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## **The effect of ownership concentration, board of directors, audit committee and ethnicity on conservative accounting : Malaysian evidence**

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**THE EFFECT OF OWNERSHIP CONCENTRATION,  
BOARD OF DIRECTORS, AUDIT COMMITTEE AND  
ETHNICITY ON CONSERVATIVE ACCOUNTING:  
MALAYSIAN EVIDENCE**

**RAHIMAH MOHAMED YUNOS**

A thesis submitted in partial fulfilment of the  
requirements for the degree of

**Doctor of Philosophy**

**School of Accounting, Finance and Economics  
Faculty of Business and Law  
Edith Cowan University, Perth  
Western Australia**

**2011**

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Faculty of Business and Law  
Edith Cowan University, Perth  
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**PROFESSOR MALCOLM SMITH  
DR. ZUBAIDAH ISMAIL**

**2011**

## USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

## **ABSTRACT**

This thesis examines whether ownership concentration, board of directors, audit committee and ethnicity of directors affect conservative accounting. Additionally, this thesis examines whether the impact of firms' governance on conservatism is moderated by ownership concentration. Previous evidence has suggested that conservative accounting controls the agency problem, but so far, there is no evidence that it is applicable in Malaysian firms, as firms are closely held by the controlling shareholders.

This thesis employs panel data on Malaysian listed companies observed over seven years from 2001 to 2007. Malaysian firms are chosen as the sample because they provide a useful setting for the study of ownership concentration and enable us to identify whether strong governance attributes in firms with controlling shareholders function effectively.

Conservatism is measured using two approaches: (a) an accrual-based method from Givoly and Hayn (2000) and (b) asymmetric timeliness from Basu (1997). Substantial shareholders are used to proxy for ownership concentration, and are classified into: (a) inside shareholders who are executive and non-executive directors, and (b) outside shareholders who are not involved with the management. Four characteristics of the board of directors are identified: board composition, board size, board skill (proxied by board tenure, board financial expertise and multiple directorships) and CEO duality. Three characteristics of the audit committee are specified: audit committee composition, financial expertise and audit committee meeting. This thesis focuses on two ethnic groups: Malay (Bumiputera) and Chinese directors, who sit on the board of directors and the audit committee.

The empirical results show that the existence of controlling shareholders can lead to significantly lower accrual-based conservatism, but they do not influence asymmetric timeliness. In contrast, none of the board and audit committee attributes appear to determine accrual-based conservatism; but board composition,

board financial expertise, audit committee composition, audit committee financial expertise and audit committee meeting are significantly associated with asymmetric timeliness. Results in this thesis surprisingly show that, independent directors on the audit committee are associated with lower asymmetric timeliness and this finding remains after using alternative measures. This thesis provide no evidence that board size, board skill (proxied by directors' tenure and multiple directorships) or CEO duality are associated with conservatism. The ethnic groups influence conservatism but the evidence is mixed, implying that there could be other factors that explained the directors' behaviour than their ethnicity per se. The analysis of the moderating effect confirms that firms' governance has positive influence on conservatism. However, ownership concentration negatively moderates the relationship between firms' governance and conservatism.

The implication from these findings is that the great power that the controlling owners exert may diminish the role of financial reports in controlling and monitoring the management. The merits of conservatism as a governance mechanism do not seem to function appropriately when its application is determined by the controlling parties, who are supposed to be subject to its control. Policy makers and regulatory bodies should interpret this evidence as motivation for them to strengthen their enforcement of legal shareholder protection.

## **DECLARATION**

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) Incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
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**Some sections of this thesis have been presented in a conference and have been published in an academic journal:**

**1. Received the following awards at the conference:**

13<sup>th</sup> International Business Research Conference, Melbourne, Australia.

- Best paper award on research titled: “Accounting conservatism and ownership concentration: Evidence from Malaysia”.
- Associate Fellowship in recognition of the research work to the body of knowledge.

**2. Published in an academic journal:**

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# **CHAPTER ONE**

## **INTRODUCTION**

### **1.1. Introduction**

Financial Accounting Standards Board (1980) SFAC No.2 notes that assets and liabilities are frequently measured in the context of significant uncertainties. Managers are allowed to use their own discretion in providing accounting estimates as not all aspects of accounting are covered by professional standards (Chung, Firth, & Jeong-Bon, 2003). For instance, the Malaysian Accounting Standards Board (MASB) does not provide detailed rules on financial reporting principles, thus allowing flexibility for managers to use their discretion in determining reported earnings (Saleh, Iskandar, & Rahmat, 2005). The estimation made could be neutral, aggressive or conservative. This thesis focuses on conservative accounting because empirical studies showed that it has a significant role in reducing agency conflict.

Conservatism is traditionally defined as accounting practices that “anticipate no profit but anticipate all losses” (Bliss, 1924). Basu (1997) depicts conservatism as the asymmetric timeliness of earnings which require higher verification to recognise good news as gain than to recognise bad news as losses. Givoly and Hayn (2000, p. 292) define conservatism as ‘a selection criterion between accounting principles that leads to the minimisation of cumulative reported earnings by slower revenue recognition, faster expense recognition, lower asset valuation and higher liability valuation’. All of these definitions acknowledge that earnings reported under conservative accounting are understated rather than overstated.

Empirical studies have documented that conservatism reduces agency conflict as it limits over payment of incentive to managers (Kwon, Newman, & Suh, 2001), allows for early detection of negative net present value projects as it immediately recognises expected losses (Ball, 2001, p. 127), limits managers’ opportunistic behaviour (W. D. Brown, He, & Teitel, 2006; Q. Chen, Hemmer, & Zhang, 2007;

Watts, 2003) and reduces information asymmetry between managers and outside shareholders (LaFond & Watts, 2008). Further, conservatism is more useful in controlling the cost of suboptimal managerial decisions than if the earnings were measured neutrally or liberally (Kwon, 2005). The benefits of conservatism in the agency relationship, ultimately improve the usefulness of financial statements (Ball & Shivakumar, 2006) and increase firm value (Watts, 2003).

It has long been recognised that contracting parties use accounting numbers to reduce agency costs (e.g.: Watts & Zimmerman, 1978). In the Malaysian context, conservatism may be useful in reducing agency conflict between the majority shareholders and minority shareholders. The traditional agency conflict between managers and shareholders is not relevant in Malaysian firms because their ownership is highly concentrated in the hands of the large shareholders (Claessens, Djankov, & Lang, 2000; M. H. Lim, 1981; Tam & Tan, 2007; Zhuang, Webb, Edwards, & Capulong, 2001). According to Shleifer and Vishny (1997), the power of controlling shareholders in East Asian economies deprive the minority shareholders of their rights and become indisputable in an environment of a weak legal system and ineffective corporate governance. In Malaysia, this phenomenon is most likely to occur as it has weak enforcement of the legal shareholder protection (Krishnamurti, Sevic, & Sevic, 2005). Debt financing could monitor management (Agrawal & Knoeber, 1996) but in Malaysia, disciplining managers through debt financing is ineffective due to its immature financial market (Suto, 2003; Tam & Tan, 2007). Moreover, the role of the hostile takeovers to discipline opportunistic managers is almost non-existent in Malaysia because the 'large shareholder' group often includes the CEO or the group has an affiliation with top management (Haniffa & Hudaib, 2006). As the abovementioned mechanisms fail to reduce agency conflict in Malaysian firms, this thesis is interested in identifying if it is possible to employ accounting conservatism to this effect.

Evidence on ownership concentration is inconclusive but weak shareholder protection, ineffective monitoring via debt financing and the absence of hostile takeovers allow the controlling shareholders to make decisions that provide personal benefit. Though evidence exists to show that conservatism is effective in

reducing agency conflict, less is known about its applicability in Malaysia. The application of conservative accounting is within the discretion of the controlling shareholders and can be explained from two competing arguments. The first argument relates to the entrenchment effect, whereby controlling owners use their power to extract firm wealth for personal benefit. Hence, the controlling shareholders may choose not to employ more conservatism so that they can conceal their expropriation activities. The second argument relates to the substitution effect, where the controlling shareholders, having closely monitored the management of the firm, do not require conservatism to monitor management. Under both effects, controlling shareholders favour less conservatism.

Consistent with other countries, Malaysia encourages listed firms to follow the best practices of corporate governance. Two important governance mechanisms discussed in the Malaysian Code on Corporate Governance are board of directors and audit committee, consistent with their significant role in overseeing the financial reporting process (Yatim, Kent, & Clarkson, 2006). This thesis expects the board of directors and audit committee to demand more conservatism because it assists them in the governance role. However, previous studies claimed that the controlling shareholders are the cause for the ineffective corporate governance system in Asian countries. It was argued that the controlling shareholders may change the conduct of the board of directors and audit committee. For instance, the dominant power of controlling shareholders in Malaysia would determine the setting of the firms' internal governance such as to appoint outside directors who are in favour of the controlling shareholders. To investigate the adverse effect of ownership concentration on the firms' governance structure, this thesis examines whether the controlling shareholders impede the effectiveness of the firms' internal governance mechanisms in employing more conservatism. This is done by examining the moderating effect of ownership concentration on the relationship between firms' governance and conservatism.

In addition to the corporate governance effects on conservatism, this thesis also examines ethnicity of the directors, following Gray's (1988) proposition that the concept of individualism and uncertainty avoidance determine conservatism. Previous studies have examined these concepts in relation to Malay and Chinese

groups in Malaysia; and hence the outcomes of the studies are used as a reference for this thesis.

The next section presents the objectives, the motivations and significance of this thesis. The structure of this thesis is presented in the final section.

## **1.2. Objectives of this thesis**

It is the aim of this thesis to identify the relationship between corporate governance and conservative accounting. Additionally, ethnicity of the members of the board and audit committee is examined following Tsakumis (2007) who claimed that culture impacts on the judgement that applies to the choice of accounting rules. Further, this thesis is interested in identifying if concentrated owners limit the effectiveness of firms' governance.

In order to fulfil the above objectives, this thesis addresses the following research question,

“What are the factors that influence accounting conservatism in Malaysian firms?”

In addressing the primary question, this thesis examines the following factors in detail:

1. Does ownership concentration influence conservative accounting?
2. Do the board of directors and audit committee influence conservative accounting?
3. Does ethnicity influence conservative accounting?
4. Does ownership concentration influence the effect of firms' governance on conservative accounting?

### **1.3. Motivation for this thesis**

This thesis is pursued for several reasons that highlight the need to examine conservatism practices in Malaysian firms. The motivation factors are discussed as follows:

#### **1. Accounting Conservatism and Agency Conflict**

This thesis is motivated by the results from previous studies that accounting conservatism can control moral hazard problems resulting from agency conflict. Since the agency problem in Malaysia is high (Kallunki, Sahlstrom, & Zerni, 2007), and Malaysian firms practise high earnings management (Rahman & Ali, 2006) and high insider trading (Ameer & Othman, 2008), it is important to examine the level of conservatism practices in Malaysian listed firms. Previous studies documented that various mechanisms implemented to deter the opportunistic behaviour of the controlling shareholders are ineffective. La Porta, Lopez-De-Silanes, Shleifer and Vishny (1998) reported that Malaysia is ranked relatively highly on anti-director rights, which is a measure of the strength of the legal system in favour of minority shareholders against managers or dominant shareholders in the decision making processes. However, the existence of strong legal protection of shareholders does not resolve the agency problem as Krishnamurti et al. (2005) stated that the enforcement of the system is poor.

According to Satkunasingam and Shanmugam (2006), many mechanisms implemented in Malaysia to monitor the controlling shareholders are not working soundly. Minority shareholders cannot rely on the board of directors because the majority of Malaysian firms' board are dominated by the large shareholders. The large institutional shareholders are unable to protect the minority shareholders' interests because they are often subject to political pressure. For instance, the Minority Shareholder Watchdog Group (MSWG) was established as a channel for the minority shareholders to report their concern. Its effectiveness is however, questionable because the founding members are institutional shareholders in government link agencies (GLC) which are subject to political interference.

Satkunasingam and Shanmugam (2006) further noted that the board of directors of the MSWG who are from these founding members, may not take action against the company that appointed them to the MSWG.

The lack of an effective agency tool motivates this thesis to investigate whether conservatism is useful to reduce the agency conflict in Malaysian firms. This is done by examining factors that determine conservative accounting in Malaysian financial statements.

## 2. Determinant Factors

It is important to understand factors that influence conservatism so that firms can assess the significance of those factors on the firm's financial reports. The following empirical evidence encouraged this thesis to investigate the determinant factors of conservative accounting in Malaysian firms. Ball, Robin and Wu (2003) found that Malaysian managers and auditors have low incentives for transparent reporting especially for losses. Among four common law countries that they examined from 1984 to 1996; Malaysia was ranked third in terms of transparency. They argued that the result is inconsistent with the common law system where accounting standards promote transparency through its shareholder-based model that resolves asymmetric information by way of public disclosure. Similar results were reported by Bhattacharya, Daouk and Welker (2003) who examined uninformative or opaque earnings among 34 countries including Malaysia. One of the proxies used in their study is the opposite measure of conservatism, namely earnings aggressiveness. The study showed that Malaysian firms are ranked amongst countries that have aggressive earnings and Malaysia ranked in 9<sup>th</sup> place, as having severe earnings opacity. Whilst the above studies implied that Malaysian financial reports are less conservative, a recent study carried out by Vichitsarawong, Eng and Meek (2010) showed that conservatism in Malaysian financial reports increased after the post Asian financial crisis (1999-2004) as compared to the pre-crisis period (1995-1996). They suggested that corporate governance reform after the financial crisis may have had a positive influence on the conservatism. This thesis complements the above studies by investigating factors that influence conservatism in Malaysian firms.



### 3. Ownership Concentration

Previous studies showed that ownership structure in Malaysian firms is highly concentrated (Claessens et al., 2000; M. H. Lim, 1981; Tam & Tan, 2007; Zhuang et al., 2001). Although closely held firms suffer less agency conflict between the managers and shareholders; they deal with greater conflict between the majority and minority shareholders. The use of ownership structure to reduce agency conflict suggested by agency theory ultimately does not solve the agency conflict. Positive accounting theory suggests conservative accounting to control the opportunistic behaviour of the managers including the controlling shareholders. However, there is concern that controlling shareholders in Malaysian firms may apply less conservatism as Tam and Tan (2007) noted that major shareholders in Malaysian firms are entrenched. It is unlikely that controlling shareholders, who have decision making power in the firms, employ a mechanism that can limit or disclose their opportunistic behaviour. Dargenidou, McLeay and Raonic (2007) argued that when agency conflict is controlled through close monitoring by large shareholders, these shareholders put less reliance on the financial reports, and thus adopt less conservative accounting.

If the predicted effect is proven, then it implies that majority shareholders can expropriate firms' wealth and delay reporting or even conceal their activities from the financial reports. This condition could adversely affect the interests of the minority shareholders. The results from this thesis provide empirical evidence on the effect of ownership concentration on conservatism, so far not investigated by other studies on Malaysian firms.

Additionally, previous studies argued that corporate governance in Asian countries generally, is not effective due to the influence of controlling shareholders. Very few studies have directly tested the adverse effect of controlling shareholders on the firms' governance, such as reported by Cho and Kim (2007). To our best knowledge, no study for Malaysian samples has directly tested the moderating effect of ownership concentration on the effectiveness of the firms' governance. This thesis, therefore, will fill this gap and contributes to the literature.

#### 4. Internal Governance Mechanisms

Dechow, Sloan and Sweeney (1996) highlighted that the reliability of the financial reporting process depends on corporate governance and management control philosophy. Specifically, an absence of appropriate supervision from the board of directors and audit committee will encourage management to employ earnings manipulation techniques. This thesis examines board of directors because they are responsible for reviewing the adequacy and integrity of the financial reporting system and are accountable to the stakeholders for firm performance. The audit committee is considered as one of the pillars of accountability because it supports the boards' role to oversee the financial reporting process.

Conservatism is an important tool in agency conflict and if it is applied effectively, can increase firm value, and hence protect the interests of the minority shareholders (Watts, 2003). Board of directors and audit committee characteristics that lead to higher conservatism indicate that good governance practices lead to better monitoring and produce transparent financial reporting. Most studies that assess the effectiveness of the board of directors or audit committee on financial reporting relate to earnings management, firm performance, financial distress status and disclosure on corporate social responsibility. None so far has assessed the internal governance structure of Malaysian firms with conservative accounting. A survey study carried out by Ismail and Abdullah (1999), examined the perception of financial analysts on accounting conservatism. The study reported that 73% of the financial analysts agreed that conservatism improves earnings quality and perceived that the audit committee influences conservatism. However, the study did not provide empirical evidence on the association between audit committees and conservatism.

#### 5. Existing Evidence

Empirical evidence on the link between corporate governance and conservative accounting mostly is available in developed countries. For instance, UK studies was performed by Beekes, Pope and Young (2004) who focused on the board

composition. Several studies examined the effect of corporate governance on conservatism of US firm: A. S. Ahmed and Duellman (2007) examined the characteristics of the board of directors, G. V. Krishnan and Visvanathan (2008) focused on the financial expertise in the audit committees but include other attributes of the board of directors and audit committee as well, LaFond and Roychowdhury (2008) focused on the managerial ownership and Lara, Osma and Neophytou (2009) employed an aggregate measure of the board characteristics. Spanish study was carried out by Lara, Osma and Penalva (2007) who examined the effect of aggregate measure of board characteristics on conservatism. Shuto and Takada (2010) examined managerial ownership and conservatism of Japanese firms whilst Kung, Cheng and James (2010) examined concentrated ownership and conservatism of Chinese firms.

This thesis is motivated to identify whether the results of UK and US studies hold in Malaysia since they have dispersed ownership as opposed to the highly concentrated ownership in Malaysian firms. Particularly, a majority of the board of Malaysian listed firms are dominated by the inside substantial shareholders who may influence the behaviour of the rest of the board members.

## 6. Ethnicity

Tsakumis, Campbell and Douppnik (2009) stated that national culture directly influences conservatism as this accounting practice involves judgement. Malaysia is a multiracial country, where its economy has clearly distinct capital segments divided along ethnic lines (Jesudason, 1989). Different aspects of culture (i.e., ethnicity and demography) could influence business and accounting disclosure practices and audit services (Haniffa & Cooke, 2002). Malaysia's population of 26.75 million is composed of Malays 54.2%, Chinese 25.3%, Indians 7.5% and others 13% (Ninth Malaysia Plan 2006-2010). Malays and the indigenous group in Sabah and Sarawak are collectively known as Bumiputera. Different ethnic groups in Malaysia, therefore, may have different interpretations of the accounting rules especially when this involves their own judgement. Hence, the common set of financial reporting rules across countries is not sufficient to ensure international comparability of financial statements.

Rees (2004) emphasised that the study of accounting differences and identifying causes for the difference is a valid focus for academic study. So far, there is no evidence in Malaysia on the relationship between ethnicity and conservatism. This finding will have significant implications for the global harmonisation of accounting (Tsakumis, 2007).

## **1.4. Significance of this thesis**

### **1.4.1. Contribution to Theory**

Agency theory suggests that conflict between managers and shareholders could be reduced through managerial ownership and good structure of governance mechanism. Many corporate governance studies, which centred on agency theory, do not find conclusive evidence to support the theory. Hence, complementary theories were developed in the literature to explain evidence not consistent with the agency theory, namely stewardship theory, resource dependence theory and managerial hegemony theory.

Findings from this thesis will strengthen our understanding of the relevance of the abovementioned theories in explaining the behaviour of the governance practices and financial reporting in the Malaysian business environment. Additionally, this thesis offers evidence consistent with positive accounting theory which suggests that conservative accounting as a useful tool to reduce agency conflict. Many studies only focused on assessing the effectiveness of corporate governance structure in reducing agency conflict, by examining firm performance, earnings management and disclosure. In addition, to evaluate the effectiveness of governance structure in Malaysian firms, the main outcome from this thesis will show whether the existing governance structure is effective in promoting another agency tool that is, accounting conservatism.

Evidence from US and UK are supportive of the positive accounting theory as firms with good governance structure employ more conservative accounting. The outcome of this thesis will reduce the gap on corporate governance literature and

provide evidence whether the same tool can be employed in emerging economies like Malaysia.

#### **1.4.2. Contribution to Policy Makers and Regulatory Agencies**

The Malaysian code on corporate governance largely follows the UK code which emphasises sound governance principles for the prosperity and accountability in the business. In 2007, the code had been revised to strengthen the roles and responsibilities of the board of directors and audit committee. Among others, it highlights the composition of the board and the importance for the independent non-executive directors to have an independent oversight function. Despite the effort to promote best governance practices in Malaysian firms, many scholars argued whether the same standard of governance in developed countries can function effectively in a country which has a different legal system, business culture and corporate structure. Particularly, Malaysian business ownerships are dominated by large shareholders who always have influence on the management of the firms. Due to poor enforcement of legal protection on shareholders and ineffective market discipline in Malaysia, the controlling shareholders are free to act in their own best interest rather than for the company as a whole.

Results from this thesis become an input for the relevant authorities to plan and design policies that are most suitable for Malaysian business culture. Bank Negara Malaysia, Securities Commission, Bursa Malaysia and the Malaysian Institute of Corporate Governance, or other regulatory bodies, will benefit from the findings of this thesis, as the findings promote understanding the effect of concentrated ownership on the quality of the financial statements. This will help the authorities to evaluate the current listing requirements and assess the existing ownership structure in Malaysian firms. Additionally, this thesis will provide an understanding and awareness to the relevant parties of whether the current governance practices produce the expected outcome. Understanding the effect of internal governance structures on conservatism also allows the authorities to assess the effectiveness of the firms' governance structure. Findings from this thesis will be an eye-opener for the authorities to understand the status of agency

conflict in Malaysia, and hence initiate and formulate an effective, yet powerful, tool to overcome agency conflict created by the controlling shareholders. The authorities will be able to emphasise suitable methods to overcome any loophole within the system.

### **1.4.3. Contributions to Researchers**

Many previous studies examined the link between corporate governance and financial reports on a short term basis. The benefit of panel data methodology explained and employed in this thesis will motivate researchers to examine a more extensive period so that the results can be generalised and provide meaningful interpretations. Additionally, ownership concentration is a unique factor in Asian countries like Malaysia, but studies which have investigated Malaysian firms did not incorporate ownership concentration into their studies. The outcome from this thesis may highlight the influence of the concentrated owners on the financial reports and the corporate governance mechanisms employed by the firm.

The outcome of this thesis will benefit researchers because it provides empirical evidence relating to agency conflicts in developing countries such as Malaysia. The unique setting of Malaysia provides additional knowledge on the effect of concentrated ownership and ethnicity on conservative accounting. This thesis contributes to the literature on corporate governance studies and may encourage more studies on corporate governance and conservative accounting.

### **1.4.4. Contribution to Users of the financial statements**

Financial information is used to assess the firm's financial position in order to forecast the firm's future prospects. The users of financial statements include financial analysts, investors, creditors, managers and executives who will use the outcome from their analysis in decision making. Understanding factors that influence the financial statements will moderate dependence on financial statement figures and build confidence in decision making.

