.	Robust Std. Err.	t	P> t	[95% Conf. Interval]	
EtPt1	.8537881	.1456254	5.86	0.000	.5680343	1.139542
EtPt1EAR_PER	-.3796087	.1902263	-2.00	0.046	-.7528805	-.0063368
Y53	-.1144201	.0454608	-2.52	0.012	-.2036257	-.0252144
Y54	-.5382576	.0374146	-14.39	0.000	-.6116746	-.4648407
_cons	.4906902	.0334815	14.66	0.000	.4249911	.5563894

```
. vif
```

Variable	VIF	1/VIF
EtPt1EAR_PER	1.50	0.665123
EtPt1	1.50	0.666934
Y53	1.34	0.747766
Y54	1.34	0.748578
Mean VIF	1.42	

```
. hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of Rt

chi2(1) = 472.17

Prob > chi2 = 0.0000

```
. reg Rt EtPt1 NewEtPtBRDSIZE EtPtBRDMEET EtPtAUDIT_COM EtPtCEO_DU EtPtBLOCK_HD NewEtPtCBOD E
> tPtINS_OWN EtPtFOREIGN_OWN EtPtFAMILY_OWN EtPtTTD LEVERAGE BIG4 AGE LN_MVE Y53 Y54 ,robust
```

Linear regression

```
Number of obs = 1043
F( 17, 1025) = 26.87
Prob > F = 0.0000
R-squared = 0.3137
Root MSE = .5216
```

Rt	Robust					[95% Conf. Interval]	
	Coef.	Std. Err.	t	P> t			
EtPt1	-4.250028	1.291011	-3.29	0.001	-6.783353	-1.716702	
NewEtPtBRDSIZE	.074182	.039127	1.90	0.058	-.0025963	.1509602	
EtPtBRDMEET	-.0335674	.0280687	-1.20	0.232	-.0886461	.0215112	
EtPtAUDIT_COM	-.0300205	.0625225	-0.48	0.631	-.1527072	.0926662	
