

BOARD OF DIRECTORS, AUDIT COMMITTEE, AUDITOR  
CHARACTERISTICS AND TIMELINESS OF FINANCIAL  
REPORTING IN LISTED COMPANIES IN INDONESIA

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**BOARD OF DIRECTORS, AUDIT COMMITTEE, AUDITOR  
CHARACTERISTICS AND TIMELINESS OF FINANCIAL  
REPORTING IN LISTED COMPANIES IN INDONESIA**

By

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Dissertation Submitted to the College of Business,  
Universiti Utara Malaysia, in Partial Fulfillment of the Requirement  
for the Degree of Doctor of Business Administration

*Dedicated to*

**Late Father Zainal Abidin**

**Late Mother Mardiana**

**Lovely Wife and Son**

**Desi Ilona and Nadlib Afra**



**Kolej Perniagaan**  
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## Abstrak (Bahasa Malaysia)

Tujuan kajian ini adalah untuk menkaji hubungan diantara ciri-ciri Lembaga Pengarah, jawatan kuasa audit, dan juruaudit dengan ketepatan masa penyampaian laporan keuangan disyarikat-syarikat tersenarai di Indonesia. Cohen et al. (2004) mencadangkan bahawa Lembaga Pengarah, pengurus, juruaudit dalam dan luar boleh mempengaruhi mutu pelaporan keuangan, termasuk ketepatan penyampaian laporan kewangan. Tambahan lagi, terdapat kekurangan kajian pada negara-negara yang mengamalkan sistem lembaga pengarah dua lapisan, seperti yang di amalkan di Indonesia. Kajian ini menggunakan 218 syarikat tersenarai di Bursa Saham Indonesia pada tahun 2006 sehingga 2008 (n=654). Data di analisa menggunakan kaedah analisa data panel. Model kelambatan laporan audit dan pengurus di gunakan di kajian ini. Keputusan menunjukkan bahawa beberapa ciri lembaga mempengaruhi ketepatan masa pelaporan kewangan. Terutama, saiz lembaga, pemegang saham, lembaga berbagai pengarah and jangka masa perkhidmatan amat mempengaruhi hubungan dengan kelewatan pelaporan audit. Selanjutnya, komposisi lembaga, kepakaran dan pengetahuan lembaga dengan kelewatan pelaporan pengurus. Tambahan lagi, ciri-ciri jawatan kuasa audit juga mempengaruhi ketepatan penyampaian pelaporan kewangan. Pengubahnya adalah kepakaran jawatan kuasa audit dan saiz. Keputusan lain menunjukkan bahawa audit dalam mempunyai hubungan bermakna dengan kelewatan pelaporan audit pada masa yang sama pendapat audit luar mempunyai hubungan bermakna dengan kelewatan laporan pengurusan. Terdapat tiga pengubah kawalan iaitu pulangan keatas harta, saiz syarikat, dan nisbah hutang keatas harta syarikat. Pulangan keatas harta dan saiz syarikat menunjukkan hubungan bermakna kepada kelewatan laporan audit, dimana hanya pulangan keatas harta mempunyai hubungan dengan kelewatan pelaporan pengurus.

## **Abstract (English)**

This study aims to investigate the relationship between the board of directors, audit committee and auditor characteristics, and timeliness of financial reporting in listed companies in Indonesia. Cohen et al. (2004) suggested that the board of directors, management, and internal and external auditors could influence the financial reporting quality, including timeliness of financial reporting. In addition, there is a lack of studies in countries in which the board system is a two-tier board system, such as is practiced in Indonesia. This study uses 218 companies listed on the Indonesian Stock Market from 2006 to 2008 (n=654). Thus, the analysis method used is panel data analysis. Audit report lag and management report lag models are used in this study. The results show that several board characteristics affect the timeliness of financial reporting. Specially, board sizes, board shareholding, board multiple directorship and length of service are significantly related to audit report lag. Further, board composition, board size, board shareholding, board expertise and knowledge, age of board members, and length of service of board members is significantly related to the management report lag. In addition, the audit committee characteristics also affect the timeliness of financial reporting. The significant variables are audit committee financial expertise and audit committee size. Other findings show that internal audit existence has a significant relationship with the audit report lag whereas the external auditor opinion has a significant relationship with the management report lag. There are three control variables: return on assets, company size and company leverage. Return on assets and company size are significantly related to the audit report lag, whereas only return on asset is associated with the management report lag.

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## ABBREVIATIONS

IICG	Indonesia Institute for Corporate Governance
FCGI	Forum for Corporate Governance in Indonesia
TARIF	Transparency, Accountability, Responsibility, Independency, and Fairness
ICMD	Indonesian Capital Market Directory
IDX	Indonesia Stock Exchange
OECD	Organization for Economic Co-operation Development
APB	Accounting Principle Board
FSAB	Financial Accounting Standard Board
AGM	Annual General Meeting
CEO	Chief Executive Officer
ARL	Audit report lag
MRL	Management report lag
BAPEPAM	<i>Badan Pengawas Pasar Modal</i> (Capital Market Supervisory Board)
BC	Board composition
BZ	Board size
BEK	Board expertise and knowledge
BS	Board shareholding
BE	Board experiences
BED	Board Directorship
BEA	Age of Board members
BET	Length of Services of Board Director
ACI	Audit committee independence
ACS	Audit committee size
ACFE	Audit committee financial expertise
ACA	Audit committee activities
AT	External audit type
AO	External audit opinion
AC	External Audit change
IA	Internal audit existence
SIZE	Companies size
ROA	Return on asset
DAR	Debt Asset Ratio

# CHAPTER 1

## INTRODUCTION

### 1.0 Introduction

Timeliness of financial reporting is one of the financial reporting qualities. Thus, timeliness is an important attribute because it influences the decisions made by the financial report users, such as investors. Further, the role of the board of directors, audit committee, external auditor and internal audit are identified as significant in determining the timeliness of financial reporting (Cohen, Krishnamoorthy, & Wright, 2004). Therefore, this study regards the role of these agents in financial reporting quality or timeliness of financial reporting.

This chapter consists of the following sub-topics, such as the background of the study, followed by problem statements. This is followed by the objectives of the study and continued by the research questions. Further topics are on the significance of the study and finally, the organization of the study and chapter summary.

### 1.1 Background of the Study

One of the important components of financial reporting is transparency. OECD (1998) also considered transparency as one of the elements of good corporate governance. Kulzickt (2004) viewed transparency from a user's perspective and divided it into several aspects: accuracy, consistency, appropriateness, completeness, clarity, timeliness, convenience, and governance and enforcement. One of the

transparency aspects is in the timeliness of financial reporting. In addition, the Accounting Principles Board (1970) considered timeliness as one of the qualitative objectives of financial reporting disclosure. Later on, APB statement No. 4 (1970) was superseded but the Financial Accounting Standard Board (FASB) continued to recognize the importance of timeliness in its concept statement No. 2 (1980). In fact, the U.S. Securities and Exchange Commission also recognized the importance of timeliness and required that listed companies file their annual 10-K reports by a specific deadline. Further, this policy was also followed by other countries, including Indonesia.

Dutch and U.S accounting practice have influenced Indonesian accounting practice and therefore, the difference between Dutch and US accounting may explain some of more unique aspect of accounting development in Indonesia (Sudarwan & Fogarthy, 1996). Sukarhasono & Gaffikin (1992) argue that the early establishment of the Dutch East Indies Company (1609) is a starting point in the adoption of modern booking in Indonesia. However, accounting development in Indonesia was marked by adoption of formal education in the University in 1952 and the enactment of the 1954 Law. The emergence of rapidly expanding conglomerates and state enterprise are other factors affecting the accounting practice during period of 1980-1990s. Further, the persistence of the historical factors, such as trade protection, entry barriers to competition, oligopoly, and the lack of well developed capital market, influenced accounting practice in Indonesia (Sudarwan & Fogarthy, 1996). Sukarhasono & Gaffikin (1992) add that the weakest feature accounting in Indonesia was the maintenance of the general account and timeliness of balance sheets.

Regulatory agency also recognized the importance of timeliness of financial reporting in Indonesia. This can be seen from the regulation released by capital market supervisory agency about timeliness of financial reporting, such as *Undang-undang (UU) No. 8 Tahun 1995*, *KEP-80/PM/1996*, and *KEP-36/PM/2003*. The first regulation is that the listed companies have to submit their financial report to the capital market supervisory agency. Thus, the listed companies must submit their financial report within 120 days. In 2003, the listed companies have to release their financial report within 90 days.

Few researchers have defined the timeliness of financial reporting. For example, Chambers & Penman (1984) define the timeliness of financial reporting as the reporting lag from fiscal year end and the date to release financial reports to the public. In addition, timeliness of financial reporting is determined by reporting time relative to the expected reporting date. In addition, Dyer & McHugh (1975) used three criteria of financial reporting lags; preliminary lag, auditor report lag, and total lag. First, primary lag refers to the interval between the balance sheet closing date and the date of notice of the annual general meeting (AGM) when the company is required to submit its audited account to the stock exchange. Secondly, audit lag refers to the interval between the balance sheet closing date and the signed date of the auditor's report stated in the annual report. Thirdly, total lag is the interval of days between the balance sheet closing date and the date of the AGM.

Timeliness of financial reports has become an important issue, now more than ever before, as a consequence of the phenomenal changes in both modern technology and business practices worldwide (Owuso-Ansah & Leventis, 2006). In addition, the

importance of timeliness of financial reporting has been identified by many researchers (see for example, Beaver, 1968; Hakansson, 1977; Givoly & Palmon, 1982; Chambers & Penman, 1984; Kross & Schroeder, 1984; Ashton, Willingham, & Elliot, 1987; Carslaw & Kaplan, 1991; Bamber et al., 1993; Schwartz & Soo, 1996; Hossain & Taylor, 1998; Jaggi & Tsui, 1999; Owusu-Ansah, 2000; Owusu-Ansah & Leventis, 2006; Lee, Mande, & Son 2008). Based on the literature above, the importance of the timeliness of financial reporting could be affecting the firm value, a greater amount of asymmetric information, etc.

Further, timely reporting would enhance decision-making and reduce information asymmetry in emerging capital markets (Owosu-Ansah & Leventis, 2006). Moreover, Owusu-Ansah (2000) argues that timely reporting is an important device to mitigate insider trading, leaks and rumors in emerging capital market, and it can improve pricing securities (Chambers & Penman, 1984) as well. Therefore, Owusu-Ansah & Leventis (2006) add that timely reporting contributes to the prompt and efficient performance of stock markets in their pricing and evaluation functions.

The literature on the timeliness of corporate annual financial reporting is of two main types (Owusu-Anshah, 2000). The first type is concerned with the impact of timely reporting on the variability of stock returns (e.g. Chambers & Penman, 1984). The second type is mainly concerned with the patterns; reporting lag and the factors influencing timely reporting behavior (see for example, Dyer & McHugh, 1975). This study focuses on the second type of timeliness.

Timeliness of financial reporting in Indonesia has become the current issue since many companies submitted financial reports late to the capital market authority. In 2009, there were about fifty companies who submitted their financial report late to the Indonesia Security Exchange Committee (Detik, 2009). Based on the preliminary study for 2007 financial reports, 1.98% of the companies released their financial report in the first month, 13.37% in the second month, 75.74% in the third month, and 9.4% after the third month. In addition, Hilmi & Ali (2008) documented that 133 (15.13%) Indonesian companies' financial reports from 2004 to 2006 (879 financial reports as the sample for their study) were submitted after the expected date.

Indonesia's stock market would probably face a greater amount of asymmetry information, moral hazard, and adverse selections due to the untimely accounting information. Further, management among Indonesia's companies may have incentives to exercise the dysfunctional behavior over the timeliness of financial reporting. This untimely reporting could probably contribute to the inefficiency of the Indonesian Stock Market and it would offer an opportunity for insider trading, leaks and rumors in the market as well. If this condition is maintained for a long time, the Indonesian stock market will perhaps not contribute to Indonesia's economic growth due to the performance of the stock market as one of the macroeconomic indicators. That is why the government agencies, such as the capital market authority, and other professional agencies (e.g. Indonesia Institute of Accounting) have put in efforts to solve the problem of timeliness.

Indonesia Financial Accounting Standard no 1 (IAI, 1998), for example, states that timeliness is an essential aspect of financial reporting. In addition, it clearly stated that

in order to be relevant, the accounting information must be on time. In fact, the Indonesia Securities Exchange Commission released regulations regarding the time when listed companies must submit their financial reports (Bapepam, 1996). In 1996, it used to be 120 days after the fiscal year end. However, the regulation was changed to 90 days in 2003 (Bapepam, 2003) and the listed companies, even then, have to submit their audited financial reports.

As timeliness is one of the qualities of financial reporting, the Indonesian Institute of Accountants (IIA) has responsibility over the information quality. It regulates when procedures have to be taken during the audit process when public accountants conduct auditing for clients. The audit process starts with the audit planning, and understanding of the client's internal control system. It also gathers evidence through inspection, observation, questions, and confirmation as the basis for deciding the audit opinion. This regulation is expected to have audit quality as well as information quality. Meanwhile, Indonesia's Institute for Corporate Governance (IICG) has also encouraged the listed companies to practice corporate governance principles. It has produced the code for corporate governance in 2001 and revised it in 2006. One of the aims of this code is to produce quality information.

The development of Indonesia's stock market could be marked by steady growth of the listed companies. There were 347 listed companies in the Indonesia Stock Exchange in 2000. It increased significantly to 485 at the end of 2008. This means that it grew 4.97% per year from 2000 to 2008. At the same time, the demand for quality information has also been growing continuously. Therefore, professional

bodies, regulators and other bodies are making efforts to increase the quality of information.

## **1.2 Problem statement**

It has been discussed above that timeliness of financial reporting is one of the qualitative attributes of the financial report and one of the aspects usually used to convey the information. Even though, the issue of timeliness of financial reporting has been a research phenomena since the 1970's, this issue is still significant enough to be studied in Indonesia. There may be additional factors regarding this issue of timeliness of financial reporting. In addition, most of the studies on timeliness used the audit lag or audit delay (e.g. Courtis, 1976), management lag (Chow, 1987; Al-Ajmi, 2008) and total lag (e.g. Dyer & McHugh, 1975). And other researchers utilized the timely reporting as a proxy for timeliness (e.g. Gilling, 1977). To see the gaps in the literature, this study reviews all timeliness studies that used those proxies.

Many studies had investigated the factors affecting timelines of financial reporting that used the audit report lag, audit report delay, management report lag and total lag as proxy, such as Courtis (1976) and Gilling (1977). It was then extended by Carslaw & Kaplan (1991) where they did a study on financial reporting with New Zealand companies. Other researchers in different countries also conducted the same studies. In the United States, there were many studies done by researchers such as Ashton et al. (1987), Ashton et al. (1989), Ettredge, Simon, Smith, & Stone (2000), Bamber, Bamber, & Schoderbek (1993), Kinney & McDaniel (1993), Schwartz & Soo (1996), Henderson & Kaplan (2000), Mclelland & Giroux (2000), Geiger & Raghunandan,

(2001), Knechel & Payne (2001), Payne & Jensen (2002), Cullinan (2003), Behn, Searcy, & Woodroof (2006), Ettredge, Li, & Sun (2006), Lambert, Brazel, & Jones (2007), and Lee et al. (2008).

Research from other countries also started studying the determinants of timeliness of financial reporting from various aspects. For example, Jaggi & Tsui, (1999) and Ng & Tai (1994) study timeliness of financial reporting in Hong Kong, Ashton et al., (1989) and Newton & Ashton (1989) in Canada, in Pakistan by Hossain & Taylor (1998), Zimbabwe (Owusu-Ansah, 2000), Bangladesh (Imam, Ahmed, & Khan, 2001), France (Soltani, 2002), Malaysia (Ahmad & Kamaruddin, 2003; Abdullah, 2006), Indonesia (Ahmad, Alim, & Subekti, 2005; Hilmi & Ali, 2008), Australia (Lai & Cheuk, 2005), Greece (Leventis, Weetman, & Caramanis, 2005; Leventis & Caramanis, 2005), Spain (Enrique Bonsón-Ponte, 2008), Korea (Lee & Jahng, 2008), , Egypt (El-Bannany, 2008) and Bahrain (Al-Ajmi, 2008).

In the earlier study on timeliness of financial reporting, the research only focused on the determinants of timeliness of financial reporting. Later, the study had been diversified to other determinants, such as audit technology (Newton & Ashton, 1989), company control (owner control vs. management control) (Carslaw & Kaplan, 1991), the case of quarterly earning review (Kinney & McDaniel, 1993), audit structure (Bamber et al., 1993), auditor change (Schwartz & Soo, 1996), the case of MNC's subsidiary (Hossain & Taylor, 1998), auditor business risk (Jaggi & Tsui, 1999), monitoring cost (Owusu-Ansah, 2000), and earning review (Ettredge et al., 2000).

Others focused on different data analysis, such as panel data analysis (Henderson & Kaplan, 2000; Enrique Bonsón-Ponte, 2008), government organization (Mclelland & Giroux, 2000; Payne & Jensen, 2002), bankruptcy firm and audit reform (Geiger & Raghunandan, 2001), audit firm international links (Imam et al., 2001; Knechel & Payne, 2001), consolidated account group (Soltani, 2002), comparative study (Ahmed, 2003; Lee et al., 2008), competing size theory (Cullinan, 2003), audit fees, non-audit fees and stressed companies (Geiger & Rama, 2003), internal audit quality (Ettredge et al., 2006), audit partner rotation and audit firm rotation (Lai & Cheuk, 2005), newly developed capital markets (Leventis et al., 2005), different timeliness of financial reporting measurements (Leventis & Caramanis, 2005), expected audit report lag (Behn et al., 2006), using auditor-related factors (Lee & Jahng, 2008), and audit complexity (El-Bannany, 2008). Other variables include company size, audit opinion, and auditor type.

From the literature review above, we can conclude the following. First, the study on timeliness has been done largely in developed countries such as the U.S. and Europe. Only a few studies were done in the developing countries, such as Asia and Africa. This may be due to the availability of data or there are many cases that occurred in those countries. Therefore, there is a large gap in the literature due to an imbalance of the study on timeliness of financial reporting between developed and developing countries.

Second, studies on timeliness of financial reporting have focused more on variables relating to client-related factors, audit-related factors and environmental factors. Among these variables, however, there are still opportunities to be expanded, such as

auditor's resources in terms of expertise and knowledge and internal auditor competency. Therefore, there is a need to study further in this area.

Third, there are limited studies using the corporate governance variables as the determinants of timeliness of financial reporting as suggested by Owusu-Ansah (2000), Leventis & Caramanis (2005) and Behn et al. (2006). Based on the analysis, there are only two studies on the effect of the corporate governance variables on the timeliness of financial report (Beekes, Pope, & Young, 2004; Abdullah, 2006). However, they only focused on the board structures, such as board composition. In addition, past researchers ignored the audit committee and other board of director characteristics. Therefore, there is still a gap in the literature.

Fourth, there are limited studies done in Indonesia, if compared to other countries such as Malaysia (3 studies), Australia (3 studies), and Hong Kong (2 studies), among others. Since Indonesia has a unique business environment, such as the new Company Act, tax laws and corporate governance practices, it offers a variety of study in this area.

The uniqueness of Indonesia business environment is that development of corporate governance in Indonesia. Indonesia has just implemented the corporate governance concept. It is evidenced by forming Notional Committee for Corporate Governance (NCCG) in 1999, later changed to National Committee for Governance (NCG). Their duty is to recommend the national framework for implementation of good corporate governance in Indonesia. This committee had designed the code of

corporate governance in 2001 and its revision in 2006 as reference for corporate sector to conduct the business.

Within the capital market, regulatory agency has established several rules and regulations regarding to corporate governance (Siregar & Utama, 2008), including :

(i) A regulation requiring public companies to have independent directors and independent commissioners, (ii) Regulations about the method of voting shares, (iii) Comprehensive rules on the responsibilities for boards of directors and independent commissioners, (iv) The role of auditors with regard to financial reporting and penalties for non-compliance, and (v) Regulations on disclosure of related-party transactions. To complement the capital market supervisory agency (BAPEPAM) rules regarding independent directors and independent commissioners, in the year 2000 the Jakarta Stock Exchange (JSE) issued rules concerning independent boards, audit committees, and corporate secretaries for public listed companies (Siregar & Utama, 2008).

Besides, Indonesia Corporate Governance follows the Continental Europe which is significantly difference to the Anglo-Saxon Model. For example, Continental Europe model use two-tier board system compared to unitary board system in Anglo-Saxon model. In fact, Indonesia has modified its two-tier board system which is unique. Further, Indonesia is representation of the developing countries which rely on the external financing. Indonesia listed company is characterized by insider dominated family ownership.

In addition, the Indonesian stock market is considered as an emerging capital market. Companies in emerging capital markets tend to be slower to report than do companies in developed markets (Errunza & Losq, 1985). This is due to enforcement on investor protection and sanctions against insider trading in emerging markets being sometimes lax (Keane, 1993) in (Leventis & Weetman, 2004).

Based on the gap generated above (e.g. limited studies using corporate governance variables as determinants of timelines of financial reporting), it motivates the researcher to study the effects of the corporate governance variables on the timeliness of financial reporting. Specifically, this study tries to link between the board of directors, audit committee and auditor characteristics with timeliness of financial reporting. The corporate governance mosaic is an interaction among actors and institutions that affect the corporate governance (Cohen et al., 2004). The issue of reporting timeliness is important in corporate governance because it is associated with corporate transparency (Abdullah, 2006). In addition, Abdullah (2006) concluded that board independence and the separation of the roles of board chairman and CEO are significantly associated with timeliness of reporting. These findings suggest that board composition is an important factor in determining the quality of UK firms reported earnings with respect to incorporating bad news on a timely basis (Beekes et al., 2004).

Boards of directors are assumed to have an important role in corporate governance. Due to separation of management and stockholder, boards exist to protect the interest of shareholders. Agency theory suggests that shareholders require protection because management (agents) may not always act in the interests of the corporation's owners

(Jensen & Meckling, 1976; Fama, 1980.). Regarding the role of the boards, DeZoort, Hermanson, & Archambbeault (2002) suggest that there are four components of audit committee: composition, authority, resources and diligences. Four characteristics of audit committees might bring in the effectiveness of the audit committee as well as the role of corporate governance in corporations.

One of the most important functions that corporation governance can play is in ensuring the quality of the financial reporting process (Cohen et al., 2004). Integration among actors, such as the board of directors, audit committee, external auditor and internal auditor, can improve the financial reporting quality (Cohen et al., 2004). In addition, one of the characteristics of financial reporting quality is timeliness of financial reporting.

There are various characteristics of boards of directors and audit committee issues: composition, independence, knowledge and expertise, effectiveness, power and duties and responsibilities (Cohen et al., 2004). In addition, other actors, such as external and internal auditors, also affect the financial reporting quality (Cohen et al., 2004). Therefore, the board and audit committee characteristics as well as the external and internal auditors as proxies for corporate governance concepts affect the financial reporting quality. Furthermore, the problem statement in this study is as follows: to examine the effect of the board of directors, audit committee, and auditor characteristics on the timeliness of financial reports.

### **1.3 Research Questions**

The research questions in this study are as follows:

1. Do board of directors characteristics relate to the timeliness of financial reporting?
2. Do audit committee characteristics relate to the timeliness of financial reporting?
3. Do auditor characteristics influence the timeliness of financial reporting?

### **1.4 Research Objectives**

1. To investigate the effects of board of director characteristics on the timeliness of financial reporting.
2. To investigate the effects of audit committee characteristics on the timeliness of financial reporting.
3. To investigate the effects of auditor characteristics on the timeliness of financial reporting.

### **1.5 Significance of the Study**

This study aims to investigate the relationship between the board of director characteristics, audit committee characteristics, auditor characteristics and timeliness of financial reporting in Indonesia. This study uses three new board of director characteristics, namely, size of the board of directors, expertise and knowledge of board members and board of director's shareholdings as factors affecting the timeliness of financial reporting. Meanwhile, the variables of audit committee size, financial expertise and activities are also used for the first time as determinants of the

timeliness of financial reporting. These new variables hopefully would contribute to the body of knowledge in financial reporting.

The uniqueness of Indonesia would also enrich the literature regarding the relationship between board of directors, audit committees, auditor characteristics and timeliness of financial reporting, or the financial reporting quality in general. The uniqueness of Indonesia could be in the form of specific environments. For example, Indonesia just released the new version of its Company Law, introducing a code of corporate governance, and could be representative of developing countries in terms of the reliance on external financing, as well as characterized by insider-dominated family ownership.

The uniqueness could also be in terms of the board of director's structure. Indonesia has a unique two-tier system (supervisory and management boards), and many of the studies on timeliness of financial reporting focused on a unitary board system (prevalent in Anglo-Saxon models). This study would provide insight to the decisions taken by the Indonesian government regarding the regulation framework for financial reporting and enhancement of corporate governance.

## **1.6 Scope and Limitations of the Study**

This study focuses on the companies listed on the Indonesian Stock Exchange. Recent data shows that there were 485 listed companies listed at the end of 2008. Thus, this study uses the data from 2006 to 2008. These years are selected due to the implementation of the corporate governance policy in Indonesia, which started in

2002. This is indicated by the releasing of the code of corporate governance in 2001 and its revision in 2006.

This study did not consider the ownership structure, or management attributes as variables that probably affect the accounting information quality or timeliness of financial reporting. In addition, this study only focuses on the board of directors, audit committee and auditor characteristics as determinants of the timeliness of financial reporting. Therefore, there may be other variables affecting the timeliness of financial report and they, however, are not considered in this study.

## **1.7 Organization of the Study**

This study is organized into several topics. First, the introduction of the chapter, which consists of the background, problem statements, research questions, objective of the study, significance of the study, and scope and limitations of the study. Second, it continues with the literature review, which discusses the timeliness of financial reporting, empirical findings on timeliness of financial reporting and financial reporting quality, theoretical aspects, board of directors, audit committee, and external auditor characteristics. The third chapter consists of the theoretical framework, hypothesis development, data collection, variables measurement, model specifications and analysis. The final chapter discusses the results and findings, and then the discussion and conclusion.

## 1.8 Chapter Summary

A study of timeliness of financial reporting has been extensively explored for company- and auditor-related factors. Thus, this kind of study largely focuses on the developed countries and not many in developing countries, such as Indonesia. Further, there are limited studies regarding the role of the board of directors, audit committee and auditor in the timeliness of financial reporting. Therefore, this study investigates the effects of the board of director characteristics (e.g. composition, size, shareholding, expertise and knowledge, and experiences), audit committee characteristics (e.g. independence, size, financial expertise, and activities), and external auditor (e.g. type, opinion and change) as well as internal audit existence. The next chapter discusses the literature review. Thus, it reviews the timeliness of financial reporting and board of director, audit committee and auditor characteristics.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.0 Introduction

This study investigates the relationship between board of directors, audit committee, external auditors' characteristics and internal audit existence and timeliness of financial reporting in Indonesia's listed companies. This chapter captures the concept of identified variables and critically reviews them one by one. Besides, theoretical aspects are also discussed in detail in this chapter.

This chapter consists of empirical findings on accounting quality studies and timeliness of financial reporting and followed by the theoretical aspects. The discussion on each independent variable is also explored. It discusses in detail about pro and cons in the literature regarding the board of directors, audit committee, external auditor and internal audit existence, and finally, the chapter summary.

#### 2.1 Empirical Findings

An important qualitative attribute of financial statements is timeliness. Both analytical and empirical evidence suggest that decisions based upon financial statement information may be affected by the timeliness of information releases (Carslaw & Kaplan, 1991).

Timeliness as one of the qualitative attributes or characteristics of useful information or relevant disclosure has been first considered by the American Accounting Association and now timeliness has been recognized as one of the important characteristics of financial statements by the professional bodies, regulatory authorities, financial analysts, investors and managers and academics.

Timeliness is informative to the stock market (Schwartz & Soo, 1996). Untimely reporting could diminish the value of public disclosures relevant to the pricing of securities and create inequity among market participants who do not share similar access to private information (Hakansson, 1977). The usefulness of published corporate reports depends on their accuracy and their timeliness (Hossain & Taylor, 1998). Timeliness requires that information should be made available to financial statement users as rapidly as possible (Carslaw & Kaplan, 1991) and it is a necessary condition to be satisfied if financial statements are to be useful (Hossain & Taylor, 1998).

Timely disclosure of financial information through audited financial statements plays an important role in reducing the asymmetric dissemination of financial information (Jaggi & Tsui, 1999). Timely reporting contributes to the prompt and efficient performance of stock markets in their pricing and evaluation functions. Timely reporting helps to mitigate (or reduce the level of) insider trading, leaks and rumors in the market (Owusu-Ansah, 2000). In addition, the increase in the reporting lag reduces the information content and the relevancy of the documents (Ahmad & Kamaruddin, 2003).

Delayed disclosure potentially compromises equal access to information among investors (Hakansson, 1977). It allows some investors to acquire costly private information and thus trade on their private information at the expense of other, less informed investors (Bamber et al., 1993). Past experience in capital markets shows that timeliness critically affects the investors' chance of being defrauded, the degree of uncertainty on investment evaluation as well as the expected payoff (Feltham 1972; Standish 1975) in (Lai & Cheuk, 2005). More precisely, the importance of timely disclosures stems from the equality of information access among investors, without which 'well-informed' investors may use private information to exploit their investments at the expense of 'less-informed' investors (Hakansson, 1977).

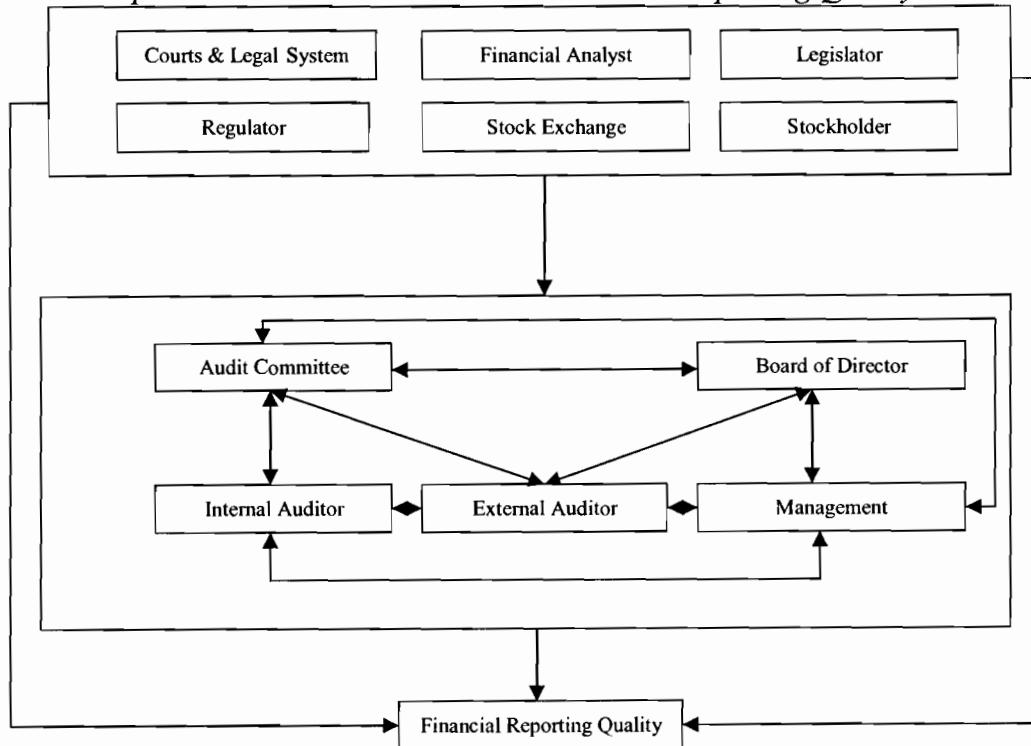
Establishing the confidence of investors requires reliable and timely accounting information. In emerging capital markets, the audited financial statements in the annual report are likely to be the only reliable source of information available to the market (Leventis et al., 2005). Increasing the timeliness of financial information increases its value to the users of that financial information (Behn et al., 2006). Investors need reliable and timely information in order to take correct decisions, and auditing is the process that assures users of the reliability of the financial information that they require (Enrique Bonsón-Ponte, 2008).

For information to be relevant to investors in their decision-making, it should be timely (Lee et al., 2008). Timely corporate financial reporting is an essential ingredient for a well-functioning capital market (Owusu-Ansah, 2000). Undue delay in releasing financial statements increases uncertainty associated with investment decisions (Ashton et al., 1987). Timeliness of accounting information has become an

important issue now than ever before as a result of phenomenal changes in both modern technology and business practices worldwide (Owusu-Ansah, 2000).

The importance of timely accounting information for operational reasons in general, and for capital markets in particular, cannot be over-emphasized. Timely reporting in emerging markets is of particular importance since information in these markets is relatively limited and has a longer time lag (Errunza & Losq, 1985). Timely reporting will enhance decision-making and reduce information asymmetry in these markets (Owusu-Ansah & Leventis, 2006). Research into the determinants of timely reporting would be of much importance to regulators of emerging capital markets in formulating new policies to enhance the allocation efficiency of their markets (Owusu-Ansah & Leventis, 2006).

**Figure 2.1**  
*Corporate Governance Mosaic and Financial Reporting Quality*



Source; Cohen et al. (2004)

The considerable amount of regulatory attention given to corporate governance issues in recent years suggests that stronger governance mechanisms would reduce opportunistic management behavior, thus improving the quality and reliability of financial reporting (Niu, 2006). Figure 2.1 shows how financial reporting quality is built.

There are two factors affecting the financial reporting quality (Cohen et al., 2004). The first factor is external factors: Court and legal system, regulators, financial analysts, stock exchanges, legislators, and stockholders. The second factor is divided into boards of directors, audit committees, external auditors, internal auditors, and management. These two factors would affect the financial reporting quality. Since one of the characteristics of the financial reporting quality is timeliness of financial reporting, those factors would also affect the timeliness of financial accounting. The following section discusses the empirical findings on timeliness of financial reporting and financial reporting quality.

### **2.1.1 Empirical Findings on Timeliness of Financial Reporting**

One element of financial reporting quality is timeliness of financial reporting (Bushman, Chen, Engel, & Smith, 2000). As mentioned before, studies on timeliness used audit report lag or audit delay, management lag and total lag. The study on determinants of the timeliness of financial reporting have also been conducted by many researchers from many countries (e.g. Courtis, 1976; Gilling, 1977; Chambers & Penman, 1984; Kross & Schroeder, 1984; Cho, 1987b; Ashton et al., 1987; Ashton

et al., 1989; Enrique Bonsón-Ponte, 2008; Ho-Young & Geum-Joo, 2008; Lee & Jahng, 2008).

Ashton et al. (1987) investigated the determinants of timeliness of financial reporting measured by audit lag. The result shows that the audit delays is significantly associated with audit opinions, industry type, fiscal year end, internal control, audit technology, and audit opinion. Ashton et al. (1989) examined the factors affecting the timeliness by using the audit lag as a proxy for timeliness of financial reporting. The result shows that companies' size, industry type, net income, the existence of extraordinary items, and busy seasons are related to the audit delay. However, the adjusted R square is relatively low, meaning that there are other variables (outside its model) that influence the audit delay. In addition, the management discretionary behavior also affects the timeliness of financial reporting.

Newton & Ashton (1989) examined the relationship between audit technology and audit delay for Canadian “Big Eight” firms from 1978 to 1982. The result shows that firms using structured audit approaches tend to have greater audit delays than firms using unstructured or intermediate approaches. In addition, the result also indicates that unstructured firms gained more clients from 1978 to 1982 than did structured firms.

Carslaw & Kaplan (1991) extended prior research by examining the multivariate relationship between a set of the explanatory variables and audit delay for a large sample of New Zealand Public Companies. The result shows that company size and profitability significantly affect audit delay. Kinney & McDaniel (1993) also studied

audit delay in the correction of previously reported interim earnings. The results show audit delay differences between the correcting and matched firms. Thus, the results show a significant increase in audit delay overall for firms correcting misstatements in previously reported interim earnings.

Bamber et al. (1993) investigated the determinants of the length of time auditors required to complete the audit. The results indicated that overall model explanatory power is nearly three times greater than that of previously reported models. In addition, greater audit structure generally lead to longer audit report lag as a measure of timeliness. Moreover, the accounting firm with greater structure also reacted more quickly to anticipated events. Schwartz & Soo (1996) examined audit report lags and earning announcement lags for a sample of firms that switched auditors. It is hypothesized that firms that replace their auditor early (late) in the fiscal year do so for positive (negative) reasons and experience shorter (longer) reporting. Results indicate that both audit report and earnings announcement lags decrease (increase) for firms that change their auditor early (late) in the fiscal year lags.

Ng & Tai (1994) examined the determinants of audit delay with a sample of 292 and 260 listed companies for 1991 and 1990, respectively. Their study confirms that audit delay is inversely related to the size, and directly to the degree of diversification. Jaggi & Tsui (1999) examined whether the audit report lag (ARL) of Hong Kong companies is associated with auditor business risk and audit firm technology. The result shows that there is a positive association between the audit report lag and the financial risk index for Hong Kong companies, suggesting that companies with a weak financial condition are associated with longer audit delays. The result also

shows that companies audited by audit firms using the structured audit approach have longer audit delays.

Schwartz & Soo (1996) examined audit reporting lags and earning announcement lags for a sample of firms that switched auditors. The result shows that change for positive reasons would shorten the lag, and conflict over the financial reporting issues also affected the lag. Specially, audit report lag is related to the early audit change, structure, size, extraordinary items, company losses, bankruptcy, audit opinion, financial industry, and audit type.

Henderson & Kaplan (2000) investigated the determinants of audit report lag of banks. The result reveals important differences between cross-sectional analysis and panel data analysis. Bank size was negatively related to the ARL in cross-section but positively related to ARL using panel data analysis. Other significant factors affecting the audit reporting lag are failure of banks, regulation, company losses, and uncertainty.

Owusu-Ansah (2000) investigated the timeliness of annual reporting of Zimbabwe listed companies. The result shows that company size, profitability and company's age significantly influenced the timeliness of annual reports. In addition, no evidence was found to support the monitoring costs theory argument, which suggests that highly-geared companies are timely reporters.

Knechel & Payne (2001) studied three previously uninvestigated audit firm factors that potentially influence audit reporting lag and are controllable by the auditor: (i)

incremental audit effort (e.g., hours), the resource allocation of audit team effort measured by rank (partner, manager, or staff), and the provision of non-audit services (Management Advisory services or MAS and tax services). The results indicate that incremental audit effort, the presence of contentious tax issues, and the use of less experienced audit staff are positively correlated with audit reporting lag. Further, audit reporting lag is decreased by the potential synergistic relationship between MAS and audit services.

Soltani (2002) investigated the relationship between reporting behavior and types of audit reports over a 10-year period. He concludes that there is an improvement in financial reporting. It is greater for reports from consolidated accounts of groups than those from annual accounts of companies. In addition, there is also evidence that qualified audit opinions were released later than unqualified opinions and that, in general, the more serious the level of qualification, the greater the delay.

Geiger & Rama (2003) examined the association between the magnitude of audit and non-audit fees and auditor report modification decisions for financially-stressed manufacturing companies. The results indicate that there is no significant relationship between going concern and audit lag. Ahmad & Kamaruddin (2003) investigated the determinants of audit delay in Malaysia (100 listed companies; 1996 to 2000). The result shows that audit delay is related positively to the company profitability, audit opinion and debt proportion and negatively with industry, auditor, and company year-end.

Ahmed (2003) examines the timeliness of corporate annual reporting in three South Asian countries, namely, Bangladesh, India and Pakistan. A multivariate regression analysis indicates that financial year-end date is a significant determinant in each country. The size of the audit firm, as measured by the factor loading of audit fees, number of reporting entities audited by an audit firm with international linkages, indicates that large audit firms take significantly less time in India and Pakistan. Further, company profitability and size were significant determinants only in Pakistan.

Cullinan (2003) tested three theories why client size may affect audit fees: (i) larger clients have shorter audit lags because they can prepare their financial statements more quickly (client preparation theory), larger clients have shorter lags because auditors are more willing to complete the audit quickly to retain larger clients (client services theory), and larger clients have more transactions to audit, resulting in longer audit delay (transaction theory). The result shows mixed support for the client services theory. In addition, fund assets was negatively related to audit lag, while other measures of the potential incentives for client service were not significantly related to audit lags.

Beekes et al. (2004) investigated the links between accounting quality, proxied by earning timeliness and conservatism, and composition of the board of directors. Results indicate that firms with a higher proportion of outside board members are more likely to recognize bad news in earnings on a timely basis. However, firms whose boards comprise a relatively high proportion of outsiders do not display greater reporting conservatism with regard to the recognition of good news. These findings

suggest that board composition is an important factor in determining the quality of UK firms' reported earnings.

Leventis et al. (2005) examined the effect of several independent variables on the audit reporting lag of Athens Stock Exchange listed companies at the time of its transition from an emerging market to a newly-developed capital market. The result reveals that type of auditor, audit fees, number of remarks in the audit report, the presence of extraordinary items, and an expression of uncertainty in the audit reporting affected the audit report lag. In addition, the results also suggest that audit report lag is reduced by appointing an international audit firm or paying a premium audit fee, but is extended by aspects of potentially bad news. Ahmad et al. (2005) examined factors affecting audit reporting lag for 70 Indonesian listed companies with 49 in manufacturing and 21 in financing sectors. The result shows that audit lag is related to client size, geographical segments, and going concern opinion.

Leventis & Caramanis (2005) examined auditor and auditee-related factors that determine audit time as a proxy of audit quality. The result reveals that audit effort (as proxy of the audit quality) is found to have a positive correlation with company size and gearing, and is also significantly higher for companies audited by large multinational audit firms and for companies that seek equity finance. In addition, they suggest that effectiveness of regulation is a mechanism for strengthening the agency relationship between management and shareholder.

Behn et al. (2006) investigated factors affecting current and future audit lag by sampling the US assurance partners of an international audit firm. The result shows

that lack of sufficient personal resources hindered a significant reduction in prior audit reporting lags. In addition, the clients' and auditors' mindset must change to accommodate a new audit approach. Thereafter, the skill-set of auditors is also believed to affect the audit lags.

Owusu-Ansah & Leventis (2006) examined the factors affecting timely annual financial reporting practices for 95 non-financial, group companies listed in the Athens Stock Exchange. The result shows that large companies, services and companies audited by the former Big-5 audit firms have shorter final reporting lead time. In addition, other factors affect the timely reporting are audit opinion, construction sector, and ownership. The finding does not support the monitoring cost theory.

Ettredge et al. (2006) examine the impact of internal control quality on audit delay following the implementation of the SOX (2002). The result shows that presence of material weakness is associated with longer delays. Regarding material weakness, general material weakness is associated with longer delays. In addition, companies with control problems in personnel, process and procedure, segregation of duties, and closing process experience longer delays.

Abdullah (2006) investigated the roles of the composition of board of directors, audit committee and the separation of the roles of the board chairman and the chief executive officer on the timeliness of reporting. The findings show that board independence and the separation of the roles of board chairman and CEO are significantly associated with timeliness of financial report. The agency cost of debt

(leverage) and information signaling theory (profitability) are also supported by this study.