**Financial analysts:** Financial analysts who help businesses to make investment decisions, would analyse the financial reports and follow up with interviews with the firm's representatives to gain better insight into the firm's prospect and managerial effectiveness. Therefore, the results of this thesis are significantly important to them as the results will highlight factors that contribute to the conservatism practices of the firm and help them to assess the financial report effectively.

**Investors:** Empirical evidence showed that Malaysian firms practice earnings management (Rahman & Ali, 2006) and perform insider trading (Ameer & Othman, 2008). Haat, Rahman and Sakthi (2008) claimed that there is an expectation gap between the information disclosed in the financial reports and the way the information is used by investors for decision making. This reflects the loss of confidence in the truthfulness of information provided by the firm when the shareholders use other reliable sources of information instead of the annual report. Therefore, it is important to explore the influence of corporate governance on accounting conservatism; since conservatism has been associated with reliable financial information as it controls managers' expropriation activities.

Findings on the effect of ethnicity on conservative accounting provide insight as to whether financial reports in Malaysian firms are comparable to those in other countries. The result will guide investors to decide whether financial statements in different countries are comparable and help them to decide whether that country is worth the investment.

**Creditors:** Creditors will also benefit from this thesis because the results may provide a basis for assessing their client. Since previous studies showed that creditors demand higher conservatism, they may become more alert to firms which may possess characteristics contributing to lower conservatism.

**Managers and Auditors:** The results of this thesis are useful to management who are concerned with the financial reporting quality and corporate governance practices in their firms. The concentrated owners and management should learn from this thesis that their impact on conservative accounting is recognised by

other users; hence this should discourage them from expropriating firms' wealth for their own use.

Knowing the effect of concentrated owners and internal governance mechanisms on conservatism would be an advantage to the auditors. The auditors will be able to plan the audit task and to focus on accounting figures that are within the discretion of the management.

## **1.5. Study Design**

This thesis uses two measures of conservatism: one is accrual-based and the other is asymmetric timeliness, and examines if ownership concentration, board of directors, audit committee and ethnicity impact conservatism practices in Malaysian firms. Additionally, this thesis investigates if ownership concentration moderates the effect of firms' governance on conservatism. The sample for this thesis is Malaysian listed firms observed over seven years from 2001 to 2007. Accordingly, this thesis employs a panel data regression model that is suitable to analyse longitudinal data. Data used in this thesis were obtained from Datastream and online annual reports. The outcome from the analysis provides evidence on the relationships between the explanatory variables and conservatism.

## **1.6. Definitions of Term**

Throughout this thesis, the term conservatism is used interchangeably with accounting conservatism, conservative accounting and conservative financial reports. Further, since this thesis uses accrual based conservatism and asymmetric timeliness as measures of conservatism, they are used in place of conservatism to correspond with the results obtained in this thesis.

## **1.7. Structure of this thesis**

The remainder of this thesis is organised as follows. Chapter 2 reviews previous evidence on conservatism, ownership structure, board of directors, audit committee, ethnicity and moderating relationship. Chapter 3 presents the



conceptual framework of this thesis and hypotheses development. Chapter 4 presents the methodology, which explains the sample used in this thesis and measurements of the variables. Chapter 5 presents the descriptive analysis and main findings. Finally, chapter 6 presents the discussion on the results, the conclusions, the implications and limitations of the study followed by suggestions for future research.

## **1.8. Summary**

This chapter provides an overview of the roles of accounting conservatism in the agency relationship and briefly explains the relation of conservatism with the corporate governance mechanisms examined in this thesis, namely concentrated ownership, board of directors and audit committee as well as ethnicity of directors. Further, this chapter presents the objectives, motivations and significance of this thesis.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1. Introduction**

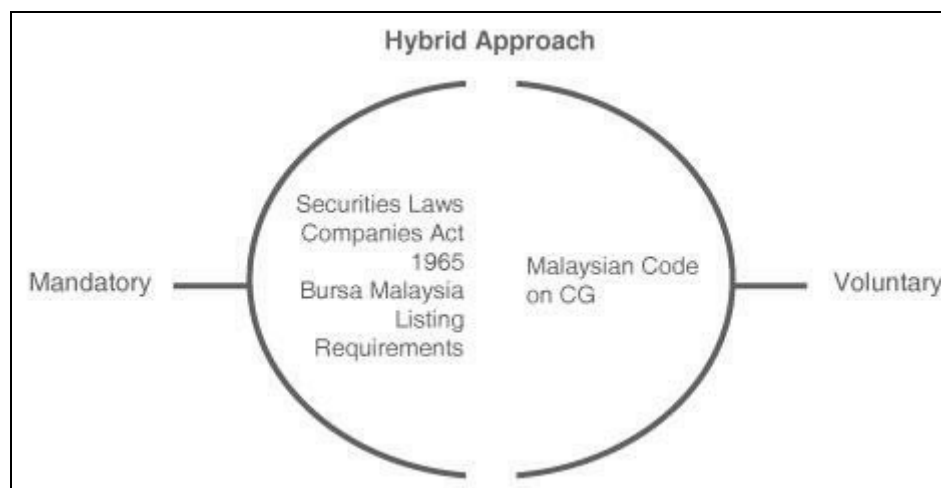
Agency theory argues that an increase in share ownership may reduce agency conflict. Initiated from agency theory, many studies have investigated the influence of corporate ownership on firms' economic activities and financial reporting. Additionally, board of directors and audit committee are important governance mechanisms to control managers' opportunistic behaviour. Whilst it is expected that these mechanisms reduce agency conflict, it is not as effective as those in developed countries.

This chapter reviews extensive research works on ownership structure, internal governance and financial reporting. This chapter begins with the overview of corporate governance in Malaysia. Next, it discusses theories underlying the studies followed by the previous empirical evidence on accounting conservatism. The reviews were further extended to the ownership concentration, characteristics of the board of directors and audit committee and ethnicity of directors in relation to their effect on firm performance and financial reporting. The review on moderating relationship was presented in the end of the chapter.

#### **2.2. Corporate Governance in Malaysia**

The Asian financial crisis in 1997 imposed pressure on the Malaysian government to strengthen its corporate governance system. It was argued that highly concentrated ownership and weak boards of directors were the cause of the crisis. The presence of concentrated ownership in Malaysia however, is not a surprise as it had long been acknowledged by M. H. Lim (1981). In 1998, Finance Committee on Corporate Governance (FCCG) and Malaysian Institute of Corporate Governance were formed, to review and reform corporate governance system in Malaysia. Subsequently, FCCG produced the Malaysian Code on

Corporate Governance in March 2000. The code covers four areas relating to board of directors, director's remuneration, shareholders and accountability, but is principally directed at increasing the efficiency and accountability of the board of directors. Even though compliance with the code initially was voluntary, in 2001 it was made mandatory by the Bursa Malaysia for listed firms to disclose the extent of their compliance (or justification for non-compliance) with the code. Figure 2.1 displays the Malaysian Corporate Governance Regulatory Framework.



**Figure 2.1: Malaysian Corporate Governance Regulatory Framework**

Source:

[http://www.bursamalaysia.com/website/bm/regulation/corporate\\_governance/framework.html](http://www.bursamalaysia.com/website/bm/regulation/corporate_governance/framework.html)

The Malaysian High Level Finance Committee defines corporate governance as, “the process and structure used to direct and manage the business and affairs of the company towards enhancing business prosperity and corporate accountability with the ultimate objective of realising long term shareholders value, whilst taking into account the interests of other stakeholders”. Corporate governance is important from both economic and finance perspectives. The economic aspect views that efficient corporate governance structure is able to allocate scarce funds to investment projects with the highest returns. The finance aspect views its importance in protecting invested funds and in generating returns. Ultimately, effective corporate governance should result in reliable financial reports from which investment decisions can be made that yield adequate returns (Shleifer & Vishny, 1997).

The Malaysian Code on Corporate Governance is largely modelled on the UK code which recognised the importance of sound governance principles for business prosperity and accountability. Following the Anglo-American approach, the model is commonly referred to as the “shareholder model” or “market model”. This model displays the unitary system where the board of directors is the highest governing body in the company. Under this system, the individual (outside) shareholders do not generally influence the direction of the firm (Keasey & Wright, 1993) but require independent outside directors to monitor the management including the CEOs. To be considered independent, the directors must pass the general test of independent as stated in Para 1.01 of Bursa Malaysia Listing requirements: “independent of management and free from any business or other relationships which could interfere with the exercise of independent judgment or the ability to act in the best interests of the company as well as not related to relatives, major shareholders or executive directors of the company and not the professional advisers, nominees of directors, officers within the last two years or certain parties contracting with the company”.

The Malaysian firms’ board were largely independent from the management as indicated by the ratio of the independent directors on the board and the separation of role between the CEO and the board chairman (S. N. Abdullah, 2004, 2006a). In fact, board independence was a practice of some companies even before the code on best practices was introduced. S. N. Abdullah (2004) reported that about 20% of Malaysian companies during 1994-1996 sample period combined the roles of chairman and CEO. Saleh et al. (2005) reported for year 2001, 45% of Malaysian listed companies combined the roles which was lower than the 80% reported for US companies. Though the studies suggest that the Malaysian board is independent from management, the effectiveness of the independent directors in Asian countries to ensure sound corporate governance, is still in doubt, because controlling shareholders appoint the entire board of directors (Allen, 2000). Hence, the requirement in the Malaysian Code on Corporate Governance that firms should appoint at least one third of independent non-executive directors on the board, which is aimed to balance the board composition and to avoid any dominant group of members, does not warrant board independence. It was argued that over a longer period, the independent judgment of the non-executive directors

may be diminished because they are bonded to the insiders, making them more sympathetic, or having interests closely aligned with the insiders. Tan Sri Zarinah Anwar, who was then the Chairman of Securities Commission Malaysia, stated that the appointment of the independent directors is “substance over form” as shown by the persistent failure to detect wrongdoing in firms (Pascoe & Rachagan, 2005).

Empirical studies showed that independent directors had no impact on the firms' outcome. S. N. Abdullah (2004) examined data in 1994-1996 and found that independent directors on the board had no influence on firm performance. S. N. Abdullah (2006b) examined data in 1998-2000 and reported that non executive directors were only effective during financial crisis because in that period, investors expected them to produce timely financial reports. Saleh et al. (2005) who observed 2001 data, found that a greater proportion of independent directors on the board could not limit earnings management. Rahman and Ali (2006) focused on the period 2002-2003, after the introduction of the Malaysia Code on Corporate Governance, and found that only board size had a significant influence on earnings management, with no influence attributable to board and audit committee independence, CEO duality, tenure, members' financial expertise and number of audit committee meetings.

Due to the strategic roles of the board of directors, the best practice of corporate governance allows some specific tasks to be delegated to its committees. One of them is the audit committee to assist the board in monitoring the firm's financial position. The formation of the audit committee has been made mandatory for all listed companies since 1993, but a one year grace period (1994) was allowed for listed companies to comply. A survey carried out by Sori, Mohmad and Hamid (2001) found that in 1994, only 56% and 24% of the sample on the main board and second board companies respectively, complied with the requirement. Further, the compliance by all sample firms was only achieved in 1998. Bursa Malaysia emphasises the quality of the audit committee members: Para 15.09(1)(b) of the listing requirements require that a majority of independent directors must sit on the audit committee and Para 15.09(1)(c) requires that at least one member is financially literate. Based on 2002 data, Haron, Jantan and

Pheng (2005) showed that some companies violated this requirements where 9% of companies' audit committees did not have members with financial expertise and 13% of the companies did not have a majority of independent directors in their audit committee. The results suggest that lack or delay in complying with the regulation is a clear indication of weak enforcement.

Malaysian firms are obliged to follow the Bursa Malaysia listing requirements, but evidence suggests that not all elements emphasising on the audit committee have significant impact on the firms' outcome. Al-Murisi and Abdullah (1997) found that length of formation and independent directors on the committee did not improve the committee effectiveness. Instead, the presence of accountants on the committee was found to be of the utmost importance. Supporting the evidence, Rahmat, Iskandar and Saleh (2009) found that financial expertise on the audit committee was inversely related to the firm's financial distress status. Audit committee size and members' independence; however, were not significantly different from the non financial distressed firms. Hence, the results support the guideline in the Malaysian Code on Corporate Governance and Bursa Malaysia listing requirements that firms must appoint financial expertise on its audit committee; but more needs to be done to strengthen the independent element of the board and its committee.

Since the creation of Malaysian Code on Corporate Governance, corporate governance standards in Malaysia are perceived have been improved following the outcome from the Malaysian Corporate Governance Survey in 2002 (Shim, 2006). The results of the survey among others showed that most of the Malaysian private limited companies (PLCs) had segregated the CEO and chairman roles; and the PLCs recognised that transparency and disclosure in the capital market enhance the confidence of investors. Vichitsarawong et al. (2010) noted that corporate governance reforms in Hong Kong, Malaysia, Singapore and Thailand might have contributed to higher conservatism in the countries, after the 1997 Asian financial crisis relative to the pre-crisis period. However, Tuan Abdul Alim Abdullah, the former CEO of Companies Commission of Malaysia stated that compliance on the best guidelines was still at a low level as firms still experience corporate abuses, conflicts of interest, failure in maintaining proper accounting

records and reporting false information (Pascoe & Rachagan, 2005). The perception that corporate governance in Malaysia is ineffective in reducing agency problems led to the suggestion that the system is merely a ceremonial rubber stamp (Mallette & Fowler, 1992), form over substance, (Pascoe & Rachagan, 2005), window dressing (Shim, 2006) and box ticking (Haat et al., 2008).

### **2.3. Ownership Concentration in Malaysia**

Thillainathan (1999) reported that a joint survey carried out by FCCG, the KLSE (now known as Bursa Malaysia) and PriceWaterhouseCoopers in 1998, revealed that substantial shareholders became members of the board of most Malaysian listed companies; more than a quarter of them were also involved in the management of the companies. This interference of the substantial shareholders will jeopardise the interest of the minority shareholders. Highly concentrated ownership was a contributing factor in the financial crisis in 1997 and remains a problem today. In the post-financial crisis, the ownership concentration become more entrenched through ownership structure (Tam & Tan, 2007). Highly concentrated ownership in East Asian countries can be explained from two different views. The political view, on the one hand suggests that ownership concentration arises as a natural response to high managerial agency costs (Roe, 2003). On the other hand, the legal view suggests that shareholders concentrate their shareholding to overcome poor legal investor protection (La Porta et al., 1998; Shleifer & Vishny, 1997). La Porta et al. (1998) suggested two possible reasons for highly concentrated ownership in countries with weak investor protection. Firstly, large capital investments allow the shareholders to closely monitor the management. Secondly, low protection discourages the small shareholders from paying shares at a high price, hence low demand from them indirectly stimulates ownership concentration. Ultimately, concentrated ownership substitutes legal protection. Another contributing factor for highly concentrated ownership is corrupted or ineffective outside governance mechanisms such as product markets, labour markets and takeover markets (Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). Malaysia specifically, was

ranked relatively high in legal protection for shareholders (La Porta et al., 1998) but the enforcement of the law is weak (Krishnamurti et al., 2005). Further, Young et al. (2008) stated that the board of directors itself needed institutional support, so that they could function effectively, but it appears that the institution itself is not effective. Similar point was raised by Barton, Coombes and Wong (2004) that good governance practices could not be achieved when there is weak enforcement of legal regulations, insufficient well-trained accountants and disruption of cultural factor in the board room.

Thillainathan (1999) explained four types of control and cash-flow rights groups in Malaysian companies. The first group is the management-control that refers to dispersed ownerships where managers have control rights but have little or no cash flow rights. Very few Malaysian firms fall in this group. The other three groups are shareholder-control that are categorised as follows: (a) direct majority stake with controlling rights, (b) direct minority stake with controlling rights and (c) indirect stake through pyramid and cross-shareholding. The pyramid structure enables the shareholders to obtain outside capital into the founding group while at the same time retaining the capital within the group. These poor structures lead to less transparency and prevent good governance systems. Many Malaysian companies are in group (a) and (b) whilst many public companies are in group (c). In group (c), the control rights of the shareholders far exceed their voting rights because of wide control including controlling rights in subsidiaries or associated companies of the listed companies. As noted in Singam (2003), majority shareholders who gained control through cross-shareholding have less concern in the business; but have great interest in nominating the board (Rachagan, 2010). Thillainathan (1999) also noted that the firms' resources are commonly passed among the majority shareholders without due regard to accepted principles of bookkeeping and accounting.

Since large shareholders govern the firms (Thillainathan, 1999), they do not rely on legal aspects to protect their investment. Legal protection is important to the minority shareholders but if concentrated owners substitute the legal protection, expropriation by the large shareholders could adversely affect the interest of the minority shareholders. Singam (2003) acknowledged that expropriation activities



of the controlling shareholders include paying a special dividend to themselves, entering into unfavourable business transactions with other companies that they have control of, or engaging in excessively risky projects, that benefit them but put other stakeholders at the risk of failure. The controlling shareholders also abuse the power they have in firms, which commonly results in less transparency, opaque financial transactions and misuse of funds raised (Solomon, 2007). The behaviour of the controlling shareholders could be driven by incentive that are different from the minority shareholders; the large shareholders invest not because they want to maximise their wealth but more to maximise the private benefits associated with control and empire building (Thillainathan, 1999).

Many studies have argued that corporate governance in Asian firms does not function effectively mainly due to the weak legal system or poor enforcement, high concentrated ownership and family-controlled types of companies (Allen, 2000; Globerman, Peng, & Shapiro, 2011). In addition, the relevant authority did not enforce the regulation, as one example provided in Bidin (2009) shows that no action was taken even though firms failed to file annual accounts or to hold an AGM. Yet, the only measure taken by the Companies Commission of Malaysia was suggesting that the directors attend a training program, with no indication of its benefit being relevant to the problem. Further, the corporate governance model in UK was designed to reduce the conflict between managers and shareholders, hence the same model may not be able to reduce conflict between controlling and minority shareholders (V. Z. Chen, Li, & Shapiro, 2011)

## **2.4. Theoretical Background**

Corporate governance studies were motivated from the agency perspective whereby firms employed governance mechanisms to control agency conflict in firms. Ownership structure, board of directors and audit committee are internal governance mechanisms developed to meet this purpose. Additionally, empirical studies showed that accounting conservatism can also govern the firm as it reduces managers' opportunistic behaviour and increases firm value (Watts,

2003), hence complementing the monitoring role of the other governance mechanisms.

### **2.4.1. Agency Theory**

Agency theory deals with the contractual relationship between the agent (manager) and the principal (shareholders) under which shareholders delegate responsibilities to the manager to run their business. This theory argues that when both parties are expected to maximise their utility, there is good reason to believe that the agent may engage in opportunistic behaviour at the expense of the principal's interest. Jensen and Meckling (1976) modelled this condition as an agency relationship where the inability of the principal to directly observe the agent's action could lead to moral hazard, thus increasing agency cost. To reduce the conflict, it was suggested that managers own shares of the firm so that their interests are in line with shareholder's wealth maximisation. The traditional manager-shareholder conflict, however, is not relevant to firms with highly concentrated ownership. According to Hannsmann cited in Rachagan (2006, p. 268), other than manager-shareholder conflict and company-other contracting party conflict, the conflict between majority shareholders and minority shareholders is more relevant in the Malaysian economy due to its highly concentrated ownership structure. This conflict indicates that the controlling shareholders (including managers) expropriate the interest of the minority shareholders for their own private advantage (Fan & Wong, 2002).

Large shareholders can easily monitor managers because they have more access to information and thus have more knowledge of decision making (Shleifer & Vishny, 1986). However, since the large shareholders' investment is less diversified, and they thus have limited liquidity, they are exposed to financial loss if the firm experience difficulties. This constraint may encourage them to extract a private benefit at the expense of the minority shareholders. As large owners have effective control of the firm and also because they oversee the financial reporting policies of firm (Fan & Wong, 2002), they can, and will, conceal any expropriation from the financial reports. Leuz, Nanda and Wysocki (2003)

affirmed that the incentive to avoid external monitoring and loss of reputation encourage the dominant shareholders to conceal their behaviour.

In addition, agency theory points out the role of the board of directors to monitor both the majority shareholders and management; and to protect minority shareholders' interests (Fama & Jensen, 1983). It was suggested that the board of directors could help reduce agency costs because it holds ultimate control over management even though some of the decision functions are entrusted to top management. Sound corporate governance should be considered as a vital means in reducing agency conflict especially when it functionally accommodates the interest of all shareholders. Complementing the board role in monitoring the management, resource dependence theory suggests the board be represented by outside directors to enhance flow of information and reduce uncertainty and secure firms' resources. Pfeffer & Salancik (2003) suggested that the board act as a 'co-optative' mechanism that links firms with the external environment in accessing resources, exchanging information, developing inter firm commitment and establishing legitimacy.

Managerial hegemony theory views the board of directors as a legal fiction that is ineffective in reducing agency conflict, if the management dominates the board (Mace, 1971). As a 'co-optative' mechanism, the board is flexible and easy to implement as management may control the selection of the outside directors (Pfeffer & Salancik, 2003). Management may appoint outside directors who have less knowledge about the business, hence making them dependent on the information supplied by the managers. Or the outside directors are motivated merely by the financial incentive from the board seat and desire the reputation associated with board membership (Kosnik, 1987). Directors who have weak attributes are less likely to challenge the management decision.

#### **2.4.2. Positive Accounting Theory**

The firm is considered as 'nexus of contracts' (Jensen & Meckling, 1976), where it has a contractual relationship with various groups of people such as employees,

creditors, government and public, simply referred to as the stakeholders. Positive accounting theory is associated with the contractual view of the firm where accounting is used as a tool to facilitate the formation and performance of the contract by mitigating the contractual costs that may arise from the agency conflict. In contrast to normative theory that seeks to determine the appropriate structure of managers' incentive to reduce the agency conflict, positive accounting theory predicts and explains actual accounting practices and focuses on analysing the agency costs arising from the contractual arrangement between the owners and top management of the firm (Jensen & Meckling, 1976). This theory posits that managers make accounting choices tailored to their needs to increase their wealth through compensation incentives, to avoid violation of debt contract or to minimise political cost. Positive accounting theory, thus suggests that accounting choices such as conservatism are desirable to limit managers opportunistic behaviour, without which managers are able to extract firms wealth for their private benefit.

## **2.5. Prior Studies**

The existing evidence on the relationship between accounting conservatism with ownerships structure, board of directors and audit committee is scarce, despite many empirical studies documenting the merits of conservatism in the agency relationship. Further, those studies that examined conservatism and corporate governance were mostly conducted in developed countries. To understand and to assess the role of these governance mechanisms on conservatism, the effectiveness of those mechanisms are reviewed based on other aspects of financial reporting that commonly exist in the literature.

This review starts with the merits and downsides of conservatism. Next, findings from previous studies are classified according to the factors examined in this thesis namely; ownership concentration, board of directors' characteristics, audit committee characteristics, ethnicity and moderating relationship.