EtPtCEO_DU	.3267934	.2603066	1.26	0.210	-.1840012	.837588	
EtPtBLOCK_HD	-.0013803	.0068425	-0.20	0.840	-.0148072	.0120466	
NewEtPtCBOD	-.1697296	.1870287	-0.91	0.364	-.5367324	.1972732	
EtPtINS_OWN	.0157477	.0059928	2.63	0.009	.0039882	.0275072	
EtPtFOREIGN_OWN	-.0124337	.005773	-2.15	0.031	-.023762	-.0011054	
EtPtFAMILY_OWN	.4041582	.309752	1.30	0.192	-.2036624	1.011979	
EtPtTTD	.0742849	.0203078	3.66	0.000	.0344352	.1141346	
LEVERAGE	.0050555	.003257	1.55	0.121	-.0013356	.0114466	
BIG4	-.0227484	.0354368	-0.64	0.521	-.0922854	.0467887	
AGE	.0010527	.0021109	0.50	0.618	-.0030895	.0051949	
LN_MVE	.026405	.0119484	2.21	0.027	.0029588	.0498511	
Y53	-.1084106	.0449827	-2.41	0.016	-.1966794	-.0201418	
Y54	-.5215318	.0372353	-14.01	0.000	-.5945979	-.4484658	
_cons	.2158974	.1042529	2.07	0.039	.0113238	.420471	

```
. hettest
```

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of Rt

chi2(1) = 1924.08

Prob > chi2 = 0.0000

```
. vif
```

Variable	VIF	1/VIF
EtPt1	340.32	0.002938
EtPtTTD	195.23	0.005122
EtPtBRDSIZE	43.49	0.022995
EtPtAUDIT~M	26.87	0.037218
EtPtCEO_DU	22.38	0.044682
EtPtBLOCK_HD	15.60	0.064104
EtPtBRDMEET	15.11	0.066165
EtPtFAMILY~N	8.83	0.113306
EtPtINS_OWN	8.09	0.123686