Abdelsalam & Street (2007) investigated the significance of several corporate governance and firm-specific characteristics as potential determinants of the timeliness of corporate Internet reporting for UK companies listed on the London Stock Exchange. The result shows that there is a significant relationship between timely corporate Internet reporting and the corporate governance characteristic of board experience and board independence. Specifically, the boards with less cross directorships, more experience in terms of the average age of directors, and lower range in services for executive directors provide more timely corporate Internet reporting. However, board independence is negatively associated with the timeliness of Internet reporting.

Lee et al. (2008) examined whether multinational firms report earnings sooner than domestic firms. In addition, they tested the contention that there is a greater amount of information asymmetry between managers and shareholders of MNC. They found that management of multinational firms exercises its discretion to report earnings earlier than managers of domestic firms. This is indicated by a shorter discretionary delay and a shorter total delay for multinational firms. In addition, audit reporting lag is associated with the leverage, annual trading volume, and total fixed assets to total assets, extraordinary items, loss, audit opinion, fiscal years, size, bad news, and auditor's size.

Ho-Young & Geum-Joo (2008) investigated whether audit reporting lag is determined by certain auditor-related factors for Korean listed companies. The result shows that audit report lag is negatively associated with the audit and non-audit fee, auditor's size, and audit opinion. Further analysis shows that abnormal audit hours, the provision tax services, and services relating to the design of internal control systems significantly reduced audit reporting lag.

El-Bannany (2008) examined the determinants of the audit reporting lag in Egyptian banks during the year 2004. The study uses 27 banks listed in the Egyptian Stock Exchange. The result reveals that external auditor's type, bank size, audit complexity in terms of the number of branches, audit complexity in terms of diversity level and profitability have a significant impact on the audit reporting lag.

Al-Ajmi (2008) investigated factors affecting the timeliness of annual reports. By using 231 firms-years listed in the Bahrain Stock Exchange, Al-Ajmi (2008) found that the determinants of timeliness of annual reporting are company size, profitability and leverage. Thus, there is no effect from the accounting complexity or auditor type on the timeliness of annual reporting. Further, corporate governance proxies significantly affected the management report lag.

The summary of the studies related to the timeliness of financial reporting (measured by audit report lag or audit delay or audit lead time, and financial reporting announcement) is shown in Table 2.2 on page 33.

Table 2.1  
*Summary of Past Studies on Timeliness of Financial Reporting*

No	Authors	Objective	Independent Variables	Sample	Result
1	Ashton et al. (1987)	Examine the determinants of the audit report lag.	Total revenue for current year, Industry classification, Public/non-public status of the company, Month of financial year end, Overall quality of internal controls Complexity of its operations, Financial complexity, Electronic data processing Complexity, Reporting complexity mix of audit work, Number of years company has been, client sign of net income, Current year net income or loss/total assets, Type of audit opinion	USA (488 companies; 1982)	Audit delay related: Positively to: total revenues, operational complexity. Negatively to: Public/nonpublic classification, overall Quality of internal control, relative mix of audit work.
2	Cho (1987)	Examine determinants of Audit delay and Management delay	Size, Standardized unexpected earnings, absolute value of unexpected earnings, audit opinion, prior year total delay	183 companies	Audit delay related to Size and audit opinion Size related to management delay. Management delay related to market reaction
3	Ashton et al. (1989)	Examine the factors affecting the timeliness by using the audit lag as proxy of the timeliness	Company size, Industry, Month of year-end, Sign of net income, Type of audit opinion, Extraordinary items, contingencies, Audit firm	Toronto (465 listed companies; 1977-82)	Companies' size, industry's type, net income, the existence of extraordinary items, and busy seasons.
4	Newton & Ashton (1989)	Examine the relation between audit technology and audit delay for Canadian Big Eight firms from 1978 to 1982	Total assets at year end (AST), industry classification, fiscal years (Mon), percentage change in earning from previous years (CNGE), Contingencies (CNTG), type of audit opinion (OPIN), degree to which audit technology is structured.	Toronto (465 listed companies; 1977-82)	Structure audit firm tend to have greater means delay. Relationship between structure and delay is very weak.
5	Carslaw & Kaplan (1991)	Examining the multivariate relationship between a set of the explanatory variables and audit	Company size, Industry, Income (LOSS), Extraordinary Items, Audit Opinion, Auditor, Company Year-End, Company Ownership Debt Proportion.	New Zealand (public companies;	Audit delay is related: Inversely to the size, Directly to losses, company ownership, and debt proportion.

		delay for a large sample of New Zealand Public Companies		1987 and 1988)
6	Kinney & McDaniel (1993)	MADD = audit delay from misstatement firm-ADD for the matched firm	Interim earning (IEST), IEOS Earn Down, earning correction (CORR), extraordinary item (ExItem), Correcting firm with first time contingency modification (NewUncert), Return	US 85 firms disclosing in the 1976-1985 annual report correction.
7	Bamber et al. (1993)	Examined factors affecting the audit lag	Timing of accounting disclosure; amount of audit work required, incentive to provide timely report, structure audit approach	USA: 972 firm in 7 industries
8	Ng & Tai (1994)	Examined the determinants of audit delay for a sample of 292 and 260 listed companies for 1991 and 1990, respectively	Company size, Industry, Income (LOSS), Extraordinary Item, Audit Opinion, Auditor, Company Year-End, Company Ownership	Hong Kong (listed companies, 1990 and 1991)
9	Schwartz & Soo (1996)	Examine audit report lags and earning announcement lags for sample of firms that switched auditors, DV ; LAG	Auditor change in early time (EARLYCH), Auditor change in later time (LATECH), structure approach, switch from structured to non-structured, intermediate audit report, size, extraordinary item, loss, probability of bankruptcy, going concern uncertainty, qualified opinion, financial industry, fiscal year end, audit firm type.	Sample of auditor change from 8-K from 1988 to 1993; 502 auditor changes representing 1800 firms
10	Hossain & Taylor (1998)	Examined the relationship between the audit delay and	Company size Debt-equity ratio	Pakistan (103 listed)

	several company characteristics in a developing country (Pakistan)	Profitability Subsidiaries of multinational companies Audit firm size	companies; 1993)	Multinational companies).
11	Jaggi & Tsui (1999)	Examines whether the audit report lag (ARL) of Hong Kong companies is associated with auditor business risk and audit firm technology	IV; auditor business risk, structured/unstructured audit approach CV: number of subsidiaries, nature of client's business, company size, unexpected positive earnings news and nature of audit opinion	393 Hong Kong companies for the 1991-1993 period
12	Henderson & Kaplan (2000)	Investigated the time line of annual reporting and factors affecting it.	Size, profit, gear, age, extra, month, and operation.	47 non-financial companies listed on the Zimbabwe Stock Exchange
13	Etredge et al. (2000)	Examined the quarterly and annual reporting lags that occur if companies currently using a retrospective review switched to timely review.	Ownership (Ball & Brown), debt to asset ratio (D/A), new securities issues (NEWSEC), internal audit function (ICONT), receivables/total assets (REC/A), size	709 companies with return rate 61% (217 timely review, 114 retrospective review) in USA, 2 stages LS
14	Henderson & Steven (2000)	Investigate the determinants of audit report lag for sample of banks using panel data analysis.	Auditor business risk (ownership concentration, financial condition, regulatory status), audit complexity (income diversity, foreign activity, and merger activity), other work related factors (extra ordinary items, annual loss, consistency exception, other auditor, and auditor change), incentive for timeliness (client size and earning size), audit technology (auditor	USA 93 banks from 1988-1993 or 558 observation.

		structure).		
15	McLelland & Giroux (2000)	Provides further evidence on the timeliness of external audit-reporting for Municipalities.	Signaling, information technology, report contents, client size and complexity, audit characteristics and regulatory constraints	209 US cities that had populations that were more than 100,000
16	Geiger & Raghunandan, (2001)	Examines the potential impact of the Reform Act on auditor reporting	Sales, probability of bankruptcy, default, lag (audit report to bankruptcy date), audit lag, post reform act	383 public company bankruptcies for the years 1991 through 1998
17	Imam et al. (2001)	Examines whether audit delay of Bangladeshi companies is associated with firms' link to international firm	Associated with the international firm	115 listed companies of the Dhaka stock exchange 1998.
18	Owusu-Ansah (2000)	Examine the determinants of the audit report lag	Size, profitability, age, gear, extra ordinary items	ARL related to ROCE, size and age.
19	Knechel & Payne (2001)	To examine the determinant of the audit report lag	Incremental audit efforts (hours), resources allocation of audit team effort measured by rank (partners, managers, staff) provision of non-audit services	226 audit engagements from an international public accounting firm
20	Payne & Jensen (2002)	Examines the effects of municipal audit and audit-firm characteristics on municipal audit delay	Management incentives for timely reporting, including a city manager form of government, the presence of a high quality financial reporting system, and bonded indebtedness, municipal size, audits performed during the external auditor's busy season, the receipt of a	USA public organizations.

		qualified audit opinion, and for municipalities that were required to comply with the Single Audit Act	external auditor's busy season, qualified audit opinion, and municipal audit engagements
21	Soltani (2002)	Reporting behavior and type of audit report, size, audit qualification.	5000 annual reports of French publicly-held companies for the years 1986-1995
22	Ahmed (2003)	Profitability and size of audit firm (proxied by audit fees), and financial conditions	sample of 558 annual reports for the year 1998
23	Cullinan (2003)	Client pressure theory (LnTA, number of funds, audit fee/asset), transaction theory (number of securities held, portfolio turnover)	269 mutual funds, OLS
24	Geiger & Rama (2003)	Size, probability of bankruptcy, default, debt, equity, cost reduction program, asset sales, audit committee, report lag, Big 5, audit fee, non-audit fee.	USA
25	Ahmad & Kamaluddin (2003)	Investigates the determinants of audit delay in Malaysia	Malaysia (100 listed companies; 1996-2000)

26	Leventis & Weetman (2004)	Examined the timeliness of FR determinants	Trading volume, public issues, change in profitability, number of audit remarks, barriers to entry, and concentration	91 companies listed in ASE. OLS	TFR related to negatively public issues, profitability, and concentration ratio and positively to number of remark in the audit report.
		Lead time to disclosure	Theory used; information cost saving, favorable/unfavorable news, and propriety cost.		
27	Beekes et al. (2004)	Examined the links between accounting quality (earning timeliness and conservatism), and composition of BOD	Return, BODC, 12 months raw return, gearing, size, price to book value, board ownership, percentage of institutional ownership, auditor type, block holder, duality	All non-financial listed companies in UK 1993 to 1995.	Firm with higher outside members are more likely to recognize bad news in earnings on a timely basis, but do not display greater reporting conservatism with regarding to the recognition of good news. Board composition is important factor in determining the quality of reported earning
28	Ahmad et al. (2005)	To examine factors affected by audit report lag	Client size, auditor size, loss, going concern opinion, segment geographic, and industry type.	Indonesia, 70 companies with 49 manufacturing and 21 financing factors.	Audit lag related to; client size, geographies segments, and going concern opinion
29	Lai & Cheuk (2005)	Examines the effect of audit partner rotation and various types (lateral, cross-up and cross-down) of audit firm rotation on audit report lags (ARL)	Audit partner rotation, earning new, loss, number subsidiaries, industry, extra ordinary item, qualified audit opinion, going concern audit opinion, probability of bankruptcy, report month, big 5 auditors, structure audit firm, NAS by incumbent, audit fees, discretionary accrual and audit firm rotation	369 companies in 2001 in Australia	ARL related positively to cross up, number subsidiaries, going concern, bankruptcy, and negatively related to size and fiscal years.
30	Leventis et al. (2005)	To examine the audit report lag of companies listed on the Athens Stock Exchange	Type of auditor, Number of remarks, Audit fee per hour, Extraordinary items, Company size, Ownership concentration, Profitability, Gearing, Number of subsidiaries, Industry, Uncertainty in the audit report,	Athens (171 listed companies; 2000)	Audit report lag related: Positively to: extraordinary, items, number of remarks and uncertainty in the audit, report. Negatively to: type of auditor, audit fee per hour.

		Other auditor, Auditor change.		
31	Leventis & Caramanis (2005)	Examined auditor-and auditee-related factors that determine audit time, as a proxy of audit quality	Type of auditors, number of remarks, audit fees, Size, ownership, profitability, public issues gearing. Control variables: auditor change, number of subsidiaries, and industry.	218 companies in Greeks
32	Niu (2006)	Examined the association between corporate governance mechanisms and the quality of accounting earnings.	Board composition, Shareholder by manager or director, shareholder right, Size, Leverage, auditor specialization,	888 firms - year observation - listed in S&P/TSX
33	Owusu-Ansah & Leventis (2006)	Examined determinants of Financial reporting lead time.	Size, debt to asset, equity share controlled by insiders, number of remark made in audit report, type of auditors, industry type.	95 non-financial, group companies listed on the ASE. Multivariate regression analysis
34	Abdullah (2006)	Investigate the role of the composition of BOD, audit committee and BOD chairman and CEO	Proportion of non executive directors, AC independence, role of CEO, size, debt to asset, ROA, auditor size, fiscal years, opinion	355 listed companies in KLSE from 1998 to 2000.
35	Behn et al. (2006)	To investigate the impediments identified by practicing auditors that keep them from significantly reducing the time lag between closing and issuing their report.	People impediments (client; skill, mindset, resources, access; auditor; schedule, resources, skill, mindset), process impediment (client; consolidation, control, closing, estimation, internal review; auditor; review, complex issues) and technology impediments (client ; system, connectivity; auditor; tools, connectivity)	Web survey to all US assurance partners of an international audit firm. 217 partners responded.

36	Ding & Stolowy (2006)	To investigate the impact of certain corporate characteristics such as size, international financing, and audit firm on timeliness of earning	Company size, international financing, audit firm	267 French listed companies	Company size is related to the timeliness of earning.
37	Ettredge et al. (2006)	To analysis the impact of internal control quality on audit delay following the implementation of SOX.	Material weakness, general material weakness, size, industry, ownership, ROA, Leverage, going concern, extra ordinary, segment report, loss, restatement, auditor opinion, auditor change.	2465 firm for year 2003 and 2350 (2041 with effective ICOFR) for 2004 ( 309 with material weakness) in USA	Audit delay related to SOX procedure and weakness, material weakness, general material weakness, internal control problems, concentration, extraordinary items, loss, size, report new loss, restate earning, and modified opinion.
38	Abdelsalam & Street (2007)	To examine the significance of several corporate governance and firm-specific characteristics as potential determinants of the timeliness of corporate Internet reporting	Board independent, role duality, board experience, board cross directorship, age of director, length of services of executive director and NED, ownership structure (number of shareholder, number of major shareholder, proportion of block ownership).	115 UK companies	Timeliness of CIR related positively to board experiences, audit fee, size and analysis, and negatively related to board independence, length of services by executive directors, cross directorship, block ownership.
39	Lambert et al. (2007)	investigate the potential effects of this legislation by examining if (and how) changes in audit delay have been associated with changes in earnings quality	Audit delay, CV; workload compressed audit, cash flow from operation, absolute value of CFO, market to book value, audit firm, loss, extra ordinary item, unqualified opinion, change in auditors, leverage, year and industry dummy.	28243 firm years in USA	Change in audit delay related negatively to change in discretionary accrual level, or that reductions (increases) in audit delay are associated with lower (higher) earnings quality
40	Enrique Bonson-Ponte (2008)	To analyse the factors that determine delays in the signing of audit reports	Regulatory pressure, size, auditor type, qualification, relative size, change in regulation	105 companies of the Spanish continuous market, from 2002	Audit delay related to financial conditions, loss, leverage, business segments, fiscal years, auditor opinion, size and BN.

			to 2005. panel data methodology	
41	Lee et al. (2008)	To examine whether multinational firms report earnings sooner than domestic firms	MNC, ownership concentration, financial condition, loss, leverage, reportable business segment, extraordinary items, auditors opinion, fiscal years, size, earning news, industry dummy, year dummy.	9555 firms years of multinational firms
42	Lee & Jahng (2008)	To examines whether audit report lag (ARL) is determined by certain auditor-related factors.	audit and non-audit fees received from clients, auditor tenure, type of auditor and audit opinion	Korea firm
43	El-Bannany (2008)	To investigate the determinants of the audit report lag in Egyptian banks during the year 2004	External auditor type, bank size, audit complexity in terms of the number of branches, audit complexity in terms of diversity level and bank profitability	Twenty-seven banks listed in the Egyptian Stock Exchange
44	Al-Ajmi (2008)	To investigate the determinants of the timeliness of annual reporting	Size, profitability, leverage, auditor type, accounting complexity and corporate governance variable.	231 firms-years of company listed in Bahrain Stock Exchange
45	Abdelsalam & El-Mastry (2008)	To investigate the impact of the board independence and ownership structure on the timeliness of corporate internet	Board independence, role duality, managerial ownership, blocks ownership. Control variable are Size, profitability, and audit fee.	44 Irish listed companies.
				TCIR is positively associated with board of director's independence and Chief executive officer (CEO) ownership.

		reporting of Irish Listed companies		
46	Ezat & El-Masry (2008)	To examine the factors that affect the timeliness of corporate internet reporting of Egyptian listed companies	firm size, type of industry, liquidity, ownership structure, board composition and board size	37 Egyptian listed companies
47	Dimitropoulos & Asteriou (2008)	To investigate whether timeliness of income recognition and conservatism exists in the Greek capital market		105 non-financial firms listed at the Athens Stock Exchange

The study on the timeliness of financial reporting (measured by audit report lag, audit delay, management report lag and total report lag) can be divided into several related variables, namely auditor-related factors (external auditor characteristics), corporate governance (board and audit committee characteristic), internal control, other firm-related variables, external to firm variables, and other variables. Determinants of the timeliness of financial reporting can be from external audit characteristics and consist of several variables. The factors are audit efforts (Knechel & Payne, 2001), audit fees (Cullinan, 2003; Abdelsalam & Street, 2007; Ho-Young & Geum-Joo, 2008; Lee et al., 2008), audit opinion (Ashton et al., 1987; Schwartz & Soo, 1996; Ahmad & Kamaruddin, 2003), going concerns (Imam et al., 2001; H. Ahmad et al., 2005), qualified opinion (Soltani, 2002), auditor size or type (Abdullah, 2006; Owusu-Ansah & Leventis, 2006; Ho-Young & Geum-Joo, 2008), audit structure (Jaggi & Tsui, 1999; Ahmad & Kamaruddin, 2003), audit technology (Ashton et al., 1987; Newton & Ashton, 1989), auditor business risk (Bamber et al., 1993), auditor link to MNC (Leventis & Caramanis, 2005; Leventis et al., 2005), and audit specialization (Owusu-Ansah & Leventis, 2006).

The second variable is concerned with corporate governance mechanism. There are several significant determinants of the timeliness of financial reporting regarding corporate governance, such as board experiences (Abdullah, 2006; Abdelsalam & Street, 2007), board length of services (Abdelsalam & Street, 2007), cross directorship (Abdelsalam & Street, 2007), board composition (Beekes et al., 2004; Niu, 2006; Owusu-Ansah & Leventis, 2006), board duality (Abdullah, 2006), and board shareholding (Niu, 2006).

The third variable that affects the timeliness of financial reporting are firm-related variables, such as net income (Ashton et al., 1989; Ahmad & Kamaruddin, 2003; Leventis et al., 2005), ownership (Ashton et al., 1987; Leventis & Weetman, 2004; Owusu-Ansah & Leventis, 2006), family ownership (Jaggi & Tsui, 1999), profitability (Abdullah, 2006; Ahmed, 2003; Leventis & Weetman, 2004), loss (Carslaw & Kaplan, 1991; Bamber et al., 1993; Schwartz & Soo, 1996; Ettredge et al., 2000; Enrique Bonsón-Ponte, 2008), leverage (Abdullah, 2006; Ettredge et al., 2000; Leventis & Caramanis, 2005; Enrique Bonsón-Ponte, 2008), and financial condition (Jaggi & Tsui, 1999; Henderson & Kaplan, 2000; El-Bannany, 2008)

Moreover, other variables are bankruptcy probability (Schwartz & Soo, 1996; Lai & Cheuk, 2005), MNC subsidiaries (Jaggi & Tsui, 1999; Lee et al., 2008), extraordinary items (Ashton et al., 1989; Bamber et al., 1993; Schwartz & Soo, 1996; Soltani, 2002; Ettredge et al., 2006), business diversification (Ng & Tai, 1994; Leventis et al., 2005), firm size (Ashton et al., 1989; Carslaw & Kaplan, 1991; Bamber et al., 1993; Ng & Tai, 1994; Schwartz & Soo, 1996; Jaggi & Tsui, 1999; Henderson & Kaplan, 2000; Henderson & Steven, 2000; Geiger & Raghunandan, 2001; Ahmed, 2003; Cullinan, 2003; Ahmad et al., 2005; Lai & Cheuk, 2005; S. Leventis & Caramanis, 2005; Ettredge et al., 2006; Abdelsalam & Street, 2007; El-Bannany, 2008; Enrique Bonsón-Ponte, 2008), fiscal year (Ashton et al., 1987; Ashton et al., 1989; Knechel & Payne, 2001; Ahmad & Kamaruddin, 2003; Lai & Cheuk, 2005), and geographic segments (Ahmad et al., 2005; Lee et al., 2008), internal control (Ashton et al., 1987), technology website (McLlelland & Giroux, 2000), return (Kinney & McDaniel, 1993), number of securities

held (Cullinan, 2003), group of report (Soltani, 2002), and general and material weakness (Ettredge et al., 2006).

There are also external factors that determine the timeliness of reporting as suggested by many researchers, such as industry type (Ashton et al., 1987; Ashton et al., 1989; Bamber et al., 1993; Newton & Ashton, 1989; Ahmad & Kamaruddin, 2003; Owusu-Ansah & Leventis, 2006), financial industry (Ashton et al., 1987; Abdelsalam & Street, 2007), public and non-public classification (Ashton et al., 1987; Payne & Jensen, 2002), analyst (Abdelsalam & Street, 2007), and regulation uncertainty (Henderson & Steven, 2000).

There are several theories involved in the timeliness of financial reporting. The agency theory is the main theory that underpins the relationship between timeliness' determinants and timeliness of financial reporting. The relationship can further be explained as well by agency cost of debt, asymmetric information (Enrique Bonsón-Ponte, 2008), monitoring cost theory (Henderson & Kaplan, 2000), client preparation theory, client services theory, and transaction theory (Cullinan, 2003).

### **2.1.2 Empirical Findings on Financial Reporting Quality**

Financial reporting quality in prior literature has focused on factors such as earning management, financial restatements, and fraud that clearly inhibit the attainment of high quality financial reports and have used the presence of these factors as evidence of a breakdown in the financial reporting process (Cohen et al., 2004). In addition, they have

examined the role of various players, such as board, audit committees, external auditors, and internal auditors, and the extent to which these players have either individually or collectively influenced the attainment of financial reports that are free from material misstatements and misrepresentations (Cohen et al., 2004).

The studies about corporate governance and financial reporting quality have been done by many researchers (Klein, 2002; Xie, Davidson Iii, & DaDalt, 2003; Lanfeng & Anlin, 2004; Park & Shin, 2004; Davidson, Goodwin-Stewart, & Kent, 2005; Iturriaga & Hoffmann, 2005; Osma, 2008; Peasnall, Pope, & Young, 2005; Young, 2005; Ali El & Seboui, 2006; Benkel, Mather, & Ramsay, 2006; Rashidah Abdul & Fairuzana Haneem Mohamed, 2006; Wright, Shaw, & Guan, 2006; Chung-Hua & Hsiang-Lin, 2007; Kin Wai, Baruch, & Yeo, 2007; Liu & Lu, 2007; Machuga & Teitel, 2007; Osma & Noguer, 2007; Piot & Janin, 2007; Cornett, Marcus, & Tehranian, 2008; Siregar & Utama, 2008).

Klein (2002) examines whether audit committee and board characteristics are related to financial reporting quality. The result shows that a negative relation is found between audit committee independence and abnormal accruals. In addition, a negative relation is also found between board independence and abnormal accruals. In other words, reductions in board or audit committee independence are accompanied by large increases in abnormal accruals.

Xie et al. (2003) examined the role of the board of directors, the audit committee, and the executive committee in preventing high quality financial reports. The result shows that

the composition of a board in general and of an audit committee more specifically, is related to the likelihood that a firm will affect the quality of financial reporting. In addition, board and audit committee members with corporate or financial backgrounds are associated with firms that have smaller discretionary current accruals. Board and audit committee meeting frequency is also associated with reduced levels of discretionary current accruals. Therefore, they conclude that board and audit committee activity and their members' financial sophistication may be important factors in the determining of financial reporting quality.

Lanfeng & Anlin (2004) examined the relationship between board characteristics and financial reporting quality. Management of a firm may reduce the financial reporting quality for their own benefit. However, under proper corporate governance mechanisms, the board of directors might be able to monitor the firm and prevent the management from reducing the quality of the financial report. In addition, they also find that when the board size is large, the higher will be the financial reporting quality. However, when there are more outside directors in the board, the extent of financial reporting quality is higher.

Park & Shin (2004) investigated the effect of board composition on the financial reporting quality in Canada. They found that outside directors, as a whole, do not reduce abnormal accruals; directors from financial intermediaries increase the financial reporting quality, and the board representation of active institutional shareholders increase it further. In addition, Peasnell et al. (2005) examined whether the incidence of earnings

management as proxy of financial reporting quality by UK firms depends on board monitoring. They focused on two aspects of board monitoring: the role of outside board members and the audit committee. Their findings suggest that boards contribute towards the integrity of financial statements, as predicted by agency theory.

Davidson et al. (2005) investigated the role of a firm's internal governance structure to increase the financial reporting quality. It is hypothesized that the quality of the financial report is systematically related to the strength of internal corporate governance mechanisms, including the board of directors, the audit committee, the internal audit function and the choice of external auditor. The result reveals that a majority of non-executive directors on the board and on the audit committee are found to be significantly associated with a higher likelihood of financial reporting quality, as measured by the absolute level of discretionary accruals.

Ali El & Seboui (2006) tested whether earnings management (as proxy for financial reporting quality) and governance mechanisms may help bridge the gap between accounting values, approximated by economic value added (Payne & Jensen, 2002) and market values, approximated by created shareholder value (CSV). They found that some governance mechanisms can attenuate the gap between CSV and EVA, whereas others can accentuate it. Finally, the results reveal that the different cases of convergence and divergence between CSV and EVA can be explained by governance mechanisms and financial reporting quality.

Wright et al. (2006) examined the level of financial reporting quality as measured by earnings management in countries where the level of investor protection provided by the legal environment is high. The results indicate that managers in both the U.K. and U.S. manage earnings downward prior to a management by objective, with U.S. managers being significantly more aggressive than U.K. managers.

Abdul & Mohamed (2006) investigated the extent of the effectiveness of monitoring functions of board of directors, audit committee and concentrated ownership in increasing the financial reporting quality among 97 firms listed on the Main Board of Bursa Malaysia over the period from 2002 to 2003. The result reveals that financial reporting quality is negatively related to the size of the board of directors. In addition, the board of directors is seen as ineffective in discharging their monitoring duties due to management dominance over board matters. The apparent reason for this phenomenon is attributed to the board of directors' relative lack of knowledge in company's affairs.

Benkel et al. (2006) analyzed whether independent directors on the board and audit committee are associated with reduced levels of financial reporting quality. The results support the hypotheses that a higher proportion of independent directors on the board and on the audit committee are associated with increased levels of financial reporting quality.

Chung-Hua & Hsiang-Lin (2007) studied the impacts of corporate governance on earnings management as a measurement of financial reporting quality. They found that firms with good corporate governance tend to produce high quality financial reports. In

addition, firms with higher growth (lower earnings yield) are prone to engage in earnings smoothing and earnings aggressiveness (proxy for financial reporting quality), but good corporate governance can mitigate the effect.

Kin Wai et al. (2007) identified a fundamental attribute of the organizational structure of the firm--the intensity of interdivisional transaction relatedness and complimentariness--which contributes to the level of financial reporting quality. They find that financial reporting quality is positively associated with organizational relatedness. They also find that, for firms with high organizational relatedness, those with a high proportion of outside directors and high institutional equity ownership have less pronounced earnings management. Collectively, their result suggests an interaction between corporate governance structure and organizational relatedness in affecting earnings quality.

Piot & Janin (2007) investigated the effect of various audit quality dimensions (i.e. auditor reputation and tenure, audit committee existence and independence) on earnings management as a measurement of financial reporting quality in France. The main findings of this study are that the presence of an audit committee (but not the committee's independence) curbs upward earnings management. In addition, although the audit committee acts as a device to control the more egregious (i.e. income-increasing) forms of earnings management, the monitoring incentive of outside directors may be hampered by the collective board responsibility for financial reporting quality.

Liu & Lu (2007) investigated the effect of corporate governance on level of earning management as a measurement of financial reporting quality for China's listed companies. They concluded that firms with higher corporate governance levels have lower levels of earnings management or higher level of financial reporting quality. In addition, the findings strongly suggest that agency conflicts between controlling shareholders and minority investors account for a significant portion of financial reporting quality in China's listed firms. Machuga & Teitel (2007) investigated whether there is an improvement in earnings quality surrounding the implementation date of the Code of Corporate Governance. The results indicated that the quality of earnings increases after the implementation of the Code. Earnings quality characteristics generally improved for firms listed exclusively on the Mexican Bolsa, and they only document improvements in income smoothing and timely loss recognition for Mexican firms listed on U.S. stock exchanges.

Cornett et al. (2008) studied the impact of governance structure and incentive-based compensation on firm performance when measured performance is adjusted for the effects of earnings management. The finding shows that institutional ownership of shares, institutional investor representation on the board of directors, and the presence of independent outside directors on the board all reduce the use of discretionary accruals or financial reporting quality.

Osma (2008) analyzed the role of boards of directors in constraining research and development (R&D) spending manipulation. Osma (2008) found that more independent

boards constrain the manipulation of R&D expenditure. He added that independent directors have sufficient technical knowledge to identify opportunistic reductions in R&D, efficiently constrain opportunistic R&D spending, and influence the financial reporting quality. Other studies examined whether corporate governance mechanisms promoted by best practice codes are effective in constraining financial reporting quality for a Spanish sample of quoted companies during the period from 1999 to 2001 (Osma & Noguer, 2007). Specifically, they analyze the association between earnings management and two key aspects of corporate governance: board composition and the existence of board monitoring committees. The results show that board composition significantly determines earnings manipulation as a proxy for financial reporting quality.

Siregar & Utama (2008) investigated whether companies listed on the Jakarta Stock Exchange (JSE) conduct efficient or opportunistic earnings management and examined the effect of ownership structure, firm size, and corporate-governance practices on it. In addition, they found inconsistent evidence with regard to the impact of institutional ownership, firm size, and corporate-governance practices on financial reporting quality.

Studies on the relationship between corporate governance and other proxies for financial reporting quality (fraud) have also been done by many researchers (Chen, Firth, Gao, & Rui, 2006; Marciukaityte, Szewczyk, Uzun, & Varma, 2006; Persons, 2006; Fich & Shivdasani, 2007; Langnan & Weibin, 2007; Kang, 2008). Chen et al. (2006) examined whether ownership structure and boardroom characteristics have an effect on corporate financial reporting quality in China. Based on the univariate analysis, it shows ownership

and board characteristics are important in explaining financial reporting quality. From the multivariate analysis results, however, it shows that the proportion of outside directors, the number of board meetings, and the tenure of the chairman are associated with the financial reporting quality.

Marciukaityte et al. (2006) examined whether the costs of corporate fraud are a primary cause to motivate changes in the internal control systems of companies. Results in the study show that after the accusation of fraud, companies increased the proportion of outsider directors on their boards of directors and on the monitoring committees of the boards. Furthermore, the results suggest that improvements in the internal control systems following accusations of fraud helped to restore the damaged reputation of a company. Thus, the proportion of outside directors can improve the financial reporting quality.

Persons (2006) use logit regression analysis to identify corporate governance characteristics that can potentially reduce the likelihood of financial reporting. Results indicate that the financial reporting quality is higher if: (1) the board of directors (BOD) has a larger proportion of outside independent directors, (2) the chief executive officer (CEO) and the BOD chairman are not the same person, (3) the BOD size is smaller, and (4) the CEO tenure on the BOD is long.

Fich & Shivdasani (2007) investigated the reputation impact of financial fraud as a proxy for financial reporting quality for outside directors based on a sample of firms facing

shareholder class action lawsuits. They found that outside directors do not face abnormal turnover on the board of the sued firm but experience a significant decline in other board seats held. In addition, interlocked firms that share directors with the sued firm also exhibit valuation declines at the lawsuit filing. Finally, fraud-affiliated directors are more likely to lose directorships at firms with stronger corporate governance and their departure is associated with valuation increases for these firms.

Langnan & Weibin (2007) studied the relationship between corporate governance and corporate fraud by utilizing logit regression and by employing a sample of 176 firms listed in Chinese stock markets during the period from 2001 to 2005. The results reveal that the proportion of independent members in the board of directors is lower for firms with lower financial reporting quality than their counterparts. They also found that the firms with CEOs being the chairman of the board of directors are more likely to have a lower quality of financial reporting than the other firms.

Another measure of the financial reporting quality is financial restatement. Studies on financial restatement have been done by a few researchers as well (see for example, Abbott, Parker, & Peters, 2004; Arthaud-Day, Certo, Dalton, & Dalton, 2006). Abbott et al. (2004) examined 88 restatements of annual results (without allegations of fraud) in the period from 1991 to 1999, together with a matched-pairs control group of firms of similar size, exchange listing, industry and auditor type. They find that the independence and activity level (proxy for audit committee diligence) of the audit committee exhibited a significant and negative association with the occurrence of restatement and increase in

the financial reporting quality. They also document a significant negative association between an audit committee that includes at least one member with financial expertise that affect the financial reporting quality. Arthaud-Day et al. (2006) used an event history analysis and they found that CEOs and CFOs of firms filing a material financial restatement were more than twice as likely to exit their firms as their counterparts in a matched sample. Directors and audit committee members were approximately 70 percent more likely to exit in restatement firms. Therefore, directors and audit committees are associated with the financial reporting quality.

As suggested by prior literature, financial reporting quality studies have been focused on the earning management, fraud and financial restatements. Regarding earning management, most of the studies show that corporate governance through board and audit committee characteristics have a significant role in reducing the earning managements and increase the financial reporting quality (see for example, Davidson et al., 2005; Ali El & Seboui, 2006; Benkel et al., 2006; Chung-Hua & Hsiang-Lin, 2007; Cornett et al., 2008). Only few studies show that there is no relationship between corporate governance and financial reporting (Piot & Janin, 2007; Abdul & Mohamed, 2006; Siregar & Utama, 2008).

However, studies on corporate governance and other proxies for financial reporting quality show all significant relationships (Chen et al., 2006; Marciukaityte et al., 2006; Persons, 2006; Fich & Shivdasani, 2007). Only one study did not support the relationship between corporate governance and fraud (Langnan & Weibin, 2007), whereas the study

on the impact of the corporate governance on financial restatement shows a significant relationship as well (Abbott et al., 2004) and other results did not show a significant impact (Arthaud-Day et al., 2006). In brief, we can conclude that the role of corporate governance (board of director and audit committee) in the financial reporting quality is very important.

## **2.2 Theoretical Aspects**

### **2.2.1 Theory of Timeliness of Financial Reporting**

There are few theories used by the researcher to explain the relationship between audit report lag or audit delay, and reporting lag. However, the main theory is agency theory. Other theories are the resources dependent theory, monitoring cost theory, client preparation theory, client services theory, and transaction theory. The last three theories are extensively used in audit lag studies. Agency and resources dependence theory would be discussed in the next section.

Client preparation theory suggests that larger clients have better internal controls, allowing faster preparation of their financial reports and finally, that audit lag will be shorter (Ashton et al. 1989). However, client services theory suggest that larger clients get first priority for scarce audit firm resources due to the importance of larger clients to the auditing firm and therefore, they would get their audit done sooner. Therefore, audit lag would be less (Bamber et al. 1993). Further, transaction theory suggests that a larger number of transactions will have longer audit delays (Simnett, Aitken & Firth, 1995).

## 2.2.2 Theory of Corporate Governance

The role of board of directors, audit committees, and auditors in companies are explained by many perspectives and theories. At least, there are three groups of disciplines that can explain the role of board of directors in the company; Law and economics, sociology and social psychology, and strategic decision-making (Ees, Gabrielsson & Huse, 2009).

The law and economics perspective has two aspects, namely command and control, and codification and compliance. Theories that are classified under law and economics are agency theory, transaction cost theory and other control-based theories. However, stewardship theory and resources dependence theory, which are classified under sociology and social psychology, are normally used in corporate governance. Finally, institutional theory is used in strategic decision-making.

Agency theory focuses on the contract between principals and agents (Jensen & Meckling, 1976). Agency theory posits that the relationship between principal and agents may be subject to inefficiencies, to the extent that asymmetric information prevents effective monitoring of the agent's actions by principals. Therefore, the solution to these problems is the assigning of a formal monitoring role to the board of directors (Fama & Jensen, 1983). As a consequence, various board structures, such as composition (e.g. Klein, 2002; Xie et. Al, 2003; Lanfeng & Anlin, 2004), were used to find the optimal incentive and monitoring structure. Research in this stream would use variables such as CEO duality, board independence, and board compositions.

Transaction cost theory (Williamson, 1984) assumes that the corporation is considered as a nexus of contracts. Therefore, a corporation has to be controlled through a formal structure. This theory and other contract-based theories assumed actors behave rationally with the objective of maximizing their own benefit under conditions of incomplete or asymmetrical information. Therefore, corporate governance regulation would structure and codify the relationship between the corporation and their external stakeholders (Monk & Minow, 2008). Research in this stream would focus on the compliance to the Code of Corporate Governance and the relationship between corporations and their external environments.

Stewardship theory explained the interaction and relationship between board members and other internal actors. This theory has been one of the more prominent perspectives in successfully challenging the agency theory perspective (Donalson & Davis, 1991). Thus, this theory shaped our understanding of the influence of effective board governance (Shen, 2003). Variables used in this area could be in the form of CEO characteristics (tenure and experiences), social ties, demographics, similarities, timing of directors' appointments.

Resources dependent theory explains how organizations search for ways to connect to the environment in order to secure a stable flow of resources (Pfeffer, 1972). This theory posits that the board can link to its environment by establishing important contacts and providing access to timely information through personal and professional networks (Ees

& Postma, 2004). Directors interlock is one of the examples of variables normally used in this area. Further, another variable is multiple board membership.

Institutional theory explains how interdependencies between corporate and other societal institutions make organizations conform to the accepted norms of their population (DiMaggio & Powel, 1983). Board appointments and social network ties are seen as enabling board members to learn about the existing norm of appropriate beliefs and behavior in the relevant industry or countries (Aguilera & Cuervo-Cazurra, 2004). Research in this stream would use variables such as board appointments, social networks ties, interlocking directorship, and multiple board membership.

As this study investigates the role of the board of directors, audit committee and auditors on the timeliness of financial report, it uses two theories; agency theory and resources dependent theory. Further, this study also utilizes the client services theory and transaction theory.

### **2.3 Determinants of Timeliness of Financial Reporting**

The variance in timeliness of financial reporting can be explained by several determinants. The determinants can be classified into several variables, namely external auditor's related variables, corporate governance, non-corporate governance firm-related variables, and external variables. This section would discuss timeliness determinants, which are divided into board of directors, audit committee, and auditor characteristics.

### **2.3.1 Board Characteristics**

The corporate board has three roles in a company, namely institutional, internal governance and monitoring, and strategic decision-making roles (Goodstein, Gautum, & Boeker, 1994). In the institutional role, the board provides a link between company and its environment and secures critical resources (Williamson, 1996). In addition, the board is also on finding instruments to access external resources, reduce environmental uncertainty, and decrease transaction costs associated with external linkages (Pfeffer & Salancik, 1978). This role is often seen from the resources dependent perspective.

The control role is involved with control of managers and evaluating the managerial performance for shareholder's interest (Barnhart, Marr, & Rosenstein, 1994). In addition, the director's job is to hire and fire the management as well as executive compensation. Indonesia's Code of Corporate Governance clearly states that the board has the control role (NCG, 2006). It adds that the board of directors may impose sanctions on members of the management in the form of a suspension, subject to further determination by a General Meeting of Shareholders, according to the Code.

In the strategic role, the directors are involved with developing a vision, a mission, screening the environment and selecting and conducting the choice role of strategic options (Hendry & Kiel, 2004). The control and institutional (dependence resources perspective) role of directors are important roles in the financial reporting quality.

Therefore, the role of boards in timeliness of financial reporting is explained by these theories.

Timeliness is a necessary component of relevant financial information and it is receiving increased attention by accounting regulators and listing authorities worldwide (Abdelsalam & Street, 2007). The role of the board in the corporate reporting process is from the contention by Jensen (1993). He argues that board characteristics, such as board composition, are associated with the board monitoring incentives. Therefore, examining board characteristics on the timeliness of financial reporting will reveal the extent to which the board is involved in overseeing the financial reporting process. In fact, the board is at the apex of the internal corporate governance systems as argued by Jensen (1993) and suggests that the board is important in determining the timeliness of financial reporting.

The characteristics of boards as determinants of the timeliness of financial reporting consist of board composition (Abdullah, 2006), board size (Beekes et al., 2004), board expertise and knowledge, board shareholding (Niu, 2006), and board experience (Abdelsalam & Street, 2007). The determinants are discussed below.

### **2.3.1.1 Board Composition**

Board composition is defined as the ratio of outside directors to the total number of directors of a company, and is regarded as a proxy of board independence (Kim, 2007).

Board independence must not be a current or a former receiver of remuneration other than as director and they have incentives to signal their managerial competence to employers and are experts in monitoring management (Hsu, 2007). He adds that outside directors are independent of management and more effective at decision control.

The importance of board independence is based on the agency theory (Fama & Jensen, 1983). Further, board independence, as representative of shareholders, have particular incentives to prevent and detect such opportunistic reporting behavior by management (Fama & Jensen, 1983). In addition, board independence is effective in resolving the agency problems due to their effectiveness in monitoring management (Johnson, Daily, & Ellstrang, 1996). The Indonesian Code Of Corporate Governance also recommends that there should be a proportion of board independence in the board of director members (NCG, 2006).

Independent Directors are valued due to their breadth of experience and knowledge, their relationship with other different companies and industries, their independence, as well as interaction with other management teams (William & Shapiro, 1979). From the resources dependent theory, board independence helps an organization secure resources through their external associations (Pfeffer & Salancik, 1978). It is because of their relatively greater independence that independent directors are better able to insure that the proper checks and balances are maintained (William & Shapiro, 1979), more than inside the board.

It has been suggested that boards dominated by outside or non-executive directors (NED) may help to alleviate the agency problem by monitoring and controlling the opportunistic behavior of management (Berle & Means, 1932; Williamson, 1985; and Jensen & Meckling, 1976) and also by ensuring that managers are not the sole evaluators of their own performance (Baysinger & Hoskisson, 1989). Independent directors also help in reducing management consumption of perquisites (Brickley & James, 1987) and removing non-performing CEOs and other board personnel (Pettigrew & McNulty, 1995). In addition, Pearce & Zahra (1992) argue that boards dominated by NED may influence the quality of directors' deliberations and decisions and provide strategic directions.