### **2.5.1. Accounting Conservatism**

Accounting conservatism practices have been the subject of a long-standing debate as to how they affect the quality of the financial statements. Discussion on conservatism has appeared in the literature since the 1960s (e.g. Devine, 1963; Sterling, 1967) and continues to the present. Financial Accounting Standard Board (FASB) (1980, para. 92) stated that: “.....introduces a bias into financial reporting, conservatism tends to conflict with significant qualitative characteristics, such as representational faithfulness, neutrality, and comparability (including consistency)”. FASB however, affirmed that conservatism should not arise from deliberate consistent understatement of net assets and profits. Malaysian Accounting Standards Board (MASB) (2007, para. 37) stated that deliberate action to understate assets or incomes; or overstate liabilities or expenses and creation of hidden reserves would result in non-neutral information and reduce the quality of reliability.

The auditors, audit committee members and management are struggling to define the concept of quality (Jonas & Blanchet, 2000) because financial reporting quality is a vague concept which has led many studies to focus on factors that constrain the achievement of earnings quality such as earnings management, financial restatements and fraud (Cohen, Krishnamoorthy, & Wright, 2004). Consistent with the accounting standards board, Jonas and Blanchet (2000) affirmed that accounting information that meet the desired qualitative characteristics should be faithful, verifiable, neutral and consistent. They however added that, the quality of the financial reports could be viewed from different approaches, either from users need or for shareholders' protection. The users view quality financial reports as those that provide relevant and reliable information for decision making. For shareholder protection, quality of the financial reports is viewed as those that provide full and fair disclosure and does not contain misleading information. In conservatism however, there is a trade-off between relevant and reliable. Conservatism may be less relevant due to the bias in understatement of the earnings, but it provides reliable information as to the reported figures, which minimised managers' opportunistic behaviour and provide

for timely reporting on potential loss. One important effect of conservatism noted by Kirk and Siegel (1996, p. 55) is “.... prudent reporting based on healthy scepticism build confidence in the results and in the long run best serves all of the divergent interests that are represented by the [FASB’s] constituents”.

The importance of conservatism was highlighted in a survey carried out by Graham, Cannice and Sayre (2002) that financial analysts treated conservative financial reports as more important than the underlying reported earnings of the firms. Their results suggest that accounting conservatism adds value to the financial reports; plausibly because it produces clean and reliable accounting figures. Q. Chen et al. (2007) found that conservatism reduced managers’ incentive to manage earnings. They argued that managers managed earnings to fulfil investor expectations to avoid adverse effect on the share prices. Since conservatism recognises losses in a timely manner and delays the recognition of gains until they are verified; it reduces the impact of the news on the share price and in turn limits the incentive for earnings management. The findings of Iyengar and Zampelli (2010) proved that conservatism produced reliable financial reports as managers’ incentive was tied to the accounting performance. To a certain extent, these findings do not support Penman and Zhang (2002) who claimed that conservatism adversely affect the quality of the earnings. Specifically, they reported that conservatism increased unrecorded reserves in high growth firms, and when the growth of the investment was reduced; the release of the reserves inflated future income. Of a similar view, Sen (2005) pointed out that conservative accounting may lead to unsustainable high future earnings. In contrast to steady growth firms, future earnings of growth firms are higher because the growing investments are able to sustain higher levels of future earnings. When the steady growth firms wanted to show higher earnings, they would mimic the quality of the growth firms by making an adverse selection decision, such as cut back on investments (and thus depreciation on invested assets) in the short run or choose less conservatism. It was argued that, even though asymmetric timeliness, which measures conservatism, reduced earnings persistence (Basu, 1997), it benefits the borrower in terms of lower borrowing costs (A. S. Ahmed, Billings, Morton, & Stanford-Harris, 2002). Consequently,

equity holders may prefer timeliness of loss even though it impairs the earnings persistence (DeFond, 2010).

Much evidence supports conservatism's advantages to firms particularly as an agency tool. The governance role of financial information depicted in Figure 2.2 shows that financial information produced as a result of conservative accounting, disciplines managers on project selection and prevents expropriation activities. Bushman and Smith (2001) argued that information in the financial reports provides direct and indirect inputs to corporate control mechanisms, which promote efficient governance of corporate control. Consistent with this argument, the findings of Ball, Robin and Sadka (2008) showed that IPO firms employ greater conservatism as demanded by the market and regulatory authorities for timely loss recognition upon going public. Additionally, Sun and Liu (2011) reported that firms employed higher conservatism when they were closely monitored by financial analysts.

The findings of Lara et al. (2009) showed that the impact of not controlling opportunistic behaviours earlier is harmful to the firms' wealth. They reported that UK bankrupt firms in their study sample showed a decrease in conservatism and aggressive earnings management prior to firm failure. In contrast, Francis and Martin (2010) showed that financial reports of firms with more profitable investments, which were measured by bidder's announcement returns and by changes in post-acquisition operating performance, were more conservative. Their evidence implies that conservatism disciplines and encourages managers to maximise the shareholders' wealth.

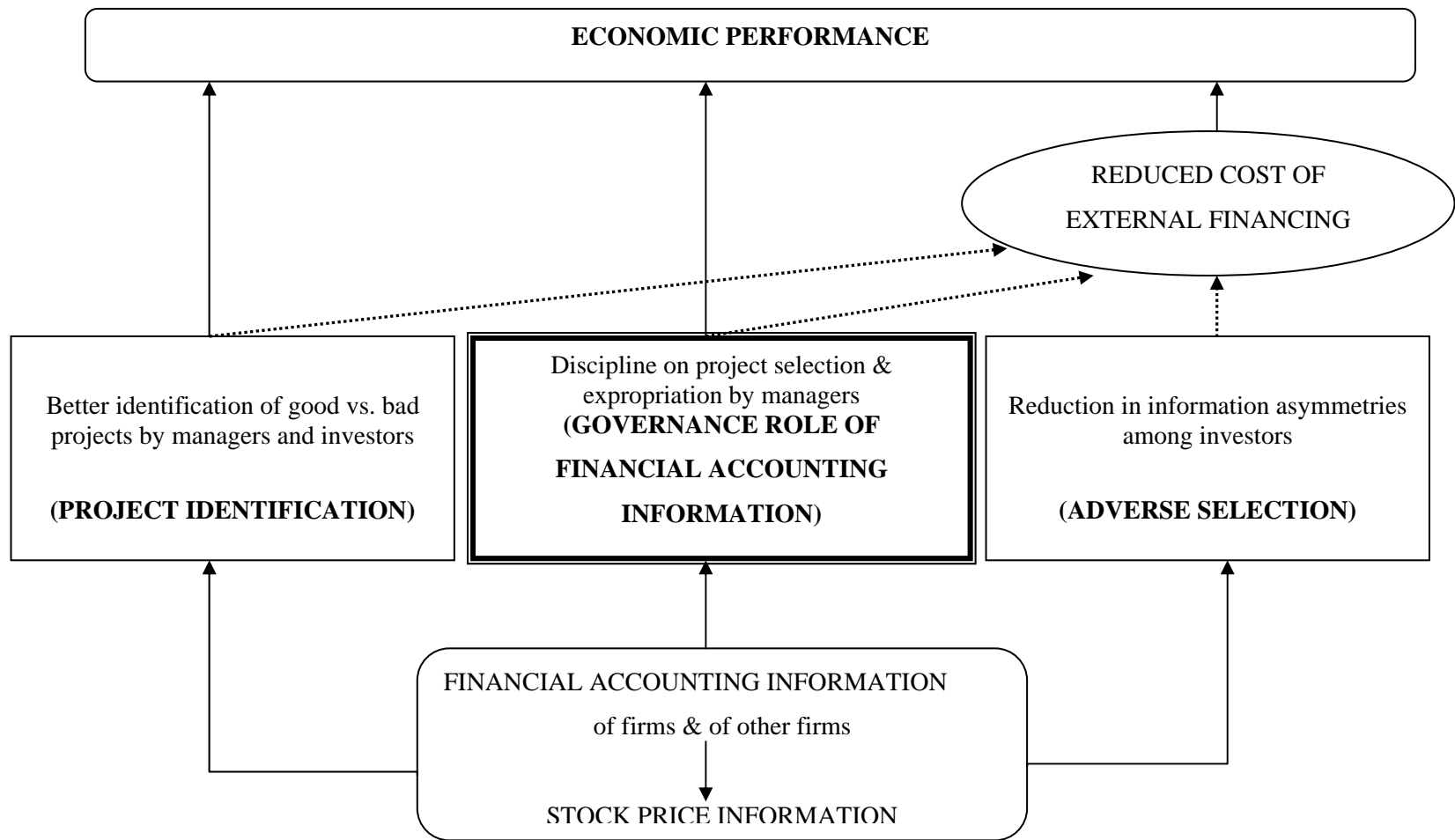


Figure 2.2: Governance Role of Financial Information  
(Source: Bushman and Smith (2001))



As a governance tool, conservatism is significantly important in debt contracts and executive compensation contracts (Watts, 2003). In debt contracts, creditors favour conservatism because they are concerned with the lower bound measure of a firm's net assets before granting loans (Beneish & Press, 1993). In liquidation cases, conservative accounting is applied to determine the value of the net assets; where possible losses are taken into account leaving out the unverifiable gains. The dividend covenant in debt contracts also demonstrates conservatism so that managers are obliged to meet the minimum net assets to repay the creditors. A. S. Ahmed et al. (2002) proved the significant role of conservatism in debt contracts as firms with conservative financial reports were ranked higher in debt rating and had lower cost of debt. Further, Zhang (2008) showed that conservatism benefits the lender in terms of an early signal of possible debt violation and that advantage was shared with the borrower in terms of lower interest costs. Managers have the advantage of holding private information and may use the information to profit themselves (LaFond & Watts, 2008). Additionally, managers enjoy limited liability and limited tenure that enable them to escape from their poor decisions (LaFond & Roychowdhury, 2008) and such decisions may be detrimental to the shareholders' wealth. For instance, managers who require excessive compensations may overstate earnings and avoid outflow funds such as foregoing positive net present value projects. Or, they may accept negative net present value projects in order to foster "empire-building" or manipulate stock price (A. S. Ahmed & Duellman, 2007). Conservatism is important in executive compensation contracts because possible losses as a result of managers' decisions are shown immediately in the financial reports; hence managers are not overpaid (Watts, 2003).

Based on the theoretical argument that shareholders incur agency costs in order to reduce agency conflict, Kwon (2005) showed that conservative accounting was useful in controlling the suboptimal managerial decisions relative to earnings reported neutrally or liberally. Conservatism also lowers asymmetric information and enhances value relevance of earnings, thus strengthening its role as a governance mechanism. H. Lin (2006) showed that conservatism is effective in revealing managers' private information on projects undertaken by the firm. The study indicates that for a good project, managers are willing to employ conservatism as they could enjoy compensation in the period the project produces cash flow.

However, managers who undertake bad project are declining to employ conservatism because they will lose compensation in any such period. Hence, the decision to employ more or less conservatism signals the prospects of the project undertaken by the managers. LaFond and Watts (2008) asserted that accounting conservatism reduces asymmetric information as it provides hard information on verifiable gains and discloses possible losses which managers might decline to reveal. With lower asymmetric information, managers are constrained from hiding unfavourable information. Hui, Matsunaga and Morse (2009) investigated the effect of conservatism on management earnings forecasts; and showed that increase in conservatism reduced the frequency and timeliness of the earnings forecast. The result is consistent with the role of conservatism in reducing information asymmetry and future uncertainty.

With regard to the value relevance of earnings, Kim and Kross (2005) argued that timely recognition of bad news in earnings might affect the firm's ability to generate future cash flow, which indeed makes it more pertinent for cash flow projection. In order to test the notion, the study grouped the sample firms into a 'conservatism increasing' industry and a 'conservatism not increasing' industry. The results showed that the explanatory power of the earnings to predict future cash flow increased in the 'conservatism increasing' group but not in the other group. The evidence implies that conservatism improves the predictability of future cash flows. W. D. Brown et al. (2006) argued that the value relevance of earnings was reduced due to managers' opportunistic behaviour in using accounting choice that favours their personal interest. Since conservatism constrains managers' expropriation activities, it therefore increases the value relevance of earnings particularly in countries with higher accrual intensity.

### **2.5.2. Ownership Concentration**

The traditional agency conflict suggests that managers involved with daily business activities, tend to create asymmetric information and expropriate shareholders' value (Bhasa, 2004); specifically by seeking higher salary, perquisites, job security and even direct exploitation of the firm's cash flows (Eriotis, Vasiliou, & Ventoura-

Neokosmidi, 2007). Managers who hold private information have an incentive to use it for a private advantage that would result in violation of debt contracts, receive excessive compensation and overstate the financial figures to transfer shareholders' wealth to themselves (LaFond & Watts, 2008).

It was suggested that; managers' interests would be aligned with those of the shareholders if they become part owners of the firm. Managerial ownership however is not a solution to the agency conflict in East Asian countries because their ownership structure is highly concentrated. In East Asian countries, conflict between majority shareholders and minority shareholders is more prevalent as decision made by the controlling owners may jeopardise the interests of the minority shareholders. The controlling owners, who are in fact the management of the firms, or control the managers of the firms, can access managers' private information and may take advantage of their controlling power to extract firms' wealth for their own good. According to Shleifer and Vishny (1986), the large shareholders have an incentive to proceed with expropriation activities to protect their investments. The conflict of interest created by the concentrated owners, particularly the insiders, is the main issue in emerging economies. Klassen (1997) however argued that inside concentrated owners have less incentive to be involved with income increasing behaviour through manipulation of accounting reports or to conceal their activities from the financial reports, as they communicated the firm value to the capital market through other channels than the financial reports alone. However, Ball et al. (2003) stated that resolving asymmetric information through insider communication reduces timeliness in accounting earnings and reduces the quality of the financial reports and its disclosure. Gomes (2000) argued that expropriation is costly to the concentrated shareholders because their wealth may be reduced if the minority shareholders discount the share price. Whilst that assurance was based on bonding costs i.e. agents guarantee not to pursue action harmful to the principal (Jensen & Meckling, 1976), Young et al. (2008) argued that such care for reputation and credibility may be diminished in crisis periods; and the controlling shareholders choose to expropriate.

Many studies have highlighted the unfavourable effect of concentrated ownership such that it may distract from capital allocation efficiency (Maher & Andersson

2002) and firms may employ weak internal controls, and thus increase the risk of expropriation (Bozec & Bozec, 2007). Gibson (2003) stated that majority shareholders expropriated especially when they are also creditor, manager or customer; thus they can extract rents from the firm through these relationships. With the decision power in firms, the managers may gain private benefit by diverting firm resources or spending funds on unprofitable projects (Lemmon & Lins, 2003). In the Malaysian context, controlling shareholders increased their profit through related party transactions or earnings management (Rachagan, 2006). The controlling shareholders not only expropriated but also concealed their behaviour through self-interested accounting choices and concealed firm performance from outsiders to avoid disciplinary action (Korczak & Korczak, 2009).

The entrenchment effect of the concentrated owners is adversely affecting the accounting information. Concentrated owners produced less informative earnings to conceal their expropriation activities and to avoid outside monitoring, hence reducing the credibility of the information for outside shareholders (Fan & Wong, 2002). This finding is consistent with the finding of Haat et al. (2008) who found no association between corporate governance and transparency, or between transparency and corporate performance. They argued that the users did not use annual reports for investment decisions due to it reporting less relevant information, or because of the availability of other credible and easily accessible sources of information. The manipulation of financial information and less reliance on the reports however implies that concentrated owners may have more freedom to pursue their personal agenda. Chin, Kleinman, Lee and Lin (2006) examined earnings forecasts of Taiwanese companies and found that firms with concentrated ownership structure issued less accurate and more optimistically biased forecasts. They argued that concentrated owners used their power to manipulate the earnings in order to protect and promote their own economic position. Haniffa and Hudaib (2006) examined Malaysian listed firms and found that concentrated ownership increased the accounting returns but not the market returns. Their results imposed doubts on the reliability of the accounting figures, while Dalton and Dalton (2005) argued that the accounting based measures are subject to managerial manipulation more than the market measures.

Ownership structure was evidently inversely related to conservatism, but the argument that explained the direction of the relationship varied. For US firms that have dispersed ownership, LaFond and Roychowdhury (2008) argued that lower managerial ownership led to higher agency conflict; and thus the shareholders demanded for more conservatism. Kung et al. (2010) who examined Chinese listed companies argued that, firms with concentrated owners employed less conservatism because the owners resolved asymmetric information through private communication. Shuto and Takada (2010) examined Japanese firms and showed that managerial ownership at low and high levels were inversely related to conservatism, while at the intermediate level of ownership, they were positively related. Consistent with LaFond and Roychowdhury (2008), Shuto and Takada (2010) argued that conservatism was employed to reduce agency conflict. High managerial ownership indicates lower agency conflict, hence conservatism is needed less. The actual motive for adopting lower conservatism at high ownership levels may not simply be due to lower agency conflict. Evidence showed that concentrated ownerships do more harm than good particularly to the minority shareholders. Fan and Wong (2002) and Chin et al. (2006) showed that concentrated owners created agency conflict between controlling owners and outside shareholders. Further, high insider ownership were more likely withholding bad news in order to delay or avoid loss of wealth (Kothari, Shu, & Wysocki, 2009). If managerial ownership does substitute conservatism as evident in LaFond and Roychowdhury (2008) and Shuto and Takada (2010) or because concentrated owners have closely monitored the managers and have less concern on the financial reports (Ball et al., 2003; Dargenidou et al., 2007), it is believed that the wealth of the other shareholders could be adversely affected.

Although managerial ownership helps to align common interests with shareholders, up to a certain point, the managers may become entrenched as their ownership increases. Ding, Zhang and Zhang (2007) however reported that at an initial stage, the entrenchment effect led the owners to manage earnings upward, but reduced when cash flow rights reached beyond the point of full control. The same effect may not be apparent in Malaysian firms due to its pyramidal and cross-shareholding structure of ownership, as explained by Thillainathan (1999). Inside concentrated ownership adversely affects the corporate governance system, not only because they are the main reason that firms engage in earnings management (Leuz et al., 2003) but

also because they get to choose less effective internal governance mechanisms. For example, where CEO and chairman positions are not separated, where there is lower proportion of non-executive directors on the board and no appointment of a non-executive director as the chairman (Lasfer, 2006). Horner (2010) argued that managerial entrenchment increases with an increase of directors' equity ownerships in firms; and hence predicted that at low levels of equity ownership, directors choose to separate CEO and chairman roles but turn over combine roles when their ownership increases.

S. N. Abdullah (2006b) showed that inside ownership should be neither too low nor too high, for the good of the firm, as both conditions can lead to financial distress status. Similar findings were reported by Sanchez-Ballesta and Garcia-Meca (2007) on earnings management and Ming and Gee (2008) with regards to firm financial performance. For Polish listed companies, Korczak and Korczak (2009) reported that earnings information improved only when the managerial ownership was between 25% and 50%, indicating that excessive managerial ownership is detrimental to the firm value. Further evidence indicated that inside controlling shareholders were associated with low firm performance (Schiehll, 2006), low level of corporate social responsibility (Ghazali, 2007) and high earnings management (Sarkar, Sarkar, & Sen, 2008).

Much evidence suggested the harmful effect of inside concentrated owners; but the outside concentrated owners are potentially an effective monitor. The findings of Yeo, Tan, Ho and Chen (2002) suggested that outside large shareholders were good monitors in reducing earnings management as the shareholders improved informativeness of the earnings. This is supported by Azofra, Castrillo and Delgado (2003) for Spanish firms as the outside large shareholders reduced earnings management. However, Schiehll (2006) did not find an association between outside concentrated ownership and firm performance for Canadian firms, whilst Rahman and Ali (2006) found no association between ownership concentration and earnings management for Malaysian firms. Rahman and Ali (2006) however, did not distinguish between internal ownership and outside ownership concentration as examined in Yeo et al. (2002) and Schiehll (2006).

Overall, the results of previous studies suggested that the inside concentrated owners have detrimental effect on the firm value whilst the outside concentrated owners are a good governance mechanism.

### **2.5.3. Board of Directors Characteristics**

Fama and Jensen (1983) and Keasey and Wright (1993) suggested that the board of directors represent the highest form of internal control to monitor top management including the CEO. Four characteristics i.e. board composition, board size, director's skill and CEO duality are among important attributes of the board. Jensen (1993) argued that these factors influenced the board's role in monitoring managers. Director's skill is an important factor because directors with a good understanding of business operations can effectively review the financial reports (Lanfranconi & Robertson, 2002).

#### **2.5.3.1. Board Composition**

Board composition refers to the participation of outside directors, also known as independent directors, on the board. Relative to a separate system of control and decision, Fama and Jensen (1983) acknowledged that internal managers dominate the board because they can perform better if they are in the capacity to control and make decisions. However, they further noted that dominant insiders are less likely to survive in a competitive business because of a lack of separation between decision management and decision control. Hence it was suggested that the presence of independent directors on the board ensures board independence from the management, as it clearly segregates the management and control tasks. In addition, independent directors can solve disagreements among the internal managers or between the internal managers and residual claimants. Thus, boards comprising independent directors will provide a counter balance so that the insiders do not take advantage of their position and sacrifice the shareholders' wealth. Based on the resource dependent view of Pfeffer and Salancik (2003), the presence of independent directors on the board will enhance the flow of information, and hence protect the firm resources and reduce uncertainty.

Previous studies investigating the effectiveness of independent directors on the board have mainly suggested that independent directors have a positive influence in the firm. Beasley (1996) examined financial statements fraud, and compared board composition between firms where fraud occurred and those where no fraud occurred. It was reported that firms with no fraud had a higher proportion of independent directors. Empirical studies also showed that independent directors are an effective monitor to the financial reporting process. Evidence on UK firms produced by Peasnell, Pope and Young (2006) showed that independent directors reduced earnings management and the effect was more pronounced when the firms' pre-managed earnings were below threshold. Additionally, findings of Koh, Laplante and Tong (2007) on Australian firms and Benkraiem (2009) on French firms, all support the significant role of the independent directors in mitigating the earnings management. A UK study carried out by Beekes et al. (2004) and a US study by A. S. Ahmed and Duellman (2007) both found that high proportions of independent directors were associated with high levels of conservative accounting. A Spanish study carried out by Lara et al. (2007) also linked conservatism with the board of directors but used an aggregate index as a proxy for a strong board. The study showed that strong boards incorporated bad news into earnings significantly faster. Weak boards, conversely, captured the good news faster than the stronger board. The evidence suggests that independent directors employ more conservatism to assist them in monitoring the management. Ameer, Ramli and Zakaria (2010) reported that performance of Malaysian listed firms was high when their board of directors were represented by a majority outside directors relative to those represented by a majority inside directors.

Although independent directors will enhance the monitoring efficiency of the board, concentrated owners are less likely to appoint them to the board. The findings were presented by Dahya, Dimitrov and McConnell (2008; 2009) who examined firms with concentrated ownership from 22 countries. They showed that independent directors improved firm value especially in a country with weak legal protection for the shareholders. However, only some of the concentrated owners chose an independent board and it was mainly due to the need for outside financing to fund their investments. In a similar vein, Setia-Atmaja (2009) examined concentrated ownership of Australian listed firms, and found that firms with concentrated



ownership had fewer independent directors. They also reported that closely held firms with less independent directors, underperformed firms with more independent directors.