EtPtFOREIG~N	7.44	0.134483
EtPtCBOD	7.14	0.140105
Y53	1.37	0.729048
Y54	1.36	0.737025
LN_MVE	1.26	0.791897
BIG4	1.22	0.819410
AGE	1.05	0.954802
LEVERAGE	1.03	0.966455
Mean VIF	41.05	

Appendix E

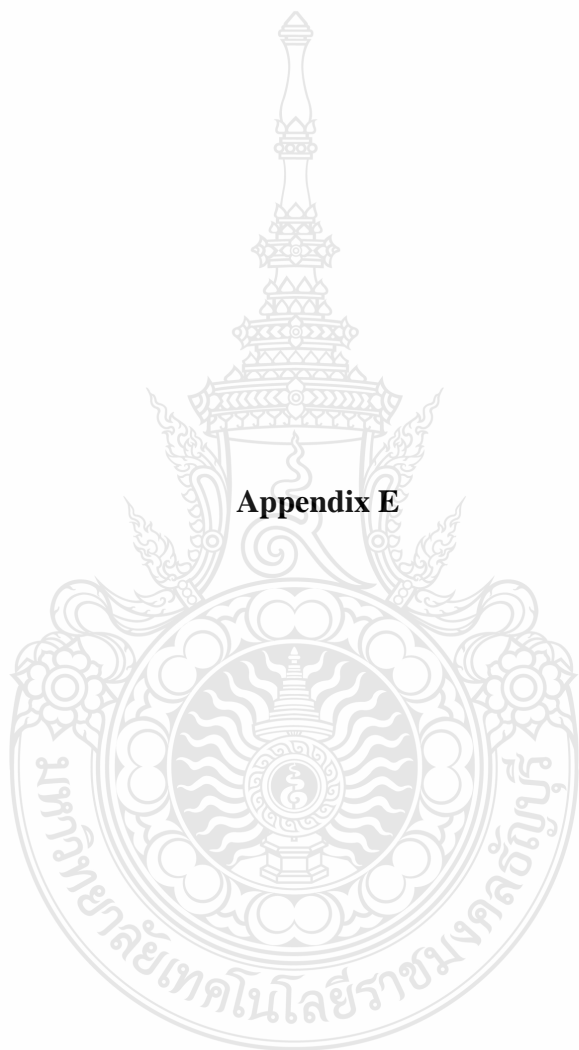


Figure : Ordinal Interaction and Disordinal Interaction

Figure 4.1 Average of (BRDSIZE)

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	0.0173	0.0597	0.0352
2	0.5719	0.4777	0.5273
Grand Total	0.3413	0.3248	0.3338

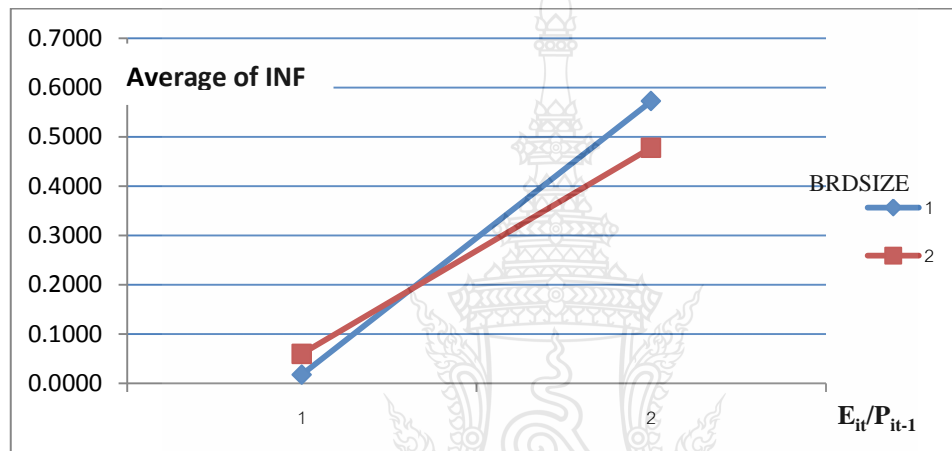


Figure 4.2 Average of (CEO_{DU})

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	0.0293	0.0377	0.0352
2	0.5430	0.5235	0.5273
Grand Total	0.2872	0.3480	0.3338

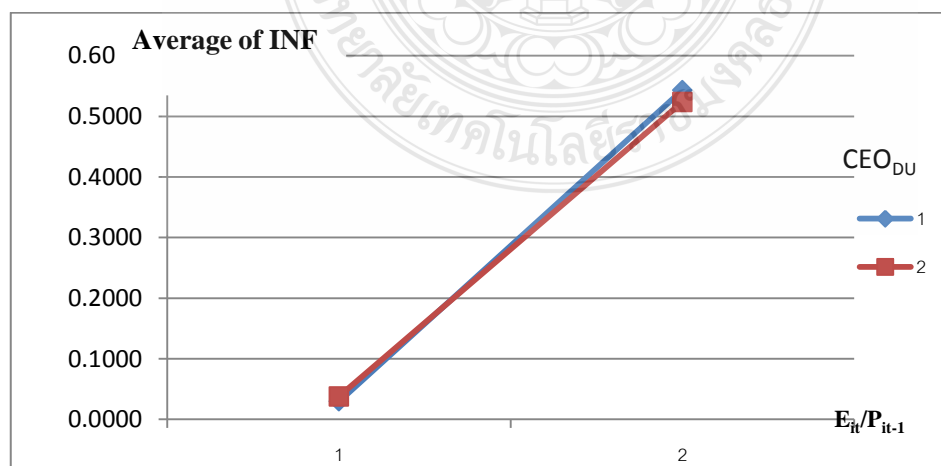


Figure 4.3 Average of (INS_{OWN})

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	-0.0209	0.1203	0.0352
2	0.5773	0.4745	0.5273
Grand Total	0.3189	0.3519	0.3338

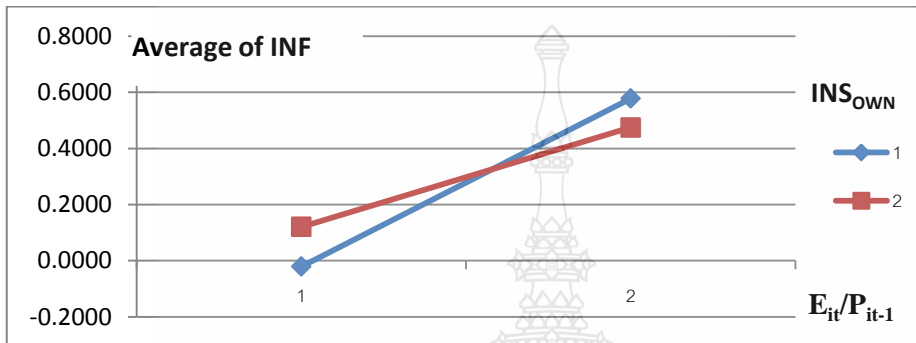


Figure 4.4 Average of ($FOEIGN_{OWN}$)

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	0.0429	0.0148	0.0352
2	0.5534	0.4747	0.5273
Grand Total	0.3424	0.3147	0.3338

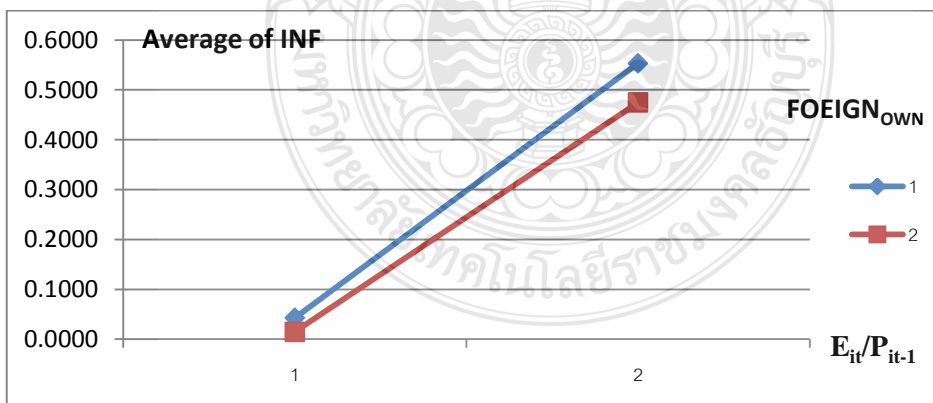


Figure 4.5 Average of (FAMILY_{OWN})