Having discussed the benefits of having the independent directors, it also has the disadvantage of having a high proportion of board independence in a company. For example, Goodstein et al. (1994) argued that board independence may be detrimental to companies as they may stifle the company's strategic actions. In addition, Bayersinger & Butler (1985) stated that board independence may engulf the company in excessive monitoring and may lack the business knowledge to be truly effective (Patton & Baker, 1987). Others argue that board independence might lack real independence (Demb & Neubauer, 1992). In fact, Byrd & Hickman (1992) concluded that high-caliber CEOs may appoint independent boards to please shareholders with an illusion of active monitoring and board independence that could likely be supporting the CEO's agenda.

Several corporate reform proposals have concluded that independent boards will enhance the audit process (Blue Ribbon Committee, 1999). In addition, the board of directors has a primary responsibility of overseeing the company's financial reporting process (Klein, 2002). It was argued that boards meet routinely with the company's accounting staff and external auditors to review financial statements, audit procedures, and internal control mechanisms (Klein, 2002).

The board of directors can influence the integrity of financial accounting process and has the responsibility to provide an independent oversight of management performance and to hold management accountable to shareholders for its actions (DeFond & Jiambalvo, 1994). The role of the board of directors as a corporate governance mechanism in corporate financial reporting or accounting quality was suggested by several researchers, such as Cohen et al. (2004). Thus, Cohen et al. (2004) argued that board composition somehow affected the accounting quality through integration with other corporate governance actors. In addition, Beasley (1996) found that the proportion of outside directors is lower in the companies that have problems with fraud compared to that of those who did not. Another author also supports the link between board independence and accounting quality (Klein, 1998; Peasnell, Pope, & Young, 2000). The effect of the board composition on timeliness of financial reporting has also been studied by a few researchers (Beekes et al., 2004; Abdullah, 2006).

Abdullah (2006) investigated the role of the composition of board directors, audit committee and the separation of the role of the board chairman and the chief executive

officer on the timeliness of financial reporting for 355 non-financial companies listed on the Kuala Lumpur Stock Exchange for the period from 1998 to 2000. He hypothesized that the extent of the outside of board directors leads to the timeliness of financial reporting. He documented that board independence is significantly associated with the timeliness of financial reports. The results, with respect to the composition of the board of directors, are generally consistent with the argument that properly constituted boards lead to effective governance. Thus, it would bring to the better-governed firms being “more transparent” and “more timely” with respect to the disclosure (Abdullah, 2007).

Beekes et al. (2004) examined the links between accounting quality, proxy with earning timeliness and conservatism, and board composition for all non-financial listed companies in UK from 1993 to 1995. They argue that the internal board structure and the proposition of non-executive directors, who are better able to monitor the activities of senior management, influence the accounting conservatism. Further, firms with a lower proposition of outside directors are expected to exhibit less conservative tendencies. They add that the recent policy changes that have occurred in the UK are likely to result in better accounting quality in UK companies.

### **2.3.1.2 Board Size**

Board size is another important element of the board of directors that may have an effect on timeliness of financial reporting. Empirical findings show that the board size does matter (Monks & Minow, 1995) because it impacts on the extent of monitoring,

controlling and decision-making in the company. Indeed, Monks & Minow (1995) and Lipton & Lorsch (1992) suggest that larger (smaller) boards are able to commit more (less) time and efforts to overseeing management.

There is no consensus in the literature about board size; whether a large number or a small number of directors on a board is better. Larger boards have a few advantages or benefits. For example, Pfeffer (1987) and Goodstein et al. (1994) argue that larger boards may benefit some companies, as they provide diversity that would help companies to secure the critical resources and reduce the environmental uncertainty. In addition, Halebian & Finkelstein (1993) stated that the main benefit to having a large board is that a large number of directors on a board has more problem-solving capabilities. Others have viewed the board-performance nexus as more specifically linked with the ability of the board to tap into significant resources that would flow from a larger rather than a smaller board size (Zahra & Pearce, 1989)

In contrast, Jensen (1993) argues that large boards are less effective due to coordination and processing problems. He notes that the benefit of increased monitoring by larger boards may be outweighed by poorer decision-making in a larger group. Small boards are believed to alleviate the processing problem and in becoming more effective (Jensen, 1993), but when they have grown too big, boards become more symbolic rather than being a part of the management process (Hermalin & Weisbach, 2000). Lipton & Lorsch (1992) adds that larger boards will outweigh the costs associated with slow decision-making, the processing problem and being easily controlled by management.

From the group decision-making perspective, larger boards have communication or coordination problems as it takes more efforts to reach a consensus, and thus the final decisions of larger boards reflect more compromises and are less extreme than smaller boards (Sah & Stiglitz, 1991). Thus, it is because the agency problems (such as boards' free riding) become more severe as a board becomes larger, and it would be easier for management to influence and control the boards. Therefore, the management has more power in decision-making when the board size increases (Jensen, 1993). In fact, larger boards will make it more difficult in arranging board meetings and for boards to reach a consensus, resulting in less efficiency and slower decision-making.

The number of board members has even suggested by several researchers. For example, Jensen (1993) suggests that the optimal board size is between seven and eight members. Further, Lipton & Lorsch (1992) recommended that board size would be around eight or nine members. However, the number of board members is not specifically regulated by Indonesia's Code of Corporate Governance. It is written in the Code that the composition of the board of directors shall be of sufficient size that suits the complexity of the business of the company by taking into account the effectiveness in decision-making (NCG, 2006).

Yermack (1996) finds that there is a negative relationship between board size and the likelihood of CEO dismissal. However, Certo, Daily, & Dalton (2001) concluded that IPO companies that have larger boards tend to have lower under-pricing. Further,

Karamanou & Vafeas (2005) finds that updates of management earnings forecast are more likely in firms with larger boards. In addition, Beasley (1996) also found that the size of the board of directors significantly affected the likelihood of financial statement frauds. His result shows that the bigger the size of board of directors, the likelihood of financial statement fraud also increases. Therefore, the board size is likely to affect the financial reporting process, hence the timeliness of financial reporting.

In short, the timeliness of financial reporting depends a great deal on the monitoring, communication, participation and coordination and decision of the board directors in the company. Therefore, if one or more of these aspects becomes a problem due to the large number of the board members, it can affect the timeliness of financial reporting. For example, because of large number of board directors, communication with the external auditor might take more time and therefore, slow the timeliness of financial reporting. However, a large number of board members might shorten the timeliness of financial reporting somehow. However, a small number of board members might not be necessary as regards the above problems. As a conclusion, the relationship between board's size and timeliness of financial reporting is expected to be exist.

### **2.3.1.3 Board Expertise and Knowledge**

Resources dependence theory views board knowledge as most often conceptualized as the stock of information or background expertise that board members have in aggregate (Payne, Benson, & Finegold, 2009). In addition, board expertise and knowledge

contribute to overall cognitive resources and improve the scope and quality of the board's decisions and its effectiveness (Hilman & Dalziel, 2003; O'Neil & Thomas, 1996).

Board member's human capital, in the form of knowledge and experience, certainly influence the outcome of board decision-making. The knowledge is classified as business strategy, succession, finance, law, governance, technology, society and how an organization works (Conger et al., 2001; Sonnenfelt, 2002). Indeed, Ravasi & Zattoni (2006) suggest that outsider board members have to have access to important information, and stakeholders and resources should have both functional knowledge (e.g. accounting, finance, marketing etc) and industry-related knowledge, while also having expertise in the forms of problem solving, communication and teamwork expertise (Rindova, 1999).

Carpenter & Westphal (2001) argue that board expertise and knowledge help to improve the monitoring as well as advising and counseling, especially companies facing environmental uncertainty. Potential trade-offs associated with boards exist and are made up of the independent boards that may lack the necessary knowledge and skills to do their jobs, especially those related to strategic involvement (Lawler & Finegold, 2006; Robert et al., 2005). Others found that board expertise is positively associated with the increased involvement in strategic issues (Ruijgrok et al., 2006; Zahra and Pearce, 1990; Zona and Zattoni, 2007).

In contrast, most studies conclude that expertise and knowledge are important determinants of board effectiveness, while other surveys show that the overall level of board expertise is insufficient to conduct the current and emerging roles and responsibilities (Felton & Fritz, 2005). As a result, the stakeholders are now stressing the boards processes to develop and improve board expertise. In addition, Brown (2007) has found that these processes are positively linked to board capability.

Cohen et al. (2004) suggests that various attributes of boards may influence board effectiveness as corporate governance mechanisms. Therefore, board expertise and knowledge, as board attributes, may also contribute to the financial reporting quality. In addition, the quality of board directors can also be seen from their background such as academic and business background (knowledge, skill, and experience) as well as good personalities (commitment) (Ruigrok, Peck, Greve, & Hu, 2006). In fact, most of the directors' occupations are business executives, lawyers, consultants and school professors (Kesner, 1988). Indeed, the accounting financial expert has experience as a public accountant, auditor, principal or chief financial officer, and controller. Brickeley et al. (1994) reported that retired executives from other companies are also effective monitors. Similarly, Monk & Minow (1995) recommended that academicians are less effective directors relative to those with business experience.

All codes of corporate governance recommended that expertise and knowledge should be possessed by board members. For example, Indonesia's Code of Corporate Governance clearly states that members of the supervisory board shall have the capability and

integrity required to ensure that oversight and advisory functions can be carried out properly (NCG, 2006). Thus, knowledge, such as accounting, finance, strategic and expertise, such as communications, problem-solving and teamwork, should be possessed by Indonesia's listed company boards.

Hsu (2007) argued that the board of directors, with good expertise and knowledge, can credibly transmit information and reduce information asymmetry between insiders and outsiders. Therefore, directors with expertise and knowledge can monitor the financial reporting process. Further, the board quality might have a relationship with the timeliness of financial reporting. The board with knowledge and expertise tends to reduce information asymmetry by reporting the financial statement as soon as possible.

#### **2.3.1.4 Board Shareholding**

Board shareholding refers to the board having stock in the company. Thus, boards are encouraged to have their own portion of ownership in the corporation. In addition, the rationale to invite board of directors, especially-non executives, to have a small portion of ownership in the corporation to reduce the gap between the board's interest and the interest of shareholders, as well as the corporation (Jensen & Meckling, 1976). Therefore, the interests of the board and shareholders can be aligned. Byrd & Hickman (1992) suggested that independent boards should own a small fraction of the bidding firm's common stock due to benefits that can be gained by the shareholders. Jensen & Meckling (1976) argued that board-equity ownership creates a more powerful board to be able to

monitor management. In addition, Monks & Minow (1995) stated that the board of directors should become effective, not just because they have no economic ties to the company beyond their job as board members, but because they are significant shareholders.

Jensen & Meckling (1976) stated that the extent of managers' shareholdings can reduce agency costs as it serves to align the interests of management with those of other shareholders. In addition, many scholars suggest that management should be compensated with ownership in order to be aligned with the stockholder interest (Jensen & Meckling, 1976). Similarly, Fama & Jensen (1983) and Morck, Shleifer, & Vishny (1988) asserted that when corporate insiders own a low level of firm equity, they have a higher incentive to keep their strategies in line with preferences of other owners since their bonding to the firm's outcome is high. However, when the ownership reaches a certain point; they should allocate firm resources for their own interests, regardless of the effect on outside shareholders (McConnel & Servaes, 1995).

There are two opposing views in the literature regarding the relationship between board or management ownership and the quality of financial reporting: managerial entrenchment hypothesis and agency theory (Niu, 2006). Under the managerial entrenchment hypothesis, managers may have more incentive to exercise discretions in accounting reporting and therefore, monitoring and disciplining would be more difficult for directors with ownership in the firm (Morck et al., 1988). In addition, Morck et al. (1988) added that high board ownership would cause the moral hazard and asymmetric

information problem between management or directors and investors. Therefore, board ownership may negatively affect the accounting quality and thus the timeliness of financial reporting.

Under the agency theory, Jensen & Meckling (1976) argued that managers with lower firm ownership would have an incentive to manipulate the accounting figures in order to relieve the constraints imposed by an accounting-based compensation contract. In addition, Jensen (1989) states that outside directors with the small number of stocks they are holding can effectively monitor and discipline the managers. Therefore, the board ownership is positively associated with the accounting quality and thus the timeliness of financial reporting.

Jensen (1993) concludes that outside board shareholding has a positive relationship with the degree of the internal control problem. It means that the internal control problem arises when outside directors have little stock ownership. He added that the internal control would be more effective if directors owned substantial stock. Most firms use the stock option compensation to increase the director's equity holding. With board ownership, it will reduce the opportunistic behavior and therefore reduce the agency costs.

Hambrick & Jackson (2000) stated that many firms require their boards to increase its ownership. In addition, Warfield, Wild, & Wild (1995) argue that the managerial shareholdings can act as a disciplining mechanism. With the same analogy, board

shareholding can also affect the financial reporting quality. Further, Niu (2006) suggested that board shareholding can affect the financial reporting quality. In brief, the relationship between board's shareholding and timeliness of financial reporting is expected to be negatively significant.

### **2.3.1.5 Board Experience**

Boards comprising experienced directors should be in a position to monitor and advise the managements (Kroll, Walters, & Wright, 2008). They add that an experienced board of directors, feeling enabled, might further involve themselves in the promotion of the firm's advantage. In addition, the board of directors might become engaged in monitoring and advising because, through experimental learning, they may be able to contribute positively to the company outcome.

Kosnik (1987) argued that cross directorship will enable directors to use their wider experience and expertise in monitoring management and in performing better. Dahya, Lonie, & Power (1996) added that board experience will assist in making information more transparent as comparisons can be made based on the knowledge of other companies. Experienced directors are also more likely to have greater incentives to monitor effectively and to safeguard their reputation or improve their external labor market (Kaplan & Reishus, 1990). Thus, institutional investors and shareholder activists have pressured companies to appoint directors with diverse bases of experience under the assumption that diversity may improve board monitoring and decision-making (Browder, 1995).

Board experience is believed to be another variable affecting accounting quality. Most recent studies used several proxies to determine the board experiences, such as cross directorship, age, and length of services by executive director and non-executive directors (Abdelsalam & Street, 2007). In addition, the experienced directors used their expertise associated with more advanced age to effectively monitor management and serve as better board members by ensuring timely information. Length of services by executive directors may reap personal benefits by delaying disclosure as also supported by Sengupta (2004).

If a board member sits on more than one board, it would be called multiple directorships. Multiple directorships benefit the company in a number of ways (Richardson, 1987). Firstly, they serve as an influential source of information (e.g. information exchange motive). Thus, they provide important information associations with new policies, trade secrets, and practices among companies that could lead to better performance (Haunschild & Beckman, 1998). Then, they also expose directors to economic trends and aspects of international business; provide directors with the opportunities to compare management policies and practices; provide insights into how other companies pursue new approaches to business; expose directors to different management styles and monitoring behavior; and allow directors to seek advice from others (Bacon & Brown, 1974). Secondly, they serve as a mechanism for control (e.g. control motive). Bazerman & Schoorman (1983) recommended that networks formed via multiple directorship help enhance corporate control and effectiveness as favorable legislation could be promoted and competition reduced. In brief, multiple directorships could offer additional insights

into the outcome of other companies, facilitating comparisons (Dahya et al., 1996) as well as enhancing control.

In contrast, Dooley (1969) and Mariolis (1975) suggested that good corporate performance has nothing to do with the directors having multiple directorships. Multiple directorships are also seen as devices for inter-corporate collusion and inter-organizational elite co-optation and corporation (Pfeffer & Salancik, 1978). Similarly, Mace (1986) argued that multiple directorships may encourage directors to pursue their own objectives at the expense of other shareholders. Vicknair, Hickman, & Carnes (1993) argued that multiple directorships may lead to a situation where very few are willing to 'rock the boat' which, in turn, will have adverse implications on the independence of the board. Shivdasani & Yermack (1999) concluded that multiple directorships are consistent with the interest of shareholders and increase the probability of accounting frauds.

Length of service for board members is frequently used as proxy for experience (see for example, Abdeisalam & Street, 2007). Bacon & Brown (1973) argues that it take at least three to five years for directors to gain an adequate understanding of a company and the way it operates. And many have insisted that a more thorough understanding of a company takes much longer. If tenure is an important factor for directors in general, it takes on even more importance in the context of committee assignments, where strong experiences in solving company problems is likely to be a highly valued characteristic.

Age of board members is also frequently used as the proxy for board experience. The experience is only achieved through years of practical applications (Nasser, 2008). Some have argued that a board of directors may become less effective as they grow older (Core & Holthausen, 1999). Core & Holthausen (1999) looked at the percentage of independent board directors over 70-years old in their study. Abdelsalam & Street (2007) found that there is a significant relationship between the board experience, age and length of service by executive directors with the corporate Internet reporting timelines. Therefore, the relationship of these variables with accounting quality or timeliness of financial reporting is expected to be significant.

### **2.3.2 Audit Committee Characteristics**

The role of audit committees in the board was stressed by Jensen & Meckling (1976). They argue that the agency costs increase when the management takes the opportunity to act against the shareholder. Contractual relationships between the management and shareholders will reduce the agency cost but this relationship should be monitored systematically. Therefore, it is the role of the audit committee to monitor the relationship.

The audit committee is a subcommittee of the full board. They facilitate the communication with other corporate governance mosaics; internal auditors, external auditors, management and board of directors (Cohen et al., 2004). Klein (1998) argues that the audit committee meets regularly with external and internal auditors to review financial statements and internal control. Hence, the audit committee would reduce the

asymmetric information between insiders and outsiders and thereby mitigating the agency problem (Hsu, 2007).

The audit committee may also be associated with better financial reporting practice as quoted by DeFond & Jiambalvo (1994) and McMullen (1996). For example, McMullen (1996) finds that companies with an audit committee are less likely to experience errors, irregularities and other indicators of unreliable financial reporting. Others argue that the creation of audit committees would improve the quality and accuracy of financial information (Cohen et al., 2004). In other words, the audit committee has a role to improve financial reporting quality, including the timeliness of financial reporting (DeFond & Jiambalvo, 1994).

There are several characteristics of audit committees that have been used in the study of financial reporting quality, such as audit committee independence, size, activity, financial expertise. Since audit committees would reduce the asymmetric information, they may be associated as well with the timeliness of financial reporting. The characteristics of audit committee independence, size, financial expertise, activity, and stockholding are discussed below.

### **2.3.2.1 Audit Committee Independence**

The first characteristic of the audit committee is the independence of the committee. The word of independence is claimed as an expertise of the accounting profession. Mautz &

Sharaf (1961) differentiated clearly between independence as the personal quality of an individual and independence as objectivity. The former focuses on the honest disinterestedness and the combination of integrity and expert skill, and the latter emphasizes on the freedom from bias or prejudice. In addition, Williams (1992) linked independence to economic self-interest.

Independence of the audit committee has become a concern of many researchers. For example, Klein (2002) argues that in order to produce unbiased financial reports, audit committee members are appointed to act independently in order to resolve the conflicts among the actors. The audit committee independence monitors better because they have no personal or economic relationship with management. In addition, they are experts and good at decision control (Beasley, 1996). The independent audit committee allows external and internal auditors to audit and assess financial information more objectively. Thus, audit committee independence can help reduce financial fraud (Abbott, Parker, & Peters, 2004).

However, audit committee independence may also have negative images as to what board independence has. For example, they may stifle the company strategic actions (Goodstein et al., 1994), may engulf the company in excessive monitoring (Baysinger & Butler, 1985), lack the accounting and finance knowledge to be truly effective (Patton & Baker, 1987), lack of real independence (Demb & Neubauer, 1992) and may please the shareholders with the illusion of active monitoring while supporting the CEO's agenda (Byrd & Hickman, 1992).

Felo, Krisnamurthy & Soleiri (2003) concluded there is a positive relationship between audit committee independence and financial reporting quality. Specifically, a number of studies have also found a relationship between audit committee independence and financial reporting practices (Cobb, 1993; Beasley, Carcello, Hermanson, & Lapides, 2000; Klein, 2002; Carcello & Neal, 2003; Abbott et al., 2004; Lin, Li, & Yang, 2006; Pucheta-Martinez & De-Fuentes, 2007; Saleh, Iskandar, & Rahmad, 2007).

Cobb (1993) concludes that there is a negative relationship between percentage of outside directors in an audit committee and the incidence of fraudulent financial reporting. Carcello & Neal (2003) found those distressed firms are more likely to receive going concern reports when that firm has audit committee independence. Beasley et al. (2000) discovered that financial statement frauds are more likely to occur in firms with less audit committee independence. Klein (2002) found that audit committee independence is associated negatively with earning management, and thus increases the financial reporting quality. In addition, she concluded that audit committee independence is effective in monitoring management. Abbott, et al. (2004) investigated whether audit committee independence is less likely to experience financial reporting restatement. By using 88 restatement firms and their matched control firms, they concluded that the independent audit committee is negatively related to restatements. This result shows that audit committee independence reduces the likelihood of restatements.

Pucheta-Martinez & De-Fuentes (2007) analyzed the relationship between the likelihood that a company will receive a qualified audit report (as a measure of the quality of

financial information) and existence and characteristics of the audit committee for listed Spanish firms. They find that the percentage of the independent audit committee do have significant influence on the receipt of non-compliance qualification. In other words, a downsizing and independent audit committee reduces the likelihood of receiving an error or non-compliance qualifications.

Lin et al. (2006) investigated the role of the audit committee characteristic in ensuring the quality of financial reporting measured by earning restatements for 267 publicly-held corporations in the USA that restated their reported earnings for the fiscal year 2000. They find that audit committee independence does not have any significant relationship on the quality of reporting earnings.

Saleh et al. (2007) assessed the effectiveness of some audit committee characteristics, i.e. the independence of members, size, and frequency of meeting and knowledge of members for 561 firms listed on the Kuala Lumpur Stock Exchange. The result shows that the presence of a fully independent audit committee reduces the earning management practice. They concluded that the audit committee independence can improve the accounting quality.

Based on studies of the effect of the audit committee independence on the financial reporting quality (as measured by earning management and financial restatement and financial fraud as well), it shows that the role of the audit committee independence is very important in monitoring the management behavior and can improve the accounting

quality. The role of the audit committee is expected to be significant as well for timeliness of financial reporting.

### **2.3.2.2 Audit Committee Size**

Audit committee size refers to the number of audit committee members in the board. The importance of the audit committee size comes from resources dependence theory (Pierce & Zahra, 1992). The more audit committee members, the more diverse skills and knowledge are employed by the committee to enhance monitoring.

There are pros and cons for having more members of an audit committee in the literature. The pros of having more members of an audit committee were recommended by Pincus, Rusbarsky, & Wong (1989). Pincus et al. (1989) argued that the audit committee is an expensive monitoring mechanism and therefore, many companies are willing to bear these expenses, especially companies with high agency costs. Thus, those larger audit committees are willing to devote greater resources to oversee the financial accounting process. In conclusion, the big size of audit committees better protects and controls financial standards more than small committees. In addition, companies with less members of the audit committee, in average, devote less time to oversee the hiring of auditors, questioning management, and meeting with the internal control system personnel.

In contrast, the benefit of many members of the audit committee may be outweighed by the incremental cost of poorer communication and decision-making associated with larger groups (Jensen, 1993). Further, Hackman (1990) argued that the audit committee may be less effective because coordination and process problems overwhelm the advantages gained from having more people to draw on. Hence, managers may find it easier to convince the members of the larger audit committee regarding the accounting practices questioned by the auditor. Therefore, Lipton & Lorsch (1992) suggest the optimal members of an audit committee should be seven or eight people.

A study of the effects of the audit committee size on the financial reporting quality has been done by many researchers. However, most of the studies used the earning management, financial fraud and financial restatement as variables. Dalton, Daily, Jhonson, & Ellstrang (1999) found a positive relationship between size and the monitoring function of the board. Xie et al. (2003) documented that there is no significant relationship between the number of directors on the audit committee and earning management. Abbott et al. (2004) concluded that there is no significant association between audit committee sizes on earning restatements as a proxy of financial reporting quality. Yang & Krisnan (2005) found that the relationship between audit committee size and financial reporting quality is positive.

The most recent findings also show the significant relationship between audit committee size and accounting quality (Lin et al., 2006; Pucheta-Martinez & De-Fuentes, 2007). Pucheta-Martinez & De-Fuentes (2007) found that there is a significant relationship

between audit committee size and non-compliance qualifications. In addition, Lin et al., (2006) concluded that there is a negative relationship between audit committee size and earning management. Since there are few evidences of an association between audit committee size and financial reporting quality that are measured by earning management, financial fraud etc, it is expected that the relationship between audit committee size and timeliness of financial reporting also exists.

### **2.3.2.3 Audit Committee Financial Expertise**

Financial expertise of audit committee members has become a concern of many capital market regulatory agencies. For example, SEC (1999) requires financial expertise of at least one of the members. In Indonesia, NCG (2006) also requires financial expertise for the audit committee. A financial expert is a person who has worked and has experience in finance or accounting. Audit committees have 'financial literacy' if they have the ability to read and understand the fundamental financial statements (Coetes, Marais, Weil, & Elliot, 2007).

Capital market participants expect improved financial reporting as one of the consequences of the formation of an audit committee (Wild, 1996). He adds that knowledge of the audit committee increases the earning response coefficients. McDaniel et al. (2002) argued and stressed that the discussion about financial reporting quality is better when financial experts are part of the audit committee. Further, they add that more audit committee members with accounting knowledge would trigger more audit committee meetings to be held due to more financial reporting issues being discussed.

Defonds et al. (2005) and Davidson et al. (2004) argued that there is a positive market reaction to the appointment of accounting financial experts assigned to an audit committee.

Research on the relationship between audit committee financial expertise and accounting quality has been done by several researchers, such as (McMullen & Raghunandan, 1996; Carcello & Neal, 2003; Abbott, et al., 2004), among others. McMullen & Raghunandan (1996) investigated the association of the audit committee financial expertise and the incidence of financial fraudulent reports. They found that there is a significant relationship between audit committee financial expertise and financial fraudulent behaviour. In addition, they concluded that firms with financial reporting problems are unlikely to have financial experts, such as CPAs on their audit committees.

McDaniel, Martin, & Maines (2002) investigated financial experts (audit managers) and financial literacy (MBA graduates) on audit committee judgments of financial reporting quality. They found that an audit committee who has financial experts is able to detect reporting problems associated with the regular business activities. In fact, they also found that audit committee financial literates with less experience in specific accounting issues are likely to detect reporting problems linked to non-recurring business activities.

Carcello & Neal (2003) examined whether audit committees with financial experts can protect auditors from dismissal following the issuance of a going concern. In addition, the issuance of a going concern opinion is a measure of the accounting quality. They documented that there is no relationship between financial expertise of audit committee

and dismissal of issuance of a going concern opinion. In other word, audit committees with financial expertise cannot protect auditors from dismissal following a going concern opinion.

Abbott et al. (2004) investigated the relationship between audit committees with financial experts and financial restatements. In addition, the financial restatement is considered a proxy of the accounting quality. The result shows that there is a negative relationship between audit committee financial expertise and financial restatement. In other words, the existence of the audit committee with financial experts can decrease the occurrence of financial restatements.

The most recent studies were done by Lin et al. (2006) and Saleh et al. (2007). They conclude that there is no relationship between audit committee financial experts and the occurrence of financial restatements (Lin et al., 2006) and earning management (Saleh et al., 2007). However, the relationship between audit committee financial expertise and timeliness of financial reporting is predicted to exist.

#### **2.3.2.4 Audit Committee Activity**

Audit committee activity is another characteristic of an audit committee. It is measured by the number of meetings, meeting duration, and information exchange in meetings (Hsu, 2007). Vafeas (1999) and Adams (2000) argued that frequency of audit committee

meetings acts as a proxy of the level of real monitoring and control. Therefore, higher levels of audit committee meetings indicate a more effective audit committee.

The audit committee, who is the watchdog of the financial accounting process, can best assure the quality of the financial statements by having at least four meetings a year (Morrissey, 2000). Thus, audit committee meeting frequency could improve the financial accounting process. Abbot et al. (2003) stated that regular meetings of the audit committee would make audit committee members more informed and knowledgeable about relevant accounting and auditing issues. Further, an audit committee without any meetings or with a small number of meetings is less likely to be a good monitor (Menon & William, 1994). In contrast, Menon & William (1994) also argued that the meeting frequency of audit committee does not provide any indications about the extent of work accomplished during the meeting.

The effect of the audit committee activity on the financial reporting quality as measured by earning management, financial statement fraud, and financial restatement has also been conducted by many researchers (see for example, McMullen & Raghunandan, 1996; Xie et al., 2003; Abbott, et al., 2004; Lin et al., 2006; Saleh et al., 2007). McMullen & Raghunandan (1996) investigated the audit committee monitoring effectiveness. They sampled the companies that reported financial fraudulence and found that there is a relationship between financial reporting problems and the number of audit committee meetings. In addition, they concluded that the companies that issued the financial

reporting problems had a less frequent number of meetings conducted by the audit committee.

Xie et al. (2003) studied whether there is an effect of the audit committee meeting on the earning management. They documented that there is a negative relationship between audit committee meetings and earning management. In addition, they concluded that the audit committee activity influences the monitoring effectiveness. Hence, the more meetings conducted by the audit committee would improve the effectiveness of monitoring and improve the accounting quality.

Abbott et al. (2004) examined the effect of the audit committee meeting on the incidence of financial misstatements for 88 misstatements of annual reports from 1991 to 1999. They demonstrated that there is a negative relationship between audit committee meetings and the occurrence of misstatements. It means that the more audit committee meetings done, the less misstatements will occur.

The most recent studies in the audit committee meeting concluded that there is no relationship between audit committee meeting and quality of financial reporting (Lin et al., 2006) and earning management (Saleh et al., 2007). In addition, the relationship between the audit committee meeting is likely to have a significant relationship with the timeliness of financial reporting, since the more meetings conducted, the more problems would be discussed in the board, especially financially-related problems.

### **2.3.3 Auditor Characteristics**

The external auditor plays a significant role in helping to promote financial reporting quality (Cohen et al., 2004). Hence, prior research regarding the relationship between various corporate governance actors and external auditors has focused on several aspects: (i) auditor selection and client acceptance, (ii) audit quality and audit fees, and (iii) audit opinion and audit process. In addition, there are several external auditor characteristics that may affect the timeliness of financial reporting: auditor type/quality, opinion, change and process. This study also employs the internal auditor existence as factors affecting the timeliness of financial reporting. It is discussed in detail below.

#### **2.3.3.1 External Auditor Type/ Quality**

Auditor quality has been defined in numerous ways. The practical definition of audit quality refers to the degree to which the audit conforms to applicable auditing standards, whereas academic society defines the audit quality in many ways (Watkins, Hillison, & Morecroft, 2004). In addition, they reviewed and stated that there are four different definitions of the audit quality: (i) the market-assessed probability that financial statements contain material errors and that the auditor will both discover and report them (DeAngelo, 1981a), (ii) probability that an auditor will not issue an unqualified opinion for statements containing material errors (Lee, Liu, & Wang, 1999), (iii) the accuracy of the information reported on by auditors (Titman & Trueman, 1986), and (vi) a measure of the audit's ability to reduce noise and bias and improve fineness in accounting data.

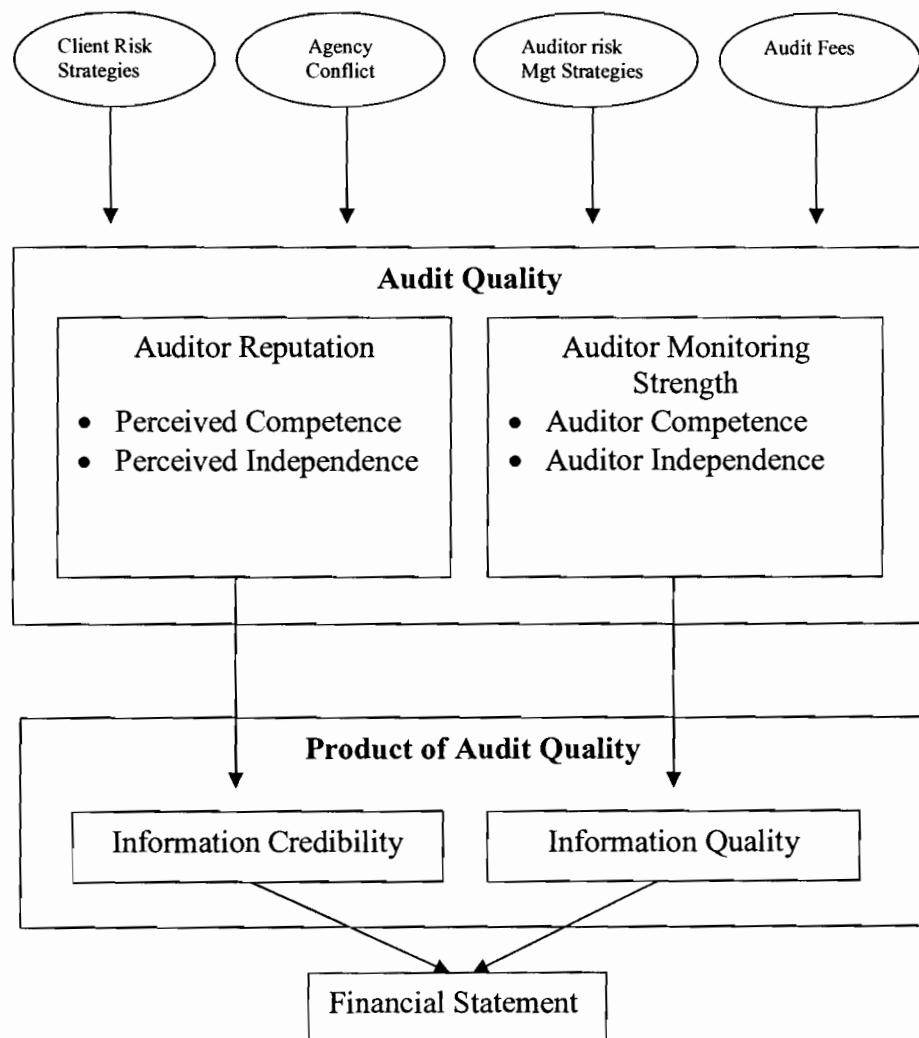
DeAngelo's definition consists of the two components of auditor quality, which is auditor's competence and independence (Watts & Zimmerman, 1983). Competence can be achieved through investment in audit technology and proper training. However, independence has long been regarded as vital for maintaining the integrity of the audit (Abidin, 2006). In addition, he noted that there four surrogates of audit quality, that are audit firm size, name-brand reputation, industry expertise and independence.

Audit quality is shown in Figure 2.2 on page 91. It captures the relations between the components of the audit quality, the product of audit quality, and their influence on financial statement information (Watkins et al., 2004). In addition, the components of audit quality, auditor reputation and auditor monitoring strength, are derived from the professional and academic literature. The drivers for audit quality are from demand and supply sides. Demand drivers consist of client risk strategy and agency theory, meanwhile the supply driver is from the auditor risk management strategy and audit fees. The product of the audit quality is information credibility and information quality.

Defond & Jiambalvo (1993) argue that larger audit firms incur costs to develop a reputation for adding value to the audit and are better able to detect and reveal managements' errors or irregularities in financial reporting. DeAngelo (1981b) suggested that large auditors have more reasons to issue accurate reports because they have more valuable reputations and the auditor has a greater reputation to lose if their clients misreport. Becker et al. (1998) suggested that large audit firms are able to detect earnings management due to their advanced knowledge and act to control opportunistic earning

management to protect their reputation. The stock market reacts more positively when a company switches to a large audit firm compared to its smaller counterpart (see for example, Teoh & Wong, 1993).

**Figure 2.2**  
*Audit Quality Framework*



Sources: Watkins et al., (2004)

Jang & Lin (1993) found that trading volume on the first trading days is significantly larger for Big Eight clients than for those of non-Big Eight firms. Firth & Smith (1992) concluded that companies undergoing IPOs experience less under-pricing when they hire large audit firms. Fuerman (2003) studied the quality difference between big six audit firms. The results of the study suggest that Coopers & Lybrand, Delloitte & Touche, Ernst & Young, KPMG and Price Waterhouse each produced higher quality auditors compared to non-Big Six firms. However, this did not apply to the Arthur Andersen Company. Eisenberg & Macey (2003) revealed that there was no evidence of audit quality differences among large auditors.

It is reasonable to expect that the larger auditor companies will have more human resources and experience in auditing quoted companies. In other words, larger auditors will be more efficient than the smaller ones (Ashton et al., 1989). Thus, Gilling (1977) argued that the audit delay for companies using an international audit firm was expected to be less than for audits done by other firms. However, it can also be argued that the small auditor companies will make special efforts to avoid delays in the auditing, with the result that the audit delay will be less for these auditors (Ng & Tai, 1994).

Other researchers have also documented the relationship between audit quality, as proxy for audit firm size and audit fees, and timeliness of financial reporting (Ahmed, 2003; Cullinan, 2003; Abdullah, 2006; El-Bannany, 2008; Enrique , Tomás, & B-D., 2008; Enrique Bonsón-Ponte, 2008; Lee & Jahng, 2008). Abdullah (2006) investigated the role of the composition of the board of directors, audit committee and separation of the role of

the board chairman and CEO on timeliness of financial reporting. In addition, he also included the auditor type, which is measured by whether the auditor is a Big 5 or a non-Big 5 audit firm. The results from the sample showed that there is a negative relationship between auditor type and timeliness of financial reporting. This means that a Big 5 audit firm will have a shorter period for timeliness of financial reporting.

El-Bannany (2008) also investigated the relationship between auditor type and audit report lag in Egypt's banks listed on the stock market. The result suggests that there is a significant relationship between auditor type and audit report lag, and thus, timeliness of financial reporting. In addition, Lee & Jahng (2008) examined the relationship between audit report lag as a timeliness measurement and several audit-related factors, including the type of auditors. They documented that the Big 4 audit firm is negatively associated with the audit report lags as the proxy for the timeliness of financial reporting.

### **2.3.3.2 External Auditor Opinion**

Previous studies suggested that the audit delay is an increasing function of the qualified audit opinion. The qualified opinion is viewed as bad news and thus slows down the audit process. Furthermore, there is a possibility of a conflict arising between the auditor and the company, which may contribute to the delay in the release of the annual reports. Whittred (1980) found that 'subject to' qualifications took an additional period to make their annual reports public.

Ashton et al. (1987) and Carslaw & Kaplan (1991) also included audit opinion as a function of audit delay investigation. Ashton et al. (1987) found that there is a significant positive relationship between audit opinion and audit report lag for non-public companies. Therefore, companies not receiving unqualified audit opinions are expected to have a longer audit delay compared to the ones receiving an unqualified (clean) report. Carslaw & Kaplan (1991) also found that a positive significant relationship existed between audit opinion and audit report lag and earning announcement date.

Schwartz & Soo (1996) documented the positive significant relationship between audit opinions for manager-controlled samples and audit report lag and earning announcement date. Ahmad & Kamaruddin (2003) also found a positive significant relationship between audit opinion and audit report lag. Ahmad et al. (2005) documented the positive significant relationship between audit opinions and audit report lag. It can be concluded that audit opinion has a significant relationship with the audit report lag and earning announcement date. Therefore, audit opinion has a significant relationship with the timeliness of financial reporting.

### **2.3.3.3 External Auditor Change**

Auditor change refers to changing made by clients due to some reasons. Johnson & Lys (1990) state that client attributes that change an incumbent auditor's competitive advantage can deteriorate, and it becomes necessary to switch auditors until a proper alignment between client attributes (such as size, complexity, and risk) and auditor

characteristics (such as size, audit structure, and expertise) is attained. Other researchers documented that clients that face new business opportunities or financing requirements can find that their preferences for different attributes of the audit product have changed (Healy & Lys, 1986; Menon & Williams, 1991).

Auditor change would affect the audit report lag as well as timeliness of financial reporting due to the new auditor-client relationship. This is because of the start-up time necessary to know in depth concerning the client's business characteristics, internal control, and risk (DeAngelo, 1981a). Therefore, there is an increased risk of litigation with new clients and thus, it motivates the auditor to perform a more extensive and time-consuming initial audit (Pierre & Anderson, 1984). As a consequence, the auditor change would make the audit report lag longer. However, the incumbent auditor might have less responsibility and therefore, it would produce a satisfied report and would affect the client's perception of the audit quality. Finally, clients would look for other auditors (Schwartz & Soo, 1996).

Studies of the relationship between auditor change and timeliness of financial reporting had been done by several researchers. Whittred & Zimmer (1984) concluded that auditor changes can be associated with an increase in reporting lags if the termination occurs because of a client's reporting methods or the potential disclosure of its deteriorating financial condition. Schwartz & Soo (1996) concluded that firms that replace their auditor early (late) in the fiscal year do so for positive (negative) reasons and experience shorter (longer) reporting lags. In addition, conflicts over reporting issues can be difficult

to resolve and consequently lead to reporting delays. In other cases, clients may be more concerned more about adhering to customary reporting practices or improving reporting timeliness.

#### **2.3.3.4 Internal auditor existence**

The importance of the internal audit in the financial reporting quality is explained by the agency theory. Internal audit, as with other mechanisms; for example, the audit committee, bonds the contractual relationship between principals and agents. Thus, internal audit also help principals to overcome the information asymmetry problem and to monitor the activities of agents cost-efficiently (Adams, 1994). In addition, the Institute of Internal Auditors' Statement of Responsibilities (1988) defines internal auditing as "an independent appraisal activity established within an organization as a service to the organization.

There are three reasons why an organization has to have the internal audit department: coercive, mimetic and normative isomorphism (Al-Twaijry, Brierley, & Gwilliam, 2003). Coercion takes place through mechanism of authority, legitimization, and the power to compel an organization to establish the internal audit department to review the adequacy of the internal control system. Further, mimetic isomorphism takes place when organizations perceive that the internal audit function will contribute to an improvement in organizational control. Finally, normative isomorphism arises from an increase in

professionalism within an organization. Therefore, it demands the internal audit professionals in an organization.

There are two main benefits for an organization from having an internal audit department. Firstly, internal audit prevents and detects irregularities that can arise from mistakes or fraud, and safeguard the assets of an organization (Alberht et al. 1988). The second benefit is performance audit, which concerns the economy, efficiency and effectiveness of various aspects of the organization by adding value to its operational performance (Marks, 2000). Further, the internal audit often performs a significant amount of work that is relevant to their host entities' financial reporting process (Al-Twaijry et al., 2003).

In addition, Cohen et al. (2004) also stressed the importance of the internal auditor as an internal control mechanism and how it affects the financial reporting quality. The agency theory explains that the existence of an internal audit can reduce the asymmetry problem and agency costs. Since timeliness of the financial report is one of the financial reporting qualities and that there is a greater amount of asymmetric information between management and shareholders during timeliness of financial reporting, internal audit may be one of the factors affecting the timeliness of financial reporting.