Empirical studies have also shown that independent directors in firms with concentrated ownership are ineffective in improving governance of the firm. P. Klein, Shapiro and Young (2005) reported that independent directors in firms with high concentrated ownership had a significant negative effect on firm value of Canadian firms. S. N. Abdullah (2004) examined Malaysian listed firms for the period between 1994 and 1996, and reported that independent directors had no influence on firm performance. Investigating New Zealand firms, K. Ahmed, Hossain and Adams (2006) found no association between independent directors and earnings informativeness. A further study by S. N. Abdullah (2006b) for the study period 1999 to 2001, also failed to find any association between independent directors and financial distress status. This evidence is consistent in suggesting that one contribution to the Asian financial crisis was the weak corporate governance associated with ineffective independent directors. Rahman and Ali (2006) found no association between independent directors and earnings management for the period 2002 and 2003. Using data from 2002 to 2005, S. N. Abdullah, Yusof and Nor (2010) did not find an association between independent directors and financial restatements. The evidence suggests that independent directors have no direct impact on the financial reports but the findings of Salleh, Stewart and Manson (2006) showed that independent directors promote other governance mechanisms. They argued that these directors were associated with higher audit fees because they demanded quality audit service.

Overall, the results from the abovementioned studies imply that independent directors play an important role in governance but to effectively improve the governance, these independent directors must be sufficiently independent in practice to be able to limit the expropriation activities of the controlling shareholders from the minority shareholders.

### **2.5.3.2. Board Size**

Lipton and Lorsch (1992) and Jensen (1993) argued that firms should not appoint too many directors to the board and suggested a maximum of seven or eight directors. According to Lipton and Lorsch (1992), directors on a large board are less likely to criticise the policies of top managers, hence are subject to CEO control. Further, large board tends to involve less meaningful discussion since too many directors are involved in the discussion, making it both time consuming and difficult to achieve cohesiveness. Further, a large board is less effective due to slowness in decision making, is more risk averse and creates a free rider problem i.e. one member is depending on other members to monitor management. Jensen (1993) recognised that overcapacity is caused by changes in physical technology, organisational practices and management technology. However, too many people within the same geographical location cannot work together effectively. Supporting Lipton and Lorsch (1992) and Jensen (1993), Judge and Zeithaml (1992) found that a large board was less involved in strategic decision making and Forbes and Milliken (1999) reported that a large board led to a problem of coordination.

Supporting a small board, empirical studies reported that large board size was associated with low firm performance (Cheng, 2008; Guest, 2009; Mak & Li, 2001), high earnings management (Rahman & Ali, 2006) and low earnings informativeness (K. Ahmed et al., 2006). Chang (2009) reported for Taiwanese firms, indicating that an increase in board size led to an increase in the occurrence of financial distress status. They showed that the board size of financially distressed firms was 9.24, which was higher than those of the healthy firms with an average of 7.24. The findings confirm the suggestion by Lipton and Lorsch (1992) and Jensen (1993) that if board members exceeded 8, the board is ineffective. Findings of Vafeas (2000) showed that a small board led to higher returns-earnings suggesting that fewer board members are better informed on the earnings of the firm. Recent evidence from Larmou and Vafeas (2010) showed that for a significantly small board, adding more members increased the share return but when the size reached a certain limit, adding more directors would reduce performance.

In opposing arguments, Dalton and Dalton (2005) suggested that a large board offers a broader pool of knowledge and expertise, but Jensen (1993) argued that the problem of coordination in large board size can outweigh the benefit. Also, Dalton and Dalton (2005) argued that fewer members on the board occupied themselves with decision making, and hence become less effective in monitoring the management. The results from Akhtaruddin, Hossain and Yao (2009) partly supported the Dalton and Dalton's (2005) argument, by reporting a positive relationship between board size and voluntary disclosure, though the positive effect was due to more independent directors on the board. Nevertheless, evidence on board size is indeed mixed. Bonn, Yoshikawa and Phan (2004) examined firms in Japan and Australia, and reported an inverse relationship between board size and performance for Japanese firms, but no association for the Australian firms. Pietra, Grambovas, Raonic and Riccaboni (2008) reported that a large board reduced firm value only in small and medium firms, but not significantly in large firms. Based on the complexity of the firm's business, Coles, Daniel and Naveen (2008) reported that a large board was beneficial to complex firms because they have greater advisory needs, a larger degree of diversification and higher financial leverage. In summary, a large board provides a better exchange of skill and knowledge but there is more risk that many members will be unable to coordinate well, and will create free rider problems.

### **2.5.3.3. Board Skills**

Three relevant types of skill are examined in the literature, namely tenure of independent directors, financial expertise and multiple directorships, detailed as follows.

#### **Board Tenure: Firm-specific expertise**

Directors, who served on the firms' board for a longer period, would have greater understanding about the firms' businesses and eventually become more competent. Buchanan (1974) suggested that directors with firm-specific skills are more committed to the firm, which in turn increases their effort to achieve the firm's goal.

Opposing this expertise hypothesis, Lipton and Lorsch (1992) preferred that there is a time limit for the directors serving on the board otherwise, the seasoned directors may assume some of the CEO functions. Their suggestion implies that long time relationships between the independent directors and the management would impair the independence of the board, and hence defeat the purpose of having independent directors in the firm. The management friendliness hypothesis proposed by Vafeas (2003) indicates that seasoned directors are more likely to befriend the management and become less effective in monitoring the managers. He found that outside directors serving for twenty years and more became affiliated with the management as these senior directors were preferred in the nomination and compensation committee. The finding suggests that the basis for the director's appointment was more on preference than qualification. Further, he claimed that longer tenure relates to the attrition process as they found that directors' participation on committees and additional directorships reduced eventually with longer service.

The empirical evidence on board tenure is mixed. Peasnell, Pope and Young (2005) examined UK firms and reported that outside directors with longer tenure reduced earnings management, implying that directors are more competent to curb earnings manipulation. Rutherford and Buchholtz (2007) showed that longer tenure reduced asymmetric information within the firms as it led to frequent information exchange with the other committees in the firms. However, it did not determine the quality of the information gathered by the board, and did not lead to more proactive information seeking. The findings of Chang (2009) indicated that board tenure was not a contributing factor to financial distressed status of the Taiwanese firms, though majority members of the non-financial distress firms' board were senior directors relative to those in the financial distressed firms.

### Board financial expertise

To monitor the financial reporting process, the directors must have accounting knowledge in order to produce quality financial reporting either to control manipulation or to make information more transparent. Lanfranconi and Robertson (2002) pointed out that the collapse of Enron and WorldCom was due to the lack of knowledge of their board members. Specifically, in the Enron case, the board

members did not understand its complex financial planning structures that used 'special purpose entities'. In the WorldCom case, the board members had no knowledge of basic accounting principles, as they were not aware of expenditure being capitalised instead of expensed. Hence, in the two cases one could ask how effective the directors were in carrying out their duties.

Empirical studies showed that financial expertise is an important determinant of quality financial statements. The findings of Agrawal and Chadha (2005) on US firms highlighted the importance of accounting knowledge among the outside directors. Initially, they found that independent directors did not determine the probability of firms being required to restate their accounts. However, when the study tested outside directors with financial expertise, the result was significant. The finding implies that outside directors are effective in reducing the probability of financial restatements only if they have financial expertise. Guner, Malmendier and Tate (2008) examined several types of financial expertise including financial executives, finance professors and bank executives. The study reported that bank executives acting as directors on the board benefit the creditors but not the shareholders. Specifically, bank executives were associated with higher debt though the firms had low investment opportunities. The findings on the non-bank finance executives however confirmed that, this type of financial expertise promotes better governance as it led to less value-destroying acquisition.

Very few studies explored financial expertise on the board as they focused more on the financial expertise of the audit committee. Although the board assigned its committee with the oversight role of the financial reporting process, the quality of the reports remained the responsibility of the board members. As noted by Volpe and Woodlock (2008), many boards have been charged to review major issues on accounting principle and financial statements presentation. Hence, knowledge on accounting and financial aspects are of the utmost importance. However, the highlight from the Volpe and Woodlock (2008) survey of 160 Fortune companies showed that the board members had a lack of knowledge on financial and accounting issues including basic accounting.

Overall, the empirical evidence showed that directors must have financial expertise; otherwise it may impair their ability to monitor the management, and hence be unable to detect irregularities in the financial reports.

#### Multiple directorships: Firm-governance skill

Fama and Jensen (1983) suggested that outside directors develop reputational effects which reflect on them as an expert in decision control. The value of the outside directors primarily depends on their performance as internal managers in other companies. Accordingly, they signal to the market that they are expert in decision control, aware of the importance of separate decision control and are capable of working in the decision control system. Lipton and Lorsch (1992) however argued that multiple directorships can adversely affect the directors ability to monitor the management as they are distracted by the affairs of other organisations. The findings of Ferris, Jagannathan and Pritchard (2003) did not support the busyness hypothesis as suggested by Lipton and Lorsch (1992); since they found that directors with multiple directorships participated in other committees and attended more committee meetings. Their findings support the reputational effect as suggested by Fama and Jensen (1983); since the firms' abnormal returns increased subsequent to the firms' announcement of the appointment of additional directorships. Fich and Shivdasani (2006) argued that Ferris et al.'s (2003) findings could be driven by the methodology choices and econometric specifications as the study utilised cross sectional analysis. Fich and Shivdasani (2006) used panel data and reported that firms where the directors had three or more directorships experienced lower market to book ratios as compared to firms where directors had fewer directorships. The results remain after using an accounting-based performance i.e. ROA. Their additional analysis further heighten the belief that multiple directorships are associated with weak governance because these busy directors were less likely to remove the CEO of poor performing firms.

Further, it was argued that multiple directorships improve information sharing on legal actions against other firms, thus avoid the same pitfall and litigation. However Schnake, Fredenberger and Williams (2005) found that that multiple directorships were associated with an increased number of legal investigations brought against the

firms. Their evidence is consistent with Schnake and Williams (2008) who found that multiple directorships negatively affect firm performance. The study argued that informational advantage gained from other firms may be lost due to lesser amounts of time spent in the firms. Saleh et al. (2005) showed that multiple directorships were effective in reducing earnings management only in firms with negative unmanaged earnings. The study argued that directors in loss making firms are more likely to be replaced than those of the profit making firms and the result could have been driven by the motivation to secure their employment instead of reflecting their competency. Other empirical studies not supporting multiple directorships were evidenced by low market performance (Haniffa & Hudaib, 2006), low accounting conservatism (A. S. Ahmed & Duellman, 2007) and high earnings management (Sarkar et al., 2008).

#### **2.5.3.4. CEO Duality**

CEO duality refers to the leadership structure where a company's CEO also acts as chairman of the board. Two competing theories that explain the consequences of this structure are agency theory and stewardship theory. Agency theory argues that CEO and chairman roles should be separated since board responsibilities are to monitor the management including the CEO. The stewardship theory perceives that the duality roles improve the leadership as there is no information breakdown between the CEO and the board. Leadership structure adopted in UK and US provides an example of adopting these conflicting views (Coombes & Wong, 2004). UK follows the separate structure on the ground that the duties of CEO and chairman are different, thus split roles are crucial for board independence. There are no recommendations on the leadership structure for the US firms but they need to provide justification for their selection. Those who combined the two roles believe that CEO acting as chairman is mostly beneficial in terms of communication, as it facilitates decision making.

Consistent with the agency theory, Jensen (1993, p. 866) argued that CEO cannot become the chairman of the board because the chairman needs to independently run the board meeting, oversee the process of hiring, firing, evaluating and compensating the CEO. Supporting the stewardship theory, Brickley, Coles and Jarrell (1997)

claimed that the dual role may diminish incomplete communication between the CEO and chairman, thus reduce internal conflicts and inconsistencies in decision making. Furthermore, the CEO's knowledge about the business allows timely and optimal decisions, resulting in better firm performance. Similarly, A. Klein (1998) stated that inside directors possess more knowledge and expertise about firms' activities which outside directors might lack. Accordingly the dual role allows the CEO-chairman to utilise the information and increase the effectiveness of the board. Daily and Dalton (1997) referred to the joint structure as strong leadership and the separate structure as effective monitors. It was suggested that the joint leadership provides a positive signal that the firms have a strong leadership and it is considered as a more efficient and reasonable form of governance. Nevertheless, practitioners and financial communities prefer the separate structure as it works as a monitoring mechanism. Farooque, Zijl, Dunstan and Karim (2007) found positive impact of CEO duality on the financial performance of Bangladesh firms, and hence argued that owner-specific attributes such as entrepreneurial skill could have increased the firm value.

Mixed evidence on the effect of leadership structure suggests that neither agency theory nor stewardship theory is superior. However, most evidence suggests that the combined structure is harmful. For example, Dechow, Sloan and Sweeney (1995) reported that firms that combined the CEO and chairman roles were more likely subjected to accounting enforcement actions by the SEC for infringement of GAAP. A. Klein (2002) found that CEO who held a position in the nominating and compensation committees, manipulated the earnings by increasing the absolute value of discretionary accrual. Muniandy (2007) reported that Malaysian firms that combined the CEO and chairman position were associated with higher audit fees. In contrast, the split structure is more efficient as it is associated with more accounting conservatism (G. V. Krishnan & Visvanathan, 2008) and such firms performed better than firms' board with duality roles (Rahman & Haniffa, 2005).

Despite the complementing findings on the split of CEO-chairman roles, the findings of S. N. Abdullah (2004, 2006b), A. S. Ahmed and Duellman (2007) and Chang (2009) were not supporting agency theory or stewardship theory as CEO duality was not associated with firm performance and accounting conservatism. Cornett, Marcus



and Tehranian (2008) reported that the combined structure had no influence on the earnings management of US listed firms. Dahya, Garcia and Bommel (2009) showed that there was no difference in firm performance whether the firms split or combine the CEO-chairman. Other studies showed that leadership structure is dependent on other factors. For instance, Faleye (2007) found that CEO duality was beneficial to firms with a complex business; and might not harm shareholders' interest if the CEO is a reputable person as the CEO may controls his or her behaviour to protect the reputation. Lam and Lee (2008) reported that the joint structure benefits the non-family firms whilst the separate structure benefits the family firms. The board of the family firms were more likely to be dominated by the insiders; hence chairman should be independent from the management to avoid conflict of interest. Ramdani and Witteloostuijn (2010) performed a cross country analysis on Indonesia, Malaysia, South Korea and Thailand and tested the effect of CEO duality on different levels of performance. Their findings showed that CEO duality was beneficial for average performing firms but not significant for low performing firms and top performing firms.

#### **2.5.4. Audit Committee Characteristics**

The audit committee plays an important role in corporate governance as it is charged with the oversight role of the financial statements. A vigilant audit committee ensures that probability of fraud on financial statements is reduced (Rezaee, 2003). Previous studies evaluated the effectiveness of the audit committee, amongst others on the composition of independent directors on the committee, the proportion of financial expertise on the committee and frequency of the committee meetings held per year.

##### **2.5.4.1. Audit Committee Composition**

The Malaysian Code on Corporate Governance stated that the audit committee be composed entirely by non-executive directors, with a majority independent directors. The recommendation is consistent with the merit of having outside directors, who could resolve any disagreement among internal managers and reduce conflict

between internal managers and residual claimants (Fama & Jensen, 1983). Further, it was argued that independent directors were less reluctant to question management decisions or policies (McMullen & Raghunandan, 1996) and provide a balance of power on the relationship between the board and management (McCabe & Nowak, 2008). Zain and Subramaniam (2007) proved this argument as they found that internal auditors put a significant trust in the independent directors to raise any controversial issues, especially from audit committee members with significant knowledge of investment.

Much evidence suggests that audit committee independence mitigates agency conflict in the firms. McMullen and Raghunandan (1996) documented that firms with financial reporting problems were less likely to have independent directors on the audit committee relative to firms with no financial problems. Muniandy (2007) found that CEO duality increased audit fees; but the relationship was mitigated by the presence of independent directors on the audit committee. The result of the study implies that auditors perceive that audit committee independence promotes a reliable accounting process. The findings of Saleh, Iskandar and Rahmat (2007) further showed that audit committee independence led to lower earnings management.

Whilst the studies suggest that audit committee independence enhances the quality of the financial reports, the findings of Owens-Jackson, Robinson and Shelton (2009) indicate that independence did not eliminate occurrence of fraud in reported earnings, even if the committee was comprised wholly of independent directors. This evidence is consistent with the results from meta-analysis carried out by Pomeroy and Thornton (2008) which indicates that audit committee independence is more effective in improving the quality of the audit than the quality of the financial statements. They found that audit committee independence had a weak relationship with accounting accruals and in avoiding financial restatements but was strongly associated with auditor ratification and averting auditor resignation. In a different context, Mustafa and Youssef (2010) reported that audit committee independence was not effective unless the independent directors are financial experts. S. N. Abdullah et al. (2010) found that financial restatements increased with the proportion of independent directors on the audit committee. Their result has two implications: firstly, the independent directors are effective, as noted by Pomeroy and Thornton

(2008) in that the independent directors revealed the need for the restatements, which often indicated a low quality of financial reporting. Secondly, the independent directors are not effective, consistent with the Rose and Rose (2008) argument that financial restatements occurred due to earnings management and earnings manipulation, but were not detected by the members of the audit committee.

In respect to conservatism, so far there is no study that investigates its association with audit committee independence except by G. V. Krishnan and Visvanathan (2008). They found that audit committee independence did not influence accounting conservatism for US firms.

#### **2.5.4.2. Financial Expertise**

The attributes of financial experts as defined by the US Securities and Exchange Commission (SEC) are to be attained through education and experience as (a) public accountant or auditor, (b) a principal financial officer, controller or principal accounting officer of an issuer, or (c) from a position involving the performance of similar functions (Bedard & Gendron, 2010, p. 189). This definition was later broadened to include CEO or president (Securities and Exchange Commission, 2003); following comments received by the SEC that the characteristics to be considered as financial experts are too restrictive, hence firms may not be able to find a qualified one. The Malaysian Code on Corporate Governance indicates that all audit committee members must be financially literate and at least one should be a member of an accounting association or body (Securities Commission, 2007). The Bursa Malaysia adopts the same condition in its listing requirements but has specifically stated that (a) at least one director must be a member of Malaysian Institute of Accountants, or alternatively, (b) must have at least three years working experience with (i) academic qualifications as listed in Part I of the First Schedule of the Accountants Act 1967, or (ii) a member of one of the recognised bodies listed out in the Part II of the First Schedule of the Accountants Act 1967. The definition of financial experts employed in Malaysia is therefore, strictly applied to directors who have qualifications and experience in accounting and finance.

With reference to the impact of the inclusion of non-accounting experts by the SEC, several studies have been carried out on US companies. DeFond, Hann and Hu (2005) tested the market reactions upon the firms announcement of the appointment of accounting financial experts versus non-accounting financial experts on the audit committee. The study revealed that the market reacted positively to the appointment of the accounting financial experts but not to the appointment of the non-accounting financial experts. A similar result was reported by Davidson, Xie and Xu (2004) indicating that the market perceives financial expertise as a good monitor of the financial reports. G. V. Krishnan and Visvanathan (2008, 2009) examined the effect of accounting financial expertise and non-accounting financial expertise on accounting conservatism and audit fees. The main objective of their study was to identify which of the two types of financial expertise contribute to better governance. The studies found that only accounting financial expertise led to higher conservatism and lower audit fees, and then conditional upon a strong governance structure in the firms. Similarly, J. Krishnan and Lee (2009) identified that firms faced with high litigation risks demanded financial expertise on the audit committee, and conditional upon strong governance structure in the firms. Further, Dickins, Hillison and Platau (2009) performed a survey on the financial analysts or supervisors of US investment banking firms. The study aimed to identify which of the financial attributes influence analyst confidence in the financial statements. The study showed that the financial analysts were more confident if the source of the expertise was accounting-based rather than supervisory-based i.e. the CEO. The above findings therefore, do not support the inclusion of non-accounting financial experts adopted by the SEC. Complementing the above results, the finding of Goh (2009) suggests that non-accounting financial experts are more relevant in the supervisory form of the task than in monitoring the financial reporting process. It was evident that the non-accounting financial experts were effective in the remediation of material weaknesses in internal control, whereas the accounting financial experts did not have a significant impact.

McMullen and Raghunandan (1996) pointed out that a Certified Public Accountant (CPA) on the audit committee enhances the committee awareness of any issues in financial reporting, accounting and auditing. Comparing the financial problems and non-financial problems of US companies, the study showed that those with financial

problems were less likely to have a CPA on their audit committee. Similarly, Rose and Rose (2008) who performed an experimental study on highly experienced audit committee members found that, members with less accounting knowledge were more likely to rely on insufficient managers explanation on the accounting judgement relative to those with more accounting knowledge. They affirmed that lack of accounting knowledge may give more freedom to the managers to manipulate the financial statements.

Empirical studies have documented that financial experts contribute to better governance as they reduced aggressive earnings management (Bedard, Chtourou, & Courteau, 2004), associated with lower probability of financial restatements and fraud (Abbott, Parker, & Peters, 2004), led to less financial restatements (Agrawal & Chadha, 2005) and reduced misappropriation of assets (Mustafa & Youssef, 2010). DeZoort and Steven (2001) identified that audit committee members who possessed audit-reporting knowledge but not financial-reporting knowledge, provided a greater support for auditor in the dispute over material accounting policy choice issue, with client management. However they argued that, high levels of accounting knowledge might have driven a great diversity of opinions among the members of the audit committee. Yatim et al. (2006) produced contrasting results as they found that financial expertise on the audit committee of Malaysian firms led to higher audit fees. They argued that higher fees may be related to quality of audit services demanded by the financial experts. Rahmat et al. (2009) showed that independent directors on the audit committee of Malaysian firms were associated with low occurrence of financial distress status.

Nevertheless, evidence also documented the insignificant effect of financial experts on the audit committee as they were not associated with financial restatements (J. W. Lin, Li, & Yang, 2006), did not reduce earnings management unless the committee members were active (Saleh et al., 2007) and did not explain the occurrence of variation between the unaudited and audited accounts of Malaysian firms (Raman & Saidin, 2009).

Generally, much of the evidence indicated that financial expertise on the audit committee is a significant attribute of effective audit committee. However, in some

cases the financial experts may not perform effectively if they do not get support from other governance mechanisms.

#### **2.5.4.3. Audit Committee Meetings**

The audit committee meeting provides an avenue for the committee members and auditor to discuss issues pertaining to the financial statements. The auditor would not only evaluate the compliance of the financial statements with the accounting standards but also express judgement about the firm's accounting choice of principles, disclosures and estimates (Kirk & Siegel, 1996). This discussion would make directors more aware of issues that might require special attentions and eventually improve the quality of the financial reports. The Malaysian Code on Corporate Governance stated a minimum of two audit committee meetings to be held per year without the presence of the executive directors (Securities Commission, 2007). The actual number of audit committee meetings held per year however depends on the company's terms of reference and the complexity of the company's operation (Saleh et al., 2007).