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	0.0615	-0.0081	0.0352
2	0.5248	0.5308	0.5273
Grand Total	0.3370	0.3290	0.3338

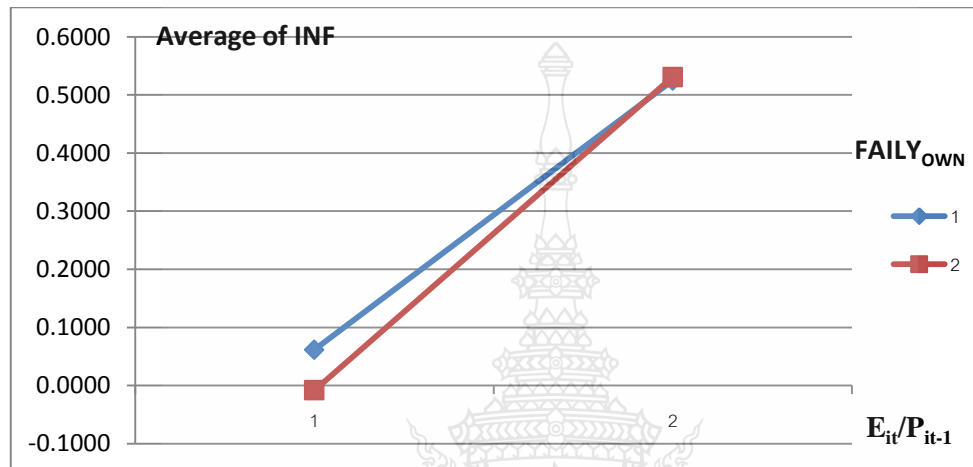


Figure 4.6 Average of (TTD)

Average of INF	Column Labels		
Row Labels	1	2	Grand Total
1	0.0150	0.0593	0.0352
2	0.5253	0.5292	0.5273
Grand Total	0.3130	0.3559	0.3338

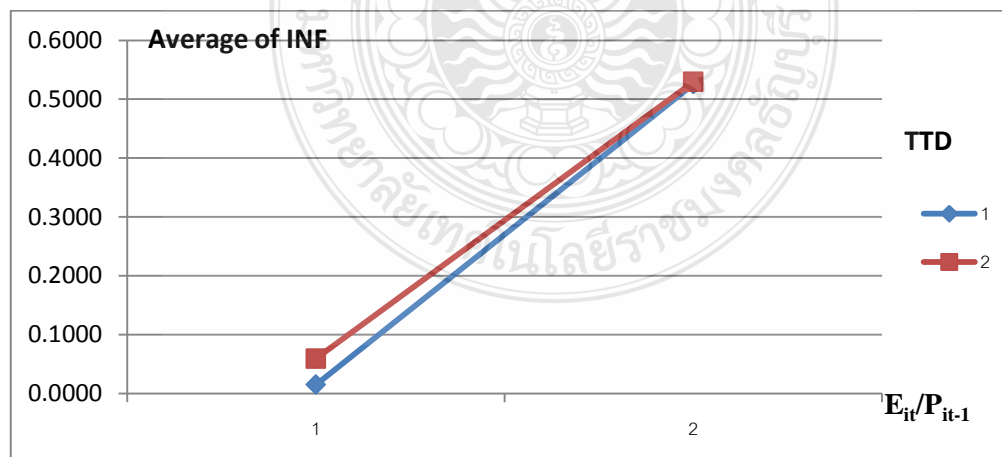


Table 4.7 Firm overall image from 81 questions

Industry Dummy	Disclosed	Not disclosed	Data not found/not sure
0 = Service	75.74%	9.85%	14.41%
1 = Industry	77.89%	8.99%	13.11%
Grand Total	76.29%	9.63%	14.08%



Biography

Name- Surname	Miss Napaphat Suknantasak
Date of Birth	12 April, 1975
Address	624 Kanchanaphisek , Road. Bangpai Bangkar Bangkok 10160.
Education	M.B.A. Major Accounting (2007)
Experiences Work	The Teacher of Public University and Private University
Telephone Number	081920-9724
Email Address	supana.nongake@hotmail.com



Declaration

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and beliefs, contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to this copy of my dissertation, when deposited in the university library, being available for loan and photocopying.

Napaphat Suknantasak