Ettredge et al. (2006) found that the presence of the material weakness in internal control over financial reporting is associated with audit delay. Further, empirical evidence provided in that study is both timely and reliable. The existence of the internal audit can review the internal control. Therefore, it may also affect the audit delay as well as the

timeliness of financial reporting. Ashton (1987) found that there is a negative relationship between quality of internal control and audit delay. These findings support the contention that there is a relationship between the existence of audit delay and timeliness of financial reporting. The summary of literature review of independent variable is shown in Table 2.2 below.

**Table 2.2**  
*Summary of Literature Review*

Variables	References	Theory
BC	(Hsu, 2007), (Fama & Jensen, 1983), (Johnson, Daily, & Ellstrang, 1996), (William & Shapiro, 1979), (Pfeffer & Salancik, 1978), William & Shapiro, 1979), (Berle & Means, 1932; Williamson, 1985; and Jensen & Meckling, 1976), (Baysinger & Hoskisson, 1989), Brickley & James, 1987), (Pettigrew & McNulty, 1995). Goodstein et al. (1994), Bayersinger & Butler, (1985), (Demb & Neubauer, 1992), Byrd & Hickman (1992)	Agency theory
BZ	Pfeffer (1987) and Goodstein et al. (1994), Halebian & Finkelstein (1993), (Zahra & Pearce, 1989). Jensen (1993), (Hermalin & Weisbach, 2000), Lipton & Lorsch (1992), (Sah & Stiglitz, 1991),	Resources dependent theory
BEK	(Hilman & Dalziel, 2003; O'Neil & Thomas, 1996), Carpenter & Westphal (2001). (Felton & Fritz, 2005)	Agency theory
BS	(Jensen & Meckling, 1976), Byrd & Hickman (1992), Monks & Minow (1995), (Morck et al., 1988),	Agency theory
BE	Kosnik (1987), Dahya, Lonie, & Power (1996), (Kaplan & Reishus, 1990), (Browder, 1995), Sengupta (2004), Richardson, 1987), & Schoorman (1983), (Dahya et al., 1996), Abdelsalam & Street, 2007). Bacon & Brown (1973), (Core & Holthausen, 1999) Dooley (1969) and Mariolis (1975), (Pfeffer & Salancik, 1978), Mace (1986), Vicknair, Hickman, & Carnes (1993), Shivdasani & Yermack (1999)	Agency theory
ACI	Klein (2002), (Beasley, 1996), (Abbott, Parker, & Peters, 2004). (Goodstein et al., 1994), Bayersinger & Butler, 1985), (Patton & Baker, 1987), (Demb & Neubauer, 1992), (Byrd	Agency theory

	& Hickman, 1992).	
ACS	Pierce & Zahra, 1992), Jensen, 1993), Hackman (1990)	Resources dependence theory
ACFE	McDaniel et al. (2002), Defonds et al. (2005) and Davidson et al. (2004)	Agency theory
ACA	Vafeas (1999) and Adams (2000), *(Morrissey, 2000), Abbot et al. (2003), (Menon & William, 1994)	Agency theory
AT	Defond & Jiambalvo (1993), DeAngelo (1981b), Becker et al. (1998), Teoh & Wong, 1993), Jang & Lin (1993), * Firth & Smith (1992). Eisenberg & Macey (2003)	Agency theory
AO	Whittred (1980a), Ashton et al. (1987), Carslaw & Kaplan (1991), Schwartz & Soo (1996)	Agency Theory
AC	Johnson & Lys (1990), Healy & Lys (1986), Menon & Williams (1991), Whittred & Zimmer (1984), Schwartz & Soo (1996)	Agency Theory
IA	Adams (1994), Al-Twaijri et al (2003), Alberht et al (1988), Cohen et al (2004), Ettredge et al (2006), Ashton (1987)	Agency theory

## 2.4 Chapter Summary

This chapter discussed the literature review regarding the board of directors, audit committee, external auditors characteristic and internal auditor existence, as well as timeliness of financial reporting and accounting quality. The role of the board of directors, audit committee, external auditor characteristics and internal auditor existence has both pros and cons in the literature. However, these variables are potential variables

determining the timeliness of financial reporting for Indonesia's companies. The next chapter explains about the research design and methodology.

# **CHAPTER 3**

## **RESEARCH DESIGN AND METHODOLOGY**

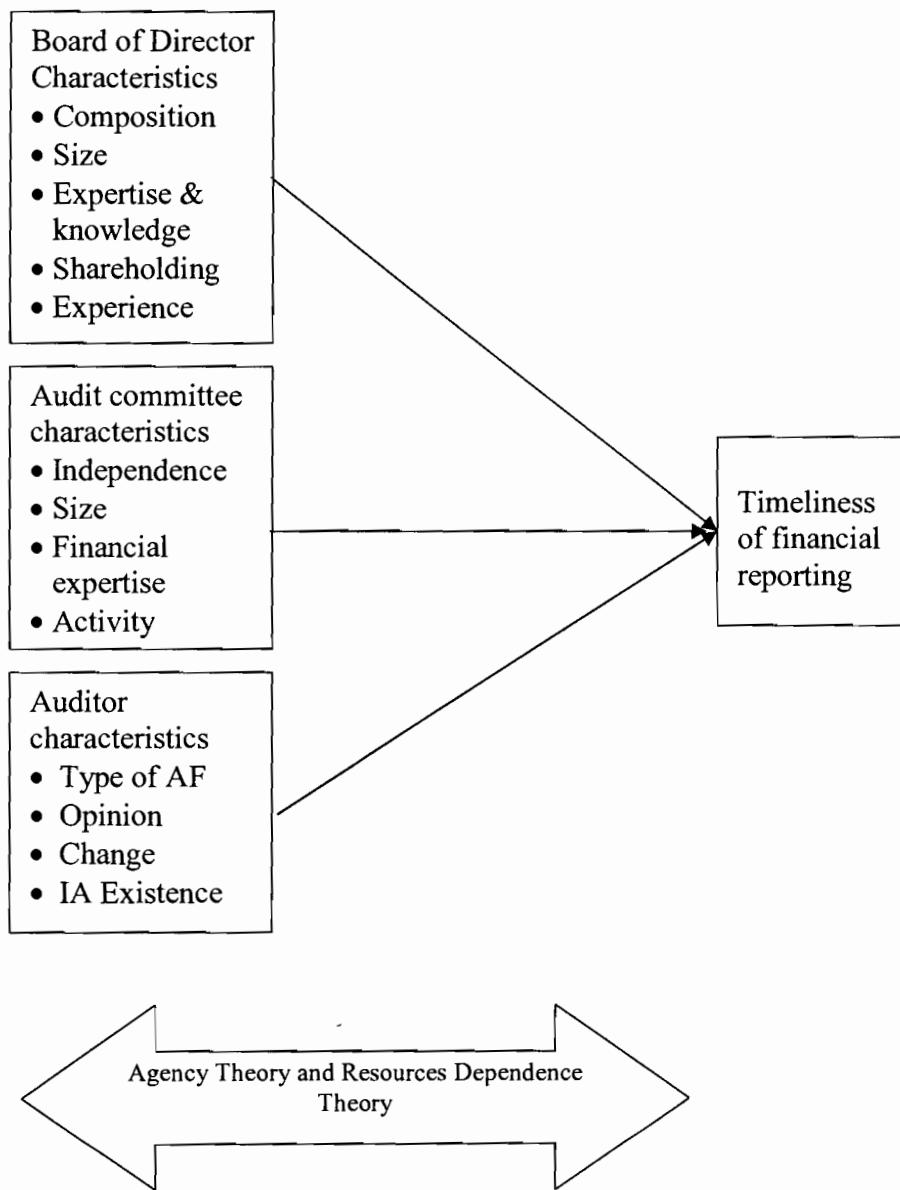
### **3.0 Introduction**

This chapter discusses the conceptual framework, hypothesis development, data collection, variables measurement, and model specification and analysis. The theoretical framework discusses the theoretical explanation of the determinants of the timeliness of financial reporting. In addition, the hypothesis development focuses on the effect of the determinants of timeliness on the timeliness of financial reporting. Further, the data collection describes the population, sample selection and procedure, and variable measurement concerns how the variables in this study are measured. Finally, the model specification and analysis evaluates the research model and analysis methodology used.

### **3.1 Conceptual Framework**

The conceptual framework of this study is shown in Figure 3.1 on page 101. The conceptual framework depicted the relationship between the board of directors, audit committee, and external auditor characteristics and timeliness of financial reporting. It also shows the relationship between timeliness of financial reporting.

Figure 3.1  
*Conceptual Framework*



Adapted from: Abdullah (2007), Beekes et. al (2004)

As mentioned above, timeliness is one of the important attributes of financial statements. In addition, decisions based on the financial statement information may be affected by the time of information release (Carslaw & Kaplan, 1991). Furthermore, the timing of earnings releases is informative for the stock market (Schwartz & Soo, 1996). Givoly & Palmon (1982) and Chambers & Penman (1984) argue that firms that announce earnings early (late) are, on average, viewed positively (negatively) by the market.

The relationship between the timeliness of financial reporting and board, audit committee and external auditor characteristic are underpinned by two theories; the agency theory and resources dependence theory. The control variables are supported by agency cost of debt (for leverage), information signaling theory for profitability and transaction theory for company sizes.

Agency theory concerns with aligning the interest of owners and managers (Jensen & Meckling, 1976). It is based on the premise that there is inherent conflict between the interests of a firm's owners and its management (Fama & Jensen, 1983). Further, manager possesses superior knowledge and expertise compared to the owners of the firm and therefore, in the position to pursue self-interested action at the expense of shareholder. Therefore, there is a need to establish adequate monitoring mechanism to protect from manager's conflict of interest.

Agency theory used as the theoretical underpinning of the board monitoring function which is described that the potential of conflict of interest that arise from separation of

ownership and control in organization (Berle & Means, 1932; Fama & Jensen, 1983). Further, monitoring by board of directors can reduce the agency cost in organization. Scholars typically discuss a number of various activities within a director's monitoring functions. The activities include the monitoring of CEO, monitoring strategy implementation, planning CEO succession, and evaluating and rewarding the CEO top managers (Hilman & Dalziel, 2003).

Resources dependence theory views organizations as being dependence on their external environment and suggests that organizational effectiveness results not only from the firm ability to manage resources but more importantly from its capacity to secure crucial resources from the environment (Pfeffer & Salancik, 1978). They add that board have additional role in a organization. They link firm to its external environment in order to secure external resources. Ruigrok, Peck, & Tacheva (2007) state that board member networks and contact are crucial for their ability to perform the role of boundary spanners securing contact for their companies.

Resources dependent theory provides the theoretical foundation for director's resources role. This theory used to underpin the relationship between the board of directors as provider of resources (e.g. legitimacy, advice and counsel, links to other organization) and financial reporting quality or firm performance (Hilman & Dalziel, 2003). This theory assumes that board of directors is both human capital (experience, expertise and reputation) and social capital (networks of ties to other firms and external contingencies).

Hilman & Dalziel (2003) argue that greater level of board capital enabled the board to secure more resources and more effectively monitor the company.

These two theories are used in this study to underpin the relationship between board of directors, audit committee and auditor characteristics and timeliness of financial reporting. The usage of these theories in this study is due to some reasons, including the role of board and its committee is to monitor the financial reporting process in order a firm to have a high quality of financial report. Further, board of directors and its committee can reduce the agency problem over the timeliness of financial reporting. Moreover, Abdullah (2007) and Beekes et al. (2004) also used these two theories in their studies.

### **3.2 Hypotheses Developments**

#### **3.2.1 Board Composition**

The relationship between the board of directors and timeliness of financial reporting is predicted to exist due to the fact that the board of directors has the authority to release the firm's annual report to the public. Hence, the board of directors has discretion, either to speed up or delay the issuance of the annual report, depending on the incentive that they have (Abdullah, 2006). Fama and Jensen (1983) argue that outside directors are experts in decision controls. Thus the role of outside director is important for the resolution of agency problems between managers and shareholders (Fama, 1980; Fama and Jensen,

1983). Under this viewpoint, effective monitoring is predicted to be a positive function of the proportion of outside board members.

The relationship between board composition and accounting quality or timeliness of financial reporting has been documented by several researchers. Beasley (1996) concluded that the proportion of outside directors is lower in the companies that have problems with fraud compared to those that did not. This implies that independent directors contribute to the financial reporting quality. In fact, Cohen et al. (2004) suggested that board composition, somehow, affects the accounting quality through integration with other corporate governance actors. Another author also supports the link between board independence and accounting quality (Klein, 1998; Peasnell et al., 2000). A study of the relationship between board composition and timeliness of financial report has also been studied by a few researchers (Beekes et al., 2004; Abdullah, 2006).

A study on the financial reporting quality shows that there is a role of board independence in determining the financial reporting quality (see for example, Klein (2002), lanfeng & Anlin (2004), Peasnell et al (2005), Davidson et al (2005), Benkel et al (2006), Kin et al (2007), Liu & Lu (2007), Cornett et al (2008), and Osma (2008)). However, Ali & Sebuoi (2006) concluded that board independence did not increase the financial report quality.

Abdullah (2006) studied whether there is a relationship between board composition and timeliness of financial reporting in listed companies in Malaysia. He found that there is a

significant relationship between the composition of the board of directors and the timeliness of financial reporting. In addition, all sample regression results show that there is a negative relationship between board composition (measured by outside directors) and timeliness of financial reporting. However, the sub-sample regression shows that early and late reporter sample did not demonstrate the significant relationship with the timeliness of financial reporting. In addition, the complier sub-sample is consistent with all samples. However, the results show the opposite sign, meaning that there is a positive relationship with timeliness of financial reporting.

Beekes et al. (2004) investigated the relationship between board composition and earning timeliness in UK. They concluded that there are links between financial reporting quality, proxied by earning timeliness, and board composition for all non-financial listed companies. They argued that firms with higher outside members are more likely to recognize bad news in earnings on a timely basis. In addition, the outside members of a board have a significant role in determining the accounting quality or timeliness of financial accounting. Therefore, the first hypothesis is as follows:

*H1: Board composition is significantly associated with the timeliness of financial reporting.*

### 3.2.2 Board Size

Number of members of the board of directors can affect the process of monitoring. The agency problems arise from dysfunctional norms of behavior in boardrooms (Cheng, 2008). Lipton & Lorsch (1992) and Jensen (1993) suggest a certain number of board of directors members in a company. Jensen (1993) argued that a company that has a board with more than seven or eight directors, the directors are less likely to function effectively and are easier for the CEO to control. He, however, added that when a board becomes larger, it is more difficult for the firm to arrange board meetings and for the board to reach a consensus. As a result, larger boards are less efficient and slower in decision-making. Thereafter, the large board also moderates the extremity of the board decisions due to making more negotiations and compromises within a large board to reach the final decision.

However, when they grow too big, a board of directors becomes more symbolic rather than being a part of the management process (Hermalin & Weisbach, 1991). Other views are that bigger boards might be constructive for some companies as they provide diversity that would help companies to secure critical resources and reduce environmental uncertainties (Pfeffer, 1987; Zahra & Pearce, 1989; Goodstein et al., 1994).

The timeliness of financial reporting mostly depends on the monitoring, communication, participation and coordination and decision of the board directors in the company.

Therefore, if one or more of these aspects become a problem due to the large number of members of the board, it can affect the timeliness of financial reporting. For example, because of the large number of board directors, the communication with the external auditor might take time and therefore, slow the timeliness of financial reporting. However, a large number of board members might shorten the timeliness of financial reporting somehow. Beasley (1996) found that the size of the board of directors significantly affects the likelihood of financial statement frauds. Saleh et al. (2006) found that there is no significant relationship between board size and earning management. Dechow et al. (1996) also documented that board size is larger for firms engaging in earning management. Furthermore, Fuerst & Kang (2000) also found that board size is negatively related to the firm values. Parsons (2006) and Ali & Sebuoi (2006) revealed that board size is positive significantly associated with financial reporting quality. Yet, Langfeng & Anlin (2004) found a negative relationship between board independence and financial reporting quality. From the findings above, we can conclude that there is a significant relationship between earning management as a proxy of financial reporting quality and board size. By using the same analogy, we hypothesize that:

*H2: Board size is significantly associated with the timeliness of financial reporting.*

### **3.2.3 Board Expertise and Knowledge**

The board of directors may theoretically be the best place to monitor the production of financial statements by the management. However, they must have sufficient incentives

and expertise (Beekes et al., 2004). The expertise and knowledge that a board of directors must also have is in management, such as finance, accounting, marketing, information technology and others. Therefore, the board expertise would align the companies' vision and at the same time, they would reduce the agency problems as well as agency costs (Fama & Jensen, 1983). In addition, most of the directors' occupations are as business executives, lawyers, consultants and school professors (Kesner, 1988). The quality of board directors can also be seen from their background in such as academics and business (knowledge, skill, and experience) as well as good personalities (commitment) (Ruigrok et al., 2006). In addition, the accounting financial experts of a board of directors are those who have experience as public accountants, auditors, principals or chief financial officers, and controllers.

Following the recent wave of accounting scandals, regulators have stressed the need for financial experts on the board. The implicit assumption is that "an understanding of generally accepted accounting principles and financial statements" will lead to better board oversight and hence will better serve the interests of shareholders as well as being able to produce a higher accounting quality (Guner, Malmendier, & Tate, 2008). The accounting financial expert of a board of directors is a person who has experience as a public accountant, auditor, principal or chief financial officer, or controller.

Hsu (2007) argued that the better quality of directors with its expertise and education can credibly transmit information and reduce information asymmetry between insiders and outsiders. Xie et al., (2003) and Park & Shin (2004) found a positive relationship between

board expertise and knowledge and financial reporting quality. However, Abdul & Mohamed (2006) found a negative impact of the board expertise and knowledge on financial reporting quality.

Therefore, the board quality might have a relationship with the timeliness of financial reporting. The board with knowledge and expertise tends to reduce information asymmetry by reporting the financial statement as soon as possible. Thus, the next hypothesis is:

*H3: Board expertise and knowledge is significantly associated with the timeliness of financial reporting.*

### **3.2.4 Board Shareholding**

The relationship of the board's shareholding and financial reporting quality is best described by two opposing views: the managerial entrenchment hypothesis and agency theory (Niu, 2006). Managerial entrenchment hypothesis states that board shareholding may negatively affect the financial reporting quality. It is because the managers may have more incentives to exercise discretion in accounting reporting and therefore, monitoring, and disciplining would be more difficult for directors with ownership in the firm (Morck et al., 1988). In addition, Morck et al. (1988) added that high board shareholding would cause the moral hazard and asymmetric information problem between management or directors and investors.

Under the agency theory, Jensen & Meckling (1976) argued that managers with lower firm ownership would have an incentive to manipulate the accounting figures in order to relieve the constraints imposed by an accounting-based compensation contract. In addition, Jensen (1989) states that outside directors with a small amount of stockholding cannot effectively monitor and discipline the managers. Therefore, the board shareholding is positively associated with the accounting quality and thus the timeliness of financial reporting.

Stock ownership by board members may reduce manager-shareholder conflict (Vafeas & Theodorou, 1998). They added that if the executive board members own part of the firm, they will develop shareholder-like interests and are less likely to engage in behavior that is detrimental to shareholders. Fama & Jensen (1983) and Morck et al. (1988) asserted that when corporate insiders own low levels of firm equity, they have higher incentives to keep their strategies in line with the preference of other owners since their bonding to the firm's outcome is high. Furthermore, Hambrick & Jackson (2000) stated that many firms require its board to increase its ownership.

Study on the relationship between board shareholding and timeliness of financial reporting is very rare. Previous studies have focused more on the firm performance (for example see; Demsetz & Lehn (1985); Morck et al. (1988)). Warfield et al. (1995) found that the managerial stockholding is associated with the accounting quality, which is measured by the absolute value of abnormal accruals. They concluded that the managerial shareholdings act as a disciplining mechanism in a company. Therefore, they

expect that board shareholding can create incentives for directors to monitor management more closely. Further, the significant relationship between board shareholding and financial reporting quality is expected. In addition, Jensen (1993) also argues that outside board shareholding can increase the degree of internal control problems. If the degree of internal control is good, it can help to have higher accounting quality. Thus, it affects the timeliness of financial reporting. Therefore, the next hypothesis is:

*H4: Board shareholding is significantly associated with the timeliness of financial reporting.*

### **3.2.5 Board Experience**

The relationship between board experience and financial reporting quality due to the experience of the board would increase effectiveness of monitoring management. Abdelsalam & Street (2007) argue that the experienced directors used their expertise associated with more advanced age to effectively monitor management and serve as better board members by ensuring timely information. Length of services by executive director may reap personal benefits by delaying disclosure as also supported by Sengupta (2004). Dahya et al. (1996) added that board experience will assist in making information more transparent as comparisons can be made based on the knowledge of other companies. Experienced directors also are more likely to have greater incentives to monitor effectively and to safeguard their reputation or improve their external labor market (Kaplan & Reishus, 1990).

Historically, board members' monitoring and control roles have been emphasized over other roles (Zahra & Pearce, 1989). To do monitoring and controlling, a board should have adequate experience. Kosnik (1987) argued that directors with cross directorship may have much experience and they use their experience to monitor the management activities, including in preparing the financial report. Dahya et al. (1996) also argue that directors with cross directorship can help a company to make information more transparent. In fact, Kaplan & Reishus (1990) stated that experienced directors are also more likely to have greater incentives to monitor effectively and to safeguard their reputation or improve their external labor market.

Most recent studies used several proxies to determine the board experiences, such as cross directorship, age, and length of service by executive directors and non-executive directors (Abdelsalam & Street, 2007). In addition, the experienced directors used their expertise associated with more advanced age to effectively monitor management and serve as better board members by ensuring timely information. Length of service by executive directors may reap personal benefits by delaying disclosure (Sengupta, 2004).

Abdelsalam & Street (2007) documented that there is a significant relationship between the board experience, age and length of service by executive directors with the corporate Internet reporting timelines. Therefore, the relationship of these variables with accounting quality or timeliness of financial reporting are expected to exist as well. Therefore, the fifth hypothesis is as follows:

*H5a: Multiple directorships are significantly associated with the timeliness of financial reporting.*

*H5b: Age of board of director is significantly associated with the timeliness of financial reporting.*

*H5c: Length of services of Board member is significantly associated with the timeliness of financial reporting.*

### **3.2.6 Audit Committee Independence**

The audit committees have responsibility in the reporting process as well as internal control mechanisms in the organization. Deli & Gillan (2000) argued that an audit committee serves as a reinforcing agent to the independence of internal as well as external auditors. Beasley (1996) argued that audit committee independence monitor better because they have no personal or economic relationship with management. In addition, they are experts and good at decision control. Klein (2002) emphasizes that audit committee members are appointed to act independently in order to produce unbiased financial reports as well as resolve the conflicts among the actors. The independent audit committee allows external and internal auditors to audit and assess financial information more objectively. Thus, audit committee independence can reduce any financial fraud (Abbott, et al., 2004). Therefore, the relationship between the audit committee independence and timeliness of financial reporting would theoretically explained by agency theory.

The importance of the audit committee independence has been documented by many researchers. A number of studies have found a relation between audit committee independence and financial reporting practices (Beasley et al., 2000; Klein, 2002; Carcello & Neal, 2003; Abbott, et al., 2004; Lin et al., 2006; Pucheta-Martinez & De-Fuentes, 2007; Saleh et al., 2007).

Carcello & Neal (2003) found those distressed firms are more likely to receive going concern reports when that firm has audit committee independence. Beasley et al. (2000) discovered that financial statement frauds are more likely to occur in firms with less audit committee independence. Klein (2002) found that audit committee independence is negatively associated with earning management. In addition, she concludes that audit committee independence is effective in monitoring management. Abbott et al., (2004) concluded that an independent audit committee is negatively related to restatements.

Lin et al. (2006) found that audit committee independence does not have any significant relationship on the quality of reporting earnings. Saleh et al. (2007) documented that the presence of a fully independent audit committee reduces the earning management practices. Abdullah (2006) also found that there is no significant relationship between audit committee independence and timeliness of financial reporting

Pucheta-Martinez & De-Fuentes (2007) find that the percentage of the independent audit committee does have a significant influence on the receipt of non-compliance qualifications. In other word, a downsizing and independent audit committee reduces the

likelihood of receiving an error or non-compliance qualifications. Therefore, the following hypothesis is offered.

*H6: Audit committee independence is significantly associated with the timeliness of financial reporting.*

### **3.2.7 Audit Committee Size**

The relationship between audit committee size and accounting quality or timeliness of financial reporting can be explained by the resources dependence theory (Pierce & Zahra, 1992). To enhance monitoring, audit committees should have more diverse skills and knowledge. In addition, good monitoring would enhance higher accounting quality. Therefore, audit committee size would affect the timeliness of financial reporting as well.

Studies of the effect of the audit committee size on the financial reporting quality have been done by many researchers. However, most of the studies used earning management, financial fraud and financial restatement as a proxy of the financial reporting quality. Dalton et al. (1999) found a positive relationship between size and the monitoring function of the board. Xie et al. (2003) documented that there is no significant relationship between the number of directors on the audit committee and earning management. Abbott et al. (2004) concludes that there is no significant association between audit committee sizes on earning restatements. Yang & Krisnan (2005) found that the relationship between audit committee size and earning management is negative.

The most recent findings also show a significant relationship between audit committee size and accounting quality (Lin et al., 2006; Pucheta-Martinez & De-Fuentes, 2007). Pucheta-Martinez & De-Fuentes (2007) found that there is a significant relationship between audit committee size and non-compliance qualifications. In addition, Lin et al. (2006) concluded that there is a negative relationship between audit committee size and earning management. Since there is few evidence of association between audit committee size and accounting quality measured by earning management, financial fraud etc, it is expected that the relationship between audit committee size and timeliness of financial reporting exists. Hence, the next hypothesis is as follows:

*H7: Audit committee size is associated with the timeliness of financial reporting*

### **3.2.8 Audit Committee Financial Expertise**

The objective of the audit committee is to oversee the accounting controls, the financial statements, and the financial affairs of the company. To carry out its functions effectively, audit committee members must have relevant experience and qualifications. Most studies used the formal accounting and finance qualification as their measurement of financial expertise. Thus, a person who is a financial expert is someone who has worked and has experience in finance or accounting. In addition, audit committees have financial literacy if they have the ability to read and understand the fundamental financial statements (Coates, Marais & Weil, 2007).

Most of the capital market also requires the audit committee to have financial expertise. For example, Indonesia's Security Exchange Commission requires financial expertise of at least one of the members. In Indonesia, the IICG (2006) also requires financial expertise of the audit committee. Therefore, audit committee financial expertise would reduce the agency problems and agency costs.

McMullen & Raghunandan (1996) concluded that firms with financial reporting problems are unlikely to have financial experts, such as CPAs on their audit committees.

McDaniel et al. (2002) found that audit committees who have financial experts are able to detect reporting problems associated with the regular business activities. In fact, they added that audit committee financial literates with less experience in specific accounting issues are likely to detect reporting problems linked to non-recurring business activities.

Carcello & Neal (2003) found that there is no relationship between financial expertise of the audit committee and dismissal of issuance of a going concern opinion. In other words, an audit committee with financial expertise cannot protect auditors from dismissal following a going concern opinion. Abbott et al. (2004) concluded that there is a negative relationship between audit committee financial expertise and financial restatement. Thus, the existence of an audit committee with financial experts can decrease the occurrence of financial restatements.

The most recent studies were done by Lin et al. (2006) and Saleh et al. (2007). They concluded that there is no relationship between audit committee financial experts and occurring of financial restatements (Lin et al., 2006) and earning management (Saleh et

al., 2007). However, the relationship between audit committee financial expertise and timeliness of financial reporting is predicted to exist. Thus, the next hypothesis is offered.

*H8: Audit committee financial expertise is significantly associated with the timeliness of financial reporting*

### **3.2.9 Audit Committee Activities**

The agency theory framework has been used to analyze the reason for forming an audit committee in the companies. In addition, Menon & Williams (1994) used an agency theoretical perspective to examine the argument that firms with high agency costs will attempt to mitigate these costs by increasing monitoring activity through their audit committees. In addition, audit committee activities are measured by the number of meetings, meeting duration, and information exchanges in the meeting (Hsu, 2007). The effect of the audit committee activity on the accounting quality, as measured by earning management, financial statement fraud, and financial restatement, has also been conducted by many researchers (see for example; McMullen & Raghunandan, 1996; Xie et al., 2003; Abbott et al., 2004; Lin et al., 2006; Saleh et al., 2007). They found that audit committee activities are related to the accounting quality. Therefore, the relationship between audit committee activities and timeliness of financial reporting is expected to exist as well.

McMullen & Raghunandan (1996) concluded that companies who issued financial reporting problems have a less frequent number of meetings conducted by the audit committee. Xie et al. (2003) documented that there is a negative relationship between audit committee meetings and earning management. In addition, they concluded that the audit committee activity influences the monitoring effectiveness. In other words, the more meetings conducted by the audit committee would improve the effectiveness of monitoring and improve the accounting quality.

Abbott, et al. (2004) examined the effect of the audit committee meeting on the incidence of financial misstatements. They found that there is a negative relationship between audit committee meetings and occurrence of misstatements. This means that the more meetings that are done by the audit committee, the less any misstatements occurred.

Other studies on audit committee activity and financial accounting quality have been done by several researchers (see for example, Xie et al., 2003; Lin et al., 2006; Saleh et al., 2007). Xie et al. (2003) concluded that audit committee activity can increase the quality of financial reporting. Lin et al. (2006) found that there is no relationship between audit committee meetings and the quality of financial report. Further, Saleh et al. (2007) documented a positive relationship between audit committee activity and quality of financial report. In addition, the relationship between the audit committee meeting is likely to have a relationship with the timeliness of financial reporting, since the more meetings are conducted, the more problems would be discussed in the board, especially financially-related problems. Thus, the next hypothesis is as follows.

*H9: Audit committee activities are significantly associated with the timeliness of financial reporting*

### **3.2.10 External Auditor Type**

There are several proxies for audit quality: audit firm size, name-brand reputation, industry expertise, and independence. The relationship between audit quality (proxy by audit firm size) and accounting quality can be explained by agency theory. There are two types of drivers; demand and supply drivers. The demand drivers consist of the client risk strategy and agency theory, while the supply driver is from the auditor risk management strategy and audit fees. The product of the audit quality is information credibility and information quality. Furthermore, the relationship between timeliness of financial reporting and type of auditor is underpinned by agency theory.

Abdullah (2006) found that there is a negative relationship between auditor type and timeliness of financial reporting. It means that Big 5 audit firms will take a shorter time for financial reporting. El-Bannany (2008) documented that there is a significant relationship between auditor type and audit report lag and thus, timeliness of financial reporting. In addition, Lee & Jahng (2008) examined the relationship between audit report lag as a timeliness measurement and several audit-related factors, including the type of auditors. They documented that the Big 4 audit firms are negatively associated with the audit report lags as a proxy of the timeliness of financial reporting. Therefore, the next hypothesis is as follows:

*H10: There is a significant relationship between type of external auditor and timeliness of financial reporting.*

### **3.2.11 External Auditor Opinion**

Audit opinion can affect the audit report lag and thus the timeliness of the financial report. The qualified opinion is viewed as bad news and thus slows down the audit process and annual report release. Whittred (1980) documented that the ‘subject to’ qualification took an additional period of time to make their annual reports public (timeliness of financial reporting). In addition, Ashton et al. (1987), Newton & Ashton (1989), and Carslaw & Kaplan (1991) also included audit opinion as a function of audit delay investigation that could slow the annual report release.

Whittred (1980) concluded that ‘subject to’ qualifications took an additional period of time to make their annual reports public. Furthermore, Carslaw and Kaplan (1991), Ashton et al. (1987) and Newton and Ashton (1989) also investigated the effect of the audit opinion on audit delay. They concluded that companies not receiving unqualified audit opinions are expected to have a longer audit delay compared to the ones receiving an unqualified (clean) report. Therefore, it is expected that companies that do not receive an unqualified audit opinion will have a longer audit delay compared with companies that received unqualified audit opinions. Companies that receive unqualified opinions view this as good news. In contrast to that, a qualified opinion is viewed as bad news, which would make the audit process slower. Schwartz & Soo (1996), Ahmad & Kamaruddin

(2003), and Ahmad et al. (2005) concluded that there is a positive significant relationship between audit report lag (as a proxy of timeliness) and audit opinion. Therefore, the following hypothesis is offered.

*H11: There is a significant relationship between external auditor opinion and timeliness of financial reporting.*

### **3.2.12 External Auditor Change**

Auditor change would affect the audit report lag as well as timeliness of financial reporting due to the new auditor-client relationship. The new auditor needs some time to study in detail concerning company business risk, internal control, and business characteristics (DeAngelo, 1981b). Johnson & Lys (1990) stated that client attributes change an incumbent auditor's competitive advantage. Other researchers argue that clients that face new business opportunities or financing requirements can find that their preferences for different attributes of the audit product could change (Healy & Lys 1986; Menon & Williams 1991). Therefore, this kind of company would change their audit firms.

If management resists disclosures or disagrees with the opinion, a termination is likely to occur (Schwartz & Menon 1985; Kluger & Shields 1991; Schwartz & Soo 1995). The relationship between auditor change and timeliness of financial reporting had been documented by several researchers. For example, Whittred & Zimmer (1984) found that

auditor changes can be associated with an increase in reporting lags if the termination occurs because of a client's reporting methods or the potential disclosure of its deteriorating financial condition. Thus, Schwartz & Soo (1996) also documented that firms that replace their auditor early (late) in the fiscal year do so for positive (negative) reasons and experience shorter (longer) reporting lags. In addition, conflicts over reporting issues can be difficult to resolve and consequently lead to reporting delays. Thus, the next hypothesis is as follow:

*H12: There is a significant relationship between external auditor change and timeliness of financial reporting.*

### **3.2.13 Internal Auditor Existence**

The relationship between internal audit existence and timeliness of financial reporting (financial reporting quality) can best be explained by agency theory. Thus, agency theory contends that internal audit, in common with other intervention mechanisms like financial reporting and external audit, helps to maintain cost-efficient contracting between owners and managers (Adams, 1994). Further, Adams (1994) argued that agency theory may not only help to explain the existence of internal audit in an organization but can also help explain some of the characteristics of the internal audit department, such as its size, activities etc. Therefore, agency theory can be utilized to investigate empirically the effect of the existence of internal audit department on the financial reporting quality and therefore, on the timeliness of financial reporting.

Cohen et al. (2004) stated that internal audit plays a role in the process of financial reporting. In fact, Adams (1994) argued that internal audit can reduce the agency cost through bonding function in the contracting process. The relationship between the internal auditor and financial reporting quality has not been studied as much. The result of the Ashton (1987) study shows that there is a negative relationship between the audit delay and quality of the internal audit. Based on the agency theory and past studies, the following hypothesis is offered.

*H13: There is a significant relationship between internal audit existence and timeliness of financial reporting.*

### **3.3 Sample of Study**

#### **3.3.1 Population**

Population in this study is the companies listed in the Indonesia Stock Exchange (formerly the Jakarta Stock Exchange). This research used secondary data from the Indonesian Capital Market Directory (ICMD) published by the Jakarta Stock Exchange (JSX), and annual reports from listed companies from 2006 to 2008. This period is taken because of the objective of this study, which is to investigate the relationship between board of directors, audit committee and auditor characteristics on timeliness of financial report. Further, the other reason is the time of release of the Indonesian Code of Corporate Governance in 2001 and its revision in 2006.

### **3.3.2 Sample**

The purpose of this study is to investigate the effect of the board of directors, audit committee, and auditors' characteristic on the timeliness of financial reporting. The sample of the study is all companies listed from the data for the period from 2006 to 2008. The number of companies listed at the end of 2008 was 485 companies. The final number of companies fell due to the unavailability of the data and IPO companies during the entire time period (2006 to 2008). The unavailable data could be from board and audit committee characteristics since Indonesia's companies are less compliant with disclosure (Lukviarman, 2004). Therefore, this would reduce the final number of companies involved in this study.

## **3.4 Operationalization of Variables**

### **3.4.1 Timeliness of Financial Reporting**

Timeliness of financial reporting used two measurements; Audit Report Lag and Management Report Lag (Cho, 1987). Audit Report Lag is measured from the time of the fiscal year and the signature of the audit report by the external auditor (Ashton, 1987 and among others). Management Report Lag, on the other hand, is measured by the difference between the time the auditor signs the audit report and the company releases its financial report to the public (May, 1971; Cho, 1987; Al-Ajmi, 2008).

### **3.4.2 Board Composition**

Board composition would be measured by the ratio of independent directors relative to the total directors in the board as was also used by many researchers, such as (Dehaene, Vuyst, & Ooghe, 2001; Peng, Buck, & Filatotchev, 2003; Lefort & Urzua, 2008).

### **3.4.3 Board Size**

Board size is measured by the total number of directors on the board of a company as suggested by Cheng (2008), Saleh et al. (2006). Xie et al (2003), Lanfeng & Anlin (2004), Ali & Sebuoi (2006), Abdul & Mohamed (2006), and Cornett et al (2008).

### **3.4.4 Board Expertise and Knowledge**

Board expertise and knowledge is measured by using the Hsu (2007) measurement. It is based on the expertise and education of its members. In addition, the measurement includes the ratio of directors who have business and management academic backgrounds relative to the total number of directors.

### **3.4.5 Board Shareholding**

Board of director shareholding is measured by the number of directors who are shareholders in that particular company, as suggested by Haniffa & Hudaib (2006). If the directors have shares, one (1) is assigned, and if not, zero (0).

### **3.4.6 Board Experience**

Board experience is measured by the ratio of directors who sit in other companies as a board of directors relative to the total number of directors in a company (Abdelsalam & Street, 2007). Age of director members is measured by the average age of director members (Abdelsalam & Street, 2007). Further, length of service of the board of directors is measured by the average length of service by the board of directors (Abdelsalam & Street, 2007).

### **3.4.7 Audit Committee Independence**

Audit committee independence is measured by the ratio of the independent directors on the audit committee relative to the total number of audit committee members as was also used by Hsu (2007), Klein (2002), Xie al al (2003), Davidson et al (2005), Abdul & Mohamed (2006), Benkel at al. (2006), Piot & Janin (2007), Siregar & Utama (2008) and Saleh et al. (2007)

### **3.4.8 Audit Committee Size**

Audit committee size is measured by the number of members of the audit committee on the board as suggested by many researchers such as (Xie et al., 2003; Abbott, et al., 2004; Saleh et al., 2007).

### **3.4.9 Audit Committee Financial Expertise**

Audit committee financial expertise in this study is measured by using the measurement offered by Hsu (2007). It is measured by seeing the proportion of the financial experts on the audit committee. Hence, the financial experts are categorized as persons who have a financial academic background.

### **3.4.10 Audit Committee Activities**

Audit committee activities is the number of audit committee meetings held in a year (Xie et al., 2003; Lin et al., 2006). If there are more meetings held in a year, this indicates that there will be more evaluations made by the audit committee.

### **3.4.11 External Audit Type**

Audit type uses the proxy of Big 4 or non-Big 4. A Big 4 audit firm is assigned one (1), and otherwise zero (0). Abdullah (2006) and Cullinan (2003) used this measurement in their research.

### **3.4.12 External Auditor Opinion**

Type of audit opinion is represented by a dummy variable: unqualified audit opinions are assigned one (1), and otherwise zero (0) as suggested by Ashton et al. (1987) and Carslaw & Kaplan (1991).

### **3.4.13 External Auditor's Change**

Auditor change is measured by seeing whether firm have a different auditor compared to the prior year. One (1) is assigned if there is audit firm change, and otherwise zero (0). This measurement was used by Whittred & Zimmer (1984).

### **3.4.14 Internal Audit Existence**

The internal audit existence is measured by looking at the internal audit department in a company. If a company has an internal audit department, it would be assigned one (1), and otherwise zero (0).

### **3.4.15 Control Variables**

#### **3.4.15.1 Profitability**

Profitability is the ability of a company to gain profits. Profitability can usually be measured by many ratios, such as return on asset, return on equity etc. Profitability also reflects the company business risk. Profitability is often used to give signals to investors. Kross (1982) concluded that a financially unhealthy company may delay the announcement of bad news. Whittred & Zimmer (1984) documented that companies that are going into distress financially experienced a longer audit report lag. Thus, this longer audit report would release their financial report later. Further, Ashton et al. (1989) argued that unprofitable companies would release their financial report later than a profitable one. These findings support the signal theory, which posits that managers have an incentive to release good news earlier than bad news.

Thus, profitability also can affect the audit report lag as quoted by Carslaw & Kaplan (1991). They argued that a company that reported a loss for a particular period is expected to have a longer audit lag. Few reasons had been suggested. Companies will delay the bad news if a loss occurs. More time will be taken to audit and the process will also be more detailed if the company is facing a loss. Companies can minimize audit lag and release its financial report sooner if they report a profit (Hossain & Taylor, 1998). Besides, an unprofitable position might be related to financial pressure, which could create a demand for higher audit work to verify the value of net assets and to confirm that the company is a going concern. Meanwhile, higher profitable companies could mean

that the company is less concerned with individual overheads and probably could more easily afford a better audit. Based on the explanation above, it can be concluded that profitability could impact the timeliness of financial report. In this study, profitability is measured by return on asset (ROA).

### **3.4.15.2 Leverage**

Leverage implies the debt position of a company. Debt is involved with fixed costs in terms of interest that the company has to pay every year. Further, the relationship between leverage and timeliness of financial report could be explained by two theories. The first theory is agency theory, which posits that leverage is related to the agency cost (Jensen & Meckling, 1976). Higher leverage companies tend to have higher agency costs. Thus, the wealth would be transferred from the debt-holder to managers and shareholders due to incentives to invest in riskier projects. Therefore, the debt-holder might demand a higher quality audit in this condition (Chow, 1982). Higher quality audit might make the audit report lag and timeliness of financial report longer. Abdulla (1996) and Conover et al. (2007) concluded that there is a negative relationship between leverage and reporting lag. In contrast, Carslaw & Kaplan (1991) and Owusu-Ansah (2000) concluded there was a positive relationship between leverage and timeliness.

Further, leverage is used in the study of business risk because high leverage firms are more likely to fail, which would make an auditor be faced with higher litigation risks. Hence, companies with high leverage will have high litigation risks (Owusu-Ansah, 2000). Therefore, firms that have low leverage are likely to complete an audit of financial

statements sooner. Bamber et al. (1993) use the debt to asset ratio as the measurement of leverage. Therefore, this study uses the debt to asset ratio as the proxy of leverage.

### **3.4.15.3 Company's Size**

Company size is believed to be the one of the factors affecting the timeliness of the financial report. The rationale behind this argument is that a larger company has more resources to establish sophisticated internal control systems and to use auditors on a continuous basis, thus enabling the auditors to carry out more interim compliances and substantive tests of year-end balances (Ng & Tai, 1994). A second reason is regarding public scrutiny, a large amount of investment and media review of a company's performance for investment decision-making of a large company will make the company release its financial report sooner (Dyer & McHugh, 1975). The last reason is related to the ability of a larger company to put greater pressure on the auditor to start and complete the audit on time (Carslaw & Kaplan, 1991).