Frequency of audit committee meeting is commonly used in empirical studies to assess the diligence of its members. Menon and Williams (1994) argued that frequency of meeting is a crude measure to assess the committee activity because it does not truly reflect the work accomplished or the effectiveness of the committee in achieving quality financial reports. However, less frequent meetings do reflect lack of monitoring as inactive audit committees are unlikely to monitor the management effectively. The use of audit committee meeting to proxy for active committee was also noted by Raghunandan and Rama (2007) who acknowledged it as the only publicly available quantitative measure that signals the diligence of the members.

Most empirical studies showed that frequent audit committee meetings lead to favourable outcomes. Anderson, Mansi and Reeb (2004) showed that creditors recognise the positive effect of active members on the reported earnings, as they found that frequent meetings led to lower cost of debts. Abbott et al. (2004) found that frequent meetings led to lower likelihood of restatement and an active

committee had an average four meetings per year. Farber (2005) who compared the meeting frequency between fraud and non-fraud firms reported that fraud firms held significantly few meetings relative to the non-fraud firms. Further, the study reported that the number of meetings in the fraud firms increased gradually throughout the analysis period. The finding suggests that the audit committee members become more active in monitoring the financial reporting process upon detection of fraud. Owens-Jackson et al. (2009) also reported a negative association between frequency of meetings and occurrence of fraud.

However, there are studies that do not support the importance of audit committee meetings. Bédard, Chtourou and Courteau (2004) reported that frequency of audit committee meeting is not important if the members of the committee were dominated by the financial expertise and independent directors. Audit committee meeting is also reportedly not associated with the occurrence of the financial restatement (J. W. Lin et al., 2006) and conservative accounting (G. V. Krishnan & Visvanathan, 2008). Rahmat et al. (2009) who examined Malaysian financial distress firms found no significant difference in the frequency of meetings between financial distress firms and non-financial distress firms; frequency of meetings did not determine the financial distress status.

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#### **2.5.5. Ethnicity (Culture)**

The influence of culture in accounting practice has long been acknowledged. Schuler and Rogovsky (1998) found that culture influenced corporate financial and operating strategies. Hope (2003) also showed that culture influenced accounting system attributes such as authority, enforcement, measurement and disclosure. The cross cultural work of Hofstede (1983) identified four cultural value dimensions namely individualism, power distance, uncertainty avoidance and masculinity. Gray (1988) proposed an association between Hofstede's cultural values with four accounting values namely; (a) Professionalism versus Statutory control, (b) Uniformity versus Flexibility, (c) Conservatism versus Optimism and (d) Secrecy versus Transparency. Table 2.1 summarizes Gray's hypotheses on the association between Hofstede's cultural values and accounting values. In regards to

conservatism, Gray (1988) proposed that someone with low individualism and masculinity but with high uncertainty avoidance may adopt a more conservative approach to measurement.

**Table 2.1**  
**Summary of Gray's hypotheses**

Hofstede's cultural values	Gray's propositions on the accounting values	
Individualism	High	
Power Distance	Low	
Uncertainty Avoidance	Low	Professionalism: <i>High</i>
Masculinity	-	
Individualism	Low	
Power Distance	High	
Uncertainty Avoidance	High	Uniformity: <i>High</i>
Masculinity	-	
Individualism	Low	
Power Distance	-	
Uncertainty Avoidance	High	<b>Conservatism: <i>High</i></b>
Masculinity	Low	
Individualism	Low	
Power Distance	High	
Uncertainty Avoidance	High	Secrecy: <i>High</i>
Masculinity	Low	

Accounting conservatism is a significant accounting value dimension as it involves the fundamental attitudes of an accountant in the measurement of assets and reporting profits (Gray, 1988). Hofstede (2003) suggested that the more an activity requires judgement, the more it will be ruled by value and hence influenced by cultural differences. This idea was acknowledged by Tsakumis et al. (2009) in that applying judgement to arrive at conservative reporting is most likely to be influenced by cultural values, due to the principle-base of financial reporting standards. Managers or accountants are allowed to use their discretion in the accounting estimates, hence the decision arrived from the judgement could be driven by their cultural values. In other words, national culture directly influences conservatism which then affects the measurement of the financial information.



The interest in Gray's accounting values motivated empirical studies to examine Gray's propositions. Schultz and Lopez (2001) found that German and French accountants, coming from countries with higher uncertainty avoidance, provided more conservative warranty estimates than their American counterparts with lower uncertainty avoidance. Doupnik and Richter (2004) examined accountants from Germany, categorised as a high-conservative country; and accountants from US, categorised as low-conservative country; the results showed that German accountants displayed higher conservatism relative to the US accountants. Guan, Pourjalali, Sengupta and Teruya (2005) examined five Asia-Pacific countries i.e. Australia, Japan, Hong Kong, Malaysia and Singapore to identify the effect of Hofstede's culture value on earnings management. The study found that higher individualism led to higher aggressive earnings management; which is the opposite of lower conservatism. However, Tsakumis (2007) did not support Gray's (1988) hypothesis. He employed an experimental method to examine the conservatism level of the US and Greek accountants on the recognition of contingent assets and contingent liabilities. His analysis identified that the Greek accountants displayed lower individualism and higher uncertainty avoidance than the US accountants, suggesting that the Greek accountants should be more conservative than the US accountants. However, their results actually revealed that the US accountants were more conservative than the Greek accountants.

In Malaysia, Iskandar and Pourjalali (2000) analysed the substantial changes in the Malaysian economy and its culture from 1987 to 1997; and explained how these factors may influence accounting practices. Their analysis indicates that individualism had increased due to increases in the country's wealth and higher survival rate in the competitive market, because of more opportunities in business and urban migration. The uncertainty avoidance factor, however, had decreased due to a lower inflation rate, improvement in quality of life and the ambitious vision of 2020. Following Gray's hypothesis, Iskandar and Pourjalali (2000) categorised Malaysia as a low conservative country, supported by Ball et al. (2003) who found that Malaysian auditors and managers were less transparent especially in the recognition of losses.

It is important to note that Iskandar and Pourjalali's (2000) analysis was on the national culture. Culture as defined by Perera (1989, p. 43) is "an expression of norms, values, beliefs, and customs which reflected typical behavioral characteristics" that are widely shared in a specific society at a particular point in time. Since Malaysia is a multiracial country, national culture may not explain behaviour of the ethnic groups in the country. Specter and Solomon (1990) claimed that, the behaviour of different groups within a nation might not represent the national culture. To predict the conservatism practices of the Malays and Chinese ethnic groups in Malaysia, it is important to identify their level of individualism and uncertainty avoidance. Literature on the Malay and Chinese individualism are mixed. Firstly, some studies argued that Malays are less individualistic than Chinese. A. Abdullah (1992) presented cultural values of the Malays, as among others, faith in god, compliance, obedience, non-aggression and reciprocal obligations, hence indicating that the Malays have high uncertainty avoidance. The Chinese however are referred to as gamblers or risk takers; implying they have low uncertainty avoidance. Islam is closed to collectivism and protect the rights of private ownership (Baydoun & Willett, 1995); and since Islam is the main religion of Malays, they are expected to have low individualism. Borrowing from management research, Hamzah, Saufi and Wafa (2002) found the Chinese to be more individualistic but had lower uncertainty avoidance than Malays. They assessed the Malaysian managers' leadership style and found that the Chinese preferred the delegating style of leadership, greater autonomy and being more directive. Malays, in contrast, preferred a participant leadership style, where they preferred to get involved with the decision making. This is consistent with A. Abdullah's (1992) findings that Malays were more masculine because they preferred relationship-based as compared to the Chinese who were task-oriented in achieving career-success.

Secondly, previous evidence indicated that the culture values between Malays and Chinese are indifferent. L. Y. Lim (1998) stated that conceptually both Malays and Malaysian Chinese have high collectivism (low individualism) which differs only in terms of content. Although Malays derive pleasure from community spirit that help to develop their sense of responsibility in helping others, the Chinese also have the same spirit but they channel it through associations that they build amongst members of the same clan, dialect or educational group, through which they offer help and

security. This is supported by Juri (1999) who identified that Malays and Chinese entrepreneurs in Peninsular Malaysia mostly shared the same cultural values of masculinity, individualism and power distance, except that the Malays had higher uncertainty avoidance than the Chinese. Selvarajah and Meyer (2008) examined two leadership styles of Malaysians, (a) managerial behaviour type was assigned to the Chinese and (b) personal qualities type was assigned to the Malays. The study argued that the Malays were assigned to the personal qualities type because they were considered as sensitive individuals living in harmony, having secured good relationships with the community members. The Chinese were believed to have persuasive powers and a strong sense of trust on leadership, thus relevant to the Managerial Behaviour type. The results however showed that, both ethnic groups fell under the Managerial Behaviour type. They argued that changes in mindset might have narrowed the commercial gap between the Malays and Chinese as the nation strives towards vision 2020. A. Abdullah (2001) found religiosity was the only factor that differentiated the Malays from Chinese and Indian. This is further confirmed by Fontaine and Richardson (2005) who found that the three ethnic groups; Malays, Chinese and Indian were not culturally different as they shared most of the cultural values examined in their studies.

Thirdly, some evidence suggested that Malays have high individualism levels. Tamam, Hassan and Said (1996) reported that Malays middle-executives portrayed the individualistic attribute. Haniffa and Cooke (2002) examined the Malays ethnic influences on voluntary disclosure in the Malaysian firms' annual reports. They predicted that Malays would provide less disclosure, consistent with Gray's (1988) hypothesis, that low individualism and high uncertainty avoidance lead to secrecy. However, they found opposite directions that implied increased individualism in the Malays. Similarly, Zawawi (2008) found that Malay employees in Nestle Malaysia acted individualistically in certain situations if such acts would be of benefit to themselves. The evidence on high individualism for Malays is consistent with the claim of Iskandar and Pourjalali (2000) that Malaysia is experiencing modernisation. Rahman and Ali (2006) added that Malays wealth had increased since the introduction of the National Development Policy (NDP) in 1991 which provided positive discrimination in favour of Bumiputera. As a nation becomes wealthier, individual behaviour appears stronger (Hofstede, 1983). Patel, Harrison and

McKinnon (2002) examined the accountants' professional judgement on auditor-client conflict resolution. Their survey on Malaysian Chinese, Australian and Indian accountants revealed that Malaysian Chinese had lower individualism because their decision could still be influenced by the client in order to maintain harmonious interpersonal relationships and to avoid conflict. The Australian accountants, however, were less likely to resolve conflict by acceding to client demands and assessed the auditors' decision as being more unethical than the Indian and Malaysian Chinese.

The effect of the ethnic groups on reported earnings can also be observed from the political perspective. Watts and Zimmerman (1978) suggested that high profit is sometimes associated with monopoly, hence firms will lower the reported earnings to reduce the likelihood of adverse political action. The New Economic Policy (NEP) implemented by Malaysian government created political incentives to minority ethnic Chinese to not report higher profits (Ball et al., 2003). Bumiputera firms that normally have a close relationship with the government might delay reporting losses because the government does not want to take the blame or to avoid foreign financing. Ball et al. (2003) inferred that the phenomena will encourage income smoothing. Evidence from Yen, Chun, Abidin and Noordin (2007) confirmed the political incentive argument, as they found government linked companies (GLC) managed earnings upwards while the Chinese family linked companies (CFLC) managed earnings downwards. They argued that the compensation plan of the GLC is normally related to earnings; hence providing an incentive to the GLC to report higher earnings. Incentives for tax saving might encourage the CFLC to show lower profits; because Chinese who are task and profit oriented may want to improve their cash flows so that they can maximise output. The political incentive, compensation incentive and tax saving incentive suggest Malays would report higher earnings whilst Chinese would report lower earnings.

### **2.5.6. Moderating Relationship**

A moderating effect indicates if a relationship of two variables is affected by the influence of another variable. Moderating governance factors employed in previous

studies are numerous. Schnake and Williams (2008) used board size and outside directors to moderate the adverse effect of multiple directorships on corporate misconduct. The study found that small board size but not outside directors, was an effective moderating factor. Akhtaruddin and Haron (2010) who examined Malaysian listed firms, showed that the negative effect of board ownerships on corporate voluntary disclosure was moderated by independent directors on the audit committee. Setia-Atmaja (2010) examined family controlled companies in Australian listed firms and found that independent directors on the board influenced the family controlled firms to pay higher dividends, and hence reduce potential expropriation of the minority shareholders' interest.

Whilst the above studies employed a single mechanism as the moderating factor, others employed aggregate and multiple mechanisms. Strong governance has been employed in a number of studies as an aggregate measure of governance mechanism. DeFond et al. (2005) observed positive stock returns upon the appointment of financial expertise on the audit committee but it occurred only for firms that have strong governance. The study argued that strong governance assists the financial expertise to increase the shareholders' wealth. The moderating effect of the strong governance on financial expertise is shown as studies indicated that financial expertise in firms with strong governance led to more conservatism (G. V. Krishnan & Visvanathan, 2008), reduced audit fees (G. V. Krishnan & Visvanathan, 2009) and was demanded when firms faced high litigation risk (J. Krishnan & Lee, 2009).

Using multiple mechanisms individually, Baek, Johnson and Kim (2009) examined the moderating effect of five governance mechanisms on the relationship between managerial ownership and level of discretionary disclosure. The mechanisms are equity-based executive compensation, outside directors, block ownership, institutional ownership and market for corporate control. They found that ownership structure mechanisms influenced the managers to disclose ownership and investor related information whilst the level of outside directors influenced the managers to report board and management process disclosure. The results indicate that those mechanisms reduce the incentive of managers not to disclose important and relevant information to the stakeholders. Pissaris, Jeffus and Gleason (2010) examined pay disparity where CEO compensations are largely more than incentive paid to other

employees. They found that CEO duality, high board equity ownership and high debt level improved the positive effect of executive pay disparity on firm performance. They argued that, (a) Unitary command hypothesis: highly compensated CEO, who holds chairman position improves his authority, (b) Incentive alignment: board equity contributes to strong governance and (c) Credit monitoring: levered firms are subject to credit monitoring.

Researchers have raised concerns that the corporate governance model adopted from developed countries does not work well in emerging economies due to its different institutional environment notably concentrated ownership structure. In particular, previous studies suggested that the board of directors or audit committee in emerging economies are ineffective due to the dominant role of the concentrated owners of whom the majority are insiders. Moderating effects provide direct indication whether or not the board of directors or audit committee is effective in influencing the concentrated owners' behaviour; or whether the concentrated owners reduce the functionality of other governance mechanisms. Cho and Kim (2007) examined the effect of large shareholders ownership on the relationship between independent directors on the board and firm performance. They reported that initially the proportion of independent directors is positively related to firm performance. However, the performance reduced when the independent directors were interacted with the large shareholders. Garcia-Meca and Sanchez-Ballesta (2009) performed meta-analysis on the effectiveness of the independent directors on the board in controlling earnings management. Their study examined corporate governance systems (Anglo-American versus emerging system) in moderating the relationship between board independence and earnings management; and concluded that board independence in the emerging system was ineffective relative to the Anglo-American system. Hu, Tam and Tan (2010) reported that concentrated owners in Chinese listed firms reduced firm performance; and board of directors and supervisory board in the firms could not improve the firm performance since their monitoring duties were hindered by the concentrated owners. V. Z. Chen et al. (2011) found similar findings, where board meeting, CEO duality, independent directors and supervisory board could not moderate the adverse effect of the concentrated owners on the firm performance.

Previous studies argued that ownership concentration limit firms' governance mechanism from function effectively. One aspect to test this argument is to test the moderating effect of ownership concentration on the relationship between firms' governance and conservatism. Entrenched controlling shareholders may adopt lower conservatism, and hence may influence the firms' governance to adopt lower conservatism.

#### **2.5.7. Methodological concerns on the corporate governance measure to test moderating effect**

Previous studies employed various approaches to examine corporate governance. Most studies examined a small subset of corporate governance provisions (L. D. Brown & Caylor, 2009) such as the effect of the proportion of outside directors, board independence or board size on the firm performance, earnings, share return or disclosure in the financial reports. However, there have been increasing studies that incorporated a summary of corporate governance provisions to consider broad governance mechanisms. Some of these studies used corporate governance ratings provided by the rating agency. For instance, Klapper and Love (2004) examined 14 emerging markets using a corporate governance ranking index calculated by Credit Lyonnais Securities Asia (CLSA). Bauer, Guenster and Otten (2004) measured the quality of the governance based on Deminor's corporate governance rating. The rating covered between 249 and 269 firms included in the FTSE Eurotop 300 over the period 2000 to 2001. Ariff, Ibrahim and Othman (2007) who examined the determinants of corporate governance ratings in Malaysia, relied on the Corporate Governance Reporting Initiative, 2004. Their study constructed two portfolios to distinguish firms' rating either at the top 50% or bottom 50%. The rating took place in year 2003 and was used as the sample period of the study. L. D. Brown and Caylor (2009) incorporated 51 governance provisions based on Institutional Shareholders Services (ISS), coding each governance provision as dichotomous depending on whether or not ISS considers the firms' governance to be minimally acceptable.

Gompers, Ishi and Metrick (2003) however, developed their own external corporate governance provision focusing on takeover defence provisions of US firms. Cremers and Nair (2005) adopted Gompers's index as a proxy of external corporate governance; in addition to an internal governance proxy by percentage shareholding of the largest institutional block holders and 18 largest public pension funds. Further, survey studies developed questionnaires based on the best practices on corporate governance. Questionnaires formed by Drobetz, Schillhofer and Zimmermann (2004) were based on the recommendations from the German Corporate Governance Code and German corporate governance scorecard whilst Black, Jang and Kim (2006) utilised the 2001 Korea Stock exchange of corporate governance practices to construct a corporate governance index for Korean companies. Similarly, Haat et al. (2008) constructed questionnaires to measure a disclosure index based on the national and international best practice guidelines as well as research studies.

Several studies focused on internal governance mechanisms, specifically the board of directors and audit committee, as they provide the main emphasis in measure of best practices in corporate governance. Studies examining moderating relationships have employed single, multiple and aggregate measures of governance. Cho and Kim (2007) interacted the proportion of outside directors with large shareholders ownership, managerial ownership and block holding ownership. Baek et al. (2009) employed several mechanisms: namely executive compensation, outside directors, block ownership, institutional ownership and market for corporate control and interacted them individually with managerial ownership. Pissaris et al. (2010) employed CEO duality, Gompers's index, board equity ownership and leverage, and interacted them individually with a pay disparity variable. V. Z. Chen et al. (2011) employed four moderating variables: namely board meeting, CEO duality, proportion of outside directors and supervisory board and interacted them individually with ownership concentration.

Since the governance variables in the abovementioned studies were tested individually, their approach on testing the governance effect are different from the following studies. Cohen et al. (2004) and Lara et al. (2007) noted that interaction among different governance players improve the effectiveness of the firms'



governance, hence the aggregate measure impacts the effectiveness of the overall governance employed in the firms. Accordingly, Lara et al. (2007) employed an aggregate measure of governance of six internal mechanisms inclusive of the characteristics of the board, audit committee and the presence of remuneration committee. Khanchel (2007) used the characteristics of the board of directors, audit committee and auditors to create board index, committee index and audit index. G. V. Krishnan and Visvanathan (2008, 2009) who examined US firms, used an aggregate measure of governance based on the board and audit committee attributes including Gompers's governance index. The variables considered in those studies are similar with a few exceptions: G. V. Krishnan and Visvanathan (2008, 2009) did not include compensation and nomination committee and numbers of meeting in their governance measure as in Lara et al. (2007) and Khanchel (2007). Auditor was included in the Khanchel (2007) study but not in the other two studies. G. V. Krishnan and Visvanathan (2008, 2009) however, included the institutional ownership and Gompers's governance index in their governance measure.

Different methods and measurements employed by previous studies to examine corporate governance indicate that the quantitative indicators of governance are highly subjective (Khanchel, 2007; Méon & Weill, 2005). Additionally, the corporate governance index based on ratings or surveys were subjective in construction and hence may be biased, and of limited use to a sample of countries (Méon & Weill, 2005, p. 82). Ranking was assessed on certain governance standards of the past, thus on historic data (Khanchel, 2007); for instance those used by Bauer et al. (2004) and Ariff et al. (2007) are relevant for studies in the year the ranking was made, but not necessary applicable for future studies.

This thesis is interested to identify whether ownership concentration limits firms' internal governance from function effectively. Hence, to account for total governance mechanisms adopted by firms, the aggregate measure of governance is used to measure firms' governance and discussed in Chapter 4, section 4.5.6.

## 2.6. Summary

In general, even though conservatism practices divert from neutrality, the benefits that they offer especially in limiting the moral hazard problem, improving corporate governance and ultimately increasing firm value should be appreciated. Therefore, in order to gain more understanding on the cost-benefit tradeoffs of conservative accounting, there is a need to identify factors that drive this accounting practice (Zhang, 2008).

The results of previous studies have shown that strong internal governance is associated with the presence of independent directors, smaller boards, board members with skill and separation of CEO and chairman roles. An effective audit committee to monitor the accounting process is also linked to its attributes such as the independent directors on the committee, members with financial expertise and meeting frequency. Evidence showed that strong board attributes are associated with better firms' performance and quality financial information. Given that conservative accounting is an effective mechanism; it could assist the board and audit committee to overcome the agency conflict. Therefore, it is expected that strong attributes of board of directors and audit committee lead to more conservative reporting.

There is limited evidence in Malaysia on the influence of ethnicity over financial reporting. The only study in Malaysia that associated ethnicity and financial reporting was conducted by Rahman and Ali (2006) but they found that ethnicity did not influence earnings management. Other studies examined ethnicity in relation to audit fees (Yatim et al., 2006) and auditor choice (Ahmad, Houghton, & Yusof, 2006). So far, no study has examined ethnicity effects on accounting conservatism. The evidence on the Hofstede-Gray hypothesis also leads to mixed arguments with regard to individualism of Malays and Malaysian Chinese. Some studies found that Malays are less individualistic than the Chinese whilst the others showed that Malays and Chinese are indifferent in respect to individualism. Political factors, compensation incentives and tax incentives also influence these ethnic groups, which might lead them to act differently.

Many studies found and argued that corporate governance in Asia generally, is ineffective due to the presence of controlling shareholders. They were associated with expropriation of minority shareholders' wealth; weak internal governance system and low quality financial reports.

## **CHAPTER THREE**

### **HYPOTHESES DEVELOPMENT**

#### **3.1. Introduction**

This chapter explains the theoretical framework of this thesis and presents hypotheses to be tested. There are ten hypotheses to be tested in relation to the effect of ownership concentration, board of directors' characteristics, audit committee characteristics and ethnicity on accounting conservatism. Hypothesis 11 tests the moderating effect of ownership concentration on the relationship between firms' governance and conservatism.