Three theories also explain why company size is related to the timeliness of financial reporting, namely client preparation theory, client services theory and transaction theory. Client preparation theory suggests that larger clients have better internal controls, allowing faster preparation of their financial reports and finally, audit lags will be shorter (Ashton et al. 1989). However, client services theory suggest that larger clients get first priority for scarce audit firm resources due to the importance of larger clients to the auditing firm and therefore, they would get their audit done sooner. Therefore, audit lag

would be less (Bamber et al. 1993). Transaction theory further suggests that a larger number of transactions will have longer audit delays (Simnett et al. 1995). The first two theories promote a negative relationship between company size and audit report lag. However, the last theory suggests a positive relationship between company size and timeliness of financial report.

The empirical findings of the relationship between company size and timeliness have been largely documented (see for example; Ashton et al., 1989; Newton & Ashton, 1989; Carslaw & Kaplan, 1991; Ng & Tai, 1994; Jaggi & Tsui, 1999; and Owusu-Ansah, 2000). The inverse relationship between company size and timeliness of financial report has been documented by many researchers (e.g. Dyer & McHugh, 1975; Davis & Whittred, 1980; Givoly & Palmon, 1982; Owusu-Ansah, 2000). In contrast, the insignificant relationship between company size and timeliness of financial reporting has also been concluded by researchers (e.g. Courties, 1976; Ashton et al., 1987; Bamber et al., 1993; Abdula, 1996; Leventis & Weetman, 2004; Owusu-Ansah & Leventis, 2006). Most of the studies used total assets as a proxy for company size (e.g. Ashton et al., 1987). Therefore, this study also uses the total assets as the proxy for company size.

### **3.5 Data Analysis**

There are two models used as the determinant of the timeliness of financial reporting: the audit report lag (ARL) model and management report lag (MRL) model. The audit report lag and management report lag model are used to test hypothesis 1 to 13 as follow:

Where:

ARL = audit report lag

MRL = management report lag

BC = Board composition

BZ = Board size

BEK = Board expertise and knowledge

BS = Board shareholding

BE = Board experiences, D= directorship, A=age, and T= length of services.

ACI = Audit committee independence

ACS = Audit committee size

ACFE = Audit committee financial expertise

ACA = Audit committee activities

AT = External audit type

AO = External audit opinion

AC = External Audit change

IA = Internal audit

SIZE = Company size

ROA = Return on asset

DAR = Leverage

Panel data analysis is used in this research. Studies on timeliness have extensively used the cross-sectional analysis and only a few studies used the panel data (see for example, Henderson & Kaplan, 2000). There are some reasons why panel data analysis is sufficient compared to the cross-sectional analysis: (i) it accounts for omitted variables, (ii) its explanatory power far exceeds that of the cross-sectional model, and (iii) specifically, its use of firm-specific intercepts that capture the role of reporting tradition and eliminate any heterogeneity bias. And it has been proven to be a powerful tool in the analysis of timeliness of financial reporting (Henderson & Kaplan, 2000).

### **3.6. Chapter Summary**

This chapter discusses the research design and methodology for this study. The research design is on the theoretical framework and hypotheses development. This study used two theories, namely agency theory and resources dependence theory. However, client size theory was also involved for the control variable, size. There are 15 (fifteen) hypotheses offered in this study.

This study used the whole population due to the small number of listed companies in Indonesia for the year 2006 to 2008. However, the number of samples had decreased due

to IPO companies during 2006 to 2008, and unavailability of data. This study further used two models: audit report lag and management report lag model. Panel data analysis is used to achieve the research objectives. The following chapter describes the results and findings of this study.

## CHAPTER 4

### RESULTS AND FINDINGS

#### 4.0 Introduction

This chapter discusses the result and findings of the study. The result of the study involved several aspects. First, it discusses the profile of the object of the study. Then, it continues to classical assumptions such as outlier, normality, multicollinearity, and heteroskedasticity. Having cleaned the classical assumption, random and fixed effect model is selected based on the Hausman test. Further, it remedies the heterokedasticity problem using White (1980) procedure. Finally, it presents the result of regression based on 2 (two) models, namely audit report lag and management report lag models. The hypotheses are judged based on the result of the regressions.

#### 4.1 Sample Selection

This study used all companies listed on the Indonesia Stock Exchange. The total listed companies at the end of 2008 were 485. However, the IPO companies during 2008, 2007, and 2006 totaled 55 and these companies have been excluded. Thus, only 430 companies are available at the end of 2005. However, 212 companies did not disclose the information regarding board characteristics (e.g. board expertise and knowledge, directorship, age) and audit committee characteristics, such as financial expertise and frequency of meeting, during 2006 to 2008. This might be due to the low disclosure

culture of compliance of Indonesia's companies (Lukviarman, 2004). Therefore, these companies were also excluded from this study. Finally, the number of companies involved is only 218 (44.9%) companies or 654 observations (from 2006 to 2008), which are from nine different industries. Table 4.1 below shows the details of the sample profile.

Table 4.1  
*Sample Selection*

No	Industry Classification	Firm	IPO	IPO	IPO	Firm	Unavailable	Available	N	%
		2008	2008	2007	2006	2005	Data			
1	Agriculture	17	1	2	0	14	6	8	24	47.1
2	Mining	14	1	2	0	11	2	9	27	64.3
3	Basic and Chemical	60	2	0	0	58	48	10	30	16.7
4	Miscellaneous	70	1	1	3	65	54	11	33	15.7
5	Consumer Goods Property, Real Estate, and	43	0	0	0	43	35	8	24	18.6
6	Construction Infrastructure, Utilities and	49	3	8	1	37	3	34	102	69.4
7	Transportation	26	1	3	2	20	3	17	51	65.4
8	Finance and Banking Trade, Services and	101	1	2	4	94	36	58	174	57.0
9	Investment	91	7	6	4	74	11	63	189	69.2
10	Public company	7	0	0	0	7	7	0	-	-
11	Grand Total	485	17	24	14	430	212	218	654	44.9

## 4.2 Descriptive Statistics of Variables

Table 4.2 shows the descriptive analysis using regression model. The dependent variables are divided into two variables; audit report (ARL) and management report lag (MRL).

Audit report is measured from fiscal year to the time of signing the audit report (for ARL) and the difference between ARL and submission time of financial report (total report lag or TRL) is a proxy for management report lag.

**Table 4.2**  
*Descriptive Statistics*

No	Variables	Descriptive Statistic before Outlier Test (n=654)			
		Min	Max	Means	SD
1	ARL (days)	14.00	165.00	72.89	20.16
2	MRL (days)	0.00	134.00	19.58	17.53
3	BC (%)	0.00	100.00	41.03	14.71
4	BZ (person)	1.00	12.00	4.33	1.91
5	BEK (%)	0.00	100.00	49.98	24.87
6	BED (%)	0.00	100.00	64.23	28.49
7	BEA (years)	27.50	82.60	55.35	6.34
8	BET (years)	0.20	20.50	5.64	3.65
9	ACI (%)	0.00	100.00	45.34	23.96
10	ACS (person)	1.00	8.00	3.21	0.74
11	ACFE (%)	0.00	100.00	52.70	26.01
12	ACA (x)	1.00	96.00	3.31	10.23
13	ROA (%)	-130.00	62.20	3.65	13.19
14	DAR (%)	0.00	238.00	53.31	29.78
15	SIZE (billion)	0.40	57929.00	5696.15	12489.51
16	BS	0.00	1.00	0.16	0.37
17	AT	0.00	1.00	0.41	0.49
18	AO	0.00	1.00	0.96	0.20
19	AC	0.00	1.00	0.18	0.38
20	IA	0.00	1.00	0.85	0.36

#### 4.2.1 Dependent Variables: Timeliness

The number of companies involved in this study is 218. The number of observations is 654 company-years. 436 company-years submitted on time while 218 company-years became late reporters. Table 4.3 shows the number of late reporters from 2006 to 2008 per industry. In 2006, sixty six (66) companies (30.28%) submitted their financial report after 90 days. In addition, 67 companies or 30.73% still reported late in 2007. Indeed, the number of late reporters had increased from previous years from 67 to 85 companies (38.99%) in 2008. The highest percentage of late reporters came from the property, real estate and construction industry (46.08%) and the lowest is from the finance and banking industry (36 companies or 20.69%).

Table 4.3  
*Late Reporters*

No	Industry Name	N	Year				Total	%
			2006	2007	2008			
1	Agriculture	24	3	2	2	7	29.17	
2	Mining	27	5	4	6	15	55.56	
3	Basic and Chemical	30	4	2	5	11	36.67	
4	Miscellaneous	33	5	3	5	13	39.39	
5	Consumer Good	24	2	3	4	9	37.50	
6	Property, Real Estate, and Construction	102	13	14	20	47	46.08	
7	Infrastructure, Utilities and Transportation	51	9	4	9	22	43.14	
8	Finance and Banking	174	10	13	13	36	20.69	
9	Trade, Services, and Investment	189	15	22	21	58	30.69	
10	Grand Total	654	66	67	85	218	33.33	

#### 4.2.1.1 Audit Report Lag

The mean value for audit report lag is 72 days with minimum and maximum values of 14 and 165 days, respectively. Forty-seven (47) companies, or 7.19%, had an audit report lag longer than 90 days. In other words, they exceeded the limit time of submission of financial report to the capital market authority. As shown in Table 4.4, nineteen (19), or 2.91%, company-years submitted their financial report between Day 1 and Day 30. In addition, one hundred thirty-four (134), or 20.49% of observations, released their financial reports between 31 and 60 days. However, most observations (454, or 69.42%) submitted their financial report between 61 and 90 days. The rest (7.19%) released its financial report after more than ninety days. The details of the data are presented in Table 4.4 below:

Table 4.4  
*Audit Report lag*

ARL	Total	Percentage	Cum Percentage
1 up to 30	19.00	2.91	2.91
31 up to 60	134.00	20.49	23.39
61 up to 90	454.00	69.42	92.81
> 90	47.00	7.19	100.00
Grand Total	654.00	100.00	

#### 4.2.1.2 Management Report Lag

The management report lag has a mean value of 19.8 days with a minimum and maximum value of 0 (zero) and 134, respectively. Zero value means that the management submitted the company financial report at the same time as the auditor signed the audited financial report. On average, the Indonesian companies take a longer time (19.8 days) to submit the financial report after being signed by the external auditors.

Most of the companies (348, or 53.21%) have a management report lag around 0 to 15 days. Thus 179, or 27.37% of the companies, had a management report lag around 16 to 30 days, while 81 companies needed between 31 to 45 days to submit its financial report to the capital market authority. In addition, the rest (46, or 7.04%) have a management report lag of more than 45 days. The details of the range of management report lag can be seen in Table 4.5 below:

Table 4.5  
*Management Report Lag*

MRL	Total	percentage	Cum percentage
≤15	348.00	53.21	53.21
16 to 30	179.00	27.37	80.58
31 to 45	81.00	12.39	92.97
46 to 60	19.00	2.91	95.87
> 60	27.00	4.13	100.00
Grand Total	654.00	100.00	

## **4.2.2 Independent Variables**

### **4.2.2.1 Board Composition**

Board composition (BC) is measured by the proportion of independent board members to total board members in the companies. However, a few companies did not comply with the regulation regarding the independent board members from the capital market monitoring agent (BAPEPAM). This was because the companies in question have no independent members on their board. The board members of other companies are all independent person (e.g. PT Arthavest Tbk). In addition, companies, on average, have 41.03% of their board composition being independent. This means that if a company has five board members, roughly two members are from outside of the company. This percentage has been aligned by the regulations of the Indonesia Stock Exchange (IDX) and BAPEPAM (at least 30% of board members should be from outside of the companies).

A small number of companies (30 companies, or 4.59%) have a board composition less than 20% and some companies (58.26%) have a board composition of 21% to 40%. Meanwhile, 181 companies have a board composition of 41% to 60%. The rest (9.48%) have a board composition greater than 60%. The range of the board composition is shown in Table 4.6 below:

Table 4.6  
*Board Composition*

BC	Total	Percentage	Cum Percentage
$\leq 20\%$	30.00	4.59	4.59
21% to 40%	381.00	58.26	62.84
41% to 60%	181.00	27.68	90.52
61% to 80%	53.00	8.10	98.62
$> 80\%$	9.00	1.38	100.00
Grand Total	654.00	100.00	

#### **4.2.2.2 Board Size**

Board size (BZ) is measured by the number of board members in a company. Three companies have one board member and two companies, however, have twelve board members (maximum number). In average, the companies have 4.33 board members. In addition, there is no regulation about the number of board members in a company. It strongly depends on the characteristics of the company. For example, a big company may have a larger number of board members, and vice versa.

The number of board members of the companies ranges from 1 to 12 members. 297 (45.41%) companies have less than 4 board members, whereas 277 (42.35%) companies have around 4 to 6 members. The rest of the companies have more than 7 members. The details of the number of members of the board of directors in the companies are presented in Table 4.7.

Table 4.7  
*Board Size*

Board Size	Total	Percentage	Cum percentage
$\leq 3$	297.00	45.41	45.41
4 to 6	277.00	42.35	87.77
7 to 9	62.00	9.48	97.25
$> 9$	18.00	2.75	100.00
Grand Total	654.00	100.00	

#### 4.2.2.3 Board Shareholding

Board shareholding (BS) is measured by using a dummy variable. Any board's members that have shares in the companies would be assigned 1 (one), and otherwise zero. Most of the board members do not have shares in the company. The data shows that 550 (or 84.1%) of the companies are not owned by any board of directors members. Only 15.9% of the companies have board of directors with shareholdings in the company.

#### 4.2.2.4 Board Expertise and Knowledge

The percentage of board members who have a management and business academic background is a proxy for board knowledge and expertise (BEK). Some companies did not have board members with management and business academic backgrounds (45 company-years, or 6.9%). Moreover, 49 companies, or 7.5%, have all board members with business and management academic background. However, companies, on average,

have 49.98% of board members with a business and management academic background. Other expertise and knowledge that board members have is in engineering and some of them have an army background. The details of board expertise and knowledge are shown in Table 4.8.

Table 4.8  
*Board Expertise and Knowledge*

BEK	Total	Percentage	Cum percentage
≤20%	77.00	11.77	11.77
21% to 40%	188.00	28.75	40.52
41% to 60%	164.00	25.08	65.60
61% to 80%	163.00	24.92	90.52
81% to 100%	62.00	9.48	100.00
Grand Total	654	100	

#### 4.2.2.5 Board Experience

Board experience has three proxies; multiple directorship (BED), board age (BEA) and board tenure (BET). Board multiple directorship is measured by the percentage of board members who are also attached to other companies, whereas board age is the average age of board members. Moreover, the board tenure is the average length of service for board members.

#### 4.2.2.5.1 Board Directorship

43 company-years (6.6%) do not have any board members engaged in other companies, while 155 company-years (22.37%) have all board members attached to other companies. On average, 64.23% of board members have multiple directorships. This percentage is quite high and might bring more experience to companies. The board directorship per range and companies can be seen in Table 4.9.

Table 4.9  
*Board Directorship*

BED	Total	Percentage	Cum percentage
≤ 20%	56.00	8.56	8.56
21% to 40%	92.00	14.07	22.63
41% to 60%	120.00	18.35	40.98
61% to 80%	193.00	29.51	70.49
81% to 100%	193.00	29.51	100.00
Grand Total	654.00	100.00	

#### 4.2.2.5.2 Age of Board Member

The second proxy for board experience is age of board member. The average age of board members is 55.35 years old. The youngest board member is 27.5 years old and the oldest is 82.60 years old. About 8 companies have board members with their age below 40 years and 10 board members of companies are above 70 years old. The older board members are mostly the owners of the companies (they are even the founders), while the

younger board members are from the second or third generation from the founder of the companies. The details of board age are presented in Table 4.10 below:

Table 4.10  
*Age of Board Members*

BEA	Total	Percentage	Cum percentage
≤ 40	9.00	1.38	1.38
41 to 60	531.00	81.19	82.57
71 to 90	114.00	17.43	100.00
Grand Total	654.00	100.00	

#### 4.2.2.5.3 Length of Service of Board Member

The third proxy for experience is board tenure, which is measured by the average length of board members service. The shortest length of board service is 0.20 years (2.4 months), whereas the longest is about 20.50 years. Meanwhile, the mean for board tenure is 5.64 years, with a standard deviation of 3.65 years. The longest board tenure is normally for the owners of the companies. The intervals of board tenure can be seen in Table 4.11.

**Table 4.11**  
*Length of Service of Board Members*

BET	Total	Percentage	Cum percentage
≤ 5	355.00	54.28	54.28
5.1 to 10	227.00	34.71	88.99
10.1 to 15	51.00	7.80	96.79
15.1 to 20.5	21.00	3.21	100.00
Grand Total	654.00	100.00	

#### **4.2.2.6 Audit Committee Independence**

Audit committee characteristics are divided into four variables: audit committee independence, size, financial expertise and activity. Audit committee independence is measured by the percentage of audit members from outside divided by the total audit committee members. Thus, 14 company-years (2.1%) have no audit committee independence; whereas 75 company-years (11.5%) have all audit committee member from outside (independence). On average, companies have audit committee independence of about 45.34%. The range of audit committee independence is presented in Table 4.12.

**Table 4.12**  
*Audit Committee Independence*

ACI	Total	Percentage	Cum percentage
≤20%	20.00	3.06	3.06
21% to 40%	443.00	67.74	70.80
41% to 60%	35.00	5.35	76.15
61% to 80%	78.00	11.93	88.07
81% to 100%	78.00	11.93	100.00
Grand Total	654.00	100.00	

#### **4.2.2.7 Audit Committee Size**

Audit committee size is measured by the number of audit committee members in the company. One company-year has only one audit committee member; where 2 company-years have 8 audit committee members. On average, Indonesian listed companies have 3.21 audit committee members. The number of audit committee members is presented in Table 4.13.

**Table 4.13**  
*Audit Committee Size*

ACS	Total	Percentage	Cum percentage
≤ 3	556.00	85.02	85.02
4 to 6	92.00	14.07	99.08
7 to 9	6.00	0.92	100.00
Grand Total	654.00	100.00	

#### 4.2.2.8 Audit Committee Financial Expertise

The percentage of audit committee members who have financial expertise is a proxy for audit committee financial expertise. 46 company-years (7%) did not have audit committee members with financial expertise. However, 73 company-years (11.2%) have all audit committee members with financial expertise. On average, Indonesian listed companies have 52.7% of audit committee members with financial expertise. The percentage of audit committee members with financial expertise is presented in Table 4.14.

Table 4.14  
*Audit Committee Financial Expertise*

ACFE	Total	Percentage	Cum percentage
≤ 20%	49.00	7.49	7.49
21% to 40%	234.00	35.78	43.27
41% to 60%	53.00	8.10	51.38
61% to 80%	245.00	37.46	88.84
81% to 100%	73.00	11.16	100.00
Grand Total	654.00	100.00	

#### 4.2.2.9 Audit Committee Activity

The frequency of meetings of audit committee is a proxy for audit committee activity. The frequency of meetings of audit committee members for the sample ranges from one

time to ninety-six times. One company only had the audit committee meeting once a year whereas, three companies had ninety-six meetings a year. However, the average time is 3.31 times a year. The audit committee activity can be seen in Table 4.15.

Table 4.15  
*Audit Committee Activity*

ACA	Total	Percentage	Cum percentage
≤ 20	622.00	95.11	95.11
21 to 40	20.00	3.06	98.17
41 to 60	8.00	1.22	99.39
61 to 80	1.00	0.15	99.54
81 to 100	3.00	0.46	100.00
Grand Total	654.00	100.00	

#### 4.2.2.10 External Auditor Type

Auditor type is measured by a dummy variable; one (1) if a company is audited by the Big 4 and zero (0) if not. The Big 4 is Ernst & Young (affiliated with the Audit Firm of Purwantono, Sanwoko, dan Sandjaya), Price Water Cooper (affiliated with the Audit firm of Haryanto, Sahari and Rekan), Delloitte (affiliated with the audit firm of Osman Bing Satrio), and KPMG (affiliated with the Audit Firm of Sidharta Sidharta & Wijaya). 265 (40.5%) company-years were audited by Big 4 affiliated audit firms and the rest (59.5%) were audited by non-Big 4 affiliated audit firms.

Table 4.16  
*External Auditor Type*

AT	Total	Percentage	Cum percentage
Big 4 Audit Firm	265	40.50	40.50
Non-Big 4 Audit firm	389	59.50	100
Total	654	100.00	

#### 4.2.2.11 External Auditor Opinion

Audit opinion is measured by a dummy variable. One (1) if the external auditor assigned an unqualified (clean) opinion, and zero (0) if not clean. Most of the companies (627, or 95.9%) had unqualified opinions and the rest (4.1%) had non-unqualified opinions.

Table 4.17  
*External Auditor Opinion*

AO	Total	Percentage	Cum percentage
Unqualified Opinion	627	95.90	95.90
Non-unqualified Opinion	27	4.10	100
Total	654	100.00	

#### 4.2.2.12 External Auditor Change

Auditor change is also measured by a dummy variable. It is assigned one (1) if companies changed the current year external auditor compared to the previous year, and otherwise zero (0). The result shows that 116 company-years (17.7%) changed its external auditor, whereas 538 company-years (82.3%) did not change their external auditor.

Table 4.18  
*External Auditor Change*

AC	Total	Percentage	Cum percentage
Change Auditor	116	17.70	17.70
Do not Change Auditor	538	82.30	100
Total	654	100.00	

#### 4.2.2.13 Internal Auditor Existence

The internal auditor is measured by a dummy variable, assigning one (1) if the company has an internal auditor department and zero (0), otherwise. Descriptive statistics shows that 85% of the company-years have an internal audit department and the rest did not have that kind of department.

**Table 4.19**  
*Internal Auditor Existence*

IA	Total	Percentage	Cum percentage
IA Existence	556	85.00	85.00
IA Non-Existence	98	15.00	100
Total	654	100.00	

#### **4.2.2.14 Return on Asset**

There are three control variables used in this study; return on asset, debt to asset ratio and company size. Each variable represents the profitability, leverage and small or big companies, respectively. Minimum and maximum value of return on asset is -130% and 62.20%, respectively. Thereafter, the average return on asset is 3.65%, which implied that for every Rupiah 1.00 worth of assets, companies can gain profits of about Rupiah 0.0365. Table 4.20 presents Return on Asset in the form of a range of values. Thus, 16.21% of 654 company-years experienced a negative return on assets.

Table 4.20  
*Return on Asset*

ROA	Total	percentage	Cum percentage
< 0%	106.00	16.21	16.21
0% to 10%	465.00	71.10	87.31
10.1% to 20%	62.00	9.48	96.79
20.1% to 30%	11.00	1.68	98.47
31% to 49%	6.00	0.92	99.39
≥ 50%	4.00	0.61	100.00
Grand Total	654.00	100.00	

#### 4.2.2.15 Debt to Asset Ratio

The second control variable is debt to asset ratio. This ratio informs us about how much a company's asset is financed by debt. The higher this ratio is, the more risk for the company. Maximum and minimum debt to asset ratio is 238% and 0%, respectively. On average, 53.31% of a company's assets are financed by debt. Table 4.21 presents the debt asset ratio in the form of a range of values. Most of the companies (192 or 29.36%) lie in the range of 40.1% to 60%.

Table 4.21  
*Debt to Asset Ratio*

DAR	Total	Percentage	Cum Percentage
0 to 20%	92.00	14.07	14.07
20.1% to 40%	116.00	17.74	31.80
40.1% to 60%	192.00	29.36	61.16
60.1% to 80%	149.00	22.78	83.94
> 80%	105.00	16.06	100.00
Grand Total	654.00	100.00	

#### 4.2.2.16 Company Size

The third control variable is company size, which is measured by total assets. The lowest company size is IDR 400.00 million and IDR 57 929 000.00 is the highest. In addition, the average total asset is IDR 5 696 150.00 million. Company size in the form of a range of values is shown in Table 4.22.

Table 4.22  
*Company Size*

Size	Frequency	percentage	Cum percentage
< 50000	56.00	8.56	8.56
50001 to 100000	48.00	7.34	15.90
100001 to 500000	147.00	22.48	38.38
500001 to 1000000	68.00	10.40	48.78
≥ 1000001	335.00	51.22	100.00
Grand Total	654.00	100.00	

## 4.3 Classical Assumption Test

### 4.3.1 Outliers

There are a few assumptions that have to be satisfied before the data is analyzed. The assumptions are outliers, normality, autocorrelation, multi-collinearity, and heteroskedasticity. The first problem is outliers. An outlier is an observation that lies outside the overall distribution (Moore & McCabe, 1999). Usually, outliers can cause data to not be normal and therefore, produce a biased result.

The results should be free from any outliers. Therefore, this must be remedied. There are several techniques to detect and remedy the outliers (e.g. graph method, Grubb Test, etc). In this study, the case of outliers are detected using the Grubb's extreme Studentised deviated test (Grubb, 1969). The Grubb test uses the formula (Z value) below.

$$Z = \frac{|\text{Mean} - \text{Value}|}{\text{SD}} \quad (3)$$

The variables are tested one by one. First, the mean is calculated and the standard deviation from all values in a particular variable. Second, it calculates the Z value using that formula. Third, the Z value is compared to a critical Z value. The critical Z value is taken from the statistical table based on the number of observations. The critical Z value for 654 company-years is around 3.933. Finally, the null hypothesis is rejected if the computed Z value > critical Z value and that value is identified as an outlier (Barnett & Lewis, 1994).

**Table 4.23**  
*Descriptive Statistics*  
*After Remedying for outliers*

No	Variables	Outlier		Descriptive Statistic After Outlier Remedy (n=654)			
		# of Obs	%	Min	Max	Means	SD
1	ARL	2.00	0.31	14.00	148.00	72.83	19.99
2	MRL	4.00	0.61	0.00	84.00	19.37	16.42
3	BC	7.00	1.07	0.00	75.00	40.69	13.57
4	BZ	2.00	0.31	1.00	10.00	4.32	1.88
5	BEK	0.00	0.00	0.00	100.00	49.98	24.87
6	BED	0.00	0.00	0.00	100.00	64.23	28.49
7	BEA	3.00	0.46	36.30	76.00	55.36	6.20
8	BET	1.00	0.15	0.20	19.70	5.64	3.64
9	ACI	0.00	0.00	0.00	100.00	45.34	23.96
10	ACS	6.00	0.92	1.00	5.00	3.18	0.60
11	ACFE	0.00	0.00	0.00	100.00	52.70	26.01
12	ACA	10.00	1.53	1.00	30.00	7.03	5.85
13	ROA	5.00	0.76	-26.10	34.00	3.46	7.88
14	DAR	1.00	0.15	0.00	158.00	53.11	28.36
15	SIZE	12.00	1.83	0.40	29706.90	3751.96	6807.35
16	BS	-	0.00	0.00	1.00	0.16	0.37
17	AT	-	0.00	0.00	1.00	0.41	0.49
18	AO	-	0.00	0.00	1.00	0.96	0.20
19	AC	-	0.00	0.00	1.00	0.18	0.38
20	IA	-	0.00	0.00	1.00	0.85	0.36

Once an outlier is identified, the value of that outlier is replaced to the second highest value. Grubb's test can only detect one outlier at a time. The procedure needs to be repeated until no further outliers are detected. Table 4.2 (on page 131) presents the summary of all variables and the percentage of outliers. Audit report lag (ARL) has two outliers (0.31%), whereas the outlier for Management report lag (MRL) was double (4

observations) or 0.61% compared to ARL. For the independent variables, company size had the largest number of outliers, which was twelve observations (1.83%). In addition, board expertise and knowledge (BEK), board experience-directorship (BED) and audit committee independence (ACI) had no outliers at all. New descriptive statistics for the total sample of 654 company-years are also presented in Table 4.23. There are differences between the descriptive statistics of variables before and after remedying for outliers. In addition, this data was used for regression analysis.

### 4.3.2 Normality

In order to have non-biased results, it is assumed that observations have to be normally distributed. The diagnostics of normality utilize the skewness and kurtosis value. The rule of thumb states that the variable is reasonably close to normal if its skewness and kurtosis have values between -1.0 and +1.0. The diagnostic results show that both dependent variables are not normal due to a skewness and kurtosis value of more than +1 and -1. Therefore, ARL is transformed by using the Van de Waerden Normal Score (Owusu-ansah, 2006), whereas the MRL is transformed using logarithm. The results in Table 4.3 show that both skewness and kurtosis for the variables are between -1.0 and +1.0.

The independent variables that used a dummy variable were not transformed. Therefore, thirteen independent variables were tested and the results showed that eight of them needed to be transformed and the rest used the original value. Table 4.24 presents skewness and kurtosis values before and after transformation. Skewness and kurtosis

after transformation is in the range of +1 and -1 (except for ACS, where kurtosis is greater than +1) and they satisfy the rule of thumb.

**Table 4.24**  
*Normality and Transformation*

<b>Variable</b>	<b>Skewness</b>		<b>Kurtosis</b>		<b>Transformation</b>	<b>Skewness</b>		<b>Kurtosis</b>	
	<b>Stat</b>	<b>SE</b>	<b>Stat</b>	<b>SE</b>		<b>Stat</b>	<b>SE</b>	<b>Stat</b>	<b>SE</b>
ARL	0.12	0.10	2.00	0.19	Normal score*	0.002	0.10	-0.12	0.19
MRL	1.66	0.10	2.91	0.19	Logarithm	-0.28	0.10	-0.07	0.19
BC	0.35	0.10	0.86	0.19	None needed	0.35	0.10	0.86	0.19
BZ	1.10	0.10	0.91	0.19	Square root	0.63	0.10	-0.022	0.19
BEK	0.04	0.10	-0.30	0.19	None needed	0.04	0.10	-0.30	0.19
BED	-0.53	0.10	-0.34	0.19	None needed	-0.53	0.10	-0.34	0.19
BEA	-0.10	0.10	0.98	0.19	None needed	-0.10	0.10	0.98	0.19
BET	1.36	0.10	2.00	0.19	Square root	0.53	0.10	0.17	0.19
ACI	1.26	0.10	0.64	0.19	Inverse	-0.52	0.10	-0.11	0.19
ACS	1.68	0.10	3.67	0.19	Normal score*	-0.94	0.10	1.76	0.19
ACFE	0.00	0.10	-0.44	0.19	None needed	0.00	0.10	-0.44	0.19
ACA	2.19	0.10	5.16	0.19	Logarithm	0.32	0.10	0.35	0.19
ROA	0.63	0.10	4.98	0.19	Normal score*	-0.01	0.10	-0.19	0.21
DAR	0.47	0.10	0.96	0.19	None needed	0.47	0.10	0.96	0.19
SIZE	2.77	0.10	7.22	0.19	Logarithm	-0.48	0.10	0.24	0.19
BS	3.38	0.10	10.36	0.19	Dummy				
AT	0.38	0.10	-1.86	0.19	Dummy				
AO	-4.62	0.10	19.42	0.19	Dummy				
AC	1.67	0.10	0.78	0.19	Dummy				
IA	-1.97	0.10	1.87	0.19	Dummy				

\*The data were transformed by computing normal scores using Van der Waerden's transformation defined by the formula  $r/(w + 1)$ , where  $w$  is the sum of the case weight and  $r$  is the rank ranging from 1 to  $w$ .

It has been argued that the issue of non-normal distribution of variables is frequent in social science research and quite common in research that involves a large sample (Pallant, 2001). Further, others state that the analysis of variances is not heavily

dependent on the normality assumption as long as the data are not extremely non-normal and it involves a large amount of data (Norusis, 2000; Kleinbaum, Kupper, Muller & Nizam, 1998).

Moreover, this study covers the whole population and involves a large amount of data (654 observations), and the normality assumption is probably not seriously affected. Therefore, only a few variables (e.g. ACS, after having transformed in all technique, the skewness and kurtosis values are still not satisfactory) have a skewness and kurtosis value more than  $\pm 1$  or violated the rule of thumb (should be less than one). In fact, modest violations of univariate normality are not a problem if the violations are due to skewness and not outlier (Hair et al., 1998). The data is free from outliers, and therefore can be tolerated in this study.

#### **4.3.3 Multi-collinearity**

Multi-collinearity refers to a situation in which two or more independent variables in a multiple regression model are highly correlated (Gujarati, 1995). It would be a perfect multi-collinearity if the correlation between two independent variables is equal to 1 or -1. There are several signals or indicators that indicate that there is a multi-collinearity problem: (i) large changes in the estimated regression coefficients when a predictor variable is added or deleted, and (ii) insignificant regression coefficients for affected variables in the model. In addition, the consequences of the multi-collinearity problem could be in the form of less precise estimations.

There are a few techniques used to detect multi-collinearity problems in the model, such as Variance Inflation Factor (VIF), Pearson-Correlation Matrix etc. However, the Pearson-correlation matrix was used to detect it. The result of the Pearson-correlated matrix is presented in Table 4.25 on page 166. Anderson, Sweeney & William (1996) argued that if the Pearson-correlation result is higher than 0.6, there would be a multi-collinearity problem. The result of the Pearson-correlation matrix (see Table 4.25) indicates that the highest correlation among the independent variables is for audit committee size (ACS) and audit committee activity (ACA), at 0.41. However, this correlation is far below 0.60. Therefore, there is no evidence of a multi-collinearity problem.

There are several significant correlations among the independent variables that have become informative and need to be explored. First of all, return on asset (ROA) has significant positive correlation with board size (BZ), board expertise and knowledge (BEK), audit committee size (ACS), audit committee activity (ACA), auditor type (AT), auditor opinion (AO) and internal auditor (IA). This result concludes that profitable companies tend to have more board members, more older board members, more audit committee members, more frequent audit committee meetings, employing Big 4 audit firms, tend to have clean opinions and tend to have internal audit departments.

Debt to asset ratio is commonly used as a dependent variable and a proxy for leverage, and capital structure. From the results, it can be concluded that the debt to asset ratio (DAR) is significantly correlated to board expertise and knowledge (BEK), audit

committee independence (ACI), audit committee size (ACS), audit committee financial expertise (ACFE), audit committee activity (ACA), auditor change (AC), and return on asset (ROA). In addition, high leverage companies tend to have older board members, more independent audit committee members, more audit committees with financial expertise, more frequent audit committee meetings, less tendency to change the external auditor, involved in the finance and banking business, and are less profitable.

Company size is a proxy for big or small companies, which is based on the total assets owned by the company. Big companies tend to have more board members, less shares owned by board members, older board members, a more independent audit committee, more audit committee members, more frequent audit committee meetings, audited by Big 4 audit firm, tend to get clean opinions, have less of a tendency to change the external auditor, have an internal auditor department, are more profitable, and tend to have higher debt.

Table 4.25  
*Pearson Correlation*

	ARL	MRL	BC	BZ	BS	BEK	BED	BEA	BET	ACI	ACS	ACFE	ACA	AT	AO	AC	IA	ROA	DAR	LSIZE
ARL	1																			
MRL	-.47**	1																		
BC	-.05	-.03	1																	
BZ	-.16**	-.01	-.06	1																
BS	.04	-.05	-.07	-.08*	1															
BEK	.01	-.04	.06	-.00	-.06	1														
BED	-.04	-.01	-.15**	.12**	-.02	.02	1													
BEA	-.04	.03	-.03	.15**	.05	-.10**	.00	1												
BET	.00	.05	-.09*	-.13**	.04	-.08*	.02	.28**	1											
ACI	-.02	-.07	.11**	.26**	-.01	.16**	.02	.10*	-.11**	1										
ACS	-.06	-.03	.04	.36**	-.03	.03	-.08*	.06	-.15**	.15**	1									
ACFE	.02	-.06	-.01	.04	-.03	.19**	.02	-.01	-.00	.14**	.02	1								
ACA	-.04	-.08*	.10*	.25**	-.04	-.05	-.10*	.05	-.02	.19**	.41**	.15**	1							
AT	-.08*	-.03	-.07	.36**	-.11**	-.06	.02	.19**	-.01	.19**	.31**	.15**	.22**	1						
AO	-.09*	-.01	.04	.11**	.03	.13**	.12**	.04	.01	.03	.09*	-.02	.08	.09*	1					
AC	.03	.01	-.06	-.08*	.03	.02	.02	-.14**	-.07	-.06	-.00	-.06	-.01	-.11**	-.02	1				
IA	-.12**	.01	.01	.24**	-.17**	.03	.02	.10**	.03	.12**	.13**	.06	.17**	.21**	.08*	-.09*	1			
ROA	-.15**	.04	-.00	.20**	-.06	-.03	-.04	.10**	-.01	-.02	.13**	-.01	.15**	.26**	.25**	-.03	.16**	1		
DAR	.03	-.08*	.05	-.02	-.04	.06	-.05	.09*	-.01	.26**	.10*	.09*	.16**	.04	-.07	-.08*	.01	-.25**	1	
LSIZE	-.04	-.12**	.04	.45**	-.14**	-.03	-.02	.18**	.03	.27**	.25**	.06	.28**	.40**	.16**	-.09*	.27**	.24**	.09*	1

Notes: two-tailed, \* and \*\* significant at 5% and 1% respectively

#### **4.4 Regression Analysis**

Having cleaned the data from outliers and other problems, such as multi-collinearity, the next stage is running the data. As mentioned above, timeliness of corporate financial reporting has two models, namely audit report model and management report model. In addition, the objective of this study is to investigate the effect of board, audit committee, and auditor characteristics on timeliness of corporate financial reporting.

The board characteristics has seven variables: board composition (BC), board size (BZ), board shareholding (BS), board expertise and knowledge (BEK), and board experience, which is divided by three variables (Directorship-BED, Age-BEA, and Tenure-BET). Further, the second group variable is audit committee characteristics. This is divided into four variables: audit committee independence (ACI), audit committee size (ACZ), audit committee financial expertise (ACFE) and audit committee activity (ACA). Other variables are from external auditor: type of auditor (AT), auditor opinion (AO), and auditor change (AC).

This study also uses internal auditor (IA), which is measured by the existence of an internal auditor department. Industry type is also involved in this study, which is measured by a dummy variable; one (1) for the finance and banking industry and zero (0) otherwise. Besides, this study also employs three control variables: return on asset (ROA), debt to asset ratio (DAR), and companies size (SIZE). This study utilizes the panel data analysis using the E-view program.

#### 4.4.1 Audit Report Lag Model

This model uses the audit report lag as the dependent variable. The determinants are board of director, audit committee and auditor characteristics. The mathematical model can be seen as follows:

$$\begin{aligned} \text{ARL}_{it} = & a + \beta_1 \text{BC}_{it} + \beta_2 \text{BZ}_{it} + \beta_3 \text{BS}_{it} + \beta_4 \text{BEK}_{it} + \beta_5 \text{BED}_{it} + \beta_6 \text{BEA}_{it} + \beta_7 \text{BET}_{it} + \beta_8 \\ & \text{ACI}_{it} + \beta_9 \text{ACS}_{it} + \beta_{10} \text{ACFE}_{it} + \beta_{11} \text{ACA}_{it} + \beta_{12} \text{AT}_{it} + \beta_{13} \text{AO}_{it} + \beta_{14} \text{AC}_{it} + \beta_{15} \text{IA}_{it} + \\ & \beta_{16} \text{ROA}_{it} + \beta_{17} \text{DAR}_{it} + \beta_{18} \text{SIZE}_{it} + e \end{aligned}$$

Where,

ARL = audit report lag

MRL = management report lag

BC = Board composition

BZ = Board size

BEK = Board expertise and knowledge

BS = Board shareholding

BE = Board experiences, D= directorship, A=age, and T= length of services.

ACI = Audit committee independence

ACS = Audit committee size

ACFE = Audit committee financial expertise

ACA = Audit committee activities

AT = External audit type

AO = External audit opinion

AC = External Audit change

IA = Internal audit

SIZE = Companies size

ROA = Return on asset

DAR = Leverage

To see the effect of the board of director, audit committee and auditor characteristics, the panel data analysis using E-view software was used to analyze the data. In addition, there are three stages in doing panel data analysis here. First, it regresses the audit report lag against the independent variables by using the panel least square (random effect vs. fixed effect). Second, the Housman test is run to see what model is better used for estimation. Third, it would test for heteroskedasticity based on the model that has been selected.

Panel data have group effects, time effects, or both. These effects are either fixed effects or random effects. A fixed effect model assumes differences in intercepts across groups or time periods, whereas a random effect model explores differences in error variances. To select which model would be used to estimate the effect of the independent variables on the audit report lag, the Housman Test is run. The Hausman Test compares the fixed versus random effects under the null hypothesis that the individual effects are uncorrelated with the other regressors in the model (Hausman, 1978). If it has a correlation ( $H_0$  is rejected), a random effect model produces biased estimators, violating one of the Gauss-Markov assumptions; thus, the fixed model is preferred. Housman's essential result is that the covariance of an efficient estimator with its difference from an inefficient estimator is zero (Greene, 2003).

In this case, the result of the Housman test can be seen in Table 4.26 below. The probability of the Housman Test shows that  $H_0$  is rejected (at  $\alpha=5\%$ ), a random effect model results a biased estimator. Thus, the fixed model is selected.

Table 4.26  
*Result of Hausman Test*  
*Test cross-section random effects*

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	30.907627	18	0.0295

The next step is to run the heteroskedasticity test. White (1980) has derived a heteroskedasticity consistent covariance matrix estimator that provides correct estimates of the coefficient covariance in the presence of the heteroskedasticity of unknown form. The procedure to test of heteroskedasticity is by regressing the dependent variable against the independent variables with coefficient covariance method of the White cross-section. The result of regression using ordinary and White's method is compared side by side and it can be seen in Table 4.27 (page 171). Thus, the coefficient regression remains at the same values, while the standard error and p values, however, are changed. Therefore, there is a heteroskedasticity problem. However, by using the White cross-section of coefficient covariance method (White, 1980), it has corrected the standard errors and probability, and then solved the heteroskedasticity problem. Finally, the corrected model would be used to reject hypotheses.

The characteristic of model that would be presented are fixed effect with White cross section. In the fixed effect model, the autocorrelation problem has been tackled and there should not be any more problems.

**Table 4.27**  
*Result of Regression*  
*Audit Report Lag (ARL) Model*

<b>Variable</b>	<b>Coef</b>	<b>Uncorrected</b>		<b>Corrected</b>	
		<b>SE</b>	<b>P-Value</b>	<b>SE</b>	<b>P-Value</b>
C	-2.877	1.189	0.016	2.001	0.151
BC	-0.127	0.624	0.838	0.767	0.868
BZ	0.215	0.254	0.400	0.061	0.001***
BS	1.252	0.350	0.000***	0.343	0.000***
BEK	0.154	0.299	0.608	0.304	0.613
BED	0.222	0.228	0.332	0.042	0.000***
BEA	0.013	0.012	0.297	0.010	0.215
BET	-0.136	0.104	0.194	0.035	0.000***
ACI	-0.051	0.087	0.560	0.069	0.467
ACS	-0.010	0.132	0.941	0.071	0.891
ACFE	0.477	0.275	0.083*	0.067	0.000***
ACA	-0.096	0.345	0.781	0.365	0.793
AT	0.078	0.237	0.742	0.129	0.545
AO	-0.031	0.318	0.923	0.164	0.851
AC	-0.006	0.093	0.947	0.055	0.909
IA	-0.347	0.209	0.098*	0.114	0.003***
ROA	-0.138	0.052	0.008***	0.013	0.000***
DAR	-0.206	0.254	0.417	0.237	0.385
SIZE	0.346	0.105	0.001***	0.102	0.001***
R Square		0.706		0.707	
Adj. R Square		0.542		0.542	
F stat		4.283		4.283	
F Sig		0.000		0.000	

Note; 2- tailed test, \*\*\*, \*\*, and \* are significant at 1%, 5% and 10%, respectively

The effect of the board of directors, audit committee and auditor on timeliness of corporate financial reporting is shown in Table 4.27 (corrected part). Before evaluating the individual effect of the independent variables on the timeliness of

financial reporting, it would be better to look first at the model fitness. The test of the model regarding fitness is to investigate whether the model really fits, since this is the best linear unbiased estimator (BLUE). To see the model fit, there are two statistical properties involved, namely F statistic and Adjusted R<sup>2</sup>.

F statistic is 4.283 with a significant level of 0.000. Therefore, the model is fit enough due to the value of the significant level being far below 0.05 (alpha < 5%). The second model fit test shows that the adjusted R<sup>2</sup> is 0.542, or 54.2%. Thus, the independent variables can explain about 54.2% the variation of the dependent variable. Furthermore, 45.8% of timeliness of financial reporting is explained by other variables. As a conclusion, the audit report lag model is fit, and therefore can be used to interpret the effect of individual independent variables on timeliness of financial reporting.

To see the effect of the individual variables on the dependent variable, the t statistic is used. There are about 18 (eighteen) independent variables in the first model. 3 (three) of them are control variables, that is return on Asset (ROA), debt to Asset (DAR), and companies' size (SIZE). Eight (8) of the independent variables are significant at alpha 1%. Two (2) of them are control variables: ROA and SIZE. The significant variables are board size (BZ), board shareholding (BS), board directorship (BED), board tenure (BET), audit committee financial expertise (ACFE) and internal auditor (IA).

#### 4.4.2 Management Report lag

The second model used in this study is the management report lag model (MRL). The mathematical model of MRL is shown below. The independent variables still maintain the same IV as the Audit report model.

$$MRL_{it} = a + \beta_1 BC_{it} + \beta_2 BZ_{it} + \beta_3 BS_{it} + \beta_4 BEK_{it} + \beta_5 BED_{it} + \beta_6 BEA_{it} + \beta_7 BET_{it} + \beta_8 ACI_{it} + \beta_9 ACS_{it} + \beta_{10} ACFE_{it} + \beta_{11} ACA_{it} + \beta_{12} AT_{it} + \beta_{13} AO_{it} + \beta_{14} AC_{it} + \beta_{15} IA_{it} + \beta_{16} ROA_{it} + \beta_{17} DAR_{it} + \beta_{18} SIZE_{it} + e$$

Where:

MRL = management report lag

BC = Board composition

BZ = Board size

BEK = Board expertise and knowledge

BS = Board shareholding

BE = Board experiences, D= directorship, A=age, and T= length of services.

ACI = Audit committee independence

ACS = Audit committee size

ACFE = Audit committee financial expertise

ACA = Audit committee activities

AT = External audit type

AO = External audit opinion

AC = External audit change

IA = Internal audit

SIZE = Company size

ROA = Return on asset

DAR = Leverage

The procedure that was used in analyzing the effect of the independent variables on timeliness of financial reporting is the same as the audit report model. First, it estimates the model by using the random effects and then the fixed effects. Second, it utilizes the Hausman Test to see which model is preferred. Third, it would test the heteroskedasticity problems by using White covariance variance. Any difference in standard error and p-value between the ordinary and White covariance variance, will indicate the existence of heteroskedasticity. The corrected covariance result would be interpreted and used to see the effect of the independent variables on timeliness of financial reporting.

Having regressed the management report lag (MRL) against board of director, audit committee and auditor characteristics using random effect and fixed effect, the Hausman Test shows that there is significant (p value < 0.05) random cross section. Therefore,  $H_0$  is rejected (at  $\alpha=5\%$ ), since a random effect model results in a biased estimator. Thus, the fixed model is preferred. The result of the Hausman Test is presented in Table 4.28 below:

Table 4.28  
*Result of Hausman Test*  
*Test cross-section random effects*

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	40.395864	18	0.0018

The next stage is to test if there is any heteroskedasticity problems with the model. The White method is used. The result of the regressions, which uses the ordinary and White method, is compared in Table 4.29. From the results, it can be concluded that there is a heteroskedasticity problem. However, the White cross-section of coefficient covariance method (White, 1980) has corrected the standard errors and probability, and then solved the heteroskedasticity problem. Finally, the corrected model is used to reject hypotheses.

The results of the regression are presented in Table 4.29 below. Before interpreting the individual effect of independent variables on the timeliness of financial reporting, the model fitness is tested. As usual, the model fitness test would use F statistic and Adjusted  $R^2$ . Thus, the F statistic for the MRL model is 2.036 with a significance level of 0.000. Therefore, it indicates the model is really fit due to the F significant being far lower than 0.05 (alpha < 0.05). Further, the Adjusted  $R^2$  is 0.272, or 27.2%, which means that 27.2% of the dependent variable is explained by the independent variables and the rest (72.8%) is explained by other variables. If compared to the Audit Report Lag, Adjusted  $R^2$  for Management Report lag model is lower. It implies that the role of the board of directors, audit committee, and auditor characteristics are more apparent in the auditing process.

Like the ARL model, the MRL model also uses 18 (eighteen) regressors. It consists of 15 (fifteen) independent variables and the rest are control variables. Out of 15 (fifteen), 8 (eight) independent variables are significant at 1% and 5%. They are board composition (BC), board size (BZ), board shareholding (BS), board expertise and knowledge (BEK), board age (BEA), board tenure (BET), audit committee size (ACS)

and audit opinion (AO). Meanwhile, the significant control variable is return on asset (ROA).

**Table 4.29**  
*Result of Regression*  
*Management Report Lag (MRL) Model*

<b>Variable</b>	<b>Uncorrected</b>			<b>Corrected</b>	
	<b>Coef</b>	<b>SE</b>	<b>P-value</b>	<b>SE</b>	<b>P-value</b>
C	4.671	1.341	0.001	1.041	0.000
BC	-0.809	0.703	0.251	0.063	0.000***
BZ	-0.222	0.287	0.441	0.105	0.035**
BS	-1.226	0.395	0.002***	0.280	0.000***
BEK	-0.724	0.338	0.033**	0.217	0.001***
BED	-0.016	0.258	0.951	0.095	0.868
BEA	-0.015	0.014	0.277	0.008	0.047**
BET	0.071	0.118	0.545	0.017	0.000***
ACI	0.014	0.098	0.887	0.051	0.785
ACS	0.421	0.149	0.005***	0.106	0.000***
ACFE	-0.203	0.310	0.514	0.196	0.303
ACA	0.264	0.389	0.497	0.167	0.114
AT	-0.015	0.267	0.955	0.143	0.915
AO	-0.732	0.359	0.042**	0.229	0.002***
AC	0.015	0.105	0.886	0.033	0.648
IA	0.064	0.236	0.786	0.193	0.740
ROA	0.135	0.059	0.022**	0.005	0.000***
DAR	0.155	0.286	0.589	0.113	0.171
SIZE	-0.156	0.118	0.186	0.128	0.222
R Square		0.534		0.534	
Adj. R Square		0.272		0.272	
F stat		2.036		2.036	
F Sig		0.000		0.000	

Note; 2- tailed test, \*\*\*, \*\*, and \* are significant at 1%, 5% and 10%, respectively

## 4.5 Hypotheses Tests

As stated in the hypothesis development, there are 15 hypotheses in this study. The hypotheses were divided into three groups, namely board of director, and audit committee and auditor characteristics. This section discusses regarding rejecting or accepting the null hypothesis.

### 4.5.1 Hypothesis 1: Board Characteristics

Board of directors characteristics consist of 7 (seven) hypotheses aligned to the number of board of director characteristics, namely board composition (BC), board size (BZ), board shareholding (BS), board expertise and knowledge (BEK), board directorship (BED), board age (BEA) and board tenure (BET). The detail of hypothesis judgment is discussed below.

#### 4.5.1.1 Board Composition and Timeliness of Financial Reporting

Board composition is measured by the percentage of independent board of directors in a company. Thus, the hypothesis states that board composition is significantly associated with the timeliness of financial reporting. The effect of the board composition on the audit report lag is negative. This means that the more independent board of director members in a company would make the audit report lag shorter. The signal is consistent with the argument that the more independent directors on the board, the shorter the audit report lag. However, the board composition is not significantly associated with the audit report lag, which is indicated by a higher *p*

value compared to 0.05 ( $\alpha=5\%$ ). Therefore, the hypothesis is not supported by the audit report lag model.

The management report lag model indicates that there is a negative relationship between board composition and management report lag. This means that the more independent directors in the company, the shorter the management report lag or financial report being submitted by the management to the public. The direction is consistent with the contention that the more independent directors there are makes the reporting lag shorter. In addition, the relationship between board composition and management report lag is significant at  $\alpha=0.01$ . It is indicated by a  $p$  value (0.000) of board composition lower than 0.01. In conclusion, the first hypothesis is partially supported.

#### **4.5.1.2 Board Size and Timeliness of Financial Reporting**

Board size is the number of members of the board of directors in a company. Further, the hypothesis posits that there is a significant relationship between board size and timeliness of financial reporting. The audit report lag model shows that a positive relationship exists between number of members of the board of directors and audit report lag. This means that the larger number of members of the board of directors would make the audit report lag longer. Further, the relationship is significant due to the  $p$ -value of board size (0.001) lower than 0.01 ( $\alpha = 0.01$ ).

The management report lag model, however, shows a negative relationship between the board size and management report lag. In other words, more board members in a

company the shorter the management report lag is. In addition, there is a significant relationship between board size and management report lag. This is indicated by the *p*-value of board size (0.035) far below 0.05 ( $\alpha = 0.05$ ). In conclusion, the second hypothesis is supported by both models.

#### **4.5.1.3 Board Shareholding and Timeliness of Financial Reporting**

Board shareholding is measured by a dummy variable: 1 (one) if any board member who owns shares in that company, and zero (0) otherwise. The hypothesis posits that there is a significant relationship between board shareholding and timeliness of financial reporting. The audit report lag model shows that there is a positive relationship between board shareholding and audit report lag. This means that companies with board shareholding tend to have longer audit report lags. Further, the relationship between board shareholding and audit report lag is significant. This is indicated by the *p* value of the board shareholding variables, which is far less than 0.01. Therefore, the third hypothesis is supported by the audit report lag model.

The management report lag model shows that there is a negative relationship between board shareholding and management report lag. This means that the more members of the board of directors having shares in a company, the shorter would be the management report lag. In addition, the relationship between them is significant at 0.01. This can be seen from the *p* value of board shareholding being far less than 0.01. Therefore, the third hypothesis is also supported by management report lag model.

#### **4.5.1.4 Board expertise and Knowledge and Timeliness of Financial Reporting**

Board expertise and knowledge is measured by the number of board members with a business and management background divided by the total number of board members. Thus, the fourth hypothesis posits that there is a significant relationship between board expertise and knowledge, and timeliness of financial reporting. The audit report lag model shows that the direction of its relationship is positive. This means that the more board members with business and management backgrounds will make the audit report lag longer. However, the relationship is not significant due to the higher  $p$  value compared to  $\alpha$  (0.05). Therefore, the fourth hypothesis is rejected.

The management report lag model indicates that the relationship between board expertise and knowledge is negative. The more board members with a business and management background, the shorter the management reports lag. In addition, the relationship is significant at  $\alpha = 0.01$  due to a  $p$ -value of board expertise and knowledge of less than 0.01 (0.001). Therefore, the fourth hypothesis fails to be rejected. In conclusion, the fourth hypothesis is partially supported.

#### **4.5.1.5 Board Directorship and Timeliness of Financial Reporting**

Board directorship is one of the proxies for board experience. Further, it is measured by the number of board members who become directors in other company divided by the total members of the board of directors. The hypothesis regarding the board directorship; board directorship is significantly associated with the timeliness of

financial reporting. The first model shows that there is a positive relationship between board directorship and audit report lag. This means that the larger the number of board directorships, the longer the timeliness of financial reporting. In addition, the relationship is significant, which is indicated by a *p* value of the board directorship (*p*-value= 0.000) smaller than 0.05. Therefore, the hypothesis is supported for the audit report lag model.

The second model indicates that there is a negative relationship between board directorship and the management report lag model. In other words, the more board members who have the same position in other companies, the shorter the management report lag. However, the relationship is not significant, which is shown by a *p*-value of board directorship greater than 0.05. Therefore, the management report lag model does not support the hypothesis. In conclusion, the fifth hypothesis is not fully supported.

#### **4.5.1.6 Age of Board Member and Timeliness of Financial Reporting**

Age of board member is another proxy for the board experience. Thus, it is measured by the average age of the board members. The hypothesis regarding board age is that board age is significantly related to the timeliness of financial reporting. The audit report lag model shows that there is a positive relationship between board age and audit report lag. Further, the older board members would make the audit report lag longer. However, the relationship is not significant due to the higher *p*-value of board age (0.215) compared to 0.05 ( $\alpha = 0.05$ ). Therefore, the hypothesis is not supported by the audit report lag model.

The regression result of the second model shows that there is a negative relationship between board age and management report lag. Thus, this means that older board members would reduce the management report lag. In addition, its relationship is significant at  $\alpha = 0.05$  due to the lower *p*-value of board age (0.047). Therefore, the hypothesis is accepted, meaning that board age is significantly related to management report lag. In conclusion, the sixth hypothesis is partially supported.

#### **4.5.1.7 Length of services of Board Director and Timeliness of Financial Reporting**

Length of services of board of director is third proxy for board experience. The measurement of Length of services of board is average length of services of board members. The result of audit report lag model shows that there is negative relationship between board tenure and audit report lag. It means a longer length of board member's services. In addition, the relationship is significant at  $\alpha = 0.05$ . Therefore, the hypothesis is supported by audit report lag model.

The result of second model also shows the negative relationship between board tenure and management report lag. The longer the length of board member's services in a company, the shorter the management report lag. Further, the relationship is significant due to small *p* value of the board tenure (0.000) compared to  $\alpha = 0.05$ . Therefore, the hypothesis is also supported by management report lag model. As a conclusion, the seventh hypothesis is fully supported by both models.

## 4.5.2 Hypothesis 2: Audit Committee Characteristics

The second group hypotheses is regarding the audit committee characteristics. Further, it is divided by four sub-hypotheses: audit committee independence (ACI), audit committee size (ACS), audit committee financial expertise (ACFE) and audit committee activity (ACA). The result of hypothesis testing is discussed below.

### 4.5.2.1 Audit Committee Independence and Timeliness of Financial Reporting

Audit committee independence is measured by the number of audit committee independent members divided by the total number of audit committee members. The hypothesis is that there is a significant relationship between audit committee independence and timeliness of financial reporting. The results of the Audit Report Lag Model shows that there is a negative relationship between audit committee independence and audit report lag. In other words, the larger number of audit committee independent members would bring a shorter audit report lag. However, the relationship is not significant due to a higher  $p$  value of audit committee independence compared to  $\alpha = 0.05$ . Therefore, the hypothesis is not supported.

The results of the second model shows that a positive relationship exists between audit committee independence and management report lag. Even though the number of audit committee independent members is large, it would not reduce the management report lag. Instead, it would make the management report lag longer. However, the relationship is not significant at  $\alpha = 0.05$ . Further; the hypothesis is

also not supported by the Management Report Lag Model. In conclusion, the first hypothesis is rejected or there is no significant relationship between audit committee independence and timeliness of financial reporting.

#### **4.5.2.2 Audit Committee Size and Timeliness of Financial Reporting**

Audit committee size is measured by the total number of members of the audit committee in a company. The hypothesis regarding the audit committee size is that there is a significant relationship between audit committee size and timeliness of financial reporting. The first model results show that there is a negative relationship between number of audit committee members in a company and audit report lag. This means that the higher number of audit committee members would bring a shorter audit report lag. However, the relationship between them is not significant because the  $p$  value for audit committee size is greater than  $\alpha$ . therefore, the hypothesis is not supported by the first model.

The results of the second model indicate that a positive relationship exists between audit committee size and management report lag. In other words, the more members in the audit committee would mean management takes more time to release the financial report to the public. In addition, the relationship is significant at  $\alpha = 0.05$ . Further, the second hypothesis is supported by the Management Report Model. It can be concluded that the second hypothesis is partially supported.

#### **4.5.2.3 Audit Committee Financial Expertise and Timeliness of Financial Reporting**

Audit committee financial expertise is measured by the number of audit committee members with an accounting and finance academic background divided by the total number of members for the audit committee. The hypothesis regarding the audit committee financial expertise is that there is a significant relationship between audit committee financial expertise and the timeliness of financial reporting. The results of the first model indicate that audit committee financial expertise is positively related to the audit report lag, meaning that the more members of the audit committee with financial expertise academic background would increase the audit report lag. In addition, the relationship is significant at  $\alpha = 0.05$ . Therefore, the third hypothesis is supported by the audit report lag model.

The results of the second model indicate that a significant relationship also exists between audit committee financial expertise and management report lag. It can be seen from the  $p$  value for audit committee financial expertise, which is lower than  $\alpha$ . However, the sign is different compared to the audit report lag model. The relationship between audit committee financial expertise and the management report lag is negative. This means that the more audit committee members with financial expertise, the shorter the management report lag. Therefore, the hypothesis is supported by this model. In conclusion, the third hypothesis is accepted, or there is a significant relationship between audit committee financial expertise and timeliness of financial reporting.

#### **4.5.2.4 Audit Committee Activity and Timeliness of Financial Reporting**

Audit committee activity is measured by the frequency of audit committee meetings. The following hypothesis is offered. There is a significant relationship between audit committee activities and timeliness of financial reporting. The result of the first model indicates that there is a negative relationship between frequency of audit committee meetings and audit report lag. This means that the higher the frequency of audit committee meetings, the shorter the audit report lag. However, the relationship is not significant due to a greater  $p$  value of audit committee activities compared to  $\alpha$ . Therefore, the hypothesis is not supported.

The results of the second model show that there is a positive relationship between audit committee activities and management report lag. In other words, the more meetings of the audit committee would not reduce the management report lag. In addition, the relationship is also not significant at  $\alpha = 0.05$ . Therefore, the hypothesis is also not supported by using this model. It can be concluded that the fourth hypothesis is rejected or there is no significant relationship between audit committee activities and timeliness of financial reporting.

#### **4.5.3 Auditor Characteristics**

Auditor characteristics are divided into 2 (two) aspects, namely external auditors and internal auditors. The external auditor aspect is about the auditor type (AT), auditor opinion (AO) and auditor change (AC). Meanwhile, the internal auditor has only 1

(one) proxy; internal auditor existence. The results of the hypothesis testing are discussed in detail below.

#### **4.5.3.1 External Auditor Type and Timeliness of Financial Reporting**

Auditor type is measured by Big 4 or non-Big 4 audit firms. If a company is audited by the Big 4 audit firm, it is assigned 1 (one) and otherwise, 0 (zero). The hypothesis regarding this variable is that there is a significant relationship between auditor type and the timeliness of financial reporting. The results of the audit report lag model indicates that there is a positive relationship between auditor type and audit report lag. Thus, a company that is audited by a Big 4 audit firm would have a longer audit report lag. However, the relationship is not significant at 0.05. Therefore, the hypothesis is not supported.

The results of the second model show the opposite sign compared to the previous model. There is a negative relationship between auditor type and management report lag. In other words, a company that was audited by a Big 4 audit firm tends to have a long management report lag. In addition, the relationship is also not significant at 0.05. Therefore, the hypothesis is also not supported. In conclusion, there is no significant relationship between auditor type and timeliness of financial reporting.

#### **4.5.3.2 External Auditor Opinion and Timeliness of Financial Reporting**

The second variable for external auditor characteristic is auditor opinion, which is measured by a dummy variable. If the company earns a clean opinion, it is assigned 1

(one) and otherwise, 0 (zero). The hypothesis regarding this variable is that there is a significant relationship between auditor opinion and timeliness of financial reporting. The results of the first model show that there is a negative relationship between audit opinion and audit report lag. Thus, a company that had an unqualified opinion tends to have a shorter audit report lag. However, the result is not significant and therefore does not support the hypothesis.

The results of the management report lag model shows that there is a negative relationship between auditor opinion and management report lag. In other words, a company that had an unqualified opinion tends to have a shorter management report lag. In addition, the relationship is significant at 0.05. Therefore, the hypothesis is supported by using this model. It can be concluded that the second hypothesis is partially supported or there is significant relationship between auditor opinion and timeliness of financial reporting by using the management report lag, but not for the audit report lag model.

#### **4.5.3.3 External Auditor Change and Timeliness of Financial Reporting**

The third variable regarding the external auditor characteristic is auditor change, which is measured by a dummy variable. If the company changed its external auditor it is assigned 1 (one) and otherwise, 0 (zero). The hypothesis regarding this variable is that there is a significant relationship between auditor change and timeliness of financial reporting. The results of the first model show that there is a negative relationship between auditor change and audit report lag. In other words, a company that changes its external auditor tends to have a shorter audit report lag. However, that

relationship is not significant due to a greater *p* value of auditor change compared to 0.05. Therefore, the hypothesis is not supported.

The results of the second model indicate that there is a positive relationship between auditor opinion and management report lag. This means that companies that changed its external auditor tend to have a longer management report lag compared to companies that did not change its external auditor. However, that relationship is not significant due to the greater *p* value of audit change compared to 0.05. Therefore, the hypothesis is also not supported by using this model. In conclusion, there is no significant relationship between auditor change and timeliness of financial reporting.

#### **4.5.3.4 Internal Auditor Existence and Timeliness of Financial Reporting**

Internal auditor existence is measured by the existence of an internal auditor department in the organizational structure. If a company has an internal auditor department, it would be assigned 1 (one) and otherwise, 0 (zero). The hypothesis regarding internal auditor is that there is a significant relationship between the existence of an internal auditor department and timeliness of financial reporting. The results of the first model show that there is a negative relationship between internal auditor and auditor report lag. Thus, a company that has an internal auditor department tends to have shorter audit report lag compared to its counterparts. In addition, the relationship is significant due to a smaller *p* value (0.000) of internal auditor compared to 0.05. Therefore, the hypothesis is supported here.

The results of the second model indicate that there is a positive relationship between internal auditor and management report lag. Thus, companies that have the internal auditor department tend to have a longer management report lag. However, the relationship is not significant. Therefore, the hypothesis is not supported. In conclusion, the hypothesis is partially supported. A significant relationship exists between internal auditor and audit report lag, but not for the management report lag.

#### **4.5.4 Control Variables: Profitability, Leverage and Company's Size**

This study employed three control variables: namely profitability (measured by return on Asset/ ROA), leverage (measured by debt to asset ratio/ DAR) and company size (SIZE). The ROA has a negative relationship with the audit report lag. This implies that profitable companies have a longer audit report lag. The relationship between return on asset and audit report lag is significant at 0.05. In addition, the second model indicates that there is a positive relationship between return on asset and management report lag. In other words, profitable companies tend to have a shorter management report lag.

The second control variable is the debt to asset ratio. The results of the first model show that there is a negative relationship between the debt to asset ratio and audit report lag. This implies that the higher the debt, the more the company tends to have a shorter audit report lag. However, the relationship is not significant at 0.05. In addition, the second model shows the opposite sign to audit report lag. The relationship between them is positive. This means that a higher debt company tends to

have a longer management report lag. However, the relationship is not significant at 0.05 due to a *p* value of debt to asset ratio (0.171) greater than 0.05.

The last control variable is company size. The company size is measured by the total assets of company. The first model shows that there is a positive relationship between company size and audit report lag. This implies that big companies tend to have a longer audit report lag. Further, the relationship is significant at 0.01 because the company size *p* value is less than 0.05. In addition, the second model shows an insignificant negative relationship between company size and management report lag. The direction implies that a big company tends to have a shorter management report lag and vice versa. The *p*-value of company size is greater than 0.05. Therefore, it supports the view that the relationship is not significant.

#### **4.6 Chapter Summary**

This section discusses the results of the data analysis. The discussion began with the profile of the companies involved in this study. It also discussed the classical assumptions for outliers, normality, multi-collinearity, and heteroskedasticity. The univariate outlier test used the Grubb's Test and showed that there were outlier problems. Therefore, it was remedied using Grubb's procedure. Then, the normality test was carried out by using skewness and kurtosis values. The rule of thumb was used: + 1 and -1 of skewness and kurtosis value. Some variables were not normal and were transformed using logarithm, inverse and normal score. Further, the heteroskedasticity used White's (1980) procedure and were corrected by using the White (1980) covariance method.

The results also tested the random and fixed effect model. This test was used to justify the preferred model. The Hausman Test suggests that the fixed effect model is preferred. The results were interpreted based on the fixed effect with the White covariance method. The F-statistic is adequate for both models; audit report lag and management report lag model. In other words, it shows a smaller *p*-value for the F statistic (0.000). Adjusted R square shows that the audit report lag model has a higher adjusted R square compared to the management report lag model.

The results of the audit report lag model shows that 8 (eight) independent variables are significantly associated with the audit report lag. Two (2) of them are control variables (ROA and Size) and accepted the six hypotheses. In addition, board size, board shareholding, board directorship, board tenure, audit committee financial expertise and internal auditor existence are among the significant variables that influenced the audit report lag. However, the results of the management report lag has 9 (nine) significant variables. One (1) of them is the control variable return on asset. Eight (8) hypotheses were accepted, meaning that there are significant relationships between board composition, board size, board shareholding, board expertise and knowledge, board age and board tenure, audit committee size, audit opinion and management report lag. The summary of the hypotheses tests is shown in the Table below. The next chapter explains the discussion of the results and conclusions.

Table 4.30  
*Summary of Results of the Hypotheses Tests*

No	Hypothesis	Model		Conclusion
		ARL	MRL	
H <sub>1a</sub>	Board Composition is significantly associated with the timeliness of financial reporting	Reject	Accepted	Partially supported
H <sub>1b</sub>	Board size is significantly associated with the timeliness of financial reporting	Accepted	Accepted	Fully supported
H <sub>1c</sub>	Board expertise and knowledge is significantly associated with the timeliness of financial reporting	Reject	Accepted	Partially supported
H <sub>1d</sub>	Board shareholding is significantly associated with the timeliness of financial reporting	Accepted	Accepted	Fully supported
H <sub>1e</sub>	Board directorship is significantly associated with the timeliness of financial reporting	Accepted	Reject	Partially supported
H <sub>1f</sub>	Board age is significantly associated with the timeliness of financial reporting	Rejected	Accepted	Partially supported
H <sub>1g</sub>	Board length of services is significantly associated with the timeliness of financial reporting	Accepted	Accepted	Fully supported
H <sub>2a</sub>	Audit committee independence is significantly associated with the timeliness of financial reporting	Reject	Reject	Not supported
H <sub>2b</sub>	Audit committee size is significantly associated with the timeliness of financial reporting	Reject	Accepted	Partially supported
H <sub>2c</sub>	Audit committee financial expertise is significantly associated with the timeliness of financial reporting	Accepted	Reject	Partially supported

		Reject	Reject	Not supported
H <sub>2d</sub>	Audit committee activities are significantly associated with the timeliness of financial reporting	Reject	Reject	Not supported
H <sub>3a</sub>	External auditor type is significantly associated with timeliness of financial report	Reject	Reject	Not supported
H <sub>3b</sub>	External auditor opinion is significantly associated with timeliness of financial report	Reject	Accepted	Partially supported
H <sub>3c</sub>	External auditor change is significantly associated with timeliness of financial report	Reject	Reject	Not supported
H <sub>3d</sub>	Internal auditor existence is significantly associated with the timeliness of financial report.	Accepted	Reject	Partially supported

# **CHAPTER 5**

## **DISCUSSION OF RESULT AND CONCLUSIONS**

### **5.0 Introduction**

This chapter provides a discussion of the major findings and conclusion. It explores in detail whether this finding support previous study and the standing of this study. The conclusion section draws all arguments and findings. It also outlines the implications of the study; theoretical and practical, limitation and suggestions for future research.

### **5.1 Discussion**

#### **5.1.1 Board of Directors**

##### **5.1.1.1 Board Composition**

The hypothesis of board composition and timeliness of financial reporting is partially supported. The board composition is insignificantly associated with the audit report lag. Thus, the board independence did not have significant role in the process of auditing the financial report. This finding is not consistent with Abdullah (2006) and Beekes et al. (2004). Abdullah (2006) found that there is a significant relationship between board composition and audit report lag. In addition, Beekes et al. (2004) concluded that board composition is an important factor in determining of timeliness of earning in UK companies. Therefore, this finding fails to support the agency theory, which posits that board composition can resolve the agency conflicts.

There are a few reasons why independent members of the board of directors of Indonesian company do not play a significant role in audit reporting lag. They might not have enough experience and knowledge in the financial reporting process and auditing. Another reason is that most Indonesian companies belong to a single family and the management is from the family members. Therefore, the management has more power than the board of directors.

The second model shows that there is a significantly negative relationship between board composition and the management report lag. The finding is in contrast to the first model. It means that independent director have a significant role in the management reporting lag. The significant relationship between board composition and management report lag supports the agency theory. Thus, board independence can reduce the management report lag and asymmetric information. This is the first study that examines the relationship between board composition and management report lag.

This finding is in line with Fama & Jensen (1983). They argued that board independence particularly gave an incentive to prevent and detect such opportunities for reporting behavior by the management. In addition, board independence of Indonesian companies is effective enough to mitigate the agency problems due to their effectiveness in monitoring management (Johnson, Daily, & Ellstrang, 1996). Thus, board independent members may have adequate experience and knowledge, and therefore, they are independent and interact with other management teams. They are

able to ensure that there are proper checks and balance (Waldo, 1985; William & Shapiro, 1979).

Compared to other studies on the quality of financial reports that used earning management fraud and financial restatement, it can be concluded that this finding partially supported those results. For example, Beasley (1996) documented that there is a significant relationship between board composition and fraud. However, the role of board independence in Beasley's (1996) study is negative, meaning that the higher the board independence in the company, the greater the fraud.

The difference between the past studies might be due to the different environment between Indonesia and other countries. For example, Indonesia adopted the two-tier board system which has, in fact, been modified. The system is prevalent in continental Europe such as the Netherlands. Meanwhile, most previous studies have been done in Anglo-Saxon countries, such as United Kingdom and United States. Another reason is that Indonesian corporate law adopted the French Civil Law, which offers a weak protection for investors (La Porta et al., 1998), compared to the previous studies.

#### **5.1.1.2 Board size**

The relationship between board size and timeliness of financial reporting is significant for both models. However, the relationship between board size and audit report lag is positive, and board size and management report lag is negative. The positive relationship between board size and audit report lag implies that the more members on a board would make the audit report lag longer. In other words, a large number of

board members do not guarantee that the audit report lag will be shorter. This is in line with Jensen (1993), which states that there is coordination and processing problems if a company has a larger board, and it makes the board less effective. Therefore, this finding supports the agency theory that states that a small number of board members is effective enough to monitor management. In this case, a large number of directors is ineffective and causes the audit report lags to be longer. Since there is no study that investigated the relationship between board size and audit report lag, this is the first evidence that documented this relationship. In terms of accounting quality, this finding supports the result of Dechow et al. (1996). They revealed a positive relationship between board size and earning management (as a proxy for accounting quality).

The management report lag model shows a negative relationship between board size and management report lag. The more members in the board will lead to a shorter management report lag. The result is consistent with the study by Dechow et al. (1996). However, their study used another proxy for accounting quality, namely earning management. Dechow et al. (1996) documented the negative relationship between board size and earning management.

This finding is consistent with the statement of Pfeffer (1987) and Goodstein et al. (1994). They stated that a larger board may be constructive for some companies because they provide diversity. Therefore, this finding supports the resources dependent theory. In addition, it is supported by Halebian & Finkelstein (1993), which argued that larger boards have more problem-solving capabilities. Further,

Zahra & Pearce (1989) argued that the ability of a board to tap into significant resources would flow from a larger board rather than a smaller board size.

### **5.1.1.3 Board Shareholding**

The relationship between board shareholding and timeliness of financial reporting is also significant for both models. The audit report lag model indicates a positive relationship between board shareholding. This implies that companies owned by board members tend to have a longer audit report lag. Even though board shareholding significantly affects the audit report lag, they fail to make the audit report lag shorter. Therefore, it is not aligned with Jensen (1993), which argues that board shareholding can effectively monitor and discipline managers. Further, it fails to reduce the opportunity behavior and agency cost. This finding supports the entrenchment hypothesis.

The management report lag model indicates that there is a significantly negative relationship between board shareholding and management report lag. This means that a company with board shareholding tends to have shorter management report lag. This finding is consistent with the findings of Morck et al. (1988). They found that there is a negative relationship between board shareholding and accounting quality. This result likely confirms the agency perspective in explaining the role of the board shareholding. In addition, management report lag also relates to the arguments by Givoly & Palmon (1982), Kross (1982) and Chambers & Penman (1984). They state that early (late) announcements are associated with higher (lower) abnormal returns or high (low) stock return variability, relative to late (early) announcements. Therefore,

board members with shareholding might influence the management to release the company financial report as soon as possible because they might have incentives because of early release. Further, this finding supports the agency theory.

#### **5.1.1.4 Board Expertise and Knowledge**

The regression result shows that there is a positive relationship between board expertise and knowledge and timeliness of financial reporting. However, the relationship is not significant. Most members of the board of directors do not have business and management background, especially in finance and accounting. Therefore, they do not have a lot of arguments relating to the audit process. In other words, it is difficult for them to control the audit process, and this makes the audit report become longer. This argument is in line with Felton & Fritz (2005), which states that the overall level of board expertise is insufficient to conduct the current and emerging roles and responsibilities of the board of directors. Therefore, they suggest that corporations should stress the board process to develop and improve the board expertise.

The regression result of the management report lag model shows that there is a significant negative relationship between board expertise and knowledge and management report lag. Thus, the Indonesian boards use their expertise and knowledge in management report lag. This finding is consistent with Fama & Jensen (1983), which argued that board expertise would align the company vision and at the same time, they would reduce the agency problems and agency costs. However, this finding supports the resources dependent theory.

### **5.1.1.5 Board Experiences**

The board experience is divided into three variables, namely multiple directorship, board age and board tenure. The discussion is as follows:

#### **5.1.1.5.1 Boards Directorship**

The relationship between board directorship and timeliness of financial reporting is significantly positive for the audit report lag model, while the management report lag model shows an insignificantly negative relationship. The positive relationship between board directorship and audit report lag implied that the more board members with directorships, the longer the audit report lag. Thus, it is not consistent with Abdel- Salam & Street (2007), which found that there is no significant relationship between board directorship and timeliness of Internet corporate reporting.

The positive relationship between board directorship and audit reporting lag might be due to the substance of the multiple directorships. A board member with multiple directorships implies that they have more experience. Therefore, they have the ability to control the financial reporting process. Thus, the relationship should be negative, which means that board directorship would decrease the audit report lag. However, the result is positive. This finding might suggest that the board directorship might have so many activities in other companies that they might have less time to control the financial reporting process in a particular company. Finally, the monitoring and control become ineffective (Feris et al., 2003). Further, the finding supports the agency theory.

A negative relationship between board directorship and management report lag implies that the more board members with directorships, the shorter the management report lag. However, the relationship is not significant. This is consistent with Abdel-Salam & Street (2007). The results of the audit report lag and management report lag is in line with major studies in the literature. However, this finding is in line with Pfeffer & Salancik (1978) and Usem (1984). They state that directorships are seen as devices for inter-corporate collusion and inter-organizational elite co-optation and corporation. In addition, Mace (1986) supports the argument, saying that directorships may encourage directors to pursue their own objectives at the expense of other shareholders. Besides, Davis (1993) and Vicknair et al. (1993) also support the contention and state that directorships may lead to a situation where very few are willing to 'rock the boat' which in turn, will have adverse implications on the independence of the board. That is why the role of multiple directorships can reduce the audit report lag and there is no role of board directorship in the management report lag.

#### **5.1.1.5.2 Age of Board Members**

The regression result shows that there is an insignificant positive relationship between board age and audit report lag. The positive relationship implies that the older board members would make the audit report lag longer. The insignificant relationship is consistent with Abdel-Salam & Street (2007), which found that there is no significant relationship between board age and timeliness of financial reporting. This finding is in line with Core & Holthausen (1999), which stated that as the board of directors grow older, they may become less effective.

The result of using the second model shows that there is a significantly negative relationship between board age and management report lag. The relationship implies that the older the board members, the shorter the management report lag. This finding is in line with Nasser (2008), which states that experience is only achieved through years of practical applications. Therefore, the age of the board of director can accumulate any experience. Therefore, board experience can improve information transparency as supported by Daya et al. (1996). Further, the findings support the agency theory.

#### **5.1.1.5.3 Length of Services of Board Members**

The regression result of using the audit report lag model shows that there is a significant negative relationship between board tenure and audit report lag model. Thus, it implies that a company with longer board tenure tends to have a shorter audit report lag. The longer board length of service indicates that the board has more experience, including audit process experiences. This finding is consistent with Abdel-Salam & Street (2007), which found a significant negative relationship between board tenure and timeliness of Internet corporate reporting.

The results of the second model, or management report lag model, also indicates a significant negative relationship between board tenure and management report lag. Thus, the longer the company's board tenure, the shorter the management report lag. This finding is also consistent with Abdel-Salam & Street (2007). Further, the findings show that the boards have adequate experiences in terms of length of service. Bacon & Brown (1973) posits that it takes about three to five years for a board to gain

an adequate understanding of a company. The mean for length of service of a board in Indonesian companies is 5.64 years, or above 5 years. Therefore, they have enough experience to do their job. Further, the findings support the agency theory.

### **5.1.2 Audit Committee**

This study also investigates the role of the audit committee in Indonesian companies. It used three characteristic of audit committee, namely audit committee independence, size, financial expertise and activities. The discussion about relationship audit committee and timeliness of financial reporting is as follows:

#### **5.1.2.1 Audit Committee Independence**

The regression result of using the audit report lag model indicates that there is an insignificant negative relationship between audit committee independence and audit report lag. The negative relationship implies that the more audit committee independence would reduce the audit report lag (ACI was transformed using inverse transformation). However, the relationship is not significant. This finding is consistent with Abdullah (2006) which found that there is no significant relationship between audit committee independence and timeliness of financial reporting for companies listed on the Malaysian Stock Market. The result of the second model also shows an insignificant relationship between audit committee independence and management report lag. However, it indicates a positive direction between them, which implies that the company with more audit committee independence tends to have a longer management report lag.

The audit report and management report lag model shows an insignificant relationship between audit committee independence and timeliness of financial reporting. This finding is consistent with Li et al. (2006). Lin et al. (2006) found that there is no significant relationship between audit committee independence and quality of reporting earnings. However, it is in line with Abbott et al. (2004), Besley et al. (2000), Carcello & Neal (2003), Klein (2002), and Saleh et al. (2007). They found that there is a significant relationship between audit committee independence and accounting quality. They used financial restatement (Abbott et al. 2004), fraud (Beasley et al., 2000), going concern report (Carcello & Neal, 2003) and earning management (Klein, 2002; Saleh et al., 2007). Their studies found a negative relationship between audit committee independence and accounting quality.

Audit committee independence in Indonesian companies does not have an effect on the timeliness of financial reporting in particular, or accounting quality in general. It might be in line with Patton and Baker (1987), Demb & Neubauer (1992), and Byrd & Hickman (1992). Audit committee independence of Indonesian companies might be lacking in accounting and finance knowledge to be truly effective and lack of real independence and may please the shareholders with the illusion of active monitoring, or they might support the management agenda.

### **5.1.2.2 Audit Committee Size**

The relationship between audit committee size and audit report lag is insignificantly negative. Thus, it implies that companies with more audit committee members tend to have shorter audit report lag. However, the relationship is not significant. Regression

results from using the management report lag model indicates that there is a significant positive relationship between audit committee size and management report lag. The positive relationship implies that companies with more audit committee members tend to have a longer management report lag. This is in line with Dalton et al. (1999), which argued that audit committee size have the monitoring functions.

The insignificant relationship between timeliness (proxy by audit report lag) and audit committee size is consistent with other accounting quality findings (see for example, Xie et al. (2003) and Abbott et al. (2004). In addition, Xie et al. (2003) concluded that there is an insignificant relationship between audit committee size and earning management, whereas Abbott et al. (2004) documented an insignificant relationship between audit committee size and earning restatements.

Further, the significant relationship between timeliness of financial reporting (proxy by management report lag) supports the findings of Yan & Krisnan (2005) and Lin et al. (2006). They found that there is a significant negative relationship between audit committee size and accounting quality, which is measured by earning management. They concluded that companies with more audit committee members would reduce the level of earning management or increase the accounting quality. However, the direction of this finding is positive. Early or late reporter- returns could probably explain this relationship.

The negative relationship between audit committee size and management report lag is in line with Pincus et al. (1989), which stated that big number of audit committee might bring more skills and knowledge to enhance monitoring. Thus, they are willing

to devote greater resources to overseeing the financial accounting process. Finally, they could influence the management report lag by submitting the financial report early. The findings support the agency theory.

### **5.1.2.3 Audit Committee Financial Expertise**

The relationship between audit committee financial expertise and timeliness of financial reporting are significant for both models; audit report lag and management report lag model. However, the direction is different. The relationship between audit committee financial expertise and the audit report lag is positive and negative for the management report lag. The positive relationship between audit report lag and audit report lag means that a company with more audit committee financial expertise tends to have a longer audit report lag. The negative relationship has the implication that a company with an audit committee with more financial expertise tends to have a shorter management report lag.

The significant relationships between audit committee financial expertise and audit report lag and management report lag are in line with McMullen & Raghunandan (1996), McDaniel et al. (2002), and Abbott et al. (2004). McMullen & Raghunandan (1996) and McDaniel et al. (2002) concluded that there is a role of financial expertise for the audit committee in financial reporting problems. Abbott et al. (2004) documented that the financial expertise of the audit committee is negatively associated with the financial restatement. Thus, more audit committee members with financial expertise would reduce the probability of financial restatement or increase the accounting quality. However, this is not supported by Saleh et al (2007), which

found that there is no significant relationship between audit committee financial expertise and earning management. This means that there is no role of financial expertise of audit committee in earning management or accounting quality.

The audit committee financial expertise increases the audit report lag. Thus, the audit committee might not use their financial expertise during the audit process. That is why the external auditor takes a longer time to sign the financial report. However, the financial expertise arises in the management report lag. The shorter management report lag could also be explained by the arguments made by Givoly & Palmon (1982), Kross (1982) and Chambers & Penman (1984). They stated that the early (late) announcements are associated with higher (lower) abnormal returns or high (low) stock return variability, relative to late (early) announcements. Therefore, management decided to release the company financial reports, which would lead to an increase in the company's stock price. Further, the findings do not support the agency theory.

#### **5.1.2.4 Audit Committee Activity**

The effect of audit committee activity on timeliness of financial reporting is not significant for both models; audit report lag and management report lag. Further, the relationship between audit committee activity and audit report lag is negative, and positive for audit committee activity and management report lag.