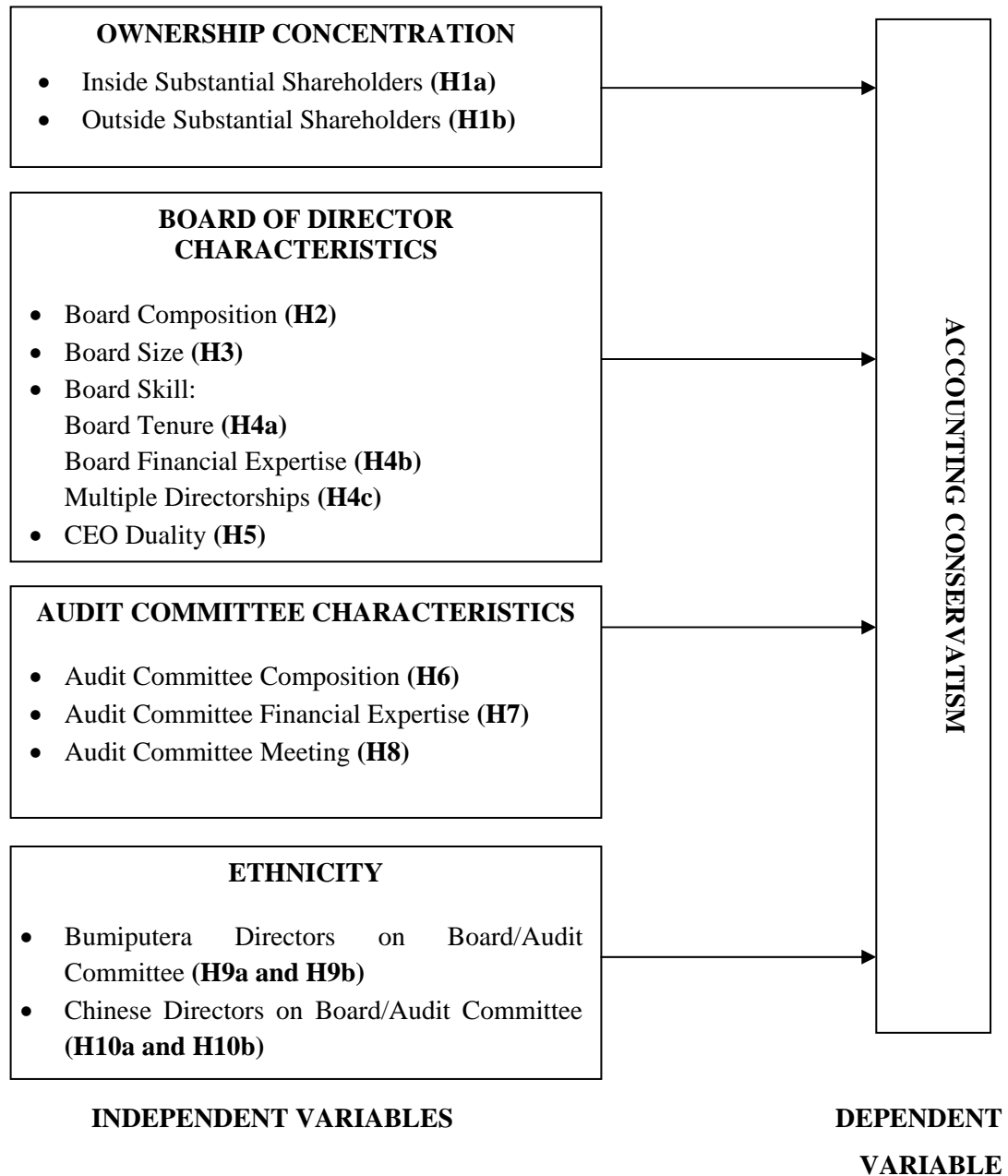
Section 3.2 presents and discusses the conceptual framework employed in this thesis. Section 3.3 presents the hypotheses according to independent variables presented in the conceptual framework. Section 3.4 summarises this chapter.

#### **3.2. Conceptual Framework**

Positive accounting theory suggests that conservatism is an effective tool to reduce agency conflict. Based on the agency theoretical framework, this thesis includes ownership concentration and characteristics of the board of directors and audit committee to examine if they affect the use of conservative financial reports. Additionally, the role of cultural values in influencing behaviour may also affect directors' judgment on accounting conservatism. This thesis uses ethnicity as a proxy for culture.

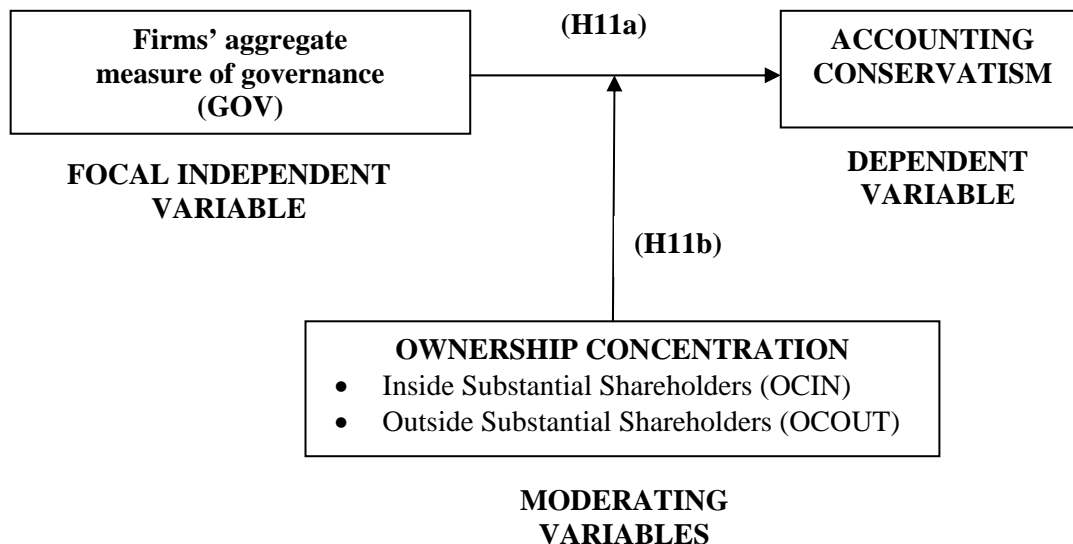
Referring to the framework in Figure 3.1, this thesis examines ownership concentration as classified into inside substantial shareholders and outside substantial shareholders (see chapter 4 Section 4.5.1 for definition). This classification is made because previous evidence showed that outside shareholders demand better governance relative to inside shareholders. Hence, their effect on conservatism may vary. The board characteristics examined are board composition, board size, board skill (proxied by board tenure, board financial expertise and

multiple directorships) and CEO duality. The audit committee characteristics are audit committee composition, audit committee financial expertise and audit committee meeting. This thesis focuses on two ethnic groups: Malay (Bumiputera) and Chinese directors, who sit on the board of directors and the audit committee.



**Figure 3.1: Conceptual Model Underpinning this thesis**

As shown in Figure 3.2, this thesis also examined the moderating effect of concentrated ownership on the relationship between firms' governance and conservatism. It is expected that firms that employ good governance practices would employ more conservatism; but concentrated owners may limit the function of the firms' governance, and hence may lead to less conservatism.



**Figure 3.2: Conceptual Model on Moderating effect of Concentrated Ownership**

### **3.3. Hypotheses Development**

#### **3.3.1. Ownership Concentration**

Concentrated owners who have a large investment in firms have access to managers' private information; hence reducing the traditional agency conflict between managers and shareholders. As a result of this advantage, concentrated owners will put less emphasis on the quality of the financial reports. Dargenidou et al. (2007) argued that the majority shareholders have lower demand for accounting conservatism because they rely less on the financial reports. Two competing arguments, namely the entrenchment effect and the substitution effect suggest that majority shareholders would lead to less conservatism either because they do not need a governance tool to control their behaviour; or their presence to monitor the management substitutes for the governance mechanism.

Previous studies however showed that outside shareholders' demand quality financial reports as they improved disclosure in financial reporting (Yeo et al., 2002) and reduced earnings management (Azofra et al., 2003). Since the effect of inside and outside shareholders on conservatism may vary, this thesis segregates the ownership concentration into insiders and outsiders. This thesis presents the following hypotheses,

- H1a: The proportion of substantial shareholding by insiders is inversely related to conservative accounting.**
- H1b: The proportion of substantial shareholding by outsiders is positively related to conservative accounting.**

### **3.3.2. Board of Directors' characteristics**

Previous studies suggested that the characteristics of a strong board of directors relate to representation by independent directors, limited number of members sitting on the board, members possessing good skill and separation of CEO and chairman roles. Independent directors are credited for being more experienced and for giving independent judgment over the board's decision. Evidence showed that independent directors reduced fraud on financial statements (Beasley, 1996), lower earnings management (Peasnell et al., 2006) and led to more conservatism (A. S. Ahmed & Duellman, 2007; Beekes et al., 2004). Board of directors that are designed to control agency conflict would demand more conservatism because it provides them with early notice of any future losses and assists them in controlling managers' opportunistic behaviour. This thesis presents the following hypothesis,

- H2: The proportion of independent directors on the board is positively related to conservative accounting.**

Empirical evidence on board size suggests that larger board size in most cases reduces board effectiveness in monitoring management. Though several studies indicated that a larger board has a broader pool of knowledge and has better monitoring capacity, the risks of having too many members may outweigh the

benefits. Lipton and Lorsch (1992) claimed that a large board creates a free rider problem, slows decision making and members are less likely to criticise the decisions of top managers. Additionally, a large board is less involved with strategic decision making (Judge & Zeithaml, 1992) and leads to coordination problems (Forbes & Milliken, 1999).

Empirical studies showed that a large board was associated with lower firm performance (Mak & Li, 2001), higher earnings management (Rahman & Ali, 2006) and higher occurrence of a distressed status (Chang, 2009). In contrast, small board size led to a higher returns-earnings relation (Vafeas, 2000) and effective monitoring of the quality of earnings (K. Ahmed et al., 2006). The previous evidence suggests that large board size is associated with weak governance ability; hence it may not promote conservative financial reports. This thesis presents the following hypothesis,

**H3: Board size is inversely related to conservative accounting.**

Previous studies examined three types of skills contributing to effective governance, namely firm-specific expertise, financial expertise and governance expertise. Firm-specific expertise refers to the cumulative knowledge of the firm through directors' longer service on the firm's board. Financial expertise refers to accounting knowledge that allows the directors to understand the process of preparing the financial reports; and the ability to make decisions that will enhance the quality of the information. Governance expertise refers to directors' experience obtained from their participation on the boards of other firms, which deepen their knowledge in solving various problems.

Empirical studies showed that longer tenure reduced earnings management (Bedard et al., 2004; Peasnell et al., 2005) and reduced the occurrence of a financial distress status (Chang, 2009). Directors that are expert in financial aspects have better monitoring skill, thus were more effective in enhancing the quality of the financial reporting (Lanfranconi & Robertson, 2002; McMullen & Raghunandan, 1996; Rose & Rose, 2008).



In regards to multiple directorships, previous studies argued that although directorships on the boards of other firms enhance the directors' knowledge, they may not be able to apply their knowledge effectively because they are too busy, and hence have limited time with the firm. Consistent with this argument, evidence showed that multiple directorships were associated with lower firm performance (Haniffa & Hudaib, 2006), lower conservatism (A. S. Ahmed & Duellman, 2007) and higher earnings management (Sarkar et al., 2008). The evidence suggests that longer tenure and financial expertise are attributes of strong governance, hence will lead to more conservatism to assist in their oversight role of the financial reporting process. Multiple directorships are however, an attribute of weak governance that will likely lead to less conservatism. This thesis presents the following hypotheses,

**H4a: Directors' tenure is positively related to conservative accounting.**

**H4b: The proportion of financial expertise on the board is positively related to conservative accounting.**

**H4c: The proportion of directors with multiple directorships is inversely related to conservative accounting.**

Using stewardship theory, previous studies have argued that duality roles reduce internal conflict as incomplete communications are diminished when the two roles are combined (Brickley et al., 1997) and improve board effectiveness because executive directors are more knowledgeable about the firms' business than the independent directors (A. Klein, 1998). Daily and Dalton (1997) pointed out that separating or combining the CEO and chairman roles are based on two perspectives, either for strong leadership structure or for effective monitoring. They further acknowledged that practitioners and financial communities prefer the separate structure. In view of the presence of concentrated owners, especially insiders in the majority of the Malaysian firms, separating the roles may limit full control of the controlling owners over the board's decision. Driven by previous evidence that CEO duality created more harm to board effectiveness (Dechow et al., 1995; A. Klein, 2002; Rahman & Haniffa, 2005), this thesis posits that the joint structure will lead to less conservatism. This thesis presents the following hypothesis,

**H5: CEO Duality is inversely related to conservative accounting.**

### **3.3.3. Audit Committee characteristics**

This thesis examines three attributes of audit committee, namely independent directors on audit committee, directors with financial expertise and frequency of audit committee meetings.

Previous studies argued that independent directors on the audit committee improve governance because they can resolve disagreement among internal managers (Fama & Jensen, 1983) and confront controversial issues with the internal auditors (Zain & Subramaniam, 2007). Empirical evidence showed that independent directors were associated with fewer financial reporting problems (McMullen & Raghunandan, 1996), reduced earnings management (Saleh et al., 2007) and positively moderated the CEO duality effects on audit fees (Muniandy, 2007). Since evidence indicates that independent directors on the audit committee reduce agency conflicts and are effective in monitoring the financial reporting process, it is likely that they will demand more conservatism. This thesis presents the following hypothesis,

**H6: The proportion of independent directors on the audit committee is positively related to conservative accounting.**

The study of McMullen and Raghunandan (1996), Rose and Rose (2008) and Dickins et al. (2009) highlighted it is important for audit committee members to have financial expertise. Similar to the evidence on financial expertise on the board, previous studies established that financial expertise on the audit committee reduced earnings management (Bedard et al., 2004), led to less restatement of earnings (Abbott et al., 2004) and employed more conservative accounting (G. V. Krishnan & Visvanathan, 2008). Since, users of the financial statements rely on the competency of directors to oversee the process of the financial reporting; it is more likely that financial expertise employs more conservatism to assist in their governance roles. This thesis presents the following hypothesis,

**H7: The proportion of financial expertise on the audit committee is positively related to conservative accounting.**

The frequency of audit committee meeting is an indication of the diligence of the audit committee members as they would normally resolve issues with the auditors in a formal meeting. Raghunandan and Rama (2007) stated that frequent meetings reflect active committee members.

Empirical studies showed that frequent audit committee meetings led to lower cost of debt (Anderson et al., 2004), reduced the possibility of restatement (Abbott et al., 2004) and lowered fraud occurrence (Owens-Jackson et al., 2009). Accordingly, it is perceived that audit committee members who hold meetings frequently are concerned with the quality of the financial reports; hence will likely demand more conservatism. This thesis presents the following hypothesis,

**H8: The frequency of audit committee meeting is positively related to conservative accounting.**

#### **3.3.4. Ethnicity**

The evidence in literature to predict the effect of Bumiputera (or Malays) and Chinese ethnic groups on conservatism is mixed. Empirical studies on the individualism component of Gray (1988) alone, produced mixed findings and arguments. Whilst some studies showed that both ethnic groups were indifferent in terms of individualism (Juri, 1999; Selvarajah & Meyer, 2008; Sendut, 1991), there are studies that suggest that Malays had lower individualism than the Chinese (A. Abdullah, 1992; Hamzah et al., 2002) or Malays' individualism had increased (Iskandar & Pourjalali, 2000; Tamam et al., 1996; Zawawi, 2008). It is difficult to predict the effect of ethnicity based on the individualism concept.

The political incentive and compensation or tax incentives suggest that the Bumiputera ethnic group prefer to report higher earnings while the Chinese ethnic group prefer to report lower earnings (Ball et al., 2003; Yen et al., 2007). Based on these incentives, it is likely that the Bumiputera ethnic group will employ less conservatism but the Chinese ethnic group will employ more conservatism. Haniffa and Cooke (2002) found Malay directors to be less secretive. According to Gray's

(1988) hypothesis, individualism has the same impact on secrecy and conservatism. Therefore, following from Haniffa and Cooke's (2002) findings, Malay directors who were less secretive may suggest that they are also less conservative. Consistent with the political incentive and compensation or tax incentives and findings of Haniffa and Cooke (2002), this thesis presents the following hypotheses,

**H9a: The proportion of Bumiputera members on the board is inversely related to conservative accounting.**

**H9b: The proportion of Bumiputera members on the audit committee is inversely related to conservative accounting.**

**H10a: The proportion of Chinese members on the board is positively related to conservative accounting.**

**H10b: The proportion of Chinese members on the audit committee is positively related to conservative accounting.**

### **3.3.5. Moderating effect of Ownership Concentration**

The Malaysian Code on Corporate Governance stated that Malaysian firms should adopt the best practice of corporate governance to ensure better monitoring ability. However, previous studies argued that corporate governance system in Asian countries is not working effectively due to the influence of the concentrated owners. This evidence was documented by Cho and Kim (2007), Hu, Tam and Tan (2010) and V. Z. Chen et al. (2011), that concentrated owners limit the effectiveness of the firms' governance mechanisms.

This thesis predicts that firms' that practice good governance would employ more conservatism. However as many studies had argued, the performance of the firms' governance mechanism could be adversely affected by the influence of the concentrated owners. This thesis presents the following hypotheses,

**H11a: There is a positive relationship between firm's governance and conservatism.**

**H11b: The power of the concentrated owners, represented by the percentage of ownership, negatively moderates the positive effect of the firms' governance on conservatism.**

### **3.4. Summary**

The first part of this chapter presents the conceptual framework in this thesis. Four main independent variables were identified, which are ownership concentration, board of directors' characteristics, audit committee characteristics and ethnicity. The predicted effect of these variables on conservatism practices was explained under the hypotheses development. There are seventeen hypotheses altogether; the first fifteen hypotheses test the relationship between the independent variables and the conservatism and the final two hypothesis tests the moderating effect of ownership concentration on the relationship between firms' governance and conservatism.

## **CHAPTER FOUR**

### **RESEARCH METHOD**

#### **4.1. Introduction**

This chapter provides explanation relating to the data used in this thesis. Firstly, it explains the sampling method and sources of the data. Next, it describes proxies and the measurement of the variables. This thesis employs a panel data methodology; hence procedures to examine the panel data are also presented.

#### **4.2. Sampling**

The sample companies were extracted from the population of all companies listed on the main board and second board of Bursa Malaysia. A list of companies printed from the Bursa Malaysia website was used as a reference to extract firms' financial data from Datastream. Finance related companies were excluded because they fell under the Banking and Financial Institutions Act of 1989, which possess unique characteristics and operated in different compliance and regulatory environment (Chu & Cheah, 2006; Yatim et al., 2006). PN4 classified companies, which are distressed companies with given time and opportunity to regularise their financial position to the minimum required of a listed company, were also excluded to avoid the influence of their financial condition on the results of this thesis. Following Strong and Walker (1993) and S. N. Abdullah (2006c), companies that changed their financial year end during the sample period were also excluded. Also, excluded were companies that had undergone significant mergers or reconstruction, and those with unavailable online annual reports. Table 4.1 provides a summary of the initial sample.

This thesis employed two measures of conservatism; namely accrual-based conservatism and asymmetric timeliness. For a sample of seven years period (2001-2007), i.e. nine years complete accounting data,  $t = 2000-2008$  is required to measure accrual-based whilst ten years complete accounting data,  $t = 1998-2007$  is required to measure asymmetric timeliness. Accrual-based conservatism used an average three-

year accounting data which is centred in year  $t$ . Therefore, a measure in 2001 requires financial data for 2000-2002; and a measure in 2007 requires financial data for 2006-2008. Asymmetric timeliness measure used a three-year backward accumulation of earnings and share returns. Thus, the measure for 2001 requires financial data of 1999-2001. In order to be included in the sample, firms with fiscal year end before December 1999, must have complete share prices in the relevant months of 1998 so that share returns for 1999 can be computed.

**Table 4.1**  
**Derivation of Sample**

Sample selection from 2001-2007	
Total number of companies extracted from the Datastream	807
Less:	
Financial related companies	(42)
PN4 companies	(12)
Companies that change financial year end	(12)
Companies involved with mergers or reconstructions	(28)
Missing share price in any period between 1998-2007	(270)
Incomplete online annual report in any period between 2001-2007	(143)
<b>Initial sample</b>	<b>300</b>

After deletion of outliers, the initial sample of 300 firms for 7 years (2100 firm-year observations) was reduced to 2031 firm-year observations for accrual-based conservatism (CONACCR) and 2012 firm-year observations for asymmetric timeliness (AT). Table 4.2 presents the sector representation of the data distributions in the two models; CONACCR and AT.

**Table 4.2**  
**Sector Representation of the Sample**

Sectors	CONACCR		AT	
	Firm-year observations	%	Firm-year observations	%
Industrial product	775	38	778	39
Trading and Services	399	20	401	20
Consumer product	347	17	324	16
Plantation	165	8	164	8
Construction	164	8	165	8
Property	63	3	63	3
Technology	62	3	62	3
Infrastructure	28	1	27	1
Hotel	28	1	28	1
<b>Total</b>	<b>2031</b>		<b>2012</b>	

### **4.3. Sources of Data**

Data was collected from two separate sources: Datastream and annual reports. Monthly share prices obtained from Datastream were used to compute stock returns. Market values or market capitalisation, which is a product of share price and number of outstanding shares, were also retrieved from the database. Any missing financial figures from Datastream were acquired from the annual reports.

The annual reports were retrieved from the Bursa Malaysia website at [www.bursamalaysia.com.my](http://www.bursamalaysia.com.my). Data on ownership concentration, board of directors and audit committee were manually extracted from these annual reports. Data on ownership concentration were obtained under the analysis of shareholding section. Information on board of directors and audit committee were extracted from the board of directors' profile and audit committee report respectively. All relevant data was collected from 2001 to 2007, except those used to compute conservatism measures that required additional figures from 1998 to 2000 and 2008. The sample period of this thesis starts from 2001 because it was the year in which Malaysian listed firms were required to make mandatory disclosure of the extent of compliance (or non-compliance) with the Malaysian Code on Corporate Governance adopted in 2000. The starting year was chosen to ensure availability of the governance data in the annual reports and to ensure uniformity of corporate governance practices of all Malaysian companies.

### **4.4. Conservatism Measures**

This thesis used two measures of conservatism; (a) accrual-based conservatism proposed by Givoly and Hayn (2000) and asymmetric timeliness introduced by Basu (1997). Basu's conservatism measure has encouraged many studies on accounting conservatism<sup>1</sup>(Givoly, Hayn, & Natarajan, 2007), but several studies highlighted its limitations as a measure of accounting conservatism (e.g. Beaver & Ryan, 2005;

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<sup>1</sup> As at July 2006, Basu's measure has been quoted by 270 published and working papers (Ryan, 2006).



Dietrich, Muller, & Riedl, 2007; Pae, Thornton, & Welker, 2005). Ryan (2006) acknowledged the criticisms<sup>2</sup>, but concluded that Basu's measure remained as the primary measure of accounting conservatism. Nevertheless, Givoly et al. (2007) affirmed the importance of incorporating several measures of conservatism, as reliance on a single measure to assess the conservatism of the reporting entity may lead to an incorrect conclusion. This thesis follows Lara et al. (2009) who used accrual-based and asymmetric timeliness to measure accounting conservatism.