This result supports the finding of Lin et al. (2006) and Saleh et al. (2007). Lin et al. (2006) concluded that there is no significant relationship between audit committee

activity and quality of financial reporting. Moreover, Saleh et al. (2007) stated that the relationship between audit committee activity and earning management is insignificant. However, this finding contradicts the findings of MuMullen & Raghunandan (1996), Xie et al. (2003) and Abbott et al. (2004). They documented a negative relationship between audit committee activity and accounting quality. In addition, they use different proxies for accounting quality. They used financial reporting problem, earning management, and occurrence of misstatement, respectively, as their measure of accounting quality.

### **5.1.3 Auditor Characteristic**

Auditor characteristics are divided into several variables, namely external auditor type, external auditor opinion, external auditor change and internal auditor existence. External auditor type is measured by Big 4 and non-Big 4 audit firms. A company that is audited by a Big 4 audit firm is assigned 1 (one) and otherwise, 0 (zero). The external auditor opinion also uses a dummy variable. Companies that gain a clean opinion are assigned 1 (one) and otherwise, 0 (zero). Meanwhile, the external auditor change is measured by a dummy variable. Companies that changed its external auditor are assigned 1 (one) and otherwise, 0 (zero). Finally, internal auditor existence is measured by the existence of an internal auditor department. Companies that have an internal auditor are assigned 1 (one) and otherwise, 0 (zero). The discussion of these characteristics is discussed below:

### **5.1.3.1 External Auditor Type**

The regression result using the audit report lag model shows that there is an insignificant positive relationship between auditor type and audit report lag. This means that a company that is audited by the Big 4 audit firms tends to have a longer audit report lag. This finding is not consistent with El-Bannany (2008), which found that there is a significant relationship between auditor type and audit report lag. The direction is different compared to Abdullah (2006) and Lee & Jahng (2008). Abdullah (2006) found that there is a negative relationship between auditor type and timeliness of financial report, while Lee & Jahng (2008) also concluded there was a negative relationship between auditor type and audit report.

The regression result of the second model also reveals that there is a negative insignificant relationship between auditor type and management report lag. The negative relationship implies that a company that is audited by Big 4 audit firms tends to have a shorter management report lag. Further, the insignificant relationship between auditor type and management report lag is consistent with Al-Ajmi (2008), which found that there is no significant relationship between auditor type and the interim report, which is measured by management report lag.

### **5.1.3.2 External Auditor Opinion**

The regression result shows that there is a negative insignificant relationship between auditor opinion and audit report lag. This means that a company that gains an unqualified opinion tends to have a shorter audit report lag. The insignificant

relationship between auditor opinion and audit report lag is not consistent with Ashton et al. (1987), Newton & Ashton (1989), Carslaw & Kaplan (1991), Schwartz & Soo (1996) and Ahmad & Kamaruddin (2003). They concluded that there is a positive significant relationship between auditor opinion and audit report lag. However, the direction is consistent with Whittred (1980), which found that a negative relationship exists between auditor opinion and audit report lag.

The regression result from using the management report lag model shows that the relationship between auditor opinion and management report lag is negative and significant. This direction implies that companies that gain an unqualified opinion tend to have a shorter management report lag. The management might think that a clean opinion is good and the financial report would be released as soon as possible. This finding is consistent with Whittred (1980). However, Whittred (1980) used the audit report lag as a proxy for timeliness of financial report. Thus, the findings support the agency theory.

### **5.1.3.3 External Auditor Change**

The regression result of using the audit report lag model reveals that there is a negative insignificant relationship between auditor change and audit report lag. The direction of the relationship indicates that a company that changed its auditor tends to have shorter audit report lag. However, the relationship is not significant at 0.05. The negative relationship is consistent with Schwartz & Soo (1995). They concluded that a company that changed its external auditor would reduce the audit report lag.

Further, the second model also shows a positive insignificant relationship between auditor change and management report lag. The positive relationship indicates that a company that changed its auditor tends to have a longer management report lag. This finding supports the findings of Whittred & Zimmer (1984) who concluded that auditor change would make the reporting lag longer.

#### **5.1.3.4 Internal Audit Existence**

The hypothesis regarding the internal auditor existence and timeliness of financial report is partially supported. The first model shows a negative significant relationship between internal auditor existence and audit report lag. However, the second model reveals that there is a positive insignificant relationship between internal auditor existence and management report lag.

The results are consistent with the contention of Cohen et al. (2004) that is there is a role for the internal auditor in the timeliness of financial reports. Therefore, the finding is consistent with the agency theory, which explained the existence of an internal auditor that could reduce the asymmetric problems and agency costs by having a shorter audit report lag and therefore, could release the financial report earlier.

### **5.1.3.5 Control Variables**

This study uses three control variables, namely profitability, leverage and company size. These three variables have been used extensively by many researchers as control variables. The results are as follows:

#### **5.1.3.5.1 Profitability**

Profitability refers to the ability of the company to earn profit. Profitability is measured by return on asset (ROA) in this study. The regression result of the audit report lag model shows that there is a significant relationship between return on asset and audit report lag. The direction of the relationship is negative, which implies that profitable companies tend to have a shorter audit report lag. This finding is consistent with Whittred & Zimmer (1984), Aston et al. (1984), Carslaw & Kaplan (1991) and Hossain & Taylor (1998). In addition, Whittred & Zimmer (1984) argued that a company that is going to be financially distressed experienced a longer audit report lag. The financially distressed companies tend to experience bad performance or negative ROA from previous years. Thus, the audit report lag would be longer. This finding supports the signal theory. Therefore, the manager of an Indonesian company has the incentives to release good news earlier than bad news.

The second model shows that there is a positive relationship between profitability and management report lag. The relationship direction is positive, which means that the profitable company tends to have a longer management report lag and a company that experiences loss would have a shorter management report lag. The profitable

companies might wait for other information in the market and therefore, they would delay the financial report being available to the public. This finding is not consistent with Al-Ajmi (2008). Al-Ajmi (2008) found an insignificant relationship between profitability and management report lag.

#### **5.1.3.5.2 Leverage**

Leverage is measured by the debt to asset ratio (DAR). DAR implies how much the company assets are financed by debt. The more the company uses debt as financing sources would make the company face higher financing risks. The effect of the leverage on timeliness of financial report also uses both models. The result of the first model shows a negative relationship between leverage and audit report lag. However, the relationship is not significant. This finding does not support the finding of Abdulla (1996) or Conover et al. (2007). They concluded there was a negative significant relationship between leverage and reporting lag.

The result of the second model also shows an insignificant positive relationship between leverage and management report lag. The positive signal implies that the higher the leverage, the company tends to have a longer management report lag. This finding is not consistent with the findings of Carslaw & Kaplan (1991) and Owusu-Ansah (2000). However, the direction is consistent with Carslaw & Kaplan (1991) and Owusu-Ansah (2000) who found a positive significant relationship between leverage and timeliness of financial report.

### **5.1.3.5.3 Company Size**

The regression results for the first model show that there is a positive significant relationship between company size and audit report lag. The positive direction implies that a large company tends to have a longer audit report lag and a small company would finish the audit process earlier. The findings are consistent with the client size and client preparation theories. These theories posit that a large company tends to have a shorter audit report lag due to better internal control and first priority for scarce audit firm resources. However, this finding supports the transaction theory; a large company has a larger number of transactions and therefore, will have a longer audit report lag (Simnett et al. 1995).

The results of the second model show that there is an insignificant negative relationship between company size and management report lag. The negative relationship implies that large companies tend to have a shorter management report lag. This finding is consistent with Courties, 1976; Ashton et al., 1987; Bamber et al., 1993; Abdula, 1996; Leventis & Weetman, 2004; Owusu-Ansah & Leventis, 2006). They also found an insignificant relationship between company size and timeliness of financial report.

## **5.2 Conclusion**

Timeliness of the financial report is one of the qualitative attributes of general purpose financial reports (AICPA, 1973; APB, 1970; FASB, 1979). Other important attributes of timeliness is that of information content (Beaver, 1968), and affect

company values (Givoly & Palmon, 1982; Chambers & Penman, 1984; Kross & Schroeder, 1984). In addition, management has incentives to exercise discretion over the timeliness of reporting (Givoly & Palmon, 1982; Ashton et al., 1989) and a greater amount of asymmetric information between management and shareholders (Lee et al., 2008). In fact, timely reporting would enhance decision-making and reduce information asymmetry in emerging markets (Owusu-Anshah, 2006). Moreover, it is an important device to mitigate insider trading, leaks and rumors in emerging capital markets (Owusu-Anshah, 2000). Thus, it contributes to the prompt and efficient performance of the stock market in their pricing and evaluation function.

This study is based on the issue regarding the timeliness of financial reports among Indonesian companies. The problem arises when many Indonesian listed companies submitted their financial report late. Hilmi & Ali (2008) concluded that there were about 133 (15.13%) Indonesian listed company financial reports from 2004 to 2006 (879 financial reports as the sample of their study) submitted after the expected date. If this condition continues in the future, it would affect the Indonesian capital market, in terms of a greater amount of asymmetric information, moral hazards, and adverse selections. Indeed, managers among Indonesian companies may have incentives to exercise dysfunctional behavior over timeliness. In fact, it could contribute to the inefficiency of the capital market and offer an opportunity to the insider trading, leaks and rumors in the market. Finally, it would probably affect economic growth due to the performance of the stock market as one of the macroeconomic indicators. Therefore, finding factors affecting the timeliness of financial reporting are desperately needed. Thus, the study of factors affecting timeliness of financial report for Indonesian listed company is worthwhile.

Studies on the factors affecting the timeliness of financial report have been done extensively. This is based on conclusions made in previous literature. First, studies on timeliness of financial report have been done largely in developed countries, such as US, Europe and Australia. Only a few studies have been done in the developing countries. Second, most studies on timeliness have focused more on variables relating to client-related variables, audit-related and environment variables. Client-related variables extensively used variables such as profitability, leverage etc. Few studies took only corporate governance variables as factors affecting the timeliness of financial report. Third, there are limited studies that have been done in Indonesia compared to other countries and therefore, reporting delays or untimely reports are still experienced by Indonesian company. Past studies focused less on the corporate governance variables as determinants of timeliness of financial report.

Based on the gap generated above, it motivates the author to study the effect of corporate governance variables on the timeliness of financial reporting. Specifically, this study tries to link between the board of directors, the audit committee and auditors with timeliness of financial reporting. The role of the board of directors, the audit committee and auditors in financial reporting quality has been suggested by Cohen et al. (2004). In fact, agency theory and other control theories posit that the boards of directors, audit committees and auditors have a role in accounting quality. Therefore, this study has investigated the link between the board of directors, audit committees, auditor characteristics and timeliness of financial reports.

The objective of this study is to investigate the effect of board of director characteristics (composition, size, shareholding, expertise and knowledge,

directorship, tenure and age), audit committee characteristics (independence, size, financial expertise and activities), and auditor characteristic (external auditor type, external auditor opinion, external auditor change and internal auditor existence) on the timeliness of financial reporting. This study used two theories to explain the effect of the hypotheses variables, namely, Agency Theory and Resources Dependency Theory.

This study has contributed to the literature due to new variables included in this study. Besides, the Indonesian environment gives the uniqueness to the literature as well. The uniqueness of Indonesia is in the form of specific environments. For example, Indonesia has just released the new version of the Company Acts, introduced the Code Of Corporate Governance, representative of developing countries in terms of the reliance on external financing as well as characterized by insider-dominated family ownership. The uniqueness is also in terms of the board of director structure. Indonesia has a unique two-tier system (supervisory and management board), and most of the studies on timeliness of financial reporting only focused on the unitary board system (prevalent in the Anglo-Saxon model). This study also provides an insight to the decisions taken by the Indonesian government regarding the regulation framework for financial reporting and to enhance corporate governance reforms.

This study used two models: the audit report lag model and the management report lag model. There are fifteen hypotheses in this study. The regression results of the first model supported six hypotheses; board size, board shareholding, board directorship, board tenure, audit committee financial expertise, and internal auditor existence. Therefore, these variables have a significant relationship with the audit

report lag. Further, the results from using the second model failed to reject eight hypotheses; board composition, board size, board expertise and knowledge, board shareholding, board age, board tenure, audit committee size, and external auditor opinion. Thus, these variables affect significantly the management report lag.

It can be concluded that few of the board of director's characteristics are significantly associated with the timeliness of financial report. However, the audit committee characteristics only partially affect the timeliness of financial reporting as well as auditor characteristics. The board size, board shareholding, board directorship, board tenure, audit committee financial expertise, and internal auditor existence are significantly associated with the audit report lag. Further, the board composition, board size, board expertise and knowledge, board shareholding, board age, board tenure, audit committee size, and external auditor opinion are significantly related to the management report lag. In addition, profitability is significantly associated with both the audit report lag and management report lag and company size is significantly related to the audit report lag.

The significant relationship between board size, board shareholding, board directorship, board tenure, audit committee financial expertise, internal auditor existence, profitability, company's size and audit report lag are in line with Courties (1976), Ashton et al. (1984), Whittred & Zimmer (1984), Ashton et al. (1987), Carslaw & Kaplan (1991), Jensen (1993), Bamber et al. (1993), Abdula (1996), Dechow et al. (1996), McMullen & Raghunandan (1996), Hossain & Taylor (1998), McDaniel et al. (2002), Abbott et al. (2004), Cohen et al. (2004), Leventis &

Weetman (2004), Owusu-Ansah & Leventis (2006), and Abdel-Salam & Street (2007).

The significant relationship between the board composition, board size, board expertise and knowledge, board shareholding, board age, board tenure, audit committee size, external auditor opinion, profitability and management report lag are in line with Whittred (1980), Fama & Jensen (1983), Pfeffer (1987), Morck et al. (1988), Pincus et al. (1989), Zahra & Pearce (1989), Halebian & Finkelstein (1993), Beasley (1996), Goodstein et al. (1994), Daya et al. (1996), Dechow et al. (1996), Yan & Krisnan (2005), Lin et al. (2006), Abdel-Salam & Street (2007), and Al-Ajmi (2008).

The answer to the research questions in Chapter 1 is discussed below. The first research question is:

“Do the board of director characteristics relate to the timeliness of financial reporting?”

The answers to this question is: Several board of director characteristics are related to the timeliness of financial report, namely board size, board shareholding, board directorship, board tenure, board composition, board expertise and knowledge, and board age. Specifically, board size, board shareholding, board directorship, and board tenure are significantly related to audit report lag. Further, board composition, board size, board shareholding, board expertise and knowledge, board age, and board tenure are also significantly related to the management report lag.

The second research question is:

“Do audit committee characteristics associate with the timeliness of financial report?”

The answer to this question is: Audit committee financial expertise and audit committee size are associated with the timeliness of financial report. Specifically, audit committee financial expertise is associated with the audit report lag, while audit committee size is associated with the management report lag.

The third research question is:

“Do the auditor characteristics influence the timeliness of financial report?”

The internal auditor existence and external auditor opinion do influence the timeliness of financial report. In addition, internal audit existence has a significant relationship with the audit report lag whereas the external auditor opinion has a significant relationship with the management report lag.

This study employs three control variables: company profitability, leverage and size. Thus, company profitability and size are also associated with the timeliness of financial report. Return on asset and company size significantly relate to the audit report lag whereas return on asset is associated with the management report lag.

### **5.2.1 Implication of the study**

#### **5.2.1.1 Theory**

Based on the conclusions from this research, there are several theoretical implications. Agency Theory posits that the relationship between principal and agents may be

subject to inefficiencies, to the extent that asymmetric information prevents effective monitoring of the agent's actions by the principal. Therefore, the solution to this problem is the assigning of a formal monitoring role to the board of directors (Fama & Jensen, 1983). Further, one of the monitored actions is the financial accounting process, in order for companies to have a higher quality of accounting information. The other accounting information quality is timeliness. The asymmetric information is high over the timeliness of financial report. This research illustrated that formation of a board of directors and their sub-committees (such as the Audit committee) and assigning a higher quality of auditor have an impact on the timeliness of financial reports.

Resources Dependent Theory predicts that a board can link to its environment by establishing important contacts and providing access to timely information through personal and professional networks (Ees & Postma, 2004). Therefore, boards can have more knowledge and expertise and transform it in the form of higher quality of accounting quality or timeliness of financial report. Boards with multiple directorships can improve the accounting quality due to experience that they gained from other companies or industries. This research shows that board expertise and knowledge and board experience (directorship) have the significant effect on the timeliness of financial report.

The previous literature review suggested that several characteristics of the board of directors, audit committee and auditors can enhance the monitoring of the financial accounting process. These board characteristics include the board composition, size, shareholding, expertise and knowledge, directorship, age and tenure. However, not all

characteristics has a significant effect on timeliness of financial report. Only a few characteristics have a significant relationship with the timeliness of financial report, such as board composition, and board size. Moreover, the significant audit committee characteristics are the audit committee financial expertise and audit committee size and the significant auditor characteristic is internal auditor existence and external auditor opinion.

This study uses two empirical models in investigating the effects of the board of director, audit committee and auditor characteristics on timeliness of financial report, namely audit report lag and management report lag. The management report lag model is seldom used by researchers. Studies on timeliness normally used audit report lag or delay, total lag, or timely reporting. The management report lag model (Chow, 1987; Al-Ajmi, 2008) gives more significant governance variables, compared to the audit report lag model.

This study used the Indonesian listed company data from 2006 to 2008. The uniqueness of Indonesia's business environment has contributed in a different way to the literature. The uniqueness is (i) Reliance on external financing, (ii) Insider-dominated family ownership, and (iii) Board system - two-tier board systems. Therefore, this finding enriches the body of knowledge of financial reporting and corporate governance as well as agency theory and resources dependent theory. The summary of results can be seen in the table below.

Table 5.1  
Summary of Results

IV	Result	Support	Confirm to
BC	ARL-not significant	Xie et al. (2003), Peasnell et al. (2005), Davidson et al. (2005), Abdul & Mohamed (2006), Kin et al. (2007), Siregar & Utama (2008).	-
	MRL-Significant (-)	Klein (2002), lanfeng & Anlin (2004), Peasnell et al. (2005), Davidson et al. (2005), Benkel et al. (2006), Kin et al. (2007), Liu & Lu (2007), Cornett et al. (2008), Osma (2008)	Agency theory
BZ	ARL-significant (+)	Dechow et al. (1996), Lanfeng & Anlin (2004)	Agency theory
	MRL-significant (-)	Beasley (1996), ,Ali & Sebuoi (2006), Pearson (2006)	Resources dependent theory
BEK	ARL- not significant	Fich & Shivdasani (2007)	-
	MRL-significant (-)	Xie et al. (2003), Park & Shin (2004)	Resources dependent theory.
BS	ARL-Significant (+)	Ali & Sebuoi (2006), Jensen (1983)	Entrenchment hypothesis.
	MRL-significant (-)	Park & Shin (2004), Cornett et al. (2008), Morck et al. (1988)	Agency theory
BED	ARL-significant (+)	-	Agency theory
	MRL-not significant	Fich & Shivdasani (2007), Abdelsalam & Street, (2007)	-
BEA	ARL-Not significant	Abdelsalam & Street, (2007), Cornett et al. (2008)	-
	MRL-Significant (-)	-	Agency theory
BET	ARL-Significant (-)	Abdelsalam & Street, (2007), Ali & Sebuoi (2006), Chen et al. (2006), Pearson (2006),	Agency theory
	MRL- Significant (-)	Abdelsalam & Street, (2007), Ali & Sebuoi (2006), Chen et al. (2006), Pearson (2006)	Agency theory
ACI	ARL-not significant	Abdul & Mohamed (2006), Benkel et al. (2006), Piot & Janin (2007), Siregar & Utama (2008). Lin et al. (2006), Abdullah (2006)	-

	MRL-Not significant	Abdul & Mohamed (2006), Benkel et al. (2006), Piot & Janin (2007), Siregar & Utama (2008). Lin et al. (2006), Abdullah (2006)	-
ACS	ARL-not significant (-)	Xie et al. (2003), Abbott, et al. (2004)	-
	MRL-significant (+)	Dalton et al. (1999)	Agency theory
ACFE	ARL- not Significant	Abdul & Mohamed (2006)	-
	MRL-Significant (+)	Ali & Sebuoi (2006)	Not confirm to agency theory
ACA	ARL-not significant	Lin et al. (2006), Abdul & Mohamed (2006),	-
	MRL-not significant	Lin et al. (2006), Abdul & Mohamed (2006),	
AT	ARL-not significant	Davidson et al. (2005), Piot & Janin (2007), Siregar & Utama (2008). Chen et al. (2006),	-
	MRL-not significant	Davidson et al. (2005), Piot & Janin (2007), Siregar & Utama (2008). Chen et al. (2006),	
AO	ARL-not significant		-
	MRL-significant (-)	Whittred (1980)	Agency theory
AC	ARL-not significant	Contrast to Schwartz & Soo (1996)	-
	MRL-not significant		
IA	ARL-significant (-)	Ashton (1987)	Agency theory
	MRL-not significant (+)	Davidson et al. (2005)	
ROA	ARL-significant (-)	Aston et al. (1984), Carslaw & Kaplan (1991) and Hossain & Taylor (1998)	Signaling theory
	MRL-not significant	Al-Ajmi (2008)	-
LEV	ARL-not significant	Not consistent with Abdulla (1996) and Conover et al. (2007). Carslaw & Kaplan (1991) and Owusu-Ansah (2000)	-
	MRL-not significant		
SIZ	ARL-significant (+)	Courties, 1976; Ashton et al., 1987; Bamber et al.,	Transaction theory

	1993; Abdula, 1996; Leventis & Weetman, 2004; Owusu-Ansah & Leventis, 2006).	
MRL –not significant		-

### 5.2.1.2 Policy and Practice

These findings also contribute to the companies, government agencies and other parties. For the Indonesian companies, these findings provide information about variables that significantly affect the timeliness of financial report or specifically audit report lag and management report lag. These variables are considered by a company if the company intends to appoint a board of directors, audit committee, and auditors in the future. The National Committee of Governance (NCG) can use these findings as an input to revise the Code Of Corporate Governance. For the governing agencies, such as the Indonesian Security Exchange Commission, it can also use these findings as the input to formulate regulations of how to improve the financial accounting quality or timeliness of financial reports in order to have a more efficient stock market. It also benefits others such as the SEC, to regulate the future listing requirements on the Indonesian Stock Exchange.

### 5.2.2 Limitations

This research has several strengths. However, it also has several limitations. First, this study only focused on the board, audit committee, and auditor characteristics. Management is the other party that could influence the financial reporting quality or timeliness of financial report as suggested by Cohen et al., (2004).

Second, this study used all companies listed on the Indonesian Stock Market from 2006 to 2008. Thus, it has a shorter period for the time series data (only three years).

Third, there are other characteristics of the board, audit committee and auditor that might affect the timeliness of financial report, such as foreigners on the board, male and female board members, audit committee tenure, etc.

Fourth, this study does not include the interaction of board characteristics or with audit committee characteristics. For example, timeliness might be affected by the interaction between audit committee financial expertise and audit committee meetings.

Finally, this study only involves the determinants of the timeliness of the financial report.

While these limitations are acknowledged, they do not detract from the strengths of this research and the importance of the findings. The limitations offer a platform for future research and are discussed in the next section.

### **5.2.3 Suggestion for Future Research**

There are several avenues for future research based on the limitations of this research. First, future research might think of other actors, such as management to be included as variables affecting the timeliness of financial report. The type of variables could be management expertise and knowledge and other variables.

Second, the future research could segment samples based on the industry. For example, do the board characteristics affect the timeliness of financial reports for finance and banking industry, or what about the defense industry? The length of data also could be extended, for example, from 2002 to 2008 in the case of Indonesia.

Third, future research could consider other data sources, such as primary data, to test the hypotheses. Fourth, future research could test other board, audit committee or auditor characteristics that affect the timeliness of financial report, such as foreigners on the board, male and female board members, and audit committee tenure and etc.

Fifth, future research could use the interaction of characteristics, such as the interaction of board independence and board expertise and knowledge. It also can use other variables as the mediating variable(s). Finally, future research might focus on the determinants and consequences of timeliness (complex model).

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## APPENDICES

## REGRESSION RESULT OF AUDIT REPORT LAG MODEL

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

Dependent Variable: ARL?  
 Method: Pooled Least Squares  
 Date: 08/23/09 Time: 09:55  
 Sample: 2006 2008  
 Included observations: 3  
 Cross-sections included: 218  
 Total pool (balanced) observations: 654

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2,877,397	1,189,017	-2,419,980	0.0159
BC?	-0.127365	0.623816	-0.204171	0.8383
BZ?	0.214599	0.254485	0.843267	0.3996
BS?	1,251,967	0.350389	3,573,076	0.0004
BEK?	0.153602	0.299433	0.512975	0.6082
BED?	0.221841	0.228417	0.971211	0.3320
BEA?	0.012935	0.012374	1,045,376	0.2965
BET?	-0.135823	0.104277	-1,302,517	0.1935
ACI?	-0.050582	0.086783	-0.582853	0.5603
ACS?	-0.009753	0.132018	-0.073874	0.9411
ACFE?	0.477208	0.274714	1,737,107	0.0831
ACA?	-0.095819	0.344644	-0.278024	0.7811
AT?	0.078127	0.237128	0.329471	0.7420
AO?	-0.030816	0.318124	-0.096868	0.9229
AC?	-0.006245	0.093430	-0.066838	0.9467
IA?	-0.346997	0.209188	-1,658,784	0.0979
ROA?	-0.137799	0.052095	-2,645,151	0.0085
DAR?	-0.206458	0.253893	-0.813169	0.4166
SIZE?	0.345913	0.104763	3,301,847	0.0010
Fixed Effects (Cross)				
_BRPT--C	-0.234525			
_DSUC--C	0.431537			
_SULI--C	-0.427691			
_AALI--C	-1,374,669			
_UNSP--C	0.654088			
_LSIP--C	-0.416214			
_SMAR--C	-1,277,237			
_FASW--C	-0.156208			

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

_ANTM--C	0.084205
_APEX--C	-0.384235
_BUMI--C	1,057,201
_ENRG--C	0.055122
_INCO--C	-0.765301
_MEDC--C	1,021,806
_PTBA--C	-0.197893
_ELSA--C	-0.867192
_MITI--C	2,035,014
_AMFG--C	0.788385
_BUDI--C	-0.028364
_DYNA--C	0.472702
_INTP--C	-0.862833
_SMCB--C	-1,495,802
_SMGR--C	-0.048201
_SOBI--C	-0.650286
_TPIA--C	-1,034,699
_TRST--C	0.281651
_UNIC--C	-1,247,807
_DVLA--C	0.159191
_ASII--C	-1,580,296
_GDYR--C	0.185105
_GJTL--C	0.363998
_IKBI--C	-0.126798
_JECC--C	-0.055918
_KBLM--C	0.784466
_VOKS--C	-1,141,546
_SUGI--C	0.928905
_KBLV--C	-0.013582
_MYOH--C	0.903975
_INDF--C	-0.109592
_KLBF--C	0.091860
_KAEF--C	0.429072
_UNVR--C	0.795583
_RMBA--C	0.034348
_TCID--C	-2,400,706
_MLBI--C	0.175079
_ULTR--C	0.554800
_SMRA--C	-1,652,717
_DILD--C	0.019261
_ADHI--C	0.778818
_CMNP--C	-1,213,798

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

_PTRO--C	0.549071
_ELTY--C	-0.706640
_BMSR--C	0.175953
_CKRA--C	-0.400433
_CTRA--C	-1,633,829
_CTRS--C	0.224823
_DART--C	1,552,443
_DUTI--C	0.254959
_MORE--C	-0.021610
_DILD--C	0.019261
_JSPT--C	-2,217,713
_JRPT--C	0.867936
_KARK--C	1,878,533
_KIJA--C	1,244,436
_KPIG--C	-0.049563
_LAMI--C	-0.871757
_LPCK--C	-1,874,079
_LPKR--C	-1,478,728
_PWSI--C	0.618812
_PJAA--C	0.369657
_PUDP--C	-1,436,898
_PTRA--C	0.549899
_RBMS--C	-1,024,791
_RODA--C	0.027296
_RAJA--C	0.140315
_SIIP--C	-0.846140
_SSIA--C	-0.470523
_SCBD--C	-0.809413
_BKSL--C	0.915170
_SMDM--C	1,267,029
_APOL--C	0.320736
_CMPP--C	0.297656
_HITS--C	-0.035102
_LTLS--C	-0.658089
_TMAS--C	-0.053348
_RIGS--C	-1,857,840
_SMDR--C	-1,449,287
_SAFE--C	1,919,114
_ZBRA--C	0.611860
_EXCL--C	-1,702,387
_FORU--C	0.610678
_ISAT--C	-1,130,104
_IATG--C	0.810138
_TLKM--C	2,723,175

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

_MIRA--C	0.962554
_PGAS--C	0.857134
_BLTA--C	0.067111
_INPC--C	-0.149244
_BABP--C	-1,671,026
_BBCA--C	-0.664937
_BCIC--C	0.977107
_BDMN--C	-1,929,142
_BDKI--C	0.163765
_BEKS--C	-0.521143
_BNII--C	-2,121,413
_BKSW--C	1,167,157
_LPBN--C	-0.504701
_BMRI--C	-0.788252
_MAYA--C	-1,450,609
_MEGA--C	-0.365966
_BBNI--C	0.967498
_NISP--C	-2,471,849
_BNLI--C	-1,641,860
_BBRI--C	-0.101012
_AGRO--C	0.365442
_BTPN--C	0.368309
_BBNP--C	-0.452934
_BVIC--C	-0.184400
_ADMF--C	-1,849,888
_DEFI--C	0.763229
_WOMF--C	-1,963,810
_BFIN--C	-1,035,150
_CFIN--C	-0.584486
_BBLD--C	-0.913043
_TRUS--C	0.002336
_ABDA--C	0.933042
_ASBI--C	-0.171979
_AMAG--C	-0.105694
_MREI--C	0.698186
_PNLF--C	0.621013
_LPGI--C	-0.717922
_LPLI--C	0.781264
_PANIN--C	1,361,677
_AHAP--C	0.777552
_ASDM--C	-0.664410
_ASJT--C	0.917631
_AKSI--C	0.426641

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

_HADE--C	1,561,667
_KREN--C	-0.379692
_PEGE--C	-0.243189
_PANS--C	-0.115832
_RELI--C	1,293,024
_TRIM--C	0.898807
_UNIT--C	0.880924
_YULE--C	-1,098,829
_LPPS--C	-0.478491
_OCAP--C	-0.450752
_SMMA--C	1,236,948
_GSMF--C	0.844591
_INCF--C	0.959079
_MTFN--C	1,163,334
_APIC--C	0.186527
_LPPF--C	0.026182
_BCAP--C	-0.337677
_ARTA--C	0.417176
_TMPI--C	1,207,780
_ASGR--C	-1,113,043
_HERO--C	-1,198,931
_HEXA--C	-0.159210
_GEMA--C	-0.204118
_INTA--C	-1,551,969
_MPPA--C	-0.683627
_MTSM--C	1,940,901
_MAPI--C	0.156451
_MLPL--C	-0.216925
_PSAB--C	1,088,984
_RALS--C	-1,208,234
_RIMO--C	-0.501575
_SONA--C	-1,119,355
_TURI--C	0.996164
_UNTR--C	-1,410,780
_WICO--C	1,275,718
_KONI--C	-1,287,641
_TGKA--C	0.508849
_TKGA--C	1,591,070
_AIMS--C	1,195,537
_ALFA--C	1,146,671
_MDRN--C	2,193,212
_SDPC--C	-0.906034
_TIRA--C	1,416,061

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

_GMCW--C	0.396811
_PWON--C	1,616,464
_PGLI--C	-1,197,521
_PLIN--C	0.819075
_PNSE--C	-0.749022
_PSKT--C	-0.373022
_SHID--C	-0.298310
_ICON--C	-0.012499
_FAST--C	1,264,927
_ANTA--C	0.977508
_BAYU--C	0.024536
_PANR--C	1,889,625
_GMTD--C	-1,379,801
_CENT--C	1,391,875
_DNET--C	-0.268030
_INDX--C	1,274,645
_ITTG--C	0.877193
_BNBR--C	1,282,803
_POOL--C	0.858638
_UNIT--C	0.880924
_AKRA--C	0.100615
_EPMT--C	-0.403383
_CLPI--C	-0.204118
_INTD--C	1,246,313
_JIHD--C	-1,454,441
_MAMI--C	1,343,743
_SMSM--C	-0.203720
_WAPO--C	-0.469218
_JTPE--C	-0.601173
_LMAS--C	0.570249
_MTDL--C	0.111690
_MNCN--C	0.538671
_SCMA--C	-0.091902
_TMPO--C	-0.314944
_IDKM--C	-0.293287
_ABBA--C	0.617841
_INPP--C	0.665550
_META--C	-0.651581

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect**

Effects Specification

(dummy variables)		
R-squared	0.706570 dependent	-0.000872
Adjusted R-squared	0.541603 dependent	0.990815
S.E. of regression	0.670831 criterion Schwarz	2,313,488
Sum squared resid	1,881,061 criterion Hannan-	3,931,246
Log likelihood	-5,205,107 Quinn criter. Durbin-	2,940,801
F-statistic	4,283,104 Watson stat	3,059,070
Prob(F-statistic)	0.000000	

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

Dependent Variable: ARL?

Method: Pooled EGLS (Cross-section random effects)

Date: 08/23/09 Time: 09:51

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.014422	0.631427	0.022841	0.9818
BC?	-0.273636	0.353984	-0.773019	0.4398
BZ?	-0.238165	0.133500	-1,784,004	0.0749
BS?	0.269722	0.142553	1,892,075	0.0589
BEK?	0.058937	0.185668	0.317434	0.7510
BED?	0.000975	0.154186	0.006322	0.9950
BEA?	0.004553	0.007777	0.585450	0.5585
BET?	-0.063433	0.066425	-0.954950	0.3400
ACI?	-0.016538	0.051884	-0.318754	0.7500
ACS?	-0.033381	0.085061	-0.392438	0.6949
ACFE?	0.356013	0.177048	2,010,828	0.0448
ACA?	-0.182105	0.183297	-0.993498	0.3208
AT?	-0.073379	0.114893	-0.638672	0.5233
AO?	-0.274016	0.224884	-1,218,476	0.2235
AC?	0.012611	0.084623	0.149025	0.8816
IA?	-0.290253	0.133614	-2,172,318	0.0302
ROA?	-0.150987	0.042889	-3,520,407	0.0005
DAR?	-0.110161	0.166570	-0.661351	0.5086
SIZE?	0.184016	0.061934	2,971,147	0.0031
Random Effects (Cross)				
_BRPT--C	-0.100337			
_DSUC--C	-0.113819			
_SULI--C	-0.280457			
_AALI--C	-0.645720			
_UNSP--C	0.464422			
_LSIP--C	-0.103994			
_SMAR--C	-0.842684			

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

_FASW--C	-0.278592
_ANTM--C	0.212116
_APEX--C	0.101561
_BUMI--C	1,137,951
_ENRG--C	0.012450
_INCO--C	0.044955
_MEDC--C	1,121,199
_PTBA--C	-0.061539
_ELSA--C	0.213609
_MITI--C	1,234,977
_AMFG--C	0.839956
_BUDI--C	0.581063
_DYNA--C	0.359840
_INTP--C	-0.295160
_SMCB--C	-0.913795
_SMGR--C	0.326040
_SOBI--C	-0.740892
_TPIA--C	-0.830465
_TRST--C	0.206475
_UNIC--C	-0.793743
_DVLA--C	0.046954
_ASII--C	-0.528371
_GDYR--C	-0.102153
_GJTL--C	0.607037
_IKBI--C	-0.103214
_JECC--C	-0.412113
_KBLM--C	0.282841
_VOKS--C	-0.146171
_SUGI--C	0.184908
_KBLV--C	0.014472
_MYOH--C	0.000293
_INDF--C	1,273,752
_KLBF--C	0.168289
_KAEF--C	0.179928
_UNVR--C	0.734681
_RMBA--C	-0.244460
_TCID--C	-1,055,566
_MLBI--C	0.121770
_ULTR--C	0.061608
_SMRA--C	-0.363575
_DILD--C	0.062428
_ADHI--C	0.602421
_CMNP--C	0.152008

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

_PTRO--C	0.461513
_ELTY--C	-0.525975
_BMSR--C	0.385864
_CKRA--C	-0.382695
_CTRA--C	-0.377473
_CTRS--C	-0.043628
_DART--C	0.950703
_DUTI--C	-0.185003
_MORE--C	0.152088
_DILD--C	0.062428
_JSPT--C	-0.815363
_JRPT--C	0.303198
_KARK--C	1,004,290
_KIJA--C	0.811655
_KPIG--C	-0.265013
_LAMI--C	-1,007,517
_LPCK--C	-1,356,206
_LPKR--C	-0.763973
_PWSI--C	-0.034339
_PJAA--C	0.196980
_PUDP--C	-0.691030
_PTRA--C	-0.050347
_RBMS--C	-0.467233
_RODA--C	-0.310622
_RAJA--C	-0.352162
_SIIP--C	-0.507622
_SSIA--C	0.541014
_SCBD--C	-0.635203
_BKSL--C	0.745032
_SMDM--C	0.771484
_APOL--C	0.098529
_CMPP--C	-0.044770
_HITS--C	-0.332148
_TLS--C	0.338788
_TMAS--C	-0.416071
_RIGS--C	-1,184,621
_SMDR--C	-0.254574
_SAFE--C	1,007,986
_ZBRA--C	-0.155216
_EXCL--C	-0.724827
_FORU--C	0.475207
_ISAT--C	-0.261338
_IATG--C	0.355869

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

_TLKM--C	2,172,673
_MIRA--C	0.616101
_PGAS--C	0.756374
_BLTA--C	0.115013
_INPC--C	-0.022674
_BABP--C	-1,027,185
_BBCA--C	-0.469624
_BCIC--C	0.683255
_BDMN--C	-1,075,419
_BDKI--C	-0.046153
_BEKS--C	-0.085463
_BNII--C	-1,008,016
_BKSW--C	0.455981
_LPBN--C	-0.300933
_BMRI--C	-0.427389
_MAYA--C	-0.464245
_MEGA--C	-0.341854
_BBNI--C	0.993939
_NISP--C	-1,472,466
_BNLI--C	-0.914881
_BBRI--C	0.136134
_AGRO--C	0.285460
_BTPN--C	0.432591
_BBNP--C	-0.383860
_BVIC--C	-0.338802
_ADMF--C	-1,113,476
_DEFI--C	0.159708
_WOMF--C	-1,322,070
_BFIN--C	-0.933084
_CFIN--C	-0.546569
_BBLD--C	-0.723765
_TRUS--C	-0.526517
_ABDA--C	0.437450
_ASBI--C	-0.215647
_AMAG--C	-0.118280
_MREI--C	0.278970
_PNLF--C	0.205683
_LPGI--C	-0.747169
_LPLI--C	0.422804
_PANIN--C	0.830735
_AHAP--C	0.177621
_ASDM--C	-0.607511

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

_ASJT--C	0.277016
_AKSI--C	-0.315925
_HADE--C	0.835292
_KREN--C	-0.058625
_PEGE--C	-0.548215
_PANS--C	-0.434766
_RELI--C	0.313641
_TRIM--C	0.587976
_UNIT--C	0.219811
_YULE--C	-0.545052
_LPPS--C	-0.570217
_OCAP--C	-0.969492
_SMMA--C	0.891184
_GSMF--C	0.696859
_INCF--C	0.092395
_MTFN--C	0.479584
_APIC--C	-0.148585
_LPPF--C	-0.376823
_BCAP--C	-0.544501
_ARTA--C	-0.090522
_TMPI--C	0.753196
_ASGR--C	-0.849305
_HERO--C	-0.772582
_HEXA--C	-0.247952
_GEMA--C	-0.452982
_INTA--C	-0.694157
_MPPA--C	-0.133485
_MTSM--C	0.938070
_MAPI--C	0.311959
_MLPL--C	-0.080638
_PSAB--C	0.330274
_RALS--C	-0.252259
_RIMO--C	-0.069409
_SONA--C	-0.237420
_TURI--C	0.792178
_UNTR--C	-0.632243
_WICO--C	0.568799
_KONI--C	-0.466869
_TGKA--C	0.223943
_TKGA--C	0.520080
_AIMS--C	0.397155
_ALFA--C	1,189,237
_MDRN--C	1,521,160

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

_SDPC--C	-0.881568
_TIRA--C	0.695692
_GMCW--C	-0.156296
_PWON--C	0.802517
_PGLI--C	-0.623871
_PLIN--C	0.627195
_PNSE--C	-0.039109
_PSKT--C	0.204163
_SHID--C	0.460307
_ICON--C	0.229020
_FAST--C	1,121,414
_ANTA--C	0.341834
_BAYU--C	-0.321774
_PANR--C	1,152,516
_GMTD--C	-0.931113
_CENT--C	0.614762
_DNET--C	0.056200
_INDX--C	0.445748
_ITTG--C	0.152751
_BNBR--C	0.817560
_POOL--C	0.470266
_UNIT--C	0.219811
_AKRA--C	-0.057812
_EPMT--C	-0.217612
_CLPI--C	-0.452982
_INTD--C	0.439944
_JIHD--C	-0.635131
_MAMI--C	0.492437
_SMSM--C	0.032274
_WAPO--C	-0.158660
_JTPE--C	-0.193493
_LMA3--C	0.112354
_MTDL--C	0.069180
_MNCN--C	0.678195
_SCMA--C	-0.024721
_TMPO--C	-0.304466
_IDKM--C	-0.345723
_ABBA--C	0.379279
_INPP--C	0.212409
_META--C	-0.769565

**RESULT OF AUDIT REPORT LAG MODEL**  
**Random Effect**

Effects Specification		
	S.D.	Rho
Cross-section random	0.697080	0.5192
Idiosyncratic random	0.670831	0.4808
Weighted Statistics		
R-squared	0.067085 dependent var	-0.000423
Adjusted R-squared	S.D. dependent	
	0.040640 var	0.691818
S.E. of regression	Sum squared	
	0.677615 resid	2,915,679
	Durbin-Watson	
F-statistic	2,536,780 stat	2,025,966
Prob(F-statistic)	0.000466	
Unweighted Statistics		
	Mean	
R-squared	0.070135 dependent var	-0.000872
Sum squared resid	Durbin-Watson	
	5,960,985 stat	0.990954

**RESULT OF AUDIT REPORT LAG MODEL**  
**Hausman Test**

Correlated Random Effects - Hausman Test

Pool: POOL3

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	30,907,627	18	0.0295

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BC?	-0.127365	-0.273636	0.263842	0.7758
BZ?	0.214599	-0.238165	0.046940	0.0366
BS?	1,251,967	0.269722	0.102451	0.0021
BEK?	0.153602	0.058937	0.055188	0.6870
BED?	0.221841	0.000975	0.028401	0.1900
BEA?	0.012935	0.004553	0.000093	0.3838
BET?	-0.135823	-0.063433	0.006461	0.3678
ACI?	-0.050582	-0.016538	0.004839	0.6246
ACS?	-0.009753	-0.033381	0.010193	0.8150
ACFE?	0.477208	0.356013	0.044122	0.5640
ACA?	-0.095819	-0.182105	0.085182	0.7675
AT?	0.078127	-0.073379	0.043029	0.4652
AO?	-0.030816	-0.274016	0.050630	0.2798
AC?	-0.006245	0.012611	0.001568	0.6340
IA?	-0.346997	-0.290253	0.025907	0.7244
ROA?	-0.137799	-0.150987	0.000874	0.6556
DAR?	-0.206458	-0.110161	0.036716	0.6153
SIZE?	0.345913	0.184016	0.007140	0.0554

**RESULT OF AUDIT REPORT LAG MODEL**  
**Hausman Test**

Cross-section random effects test equation:

Dependent Variable: ARL?