#### **4.4.1. Accrual-based Conservatism (CONACCR)**

Reverse pattern of accruals occurs when periods in which net income exceeds (falls below) cash flow from operation, is expected to be followed by periods with negative (positive) accruals (Givoly & Hayn, 2000). Firms with a steady state are expected to converge accruals in previous periods to cash flow from operation in the subsequent periods. Therefore, a consistent predominance of negative accruals across firms over a period of time is an indication of conservatism.

The accrual-based measure of conservatism was computed as income before extraordinary items and discontinued operations (INC) plus depreciation expenses (DEPRN) minus operating cash flows (OCF) and deflated by total assets (TA). The accrual value is averaged over a three-year period centred at year  $t$ , and multiplied by -1 and referred to as CONACCR. The simple form is shown as follows:

$$\text{Accruals}_{3 \text{ years}} = [(\text{INC} + \text{DEPRN} - \text{OCF})] / \text{TA}$$

$$\text{CONACCR} = (\text{Accruals} / 3 \text{ years}) \times (-1)$$

Averaging over a number of years will mitigate the effects of any temporary large accruals, since accruals are likely reversed within one to two years (Richardson,

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<sup>2</sup> Ryan (2006, footnote no.2) states that “In my view, two well-known empirical results together imply the biases identified by Dietrich et al.(2007) are likely to be fairly small and so biases in returns-based measures of asymmetric timeliness are likely to be correspondingly small. First, the low values of  $R^2$  observed in contemporaneous returns–earnings regressions suggest that the extent to which earnings causes returns is tiny compared to the extent to which both variables are determined by other, more primitive information. Second, a large literature, only some of which employs the reverse regressions of earnings on returns used to estimate asymmetric timeliness, exists that shows returns typically reflect information on a timelier basis than earnings”.

Sloan, Soliman, & Tuna, 2005). The CONACCR value above was derived after multiplying by -1, so that higher value of CONACCR indicates more conservatism. Zhang (2008) noted that the accrual conservatism measured here is a non-operating accruals that summarise the actual recording of bad news and capture the asymmetric verification requirements as reflected in earnings.

#### 4.4.2. Asymmetric Timeliness (AT)

Basu (1997) introduced asymmetric timeliness to measure accounting conservatism where share returns are used as a proxy for news about firm performance. Timeliness in earnings is measured using reverse-regression between earnings and contemporaneous returns that capture the difference in the effects of negative returns and positive returns on earnings. A dummy variable (D) interacts with the return variable (R) to proxy for bad news (R\*D) whilst the main effect on return (R) is a proxy for good news. Basu's regression model is presented as follows:

$$E_{it}/P_{it-1} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \varepsilon_{it}$$

Where:

For each firm (*i*) and each year (*t*),

$E_{it}/P_{it-1}$  = Net Income before extraordinary items divided by beginning of fiscal year market value of equity;

R = fiscal year share return;

D = dummy variable is equal to 1 if returns are negative; 0 if otherwise.

R\*D = Interaction between R and D

The sensitivity of earnings to good news is measured by the  $\beta_1$  estimate while sensitivity of earnings to bad news is measured by  $\beta_1 + \beta_3$ . Positive coefficients are predicted for intercept ( $\beta_0$ ) and return ( $\beta_1$ ). The positive sign for the intercept reflects the realised gain (good news) from previous periods recognised in the current year (Basu, 1997). The value of  $\beta_3$  reflecting the incremental sensitivity of earnings to bad news compared to good news, and thus measures the accounting conservatism. The coefficient of  $\beta_3$  is commonly referred to as 'asymmetric

timeliness'. Under greater conservatism, earnings will have higher sensitivity to bad news as compared to good news. Accordingly,  $\beta_3$  is expected to be larger than zero.

#### 4.5. Measurement of Independent Variables

This section provides the operational definitions of each independent variable examined in this thesis. The independent variables are categorised as ownership concentration, board of directors' characteristics, audit committee characteristics, ethnicity and control variables. Table 4.3 provides a summary of the measurements used in this thesis.

**Table 4.3**  
**Summary of the Measurements of the Variables**

Variables	Acronym	Measurements
<b>DEPENDENT VARIABLES:</b>		
1) Accrual-based Conservatism	CONACCR	Accrual measure= [(Income before extraordinary item & discontinued operation + depreciation - operating cash flow) ÷ total asset] ÷ 3 years X (-1).
2) Earnings Price ratio	$E_{it}/P_{it-1}$	Net Income before extraordinary items ÷ beginning of fiscal year market value of equity.
<b>INDEPENDENT VARIABLES:</b>		
<b>Ownership Concentration:</b>		
1) Inside Substantial Shareholders	OCIN	Percentage of substantial shareholding held by executive and non-independent non-executive directors.
2) Outside Substantial Shareholders	OCOUT	Percentage of substantial shareholding held by outsiders who are independent from the management.
<b>Board of Directors characteristics</b>		
3) Board Composition	BID	Proportion of independent directors to total directors on board.
4) Board Size	BS	Natural logarithm of board size.
5) Board Tenure	BT	Average years the independent directors served on the firm's board.
6) Board Financial Expertise	BF	Proportion of board members with financial expertise to total directors on board.
7) Multiple Directorships	BSHIP	Proportion of board members with more than two outside directorships to total directors on board.
8) CEO Duality	BCD	Dummy = 1 if CEO-Chairman roles combine; 0 if separate.

Variables	Acronym	Measurements
<b>INDEPENDENT VARIABLES:</b>		
<b>Audit Committee characteristics</b>		
9) Audit Committee Composition	ACID	Proportion of independent directors to total directors on audit committee.
10) Audit Committee Financial Expertise	ACF	Proportion of audit committee members with financial expertise to total directors on audit committee.
11) Audit Committee Meeting	ACM	Numbers of audit committee meeting held per year.
<b>Ethnicity</b>		
12) Bumiputera Directors on Board	BBR	Proportion of Bumiputera directors to total directors on board.
13) Bumiputera Directors on Audit Committee	ACBR	Proportion of Bumiputera directors to total directors on audit committee.
14) Chinese Directors on Board	BCR	Proportion of Chinese directors to total directors on board.
15) Chinese Directors on Audit Committee	ACCR	Proportion of Chinese directors to total directors on audit committee.
<b>Control Variables</b>		
16) Auditor	AUD	Dummy = 1 if audited by big 4 audit firm, 0 otherwise.
17) Firm Size	TA	Natural logarithm of total assets.
18) Profitability	PROF	Cash flow from operation ÷ Total assets.
19) Leverage	LEV	Noncurrent liabilities ÷ Total assets.
20) Sales Growth	SGROW	Annual percentage change in sales.
21) Market to Book	MTB	Market value of equity ÷ Book value of equity.

#### 4.5.1. Ownership Concentration

Ownership concentration is measured by the percentage of the firm's outstanding shares held by the substantial shareholders. Section 69D of Companies Act 1965, defines substantial shareholder as a person who holds not less than five per centum of the aggregate of the nominal amounts of all the voting shares in the company. The substantial shareholding disclosures in the annual reports indicate the shareholders' direct interest and indirect interest. Direct interest refers to shares directly purchased from the firm under the shareholder's own name whilst indirect interest refers to the interest of individual shareholders (or firms) through shares owned in another linked company and/or through shareholdings by the shareholder's family members.

Many studies have used the top ten largest, the top five largest or the largest shareholders as a proxy for ownership concentration. This thesis however, uses

substantial shareholders as the proxy because many Malaysian firms are controlled by certain parties via nominee names to remain anonymous (Chu & Cheah, 2006; Singam, 2003). Selecting the largest shareholders, top five or top ten largest shareholders as the proxy for ownership concentration may not be accurate because the list of the 30 largest shareholders in the annual reports does not aggregate different securities accounts belonging to the same person. The substantial shareholding, however account for total ownerships with five percent and more including through nominees and indirect holding via other institution or connected person. Therefore, shareholders who fall outside the top five or ten in the list of the 30 largest shareholders are accounted for under the substantial shareholding.

This thesis classified the substantial shareholders into insiders and outsiders. This measure is undertaken following a survey result due to Bursa Malaysia and PricewaterhouseCoopers in 2002, that directors involved in management were also substantial shareholders of the company (Satkunasingam & Shanmugam, 2006). The insiders (OCIN) are substantial shareholders who are executive and non-independent non-executive directors (or their family members) of the company or firms in which the executive and non-executive directors (or their family members) have an indirect interest. The outsiders (OCOUT) are those, other than categorised under insiders, who are individuals or firms that are independent from the management. The measures for the two types of substantial shareholders are (a) OCIN is the percentage of the firm's outstanding shares held by the inside substantial shareholders; and (b) OCOUT is the percentage of the firm's outstanding shares held by the outside substantial shareholders.

#### **4.5.2. Board of Directors' characteristics**

**Board composition (BID)** is the proportion of independent directors on the board. Bursa Malaysia defines independent directors as those independent of the management, and free from any business or other relationship which could interfere with the exercise of independent judgment or the ability to act in the best interest of the stakeholders. *BID* was computed as the total number of independent non-executive directors on the board divided by the total number of board members (S. N. Abdullah, 2006a; A. Klein, 2002; Peasnell et al., 2006).

**Board size (BS)** is the natural logarithm of total number of board members. A similar measure was employed by previous studies, among others A. S. Ahmed and Duellman (2007), G. V. Krishnan and Visvanathan (2008) and Lam and Lee (2008).

**Board skill** is proxied by board tenure, board financial expertise and multiple directorships. These three proxies represent different skills possessed by directors on the board that may influence accounting conservatism. Board tenure reflects firm-specific expertise; board financial expertise reflects directors' expertise in accounting or finance, and multiple directorships reflect governance expertise.

**Board tenure (BT)** is the average years the independent directors served on the firm's board. *BT* was computed as the total number of years of service of all independent directors on the board divided by the total number of independent directors on board (Peasnell et al., 2005; Rahman & Ali, 2006).

**Board financial expertise (BF)** is the proportion of board members with qualifications or experience in accounting or finance, including those who are members of accounting professional bodies. The definition includes directors who are current or former chief financial officers, accountants and former auditors. *BF* was computed as the total number of board members with financial expertise divided by the total number of board members (Bedard et al., 2004; Saleh et al., 2007).

**Multiple directorships (BSHIP)** are the proportion of directors on the board with more than two outside directorships. A similar measure was employed by Ferris et al. (2003), Saleh et al. (2005) and Fich and Shivdasani (2006). Many previous studies (e.g.: A. S. Ahmed & Duellman, 2007) used average number of additional directorships as a measure of *BSHIP*. Fich and Shivdasani (2006) noted that an average number of directorships is a noisy measure as the number of directorships are widely dispersed. This thesis found that average number could not be used because most companies did not provide a clear number of the directors' additional directorships. Rather, this thesis observed that the word 'several' was used in place of the actual number of directorships. This thesis assumed 'several' as more than two directorships. *BSHIP* was computed as the

total number of board members with more than two outside directorships divided by the total number of board members.

*CEO Duality (BCD)* occurs when the CEO is also the chairman of the board. Dummy was assigned as 1 if the roles of the CEO and chairman were combined and 0 otherwise.

#### **4.5.3. Audit Committee characteristics**

*Audit committee composition (ACID)* is the proportion of independent directors on the audit committee. *ACID* was computed as the total number of independent directors on the audit committee divided by the total number of audit committee members (G. V. Krishnan & Visvanathan, 2008; Salleh et al., 2006).

*Audit committee financial expertise (ACF)* is the proportion of audit committee members with qualifications or experience in accounting or finance, including those who are members of accounting professional bodies. The definition includes directors who are current or former chief financial officers, accountants and former auditors. *ACF* was computed as the total number of audit committee members with financial expertise divided by the total number of audit committee members (G. V. Krishnan & Visvanathan, 2008).

*Audit committee meeting (ACM)* was measured as the number of meetings held by the audit committee per year. The same measure had been used by previous studies to proxy for the diligence of the audit committee (e.g.: G. V. Krishnan & Visvanathan, 2008; Raghunandan & Rama, 2007)

#### **4.5.4. Ethnicity**

This thesis examines Bumiputera ethnic and Chinese ethnic directors on the board and audit committee.

*Bumiputera directors on board (BBR)* were computed as the total number of Bumiputera directors on the board divided by the total number of board members.

*Bumiputera directors on audit committee (ACBR)* were computed as the total number of Bumiputera directors on the audit committee divided by the total number of audit committee members.

*Chinese directors on board (BCR)* were computed as the total number of Chinese directors on the board divided by the total number of board members.

*Chinese directors on audit committee (ACCR)* were computed as the total number of Chinese directors on the audit committee to the total number of audit committee members.

#### **4.5.5. Control Variables**

As in previous studies, this thesis included auditor, firm size, growth, profitability and leverage as control variables in the regression models, given the evidence of the association between these variables and accounting conservatism. Sales growth and market to book ratio are the two proxies for growth; where sales growth is a control factor in accrual-based conservatism whilst the market to book ratio is a control factor in asymmetric timeliness.

*Auditor (AUD)* was measured using binary variables; a dummy is assigned the value of 1 if firms were audited by big four audit firms and 0 otherwise. Empirical evidence showed that the auditor influences financial reporting process; for instance appointment of a big six auditor led to lower earnings management (Becker, DeFond, Jambalvo, & Subramanyam, 1998; Francis & Krishnan, 1999). Additionally, big-firm auditors were more widely associated with conservatism than were non big-firm auditors. For instance, DeFond and Subramanyam (1998) found that big six auditors adopted more conservatism than the non-big six auditors. Chung et al. (2003) reported that large audit firms demanded more accounting conservatism. Relative to small and medium size audit firms, large audit firms are more exposed to loss of reputation or legal action in case of audit failure. Small audit firms are less likely to be sued because their ability to settle lawsuits may be



insufficient to cover the costs incurred by the shareholders or creditors. A positive association is expected between auditor and conservatism.

**Firm size (TA)** was measured by the natural logarithm of total assets. This measurement was employed by Rahman and Ali (2006) and G. V. Krishnan and Visvanathan (2008). According to Watts and Zimmerman (1978), large firms that are exposed to more political costs will adopt more accounting conservatism. However, these political costs could be subject to the information asymmetry effects and the aggregation effects. LaFond and Watts (2008) viewed larger firms to suffer less information asymmetry because they produce more public information. This is supported by the findings of Givoly et al. (2007) where asymmetric timeliness of earnings of the large firms was significantly smaller than for small firms. Thus, large firms with lesser information asymmetry may be exposed to lower political costs, hence adopt lower conservatism. A negative association is expected between firm size and conservatism.

**Profitability (PROF)** was computed as cash flow from operations divided by total assets, following A. S. Ahmed and Duellman (2007) and G. V. Krishnan and Visvanathan (2008). Relative to profitable firms, A. S. Ahmed et al. (2002) noted that unprofitable firms will be less likely to employ conservative accounting as it will decrease its profits further. A positive association is predicted between profitability and conservatism.

**Leverage (LEV)** was computed as total noncurrent liabilities divided by total assets following A. S. Ahmed and Duellman (2007) and G. V. Krishnan and Visvanathan (2008). As the demand for conservatism is partly from debt contracting, it is argued that highly leveraged firms may employ more conservative accounting in order to reduce the conflict between shareholders and debt holders. A. S. Ahmed et al. (2002) reported that firms employed accounting conservatism and dividend policy to mitigate the debtholders-shareholders conflict, which in turn reduced the cost of debt. Also, LaFond and Roychowdhury (2008) documented that highly leveraged firms employed more conservatism. Beatty, Weber and Yu (2008) reported that debt holders demanded conservative financial reports even though they had the ability to specify the financial numbers in the debt contract. A positive association is expected between leverage and conservatism.

**Sales growth (SGROW)** is the percentage of annual growth in total sales [ $SGROW = (Sales_t - Sales_{t-1}) / Sales_{t-1}$ ]. SGROW is included in the CONACCR regression model because A. S. Ahmed et al. (2002) argued that growth in sales is likely to affect the CONACCR measure due to several reasons. First, SGROW affects accruals items such as inventory and receivables; and in turn affects CONACCR. Second, for firms with declining sales, CONACCR is a poor measure of accounting conservatism. A negative association is expected between sales growth and accrual-based conservatism because higher sales growth will likely increase current accruals, which in turn reduces CONACCR.

**Market to book (MTB)** was measured as the ratio of market value of equity to book value of equity. MTB is a proxy for growth opportunity and needs to be controlled for in the asymmetric timeliness model because changes in growth opportunities can create variation in the asymmetric timeliness that are unrelated to accounting conservatism (Roychowdhury & Watts, 2007). LaFond and Roychowdhury (2008) stated that MTB is used to control for the effect of beginning composition of equity value on future asymmetric timeliness. A negative association is expected between market to book and asymmetric timeliness.

#### **4.5.6. Moderating Relationship: Aggregate measure of firms' governance (GOV)**

This thesis, which focused on internal governance mechanisms, is interested in identifying whether ownership concentration constrains firms' governance from applying high conservatism practices. The concentrated owners were identified as inside substantial shareholders (OCIN) and outside substantial shareholders (OCOUT). Aggregate measure was used to measure firms' governance (GOV) following the approach undertaken by Lara et al. (2007), Khanchel (2007) and G. V. Krishnan and Visvanathan (2008); and because aggregate measure accounts the effectiveness of the overall governance employed in the firms (Cohen et al., 2004; Lara et al., 2007). If Malaysian firms' governance mechanisms are effective, the controlling shareholders might not be able to influence the firms' governance to adopt lower conservatism.

To compute the aggregate measure of firms' governance (GOV), this thesis incorporated eight governance mechanisms that are consistent with the recommendation in the Malaysian Code on Corporate Governance and the empirical evidence. The mechanisms are board composition, board size, CEO duality, financial expertise on the board and audit committee, audit committee composition, audit committee meeting and auditor to represent the firms' governance. As presented below, the empirical evidence has shown that these mechanisms have significant roles in determining the effectiveness of the firms' governance.

### ***Board Composition***

Agency theory and resource dependence theory highlight the importance of having independent directors on the board so that the board could monitor the management effectively (Fama & Jensen, 1983). Additionally, independent directors could protect firms' resources and reduce uncertainty as a result from improving the flow of information between the firms and outside environment (Pfeffer & Salancik, 2003). Since independent directors are associated with strong governance, Malaysian Code on Corporate Governance dictates that Malaysian listed firms to comply with minimum one third ratios of outside directors on the board. Empirical evidence showed that independent directors contributed to strong governance as it improved the quality of the financial reports (A. S. Ahmed & Duellman, 2007; Beekes et al., 2004; Benkraiem, 2009; Dahya et al., 2008; Dahya, Dimitrov, et al., 2009; Koh et al., 2007; Peasnell et al., 2006; Salleh et al., 2006). Concentrated owners themselves acknowledged that the presence of independent directors on the board are a threat to them as evidence showed that, firms with concentrated owners had few independent directors (Dahya et al., 2008; Setia-Atmaja, 2009). The evidence suggests that higher proportions of independent directors on the board contribute to stronger governance.

### ***Board Size***

The best practices in corporate governance suggest that firms should revise its board size that makes it function effectively. Previous studies have shown that members in a large board were inactive in strategic decision making and had problem in

coordination (Forbes & Milliken, 1999; Judge & Zeithaml, 1992). Most empirical evidence supported the Jensen (1993) and Lipton and Lorsch (1992) arguments that large board is ineffective for monitoring the management as it was associated with low firm performance (Cheng, 2008; Guest, 2009; Mak & Li, 2001), high earnings management (Rahman & Ali, 2006), lower earnings informativeness (K. Ahmed et al., 2006) and higher occurrence of financial distress status (Chang, 2009). Hence, large board is considered an attribute of weak governance.

### ***CEO Duality***

The best practices in corporate governance suggest firms to separate the CEO and chairman roles; and require firms to disclose reasons if they choose to combine them. The requirement is a clear indication that the combined roles may impair the board independence. Conflicting views of whether or not the CEO should hold the chairman position are explained by the agency theory and the stewardship theory. To promote good leadership, the stewardship theory suggests that the CEO and chairman roles should be held by one person. However, from the governance perspective proposed by the agency theory, separating the two roles ensures board independence from the management. Much evidence suggests that joint leadership structure weakened firms' governance, as it led to earnings manipulation (Dechow et al., 1995; A. Klein, 2002) and higher audit fees (Muniandy, 2007). The separate structure however, contributes to stronger governance as it was associated with more accounting conservatism (G. V. Krishnan & Visvanathan, 2008) and increased firm performance (Rahman & Haniffa, 2005). Lam and Lee (2008) showed that when insiders dominate the board, CEO and chairman roles should be separated. The empirical evidence suggests that CEO duality is an attribute of weak governance.

### ***Financial Expertise on the Board and Audit Committee***

The quality of the financial statements remains the responsibility of the board of directors although audit committee has been formed to deal with issues relevant to financial reports. This is consistent with Volpe and Woodlock (2008) argument that board members are responsible to review major issues on accounting principle and financial statements presentation. Evidence has shown that financial failure was

caused by lack of accounting knowledge among the board members (Agrawal & Chadha, 2005; Guner et al., 2008; Lanfranconi & Robertson, 2002). In addition, audit committee members need to have expertise in accounting or finance to qualify them as monitor of financial reporting process. Malaysian Code on Corporate Governance requires the members of the audit committee to be financially literate and at least one is a registered member of the accounting body. The market perceives financial expertise as an attribute of strong governance as reflected by the increased in the stock returns following the appointment of financial expertise to the firms (Davidson et al., 2004; DeFond et al., 2005). Also, financial expertise enhanced the quality of the financial reports (Abbott et al., 2004; Agrawal & Chadha, 2005; Bedard et al., 2004) and enhanced governance through the demand of quality audit (Yatim et al., 2006). Further, financial analysts preferred financial expertise over the non-accounting financial expertise (Dickins et al., 2009). Therefore, higher proportions of financial expertise on the board and audit committee contribute to stronger governance.

#### ***Audit Committee Composition***

Fama and Jensen (1983) and McMullen and Raghunandan (1996) highlighted the significant role of independent directors on the audit committee in reducing agency conflict. Most empirical evidence showed the benefit of having independent directors on the audit committee as firms were less likely experiencing financial problem, the independent directors were associated with lower earnings management and they reduced the negative effect of CEO duality on audit fees (McMullen & Raghunandan, 1996; Muniandy, 2007; Saleh et al., 2007). Since audit committee independence would contribute to better monitoring of the management, the Malaysian Code on Corporate Governance suggests that majority of the audit committee members must be represented by independent directors. Based on empirical evidence, higher proportions of independent directors on the audit committee contribute to stronger governance.

### ***Audit Committee Meeting***

Audit committee meeting is a place where the members of the audit committee meet and discuss with the auditor on accounting issues including those that arise from the internal audit. Frequency of meetings therefore, reflects how active the audit committee members communicate with the auditors. The best practices of corporate governance suggest a minimum of two meetings with the auditor without the presence of the management, but active members are expected to hold frequent meetings. Number of meetings reflect the diligence of the committee members (Raghunandan & Rama, 2007) and most evidence suggests that frequent meetings improve governance as it was associated with less fraud (Farber, 2005; Owens-Jackson et al., 2009), improved quality of the financial reports (Abbott et al., 2004) and led to less cost of debt (Anderson et al., 2004). The evidence suggests that frequent audit committee meetings contribute to stronger governance.