Method: Panel Least Squares

Date: 08/23/09 Time: 09:34

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2,877,397	1,189,017	-2,419,980	0.0159
BC?	-0.127365	0.623816	-0.204171	0.8383
BZ?	0.214599	0.254485	0.843267	0.3996
BS?	1,251,967	0.350389	3,573,076	0.0004
BEK?	0.153602	0.299433	0.512975	0.6082
BED?	0.221841	0.228417	0.971211	0.3320
BEA?	0.012935	0.012374	1,045,376	0.2965
BET?	-0.135823	0.104277	-1,302,517	0.1935
ACI?	-0.050582	0.086783	-0.582853	0.5603
ACS?	-0.009753	0.132018	-0.073874	0.9411
ACFE?	0.477208	0.274714	1,737,107	0.0831
ACA?	-0.095819	0.344644	-0.278024	0.7811
AT?	0.078127	0.237128	0.329471	0.7420
AO?	-0.030816	0.318124	-0.096868	0.9229
AC?	-0.006245	0.093430	-0.066838	0.9467
IA?	-0.346997	0.209188	-1,658,784	0.0979
ROA?	-0.137799	0.052095	-2,645,151	0.0085
DAR?	-0.206458	0.253893	-0.813169	0.4166
SIZE?	0.345913	0.104763	3,301,847	0.0010

RESULT OF AUDIT REPORT LAG MODEL  
Hausman Test

## Effects Specification

## Cross-section fixed (dummy variables)

R-squared	0.706570	Mean dependent var	-0.000872
Adjusted R-squared	0.541603	S.D. dependent var	0.990815
S.E. of regression	0.670831	Akaike info criterion	2,313,488
Sum squared resid	1,881,061	Schwarz criterion	3,931,246
Log likelihood	-5,205,107	Hannan-Quinn criter.	2,940,801
F-statistic	4,283,104	Durbin-Watson stat	3,059,070
Prob(F-statistic)	0.000000		

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

Dependent Variable: ARL?

Method: Pooled Least Squares

Date: 08/23/09 Time: 09:56

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

White cross-section standard errors & covariance (d.f. corrected)

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2,877,397	2,001,317	-1,437,752	0.1513
BC?	-0.127365	0.767024	-0.166051	0.8682
BZ?	0.214599	0.061318	3,499,746	0.0005
BS?	1,251,967	0.342459	3,655,815	0.0003
BEK?	0.153602	0.303745	0.505693	0.6133
BED?	0.221841	0.042116	5,267,387	0.0000
BEA?	0.012935	0.010409	1,242,724	0.2147
BET?	-0.135823	0.034914	-3,890,165	0.0001
ACI?	-0.050582	0.069412	-0.728723	0.4666
ACS?	-0.009753	0.071345	-0.136697	0.8913
ACFE?	0.477208	0.067263	7,094,646	0.0000
ACA?	-0.095819	0.365397	-0.262233	0.7933
AT?	0.078127	0.128987	0.605693	0.5450
AO?	-0.030816	0.164152	-0.187729	0.8512
AC?	-0.006245	0.054605	-0.114360	0.9090
IA?	-0.346997	0.114127	-3,040,454	0.0025
ROA?	-0.137799	0.012784	-1,077,932	0.0000
DAR?	-0.206458	0.237160	-0.870542	0.3845
SIZE?	0.345913	0.102135	3,386,827	0.0008
Fixed Effects (Cross)				
_BRPT--C	-0.234525			
_DSUC--C	0.431537			
_SULI--C	-0.427691			
_AALI--C	-1,374,669			
_UNSP--C	0.654088			
_LSIP--C	-0.416214			
_SMAR--C	-1,277,237			

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_FASW--C	-0.156208
_ANTM--C	0.084205
_APEX--C	-0.384235
_BUMI--C	1,057,201
_ENRG--C	0.055122
_INCO--C	-0.765301
_MEDC--C	1,021,806
_PTBA--C	-0.197893
_ELSA--C	-0.867192
_MITI--C	2,035,014
_AMFG--C	0.788385
_BUDI--C	-0.028364
_DYNA--C	0.472702
_INTP--C	-0.862833
_SMCB--C	-1,495,802
_SMGR--C	-0.048201
_SOBI--C	-0.650286
_TPIA--C	-1,034,699
_TRST--C	0.281651
_UNIC--C	-1,247,807
_DVLA--C	0.159191
_ASII--C	-1,580,296
_GDYR--C	0.185105
_GJTL--C	0.363998
_IKBI--C	-0.126798
_JECC--C	-0.055918
_KBLM--C	0.784466
_VOKS--C	-1,141,546
_SUGI--C	0.928905
_KBLV--C	-0.013582
_MYOH--C	0.903975
_INDF--C	-0.109592
_KLBF--C	0.091860
_KAEF--C	0.429072
_UNVR--C	0.795583
_RMBA--C	0.034348
_TCID--C	-2,400,706
_MLBI--C	0.175079
_ULTR--C	0.554800
_SMRA--C	-1,652,717
_DILD--C	0.019261
_ADHI--C	0.778818
_CMNP--C	-1,213,798

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_PTRO--C	0.549071
_ELTY--C	-0.706640
_BMSR--C	0.175953
_CKRA--C	-0.400433
_CTRA--C	-1,633,829
_CTRS--C	0.224823
_DART--C	1,552,443
_DUTI--C	0.254959
_MORE--C	-0.021610
_DILD--C	0.019261
_JSPT--C	-2,217,713
_JRPT--C	0.867936
_KARK--C	1,878,533
_KJJA--C	1,244,436
_KPIG--C	-0.049563
_LAMI--C	-0.871757
_LPCK--C	-1,874,079
_LPKR--C	-1,478,728
_PWSI--C	0.618812
_PJAA--C	0.369657
_PUDP--C	-1,436,898
_PTRA--C	0.549899
_RBMS--C	-1,024,791
_RODA--C	0.027296
_RAJA--C	0.140315
_SIIP--C	-0.846140
_SSIA--C	-0.470523
_SCBD--C	-0.809413
_BKSL--C	0.915170
_SMDM--C	1,267,029
_APOL--C	0.320736
_CMPP--C	0.297656
_HITS--C	-0.035102
_LTLS--C	-0.658089
_TMAS--C	-0.053348
_RIGS--C	-1,857,840
_SMDR--C	-1,449,287
_SAFE--C	1,919,114
_ZBRA--C	0.611860
_EXCL--C	-1,702,387
_FORU--C	0.610678
_ISAT--C	-1,130,104
_IATG--C	0.810138

**REUSLT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_TLKM--C	2,723,175
_MIRA--C	0.962554
_PGAS--C	0.857134
_BLTA--C	0.067111
_INPC--C	-0.149244
_BABP--C	-1,671,026
_BBCA--C	-0.664937
_BCIC--C	0.977107
_BDMN--C	-1,929,142
_BDKI--C	0.163765
_BEKS--C	-0.521143
_BNII--C	-2,121,413
_BKSW--C	1,167,157
_LPBN--C	-0.504701
_BMRI--C	-0.788252
_MAYA--C	-1,450,609
_MEGA--C	-0.365966
_BBNI--C	0.967498
_NISP--C	-2,471,849
_BNLI--C	-1,641,860
_BBRI--C	-0.101012
_AGRO--C	0.365442
_BTPN--C	0.368309
_BBNP--C	-0.452934
_BVIC--C	-0.184400
_ADMF--C	-1,849,888
_DEFI--C	0.763229
_WOMF--C	-1,963,810
_BFIN--C	-1,035,150
_CFIN--C	-0.584486
_BBLD--C	-0.913043
_TRUS--C	0.002336
_ABDA--C	0.933042
_ASBI--C	-0.171979
_AMAG--C	-0.105694
_MREI--C	0.698186
_PNLF--C	0.621013
_LPGI--C	-0.717922
_LPLI--C	0.781264
_PANIN--C	1,361,677
_AHAP--C	0.777552
_ASDM--C	-0.664410

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_ASJT--C	0.917631
_AKSI--C	0.426641
_HADE--C	1,561,667
_KREN--C	-0.379692
_PEGE--C	-0.243189
_PANS--C	-0.115832
_RELI--C	1,293,024
_TRIM--C	0.898807
_UNIT--C	0.880924
_YULE--C	-1,098,829
_LPPS--C	-0.478491
_OCAP--C	-0.450752
_SMMA--C	1,236,948
_GSMF--C	0.844591
_INCF--C	0.959079
_MTFN--C	1,163,334
_APIC--C	0.186527
_LPPF--C	0.026182
_BCAP--C	-0.337677
_ARTA--C	0.417176
_TMPI--C	1,207,780
_ASGR--C	-1,113,043
_HERO--C	-1,198,931
_HEXA--C	-0.159210
_GEMA--C	-0.204118
_INTA--C	-1,551,969
_MPPA--C	-0.683627
_MTSM--C	1,940,901
_MAPI--C	0.156451
_MLPL--C	-0.216925
_PSAB--C	1,088,984
_RALS--C	-1,208,234
_RIMO--C	-0.501575
_SONA--C	-1,119,355
_TURI--C	0.996164
_UNTR--C	-1,410,780
_WICO--C	1,275,718
_KONI--C	-1,287,641
_TGKA--C	0.508849
_TKGA--C	1,591,070
_AIMS--C	1,195,537
_ALFA--C	1,146,671
_MDRN--C	2,193,212

**RESULT OF AUDIT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_SDPC--C	-0.906034
_TIRA--C	1,416,061
_GMCW--C	0.396811
_PWON--C	1,616,464
_PGLI--C	-1,197,521
_PLIN--C	0.819075
_PNSE--C	-0.749022
_PSKT--C	-0.373022
_SHID--C	-0.298310
_ICON--C	-0.012499
_FAST--C	1,264,927
_ANTA--C	0.977508
_BAYU--C	0.024536
_PANR--C	1,889,625
_GMTD--C	-1,379,801
_CENT--C	1,391,875
_DNET--C	-0.268030
_INDX--C	1,274,645
_ITTG--C	0.877193
_BNBR--C	1,282,803
_POOL--C	0.858638
_UNIT--C	0.880924
_AKRA--C	0.100615
_EPMT--C	-0.403383
_CLPI--C	-0.204118
_INTD--C	1,246,313
_JIHD--C	-1,454,441
_MAMI--C	1,343,743
_SMSM--C	-0.203720
_WAPO--C	-0.469218
_JTPE--C	-0.601173
_LMAS--C	0.570249
_MTDL--C	0.111690
_MNCN--C	0.538671
_SCMA--C	-0.091902
_TMPO--C	-0.314944
_IDKM--C	-0.293287
_ABBA--C	0.617841
_INPP--C	0.665550
_META--C	-0.651581

RESULT OF AUDIT REPORT LAG MODEL  
Fixed Effect with White Correction

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.706570	Mean dependent var	-0.000872
Adjusted R-squared	0.541603	S.D. dependent var	0.990815
S.E. of regression	0.670831	Akaike info criterion	2,313,488
Sum squared resid	1,881,061	Schwarz criterion	3,931,246
Log likelihood	-5,205,107	Hannan-Quinn criter.	2,940,801
F-statistic	4,283,104	Durbin-Watson stat	3,059,070
Prob(F-statistic)	0.000000		

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## APPENDICES

## REGRESSION RESULT OF MANAGEMENT REPORT LAG MODEL

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

Dependent Variable: MRL?  
 Method: Pooled Least Squares  
 Date: 08/23/09 Time: 10:05  
 Sample: 2006 2008  
 Included observations: 3  
 Cross-sections included: 218  
 Total pool (balanced) observations: 654

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4,671,132	1,340,591	3,484,382	0.0005
BC?	-0.809259	0.703339	-1,150,595	0.2506
BZ?	-0.221470	0.286926	-0.771869	0.4406
BS?	-1,225,932	0.395056	-3,103,183	0.0020
BEK?	-0.724343	0.337604	-2,145,539	0.0325
BED?	-0.015728	0.257535	-0.061069	0.9513
BEA?	-0.015181	0.013951	-1,088,143	0.2772
BET?	0.071304	0.117570	0.606477	0.5445
ACI?	0.013966	0.097846	0.142740	0.8866
ACS?	0.420634	0.148848	2,825,939	0.0049
ACFE?	-0.202552	0.309734	-0.653953	0.5135
ACA?	0.264294	0.388579	0.680155	0.4968
AT?	-0.015268	0.267357	-0.057108	0.9545
AO?	-0.731605	0.358678	-2,039,725	0.0420
AC?	0.015123	0.105340	0.143561	0.8859
IA?	0.064145	0.235855	0.271966	0.7858
ROA?	0.135245	0.058736	2,302,607	0.0218
DAR?	0.154670	0.286259	0.540315	0.5893
SIZE?	-0.156432	0.118119	-1,324,364	0.1861
Fixed Effects (Cross)				
_BRPT--C	0.175644			
_DSUC--C	-0.328417			
_SULI--C	0.119880			
_AALI--C	-0.461041			
_UNSP--C	-0.784185			
_LSIP--C	-0.448040			
_SMAR--C	1,045,751			
_FASW--C	-0.255598			

Appendix 5 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

_ANTM--C	-1,684,141
_APEX--C	-0.090605
_BUMI--C	-1,023,559
_ENRG--C	-0.092811
_INCO--C	1,172,672
_MEDC--C	-0.685778
_PTBA--C	-0.701976
_ELSA--C	0.566626
_MITI--C	0.202924
_AMFG--C	-0.709313
_BUDI--C	0.787468
_DYNA--C	-0.611821
_INTP--C	0.220881
_SMCB--C	0.641218
_SMGR--C	-1,508,581
_SOBI--C	0.698658
_TPIA--C	0.554400
_TRST--C	-0.127486
_UNIC--C	1,381,546
_DVLA--C	0.051168
_ASII--C	-0.719085
_GDYR--C	-0.365118
_GJTL--C	1,078,738
_IKBI--C	0.274675
_JECC--C	0.129752
_KBLM--C	-0.486665
_VOKS--C	1,288,736
_SUGI--C	-0.038649
_KBLV--C	0.286089
_MYOH--C	-0.691722
_INDF--C	0.833560
_KLBF--C	-0.534988
_KAEF--C	0.134963
_UNVR--C	-0.155826
_RMBA--C	-0.190630
_TCID--C	1,868,772
_MLBI--C	-0.529602
_ULTR--C	-0.067552
_SMRA--C	1,639,558
_DILD--C	0.421353
_ADHI--C	-0.123116
_CMNP--C	0.436297

Appendix 5 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

_PTRO--C	-1,560,004
_ELTY--C	0.558955
_BMSR--C	1,373,968
_CKRA--C	0.888471
_CTRA--C	1,218,542
_CTRS--C	0.102853
_DART--C	-0.119909
_DUTI--C	0.554042
_MORE--C	0.156108
_DILD--C	0.421353
_JSPT--C	1,992,359
_JRPT--C	0.842847
_KARK--C	-0.361970
_KIJA--C	-0.237057
_KPIG--C	0.192007
_LAMI--C	0.902165
_LPCK--C	1,603,339
_LPKR--C	1,014,815
_PWSI--C	-0.731752
_PJAA--C	-0.333253
_PUDP--C	1,720,653
_PTRA--C	-0.339424
_RBMS--C	1,876,347
_RODA--C	0.409048
_RAJA--C	0.234177
_SIIP--C	0.669608
_SSIA--C	0.699023
_SCBD--C	0.528620
_BKSL--C	0.235670
_SMDM--C	-0.025715
_APOL--C	0.344089
_CMPP--C	0.426426
_HITS--C	0.026847
_LTLS--C	0.406292
_TMAS--C	0.660942
_RIGS--C	1,104,973
_SMDR--C	1,944,570
_SAFE--C	-0.713405
_ZBRA--C	-1,031,027
_EXCL--C	-0.830750
_FORU--C	-0.444857
_ISAT--C	-0.575902
_IATG--C	-0.522243

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

_TLKM--C	-3,814,446
_MIRA--C	-0.481057
_PGAS--C	-1,998,860
_BLTA--C	-0.884747
_INPC--C	0.499839
_BABP--C	0.873922
_BBCA--C	0.220567
_BCIC--C	-0.945390
_BDMN--C	-0.724714
_BDKI--C	-0.538273
_BEKS--C	0.676451
_BNII--C	-1,252,230
_BKSW--C	-0.276244
_LPBN--C	-0.448565
_BMRI--C	-0.775403
_MAYA--C	1,213,724
_MEGA--C	-0.017090
_BBNI--C	-1,734,911
_NISP--C	0.350664
_BNLI--C	-0.772262
_BBRI--C	-1,070,886
_AGRO--C	0.675910
_BTPN--C	-1,134,928
_BBNP--C	0.116859
_BVIC--C	0.479612
_ADMF--C	-0.362922
_DEFI--C	0.091980
_WOMF--C	0.609054
_BFIN--C	1,095,957
_CFIN--C	0.522495
_BBLD--C	0.435635
_TRUS--C	0.152623
_ABDA--C	-0.926633
_ASBI--C	-0.215880
_AMAG--C	0.391854
_MREI--C	-0.739670
_PNLF--C	-0.315741
_LPGI--C	1,000,794
_LPLI--C	0.238530
_PANIN--C	-1,830,126
_AHAP--C	-0.741488
_ASDM--C	0.050005

Appendix 5 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

_ASJT--C	-0.873522
_AKSI--C	-2,150,448
_HADE--C	-0.403068
_KREN--C	0.816815
_PEGE--C	-0.013993
_PANS--C	0.145076
_RELI--C	-0.275585
_TRIM--C	-0.463713
_UNIT--C	-1,256,516
_YULE--C	1,588,701
_LPPS--C	0.953688
_OCAP--C	0.397679
_SMMA--C	-0.190756
_GSMF--C	-0.779074
_INCF--C	-1,442,700
_MTFN--C	-1,009,724
_APIC--C	-0.045601
_LPPF--C	0.890775
_BCAP--C	0.171359
_ARTA--C	0.066331
_TMPI--C	0.280025
_ASGR--C	-1,063,394
_HERO--C	-1,151,618
_HEXA--C	-0.039524
_GEMA--C	0.581412
_INTA--C	1,633,199
_MPPA--C	-0.238020
_MTSM--C	-0.072115
_MAPI--C	-0.437014
_MLPL--C	-0.174693
_PSAB--C	-0.947830
_RALS--C	1,290,169
_RIMO--C	1,195,245
_SONA--C	1,180,882
_TURI--C	-1,967,893
_UNTR--C	-0.682197
_WICO--C	0.127761
_KONI--C	1,816,488
_TGKA--C	-0.953138
_TKGA--C	-1,354,208
_AIMS--C	-0.656252
_ALFA--C	-0.357115

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect**

_MDRN--C	0.555970
_SDPC--C	0.230239
_TIRA--C	-0.907757
_GMCW--C	-0.327950
_PWON--C	0.298127
_PGLI--C	1,448,386
_PLIN--C	-0.848642
_PNSE--C	1,577,943
_PSKT--C	0.268036
_SHID--C	0.500184
_ICON--C	-0.181104
_FAST--C	-0.006201
_ANTA--C	-0.319696
_BAYU--C	0.036514
_PANR--C	0.081962
_GMTD--C	0.990123
_CENT--C	-1,363,159
_DNET--C	0.885150
_INDX--C	-0.020548
_ITTG--C	-1,075,698
_BNBR--C	-0.760712
_POOL--C	-0.555992
_UNIT--C	-1,256,516
_AKRA--C	-0.156246
_EPMT--C	-0.173777
_CLPI--C	0.581412
_INTD--C	-0.959806
_JIHD--C	0.005716
_MAMI--C	-0.227588
_SMSM--C	0.153728
_WAPO--C	0.779750
_JTPE--C	1,283,618
_LMAS--C	-0.383236
_MTDL--C	-0.102203
_MNCN--C	-0.512914
_SCMA--C	0.576843
_TMPO--C	0.016820
_IDKM--C	-0.032394
_ABBA--C	0.158155
_INPP--C	-0.812631
_META--C	0.849322

RESULT OF MANAGEMENT REPORT LAG MODEL  
Fixed Effect

Effects Specification

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Cross-section fixed (dummy variables)

---

R-squared	0.533687	Mean dependent var	2,613,440
Adjusted R-squared	0.271525	S.D. dependent var	0.886165
S.E. of regression	0.756348	Akaike info criterion	2,553,456
Sum squared resid	2,391,220	Schwarz criterion	4,171,214
Log likelihood	-5,989,801	Hannan-Quinn criter.	3,180,769
F-statistic	2,035,718	Durbin-Watson stat	2,869,322
Prob(F-statistic)	0.000000		

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**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

Dependent Variable: MRL?

Method: Pooled EGLS (Cross-section random effects)

Date: 08/23/09 Time: 10:03

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3,354,655	0.548059	6,120,974	0.0000
BC?	-0.279819	0.302860	-0.923923	0.3559
BZ?	-0.034151	0.114213	-0.299010	0.7650
BS?	-0.074651	0.117018	-0.637947	0.5237
BEK?	-0.152733	0.161896	-0.943399	0.3458
BED?	0.019962	0.138974	0.143639	0.8858
BEA?	0.000535	0.006856	0.078055	0.9378
BET?	0.076734	0.058256	1,317,191	0.1882
ACI?	0.075278	0.045057	1,670,726	0.0953
ACS?	0.045765	0.075423	0.606772	0.5442
ACFE?	-0.126666	0.156955	-0.807019	0.4200
ACA?	-0.046760	0.155440	-0.300822	0.7636
AT?	-0.007120	0.096926	-0.073456	0.9415
AO?	-0.207433	0.203980	-1,016,928	0.3096
AC?	-0.011069	0.088364	-0.125269	0.9004
IA?	0.094713	0.117658	0.804983	0.4211
ROA?	0.070665	0.041810	1,690,142	0.0915
DAR?	-0.082594	0.149243	-0.553417	0.5802
SIZE?	-0.127463	0.053617	-2,377,267	0.0177
Random Effects (Cross)				
_BRPT--C	0.019728			
_DSUC--C	0.134776			
_SULI--C	0.171441			
_AALI--C	-0.204643			
_UNSP--C	-0.281066			
_LSIP--C	-0.205848			
_SMAR--C	0.630591			

Appendix 6 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

_FASW--C	0.016799
_ANTM--C	-0.398106
_APEX--C	-0.073716
_BUMI--C	-0.345387
_ENRG--C	0.046417
_INCO--C	0.474969
_MEDC--C	0.031106
_PTBA--C	-0.146917
_ELSA--C	0.103542
_MITI--C	0.023203
_AMFG--C	-0.308101
_BUDI--C	-0.107104
_DYNA--C	-0.349619
_INTP--C	0.083014
_SMCB--C	0.322568
_SMGR--C	-0.309339
_SOBI--C	0.479013
_TPIA--C	0.264833
_TRST--C	0.131474
_UNIC--C	0.745621
_DVLA--C	0.017121
_ASII--C	-0.357383
_GDYR--C	-0.070350
_GJTL--C	0.381207
_IKBI--C	0.168508
_JECC--C	0.286835
_KBLM--C	-0.088132
_VOKS--C	0.024825
_SUGI--C	0.033965
_KBLV--C	0.118056
_MYOH--C	-0.184988
_INDF--C	0.032640
_KLBF--C	-0.101593
_KAEF--C	0.011992
_UNVR--C	-0.098874
_RMBA--C	-0.007031
_TCID--C	0.389691
_MLBI--C	0.046121
_ULTR--C	-0.167225
_SMRA--C	0.265931
_DILD--C	0.310421
_ADHI--C	0.139809

Appendix 6 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

_CMNP--C	0.005754
_PTRO--C	-0.705602
_ELTY--C	0.302729
_BMSR--C	-0.093793
_CKRA--C	0.220522
_CTRA--C	-0.037320
_CTRS--C	-0.014174
_DART--C	0.151001
_DUTI--C	0.286470
_MORE--C	-0.133573
_DILD--C	0.310421
_JSPT--C	0.403163
_JRPT--C	0.338939
_KARK--C	-0.129590
_KIJA--C	-0.094020
_KPIG--C	0.206523
_LAMI--C	0.346029
_LPCK--C	0.596375
_LPKR--C	0.351835
_PWSI--C	-0.170919
_PJAA--C	-0.049572
_PUDP--C	0.327855
_PTRA--C	-0.076249
_RBMS--C	0.343587
_RODA--C	0.205651
_RAJA--C	0.269989
_SIIP--C	0.137029
_SSIA--C	-0.258937
_SCBD--C	0.187434
_BKSL--C	0.160052
_SMDM--C	0.025147
_APOL--C	0.132377
_CMPP--C	0.191906
_HITS--C	0.123028
_LTLS--C	-0.520811
_TMAS--C	0.385161
_RIGS--C	0.564479
_SMDR--C	0.303511
_SAFE--C	-0.202706
_ZBRA--C	-0.269701
_EXCL--C	-0.325443
_FORU--C	-0.131162

Appendix 6 (Continue)

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

_ISAT--C	0.106050
_IATG--C	-0.188945
_TLKM--C	-1,340,016
_MIRA--C	-0.110203
_PGAS--C	-0.545866
_BLTA--C	-0.210908
_INPC--C	0.274710
_BABP--C	0.491894
_BBCA--C	0.317694
_BCIC--C	-0.444571
_BDMN--C	0.027544
_BDKI--C	-0.199228
_BEKS--C	-0.064488
_BNII--C	-0.315652
_BKSW--C	-0.008442
_LPBN--C	0.037221
_BMRI--C	0.132796
_MAYA--C	0.088677
_MEGA--C	0.166389
_BBNI--C	-0.448893
_NISP--C	0.373309
_BNLI--C	-0.052303
_BBRI--C	0.035780
_AGRO--C	0.200957
_BTPN--C	-0.475340
_BBNP--C	0.088815
_BVIC--C	0.421803
_ADMF--C	0.249036
_DEFI--C	-0.043467
_WOMF--C	0.368711
_BFIN--C	0.537565
_CFIN--C	0.353643
_BBLD--C	0.279290
_TRUS--C	0.335831
_ABDA--C	-0.437564
_ASBI--C	0.141303
_AMAG--C	0.055333
_MREI--C	-0.260472
_PNLF--C	-0.215965
_LPGI--C	0.390416
_LPLI--C	-0.056289
_PANIN--C	-0.875188
_AHAP--C	-0.353738

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

_ASDM--C	0.253627
_ASJT--C	-0.413594
_AKSI--C	-0.587438
_HADE--C	-0.166938
_KREN--C	0.029364
_PEGE--C	0.014584
_PANS--C	0.318151
_RELI--C	-0.070012
_TRIM--C	-0.056588
_UNIT--C	-0.402709
_YULE--C	0.272442
_LPPS--C	0.339968
_OCAP--C	0.259570
_SMMA--C	-0.012427
_GSMF--C	-0.013757
_INCF--C	-0.272095
_MTFN--C	-0.410647
_APIC--C	-0.054026
_LPPF--C	0.356678
_BCAP--C	0.162528
_ARTA--C	0.085730
_TMPI--C	-0.008965
_ASGR--C	-0.368644
_HERO--C	-0.546141
_HEXA--C	0.152882
_GEMA--C	0.214412
_INTA--C	0.312479
_MPPA--C	-0.147179
_MTSM--C	0.294399
_MAPI--C	-0.238198
_MLPL--C	-0.204720
_PSAB--C	-0.370429
_RALS--C	0.044643
_RIMO--C	0.020222
_SONA--C	0.057374
_TURI--C	-0.761977
_UNTR--C	-0.334785
_WICO--C	0.444330
_KONI--C	0.480650
_TGKA--C	-0.397517
_TKGA--C	-0.495409
_AIMS--C	-0.279836

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

_ALFA--C	-0.076789
_MDRN--C	0.374678
_SDPC--C	0.113471
_TIRA--C	-0.177902
_GMCW--C	-0.082020
_PWON--C	0.030400
_PGLI--C	0.128997
_PLIN--C	-0.306512
_PNSE--C	0.283422
_PSKT--C	-0.477113
_SHID--C	-0.357152
_ICON--C	-0.448584
_FAST--C	-0.217868
_ANTA--C	-0.156787
_BAYU--C	0.157151
_PANR--C	0.098968
_GMTD--C	0.358170
_CENT--C	-0.560474
_DNET--C	-0.034276
_INDX--C	-0.088350
_ITTG--C	-0.311262
_BNBR--C	-0.296338
_POOL--C	-0.176831
_UNIT--C	-0.402709
_AKRA--C	-0.091581
_EPMT--C	0.240139
_CLPI--C	0.214412
_INTD--C	-0.251188
_JIHD--C	0.066456
_MAMI--C	0.114102
_SMSM--C	-0.110555
_WAPO--C	-0.081292
_JTPE--C	0.209837
_LMAS--C	-0.156735
_MTDL--C	-0.046706
_MNCN--C	-0.267118
_SCMA--C	0.201864
_TMPO--C	0.168306
_IDKM--C	0.205469
_ABBA--C	0.008516
_INPP--C	-0.365530
_META--C	0.475889

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Random Effect**

Effects Specification		S.D.	Rho
Cross-section random		0.433648	0.2474
Idiosyncratic random		0.756348	0.7526
Weighted Statistics			
R-squared	0.036155	Mean dependent var	1,854,403
Adjusted R-squared	0.008833	S.D. dependent var	0.772992
S.E. of regression	0.769570	Sum squared resid	3,760,713
F-statistic	1,323,300	Durbin-Watson stat	1,964,594
Prob(F-statistic)	0.165916		
Unweighted Statistics			
R-squared	0.036051	Mean dependent var	2,613,440
Sum squared resid	4,943,060	Durbin-Watson stat	1,494,676

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Hausman Test**

Correlated Random Effects - Hausman Test

Pool: POOL3

Test cross-section random effects

Test Summary	Chi-Sq.	Chi-Sq. d.f.	Prob.
	Statistic		
Cross-section random	40,395,864	18	0.0018

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
BC?	-0.809259	-0.279819	0.402962	0.4043
BZ?	-0.221470	-0.034151	0.069282	0.4767
BS?	-1,225,932	-0.074651	0.142376	0.0023
BEK?	-0.724343	-0.152733	0.087766	0.0537
BED?	-0.015728	0.019962	0.047011	0.8693
BEA?	-0.015181	0.000535	0.000148	0.1958
BET?	0.071304	0.076734	0.010429	0.9576
ACI?	0.013966	0.075278	0.007544	0.4802
ACS?	0.420634	0.045765	0.016467	0.0035
ACFE?	-0.202552	-0.126666	0.071300	0.7763
ACA?	0.264294	-0.046760	0.126832	0.3824
AT?	-0.015268	-0.007120	0.062085	0.9739
AO?	-0.731605	-0.207433	0.087042	0.0756
AC?	0.015123	-0.011069	0.003288	0.6479
IA?	0.064145	0.094713	0.041784	0.8811
ROA?	0.135245	0.070665	0.001702	0.1175
DAR?	0.154670	-0.082594	0.059671	0.3314
SIZE?	-0.156432	-0.127463	0.011077	0.7831

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Hausman Test**

Cross-section random effects test equation:

Dependent Variable: MRL?

Method: Panel Least Squares

Date: 08/23/09 Time: 10:06

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4,671,132	1,340,591	3,484,382	0.0005
BC?	-0.809259	0.703339	-1,150,595	0.2506
BZ?	-0.221470	0.286926	-0.771869	0.4406
BS?	-1,225,932	0.395056	-3,103,183	0.0020
BEK?	-0.724343	0.337604	-2,145,539	0.0325
BED?	-0.015728	0.257535	-0.061069	0.9513
BEA?	-0.015181	0.013951	-1,088,143	0.2772
BET?	0.071304	0.117570	0.606477	0.5445
ACI?	0.013966	0.097846	0.142740	0.8866
ACS?	0.420634	0.148848	2,825,939	0.0049
ACFE?	-0.202552	0.309734	-0.653953	0.5135
ACA?	0.264294	0.388579	0.680155	0.4968
AT?	-0.015268	0.267357	-0.057108	0.9545
AO?	-0.731605	0.358678	-2,039,725	0.0420
AC?	0.015123	0.105340	0.143561	0.8859
IA?	0.064145	0.235855	0.271966	0.7858
ROA?	0.135245	0.058736	2,302,607	0.0218
DAR?	0.154670	0.286259	0.540315	0.5893
SIZE?	-0.156432	0.118119	-1,324,364	0.1861

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**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Hausman Test**

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Effects Specification

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Cross-section fixed (dummy variables)

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R-squared	0.533687	Mean dependent var	2,613,440
Adjusted R-squared	0.271525	S.D. dependent var	0.886165
S.E. of regression	0.756348	Akaike info criterion	2,553,456
Sum squared resid	2,391,220	Schwarz criterion	4,171,214
Log likelihood	-5,989,801	Hannan-Quinn criter.	3,180,769
F-statistic	2,035,718	Durbin-Watson stat	2,869,322
Prob(F-statistic)	0.000000		

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**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

Dependent Variable: MRL?

Method: Pooled Least Squares

Date: 08/23/09 Time: 10:07

Sample: 2006 2008

Included observations: 3

Cross-sections included: 218

Total pool (balanced) observations: 654

White cross-section standard errors & covariance (d.f. corrected)

WARNING: estimated coefficient covariance matrix is of reduced rank

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4,671,132	1,040,702	4,488,442	0.0000
BC?	-0.809259	0.062789	-1,288,861	0.0000
BZ?	-0.221470	0.104620	-2,116,896	0.0349
BS?	-1,225,932	0.280215	-4,374,970	0.0000
BEK?	-0.724343	0.217104	-3,336,387	0.0009
BED?	-0.015728	0.094722	-0.166039	0.8682
BEA?	-0.015181	0.007619	-1,992,525	0.0470
BET?	0.071304	0.017262	4,130,763	0.0000
ACI?	0.013966	0.051265	0.272440	0.7854
ACS?	0.420634	0.106246	3,959,064	0.0001
ACFE?	-0.202552	0.196236	-1,032,185	0.3026
ACA?	0.264294	0.167038	1,582,236	0.1144
AT?	-0.015268	0.142552	-0.107106	0.9148
AO?	-0.731605	0.229231	-3,191,565	0.0015
AC?	0.015123	0.033123	0.456566	0.6482
IA?	0.064145	0.193259	0.331909	0.7401
ROA?	0.135245	0.004536	2,981,522	0.0000
DAR?	0.154670	0.112644	1,373,089	0.1705
SIZE?	-0.156432	0.127897	-1,223,114	0.2220
Fixed Effects (Cross)				
_BRPT--C	0.175644			
_DSUC--C	-0.328417			
_SULI--C	0.119880			
_AALI--C	-0.461041			
_UNSP--C	-0.784185			

## RESULT OF MANAGEMENT REPORT LAG MODEL

t with White Correction

_LSIP--C	-0.448040
_SMAR--C	1,045,751
_FASW--C	-0.255598
_ANTM--C	-1,684,141
_APEX--C	-0.090605
_BUMI--C	-1,023,559
_ENRG--C	-0.092811
_INCO--C	1,172,672
_MEDC--C	-0.685778
_PTBA--C	-0.701976
_ELSA--C	0.566626
_MITI--C	0.202924
_AMFG--C	-0.709313
_BUDI--C	0.787468
_DYNA--C	-0.611821
_INTP--C	0.220881
_SMCB--C	0.641218
_SMGR--C	-1,508,581
_SOBI--C	0.698658
_TPIA--C	0.554400
_TRST--C	-0.127486
_UNIC--C	1,381,546
_DVLA--C	0.051168
_ASII--C	-0.719085
_GDYR--C	-0.365118
_GJTL--C	1,078,738
_IKBI--C	0.274675
_JECC--C	0.129752
_KBLM--C	-0.486665
_VOKS--C	1,288,736
_SUGI--C	-0.038649
_KBLV--C	0.286089
_MYOH--C	-0.691722
_INDF--C	0.833560
_KLBF--C	-0.534988
_KAEF--C	0.134963
_UNVR--C	-0.155826
_RMBA--C	-0.190630
_TCID--C	1,868,772
_MLBI--C	-0.529602
_ULTR--C	-0.067552
_SMRA--C	1,639,558
_DILD--C	0.421353

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_ADHI--C	-0.123116
_CMNP--C	0.436297
_PTRO--C	-1,560,004
_ELTY--C	0.558955
_BMSR--C	1,373,968
_CKRA--C	0.888471
_CTRA--C	1,218,542
_CTRS--C	0.102853
_DART--C	-0.119909
_DUTI--C	0.554042
_MORE--C	0.156108
_DILD--C	0.421353
_JSPT--C	1,992,359
_JRPT--C	0.842847
_KARK--C	-0.361970
_KIJA--C	-0.237057
_KPIG--C	0.192007
_LAMI--C	0.902165
_LPCK--C	1,603,339
_LPKR--C	1,014,815
_PWSI--C	-0.731752
_PJAA--C	-0.333253
_PUDP--C	1,720,653
_PTRA--C	-0.339424
_RBMS--C	1,876,347
_RODA--C	0.409048
_RAJA--C	0.234177
_SIIP--C	0.669608
_SSIA--C	0.699023
_SCBD--C	0.528620
_BKSL--C	0.235670
_SMDM--C	-0.025715
_APOL--C	0.344089
_CMPP--C	0.426426
_HITS--C	0.026847
_LTLS--C	0.406292
_TMAS--C	0.660942
_RIGS--C	1,104,973
_SMDR--C	1,944,570
_SAFE--C	-0.713405
_ZBRA--C	-1,031,027
_EXCL--C	-0.830750

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_FORU--C	-0.444857
_ISAT--C	-0.575902
_IATG--C	-0.522243
_TLKM--C	-3,814,446
_MIRA--C	-0.481057
_PGAS--C	-1,998,860
_BLTA--C	-0.884747
_INPC--C	0.499839
_BABP--C	0.873922
_BBCA--C	0.220567
_BCIC--C	-0.945390
_BDMN--C	-0.724714
_BDKI--C	-0.538273
_BEKS--C	0.676451
_BNII--C	-1,252,230
_BKSW--C	-0.276244
_LPBN--C	-0.448565
_BMRI--C	-0.775403
_MAYA--C	1,213,724
_MEGA--C	-0.017090
_BBNI--C	-1,734,911
_NISP--C	0.350664
_BNLI--C	-0.772262
_BBRI--C	-1,070,886
_AGRO--C	0.675910
_BTPN--C	-1,134,928
_BBNP--C	0.116859
_BVIC--C	0.479612
_ADMF--C	-0.362922
_DEFI--C	0.091980
_WOMF--C	0.609054
_BFIN--C	1,095,957
_CFIN--C	0.522495
_BBLD--C	0.435635
_TRUS--C	0.152623
_ABDA--C	-0.926633
_ASBI--C	-0.215880
_AMAG--C	0.391854
_MREI--C	-0.739670
_PNLF--C	-0.315741
_LPGI--C	1,000,794
_LPLI--C	0.238530

## RESULT OF MANAGEMENT REPORT LAG MODEL

## Fixed Effect with White Correction

_PANIN--C	-1,830,126
_AHAP--C	-0.741488
_ASDM--C	0.050005
_ASJT--C	-0.873522
_AKSI--C	-2,150,448
_HADE--C	-0.403068
_KREN--C	0.816815
_PEGE--C	-0.013993
_PANS--C	0.145076
_RELI--C	-0.275585
_TRIM--C	-0.463713
_UNIT--C	-1,256,516
_YULE--C	1,588,701
_LPPS--C	0.953688
_OCAP--C	0.397679
_SMMA--C	-0.190756
_GSMF--C	-0.779074
_INCF--C	-1,442,700
_MTFN--C	-1,009,724
_APIC--C	-0.045601
_LPPF--C	0.890775
_BCAP--C	0.171359
_ARTA--C	0.066331
_TMPI--C	0.280025
_ASGR--C	-1,063,394
_HERO--C	-1,151,618
_HEXA--C	-0.039524
_GEMA--C	0.581412
_INTA--C	1,633,199
_MPPA--C	-0.238020
_MTSM--C	-0.072115
_MAPI--C	-0.437014
_MLPL--C	-0.174693
_PSAB--C	-0.947830
_RALS--C	1,290,169
_RIMO--C	1,195,245
_SONA--C	1,180,882
_TURI--C	-1,967,893
_UNTR--C	-0.682197
_WICO--C	0.127761
_KONI--C	1,816,488
_TGKA--C	-0.953138

**RESULT OF MANAGEMENT REPORT LAG MODEL**  
**Fixed Effect with White Correction**

_TKGA--C	-1,354,208
_AIMS--C	-0.656252
_ALFA--C	-0.357115
_MDRN--C	0.555970
_SDPC--C	0.230239
_TIRA--C	-0.907757
_GMCW--C	-0.327950
_PWON--C	0.298127
_PGLI--C	1,448,386
_PLIN--C	-0.848642
_PNSE--C	1,577,943
_PSKT--C	0.268036
_SHID--C	0.500184
_ICON--C	-0.181104
_FAST--C	-0.006201
_ANTA--C	-0.319696
_BAYU--C	0.036514
_PANR--C	0.081962
_GMTD--C	0.990123
_CENT--C	-1,363,159
_DNET--C	0.885150
_INDX--C	-0.020548
_ITTG--C	-1,075,698
_BNBR--C	-0.760712
_POOL--C	-0.555992
_UNIT--C	-1,256,516
_AKRA--C	-0.156246
_EPMT--C	-0.173777
_CLPI--C	0.581412
_INTD--C	-0.959806
_JIHD--C	0.005716
_MAMI--C	-0.227588
_SMSM--C	0.153728
_WAPO--C	0.779750
_JTPE--C	1,283,618
_LMAS--C	-0.383236
_MTDL--C	-0.102203
_MNCN--C	-0.512914
_SCMA--C	0.576843
_TMPO--C	0.016820
_IDKM--C	-0.032394
_ABBA--C	0.158155

Appendix 8 (Continue)

RESULT OF MANAGEMENT REPORT LAG MODEL  
Fixed Effect with White Correction

_INPP--C	-0.812631
_META--C	0.849322

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.533687	Mean dependent var	2,613,440
Adjusted R-squared	0.271525	S.D. dependent var	0.886165
S.E. of regression	0.756348	Akaike info criterion	2,553,456
Sum squared resid	2,391,220	Schwarz criterion	4,171,214
Log likelihood	-5,989,801	Hannan-Quinn criter.	3,180,769
F-statistic	2,035,718	Durbin-Watson stat	2,869,322
Prob(F-statistic)	0.000000		