### ***Auditor***

Auditor plays an important role in corporate governance as the auditor provides an independent assessment on the financial reports. According to the best practice guidelines, audit committee members are required to have a close collaboration with the auditor to resolve any problems and conditions arising from the audit works. Since the auditor is regarded as an active participant in the governance process (Cohen et al., 2004), the audit committee members may not be able to monitor the management effectively without the auditor's support. The big-brand auditors (the big 4/5 audit firms) are perceived to be a strong governance mechanism; as evidence showed that they provided quality audit service through higher qualified opinion in the case of detection of earnings management (Johl, Jubb, & Houghton, 2007), reduced earnings forecast errors (Ahmad-Zaluki & Wan-Hussin, 2010; Lee, Taylor, & Taylor, 2006) and influenced firms to disclose internal audit reports mandatorily and led to frequent audit committee meetings (Haron, Ibrahim, Jeyaraman, & Chye, 2010).

### **Computation of GOV**

Following Khanchel (2007), percentile ranking was used to obtain GOV. Higher score in the ranking indicates direction of stronger monitoring. Procedures to compute the percentile ranking are explained as follows:

- (a) The eight mechanisms were ranked from bottom to top; small value was ranked bottom and high value was ranked top. Firms that were ranked with highest score represent those firms having stronger mechanism. With exceptions, larger board size reflecting weak governance and was ranked in reverse order where larger board was scored lower. Similarly, firms that combined the CEO and chairman roles were scored lower than those who separated the roles. The computations were run by the STATA statistical software, using syntax: `egen rank_ (variable name) = rank (variable name)`. The egen syntax ensures that any tied values on the variables are ranked as an average score.
- (b) The ranked score of the eight mechanisms in part (a) were added and divided by eight and were assigned as the average ranked score of GOV. The average score was used to compute percentile rank, simply  $i$  divided by  $n$  ( $i/n$ ) where  $i$  is the rank and  $n$  is the number of observations.

Multiple regressions analysis was carried out to test the moderating effect of concentrated ownership on the relationship between GOV and conservatism. Moderated relationship tests the interaction effect between the focal independent variable and moderated variable; and interaction effect exist if the effect of the independent variables on the dependent variables changes depending on the value of the moderating variable (Jaccard & Turrisi, 2003). Since this thesis wanted to test the effect of concentrated owners on the relationship between firms' governance (GOV) and conservatism, hence GOV is the focal independent variable and concentrated owners i.e. insiders (OCIN) and outsiders (OCOUT) are the moderating variables. The model summarises this moderating relationship as presented in Chapter 3, figure 3.2.

The interaction effect between GOV with OCIN and OCOUT was operationalised as follows. OCIN and OCOUT were separately multiplied with GOV to represent the effect of insiders and outsiders on firms' governance. The two interaction variables, OCIN\*GOV and OCOUT\*GOV were included in the original regression models used in the hypothesis testing earlier, but excluded the eight variables that have been accounted for in the GOV. An interaction effect exists if the coefficients on OCIN\*GOV or OCOUT\*GOV are significant. For the asymmetric timeliness model, 3-way interactions were made to test the moderating effect of OCIN and OCOUT on the effect of GOV on R and RD. The interacted variables are shown as follows: OCIN\*GOV\*R, OCIN\*GOV\*RD, OCOUT\*GOV\*R and OCOUT\*GOV\*RD.

## 4.6. Regression Models

### 4.6.1. Accrual-based Conservatism (CONACCR)

The following regression model tests the influence of ownership concentration, attributes of the board of directors, attributes of the audit committee and ethnicity of the directors on accrual-based conservatism.

$$\begin{aligned} \text{CONACCR}_{it} = & \beta_0 + \beta_1 \text{OCIN}_{it} + \beta_2 \text{OCOUT}_{it} + \beta_3 \text{BID}_{it} + \beta_4 \text{BS}_{it} + \beta_5 \text{BT}_{it} + \beta_6 \text{BF}_{it} + \\ & \beta_7 \text{BSHIP}_{it} + \beta_8 \text{BCD}_{it} + \beta_9 \text{ACID}_{it} + \beta_{10} \text{ACF}_{it} + \beta_{11} \text{ACM}_{it} + \beta_{12} \text{BBR}_{it} + \beta_{13} \text{ACBR}_{it} + \\ & \beta_{14} \text{BCR}_{it} + \beta_{15} \text{ACCR}_{it} + \beta_{16} \text{AUD}_{it} + \beta_{17} \text{TA}_{it} + \beta_{18} \text{PROF}_{it} + \beta_{19} \text{LEV}_{it} + \beta_{20} \text{SGROW}_{it} + \\ & \varepsilon_{it} \end{aligned} \quad (1)$$

Where:

For each firm (*i*) and each year (*t*),

CONACCR<sub>it</sub> = Accrual-based measure of conservatism proposed by Givoly and Hayn (2000).

OCIN<sub>it</sub> = Percentage of substantial shareholding held by executive and non-executive directors.



$OCOUT_{it}$	=	Percentage of substantial shareholding held by outsiders independent from the management.
$BID_{it}$	=	Proportion of independent directors to total directors on board.
$BS_{it}$	=	Natural logarithm of board size.
$BT_{it}$	=	Average years the independent directors served on the firm's board.
$BF_{it}$	=	Proportion of board members with financial expertise.
$BSHIP_{it}$	=	Proportion of directors with more than two outside directorships.
$BCD_{it}$	=	Dummy = 1 if CEO-Chairman roles combine; 0 if separate.
$ACID_{it}$	=	Proportion of independent directors to total directors on audit committee.
$ACF_{it}$	=	Proportion of audit committee members with financial expertise.
$ACM_{it}$	=	Number of audit committee meetings per year.
$BBR_{it}$	=	Proportion of Bumiputera directors to total directors on board.
$ACBR_{it}$	=	Proportion of Bumiputera directors to total directors on audit committee.
$BCR_{it}$	=	Proportion of Chinese directors to total directors on board.
$ACCR_{it}$	=	Proportion of Chinese directors to total directors on audit committee.
$AUD_{it}$	=	Dummy = 1 if audited by big 4 audit firm; 0 otherwise.
$TA_{it}$	=	Natural logarithm of total assets.
$PROF_{it}$	=	Cash flow from operation ÷ Total assets.
$LEV_{it}$	=	Noncurrent liabilities ÷ Total assets.
$SGROW_{it}$	=	Annual percentage change in sales.

#### 4.6.2. Asymmetric Timeliness (AT)

As presented in section 4.4.2, the following is Basu's original model of asymmetric timeliness.

$$E_{it} / P_{it-1} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \varepsilon_{it} \quad (2)$$

Where:

For each firm (*i*) and each year (*t*),

$E_{it}/P_{it-1}$  = Net Income before extraordinary items ÷ beginning of fiscal year market value of equity.

R = Fiscal year share return.

D = Dummy variable is equal to 1 if returns are negative; 0 otherwise.

R\*D = Interaction between R and D.

### Interaction of independent variables with equation 2:

This thesis extends Basu's original model to examine the relationship between conservatism and ownership concentration, board of directors' characteristics, audit committee characteristics and ethnicity. These independent variables and the control variables interact with each variable in Basu's original model as shown in equation 2. The following model illustrates the interaction of OCIN with each component in equation 2. Similar interactions are made with the remaining independent variables; OCOUT to MTB, but are not shown for clarity purposes.

$$E_{it}/P_{it-1} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} + \beta_7 R_{it} * D_{it} * OCIN_{it} + \dots + \varepsilon_{it}$$

The coefficient of the interaction term R\*D with the independent variable, represents the effect of the respective variable on asymmetric timeliness. For instance, the effect of insiders on asymmetric timeliness, is observed on  $\beta_7$ , which is the coefficient of the interaction term of R\*D with insiders (R\*D\*OCIN). If insiders employ more conservatism,  $\beta_7$  is expected to be positive.

Basu's original specification of asymmetric timeliness used a one year measure of earnings ( $E_{it}$ ) and returns ( $R_{it}$ ). A one year horizon is, however affected by firms' failure to record asset write-downs, since due to conservatism, previous increases in assets were unrecorded. This is referred to as the "buffer" problem (LaFond & Watts, 2008). Pae et al. (2005) stated that Basu's annual coefficient understates the

degree of conservatism. Also, Roychowdhury and Watts (2007) noted that the single period asymmetry is not a measure of aggregate conservatism but is an implication of asymmetric verification standards. They stated that asymmetric timeliness measures estimated over several years would progressively eliminate time lags between returns and earnings. Following this suggestion, A. S. Ahmed and Duellman (2007), LaFond and Watts (2008) and LaFond and Roychowdhury (2008) are amongst others who accumulated the returns and earnings over the past three years. A similar approach was employed in this thesis.

#### **4.7. Research Design**

This thesis employed panel data methodology to examine the effect of the independent variables on accounting conservatism. Panel data methodology has been adopted by previous accounting studies including Banker, Devaraj, Schroeder and Sinha (2002); Bhattacharya et al. (2003); Schiehl (2006); Sanchez-Ballesta and Garcia-Meca (2007); Ming and Gee (2008); Leng (2008) to name a few. Data in this thesis was analysed using STATA statistical software version 11 as it is suitable for panel data regression.

Panel data, also known as longitudinal data or cross sectional time series data, refers to data on the same subjects observed over several years. Greene (2008) noted that some issues could not be studied purely by cross sectional or time series data; firms' conservative accounting can be better captured if firms are examined for a longer period (A. S. Ahmed & Duellman, 2007; Roychowdhury & Watts, 2007). This thesis examined 300 firms over 7 years.

Panel data suggests that the subjects (countries, states, firms or individuals) under study are heterogeneous. It means that although some variables vary across subject and time, there are many of other variables that may be subject-invariant or time-invariant. Subject invariant refers to factors that influence all subjects but varies across time. Time-invariant refers to factors that are time constants as they are unique to the subjects. It is important to include these type of variables (subject-invariant or/and time-invariant) in the model equation; otherwise it leads to bias in

the resulting estimates. The panel data methodology provides a solution to control these invariant factors that are not controlled for either in cross sectional or time series studies. Additionally, a further motivation for using panel data is to solve the omitted variables problem (Wooldridge, 2002, p. 247).

#### **4.7.1. Advantages of Panel Data**

Over pure cross sectional and pure time series analysis, panel data has benefits, discussed in Hsio (2003) and Baltagi (2008) and presented as follows:

- a. Panel data provides a richer source of information as it accounts for multiple observations on cross sectional units. Thus, it offers more variability and is more efficient in the estimation of parameters. The informative data also provides more reliable estimates and tests a more sophisticated behavioural model with less restrictive assumptions.
- b. For pure time series data, serious multicollinearity problem appears among the independent variables ( $X$ ); where current period independent variables ( $X_t$ ) are highly correlated with those in previous period ( $X_{t-1}$ ). Hence, for panel data, differences in the  $X$  across cross sectional units can be used to reduce the collinearity. This is due to the fact that the pooling of cross sectional and time series data increases variability that can be decomposed into variation between subjects and variation within subjects.
- c. Individual heterogeneity is controlled in panel data. The panel data model resolves or reduces the problem of omitted variables, due to mismeasurement or no observed items that correlate with the included independent variables in the model.
- d. Panel data allows the researcher to study the complex issues of dynamic behaviour because it can identify and estimate effects that are simply not detectable in either pure cross section or time series data.

- e. Panel data enables the researcher to identify an otherwise unidentified model which under usual circumstances may be undetectable due to measurement errors.

#### **4.7.2. Panel Data Analysis**

The simple OLS regression assumes that the sample companies were homogenous, thus do not account for heterogeneity unlike in the panel regression technique. Jager (2008) investigated whether panel data that is analysed using a simple OLS regression technique produced a different result than if it is analysed using panel data techniques. The results generated from the two techniques are substantially different; implying that adopting OLS technique on panel data leads to incorrect inference.

Panel data observations cannot be assumed as independently distributed across time due to individual unique factors that remain constant over time (Baddeley & Barrowclough, 2009; Wooldridge, 2003). Therefore, a single regression (also known as pooled OLS) applied in pure cross-sectional or time series analysis, which assume homogeneity, if estimated on panel data may lead to misleading inference (Baddeley & Barrowclough, 2009). In simple pooling on panel data no adjustment is made for firm specific factors, resulting in autocorrelation, because for each year under study the firm unique factor was left in the residual. Additionally, it also results in heterogeneity bias in terms of omitted variables bias because the firm unique factor is not included in the deterministic part of the model (Baddeley & Barrowclough, 2009).

Panel regression models control for the heterogeneity effect in panel data using either a fixed effects model or random effects model. The main difference between the two methods is whether the unobserved effects (the error term) are correlated with included independent variables (Wooldridge, 2003).

#### **4.7.2.1. Fixed Effects Model**

Each entity has its own individual attributes, which are constant across time, that may or may not affect the dependent variables. Fixed effects, which investigate the relationship between the dependent and independent variables within an entity, control for these unobserved unique attributes (the time-invariant factor) within the entity that may affect or bias the dependent variables. Following the assumption underlying the use of a fixed effects method that the error term is correlated with the independent variables; this method removes the effect of unobserved time-invariant characteristics from the independent variables, so that the net effect of independent variables is assessable. Therefore, the fixed effects method is unbiased as it controls for unobserved time-invariant factors but it may be inefficient if the correlation that it assumes is really zero (Allison, 2009).

The fixed effects method can be implemented either by dummy variables or through the mean deviation method. A dummy variables method is implemented by creating a set of dummy variables for each entity in the data set. The coefficient of the entity's dummy variables produced upon analysis represents an estimate of the unobserved time-invariant factors. However, Wooldridge (2003) suggested that this method is not practical for data sets with many cross sectional observations. Allison (2009) pointed out that this method imposes difficulty as it may be beyond the capacity of the accounting software. The mean deviation method is an alternative to estimate fixed effects regression which is simple to perform using accounting software. The mean deviation method implies that mean values for all time-varying variables is identified for each entity. Subsequently, these entity's specific means are subtracted from the observed value for each variable. In this method, estimate coefficients for the time-invariant independent variables are not given, since their values are constant for each entity; subtracting the entity-specific mean of time-invariant variables from the individual values yield a value of zero for all entities. Accordingly, the time-invariant independent variables are dropped out of the equation, nevertheless their effect has been controlled (Allison, 2009).

#### **4.7.2.2. Random Effects Model**

The advantage of a random effects model over the fixed effects model is that time-constant independent variables are allowed and can be examined in a regression model. This result from the assumption that the unobserved effect is not correlated with the independent variables, whether or not they are fixed over time.

Accordingly, a random effects model allows time-constant independent variables and does not drop them out of the regression model. However, if it violates the assumption that fixed effects are not correlated with the disturbances reflected in the between effects, it may produce biased results.

#### **4.7.3. Hausman Specification Test**

According to Greene (2008), the assumption in random effects model that individual effects are uncorrelated with the other regressors has little justification. Thus, it may suffer inconsistency should this correlation exist. As noted earlier, the main factor that distinguishes fixed effects from the random effects is whether the error term is correlated with the included independent variables. Hence, in order to choose between the fixed effects method and random effects method of panel data regression, the Hausman specification test is used to determine the existence of the correlation.

Recall that the fixed effects model assumes that the independent variables are correlated with the error term whilst the random effects model does not. Thus, the following hypotheses are to be tested:

**H0: Unobserved effect is uncorrelated with explanatory variables**

**H1: Unobserved effect is correlated with explanatory variables**

The null hypothesis (H0) predicts the use of random effects and the alternative (H1) as fixed effects. To test whether there is any correlation between the error term and the explanatory variables, the Hausman specification test is performed upon running

the fixed effects and random effects regression models (Baltagi, 2008). If the Hausman test produces a significant p-value, the null hypothesis is rejected; hence the fixed effects model should be used.

Two Hausman tests were performed, one each for the accrual-based conservatism (CONACCR) and asymmetric timeliness (AT). In both conservatism models, the Hausman tests were significant at the 1% level, thus rejecting the null hypothesis. Accordingly, the fixed effects model clustered at firm level was used to estimate the effect of the independent variables on accounting conservatism. Pirie and Smith (2008) who examined accounting information of Malaysian firms suggested that firm fixed effects model is a preferred specification in the Malaysian market because it provides more informative results as it incorporates fixed effects for individual firms.

#### **4.7.4. Diagnostic Tests**

This section explains the diagnostic tests performed on the data employed in this thesis. First, the diagnostic tests on the data distributions in terms of normality, extreme outliers and multicollinearity are discussed. Second, diagnostic tests specifically for the panel data are presented, namely contemporaneous correlation (also known as cross sectional dependence), heteroskedasticity and autocorrelation.

##### **4.7.4.1. Normality**

Normality refers to the shape of data distributions for an individual quantitative data variable and its correspondence to the normal distribution. Normality is a fundamental assumption in multivariate analysis, such that a sufficiently large deviation from normality will lead to invalid statistical results (Hair, Black, Babin, Anderson, & Tatham, 2006). In multivariate analysis, the residual, which is the difference between the observed and predicted values, is assumed to be independent and normally distributed. Accordingly, the residual is assessed for normality testing. Should the examination of residuals meet the assumption, it is unnecessary to check the normality of individual variables (Tabachnick & Fidell, 2007)



Skewness and kurtosis are among the common statistical tests for normality. Skewness reflects the balance of the distribution, with the skewness of non normal distribution shifted to one side (left or right). Kurtosis refers to “peakedness” or “flatness” of the distribution compared to normal distribution. Tabachnick and Fidell (2007) claimed that the use of skewness and kurtosis statistical tests are sensitive in a large data set. A variable with significant skewness or kurtosis often does not deviate enough from normality to make a significant difference to the analysis. They suggest looking at the shape of the distribution on a graph. The distributions of the residual based on standardized normal probability plots (*pnorm*), which are sensitive to non-normality in the middle range of data, was observed. Further, as recommended by Miller (1997), the residual was observed against the quartiles of a normal distribution (*qnorm*), which is sensitive to non-normality near the tails. Hair et al. (2006) stated that the normal probability plot is a reliable approach as actual data values are compared with the cumulative distribution of normal distribution. A line representing the actual data that closely follows the diagonal line (normal distribution) indicates normality. Examination of the normality plot of CONACCR and AT models employed in this thesis indicated minor deviation from normality. Since this thesis examined data from a large sample, this condition may not distort the results as significant departure from non normality may be negligible for a sample size of 200 or more (Hair et al., 2006).

#### **4.7.4.2. Outliers**

Transformation is one of the options to solve a normality problem cause by the outliers. However, some authors have argued against it. Grissom (2000) argued that the means of transformed data can occasionally reverse the difference of means of the original data. Tabachnick and Fidell (2007) highlighted that data transformations are not usually recommended, although they are feasible as a remedy for outliers and for failures of normality.

This thesis detected multivariate outliers using the method developed by Hadi (1992, 1994). The procedure was conducted using the *hadimvo* syntax, which method is more robust than the classical Mahalanobis Distance (Hadi, 1992). Extreme points

identified were further investigated to ensure that they were not due to data entry error. Upon deletion of the outliers, the initial sample of 300 companies observed from year 2001 to 2007 (2100 firm-year observations) were reduced to 2031 firm-year observations for CONACCR model and 2012 firm-year observations for AT model.

#### **4.7.4.3. Multicollinearity**

According to Tabachnick and Fidell (2007) and Hair et al. (2006), a multicollinearity problem exists if the correlation between independent variables exceeds 0.9. The Pearson and Spearman correlations shown in Table 5.4 indicated that the highest correlation was between Bumiputera directors on board (BBR) and Bumiputera directors on audit committee (ACBR) at 0.71. Also, correlation between Chinese directors on board (BCR) and Chinese directors on audit committee (ACCR) was 0.73.

In addition to the correlation values, the test on the variance inflation factor (VIF) is performed since multicollinearity cannot necessarily be detected or ruled out by examining the matrix of the correlations between variables (Hamilton, 2009). VIF is an indicator of the effect that the other independent variables have on the standard error of a regression coefficient. VIF that exceeds 10 suggests collinearity problems. The VIF test ran on the independent variables used in this thesis showed that the highest VIF was 7.91 for ACCR. The above correlation and VIF values suggest that there is no multicollinearity problem between the independent variables; hence these variables can be fitted into one regression model.

#### **4.7.4.4. Contemporaneous Correlation**

Contemporaneous correlation, also known as cross sectional dependence refers to the correlation of unobserved factors across units. This cross-sectional dependence is more likely to occur for a sample with cross-section units (Wooldridge, 2003). Hoyos and Sarafidis (2006) suggested that strong interdependencies between cross-sectional units can plausibly follow from the economic and financial factors that are

integrated in country and financial entities. Thus, a similar response could have been experienced by individuals as explained by genuinely interdependent preferences, neighbourhood effects, herd behaviours and social norms. Ignoring its presence will cause bias in the standard error estimation. The test on cross-sectional dependence in STATA was performed using *xtcds*, *pesaran* syntax which is valid for panel data that has large N and small T (Hoyos & Sarafidis, 2006). This procedure implements a parametric testing procedure proposed by Pesaran (2004).

The test on cross-sectional dependence was carried out on the two regression models employed in this thesis, which are accrual-based conservatism (CONACCR) and asymmetric timeliness (AT), but only the test on the AT model showed a significant p-value indicating the presence of cross sectional dependence. Accordingly, standard errors with the presence of cross sectional dependence need to be corrected.

#### **4.7.4.5. Heteroskedasticity**

Homoskedasticity is where the error process is independently and identically distributed. Although the error process may be homoskedastic within cross-sectional units, its variance may differ across units: a condition known as groupwise heteroskedasticity (Baum, 2001). According to Baltagi (2008), assuming homoskedasticity in regression disturbances of panel data model is a restrictive assumption because every unit has its own individual characteristics or heterogeneity which remains constant overtime.

Baltagi (2008) further stated that ignoring the presence of heteroskedasticity produced a consistent but inefficient estimate of the regression coefficients, and the standard errors of these estimates would be biased. Heteroskedasticity of the error term is tested based on a modified Wald statistic (Baltagi, 2008). This test was performed using *xttest3* syntax in STATA. The test carried out on CONACCR and AT models confirmed the presence of heteroskedasticity in the residual. Accordingly, standard errors with the presence of heteroskedasticity need to be corrected.

#### **4.7.4.6. Autocorrelation**

Autocorrelation, also known as serial correlation, refers to the correlation of error components across time periods. This condition violates the classical assumption of regression analysis but it is a reasonable characteristic of error term in time series analysis (Wooldridge, 2003). Autocorrelation is likely to have more substantial influence on the estimated covariance matrix of the least square estimator than is heteroskedasticity (Greene, 2008, p. 211).

The tests to detect the presence of autocorrelation was carried out using *xtserial* syntax in STATA, which implements a test for serial correlation in the idiosyncratic errors of a linear panel-data model, as discussed by Wooldridge (2002). The tests on CONACCR and AT models confirmed the presence of autocorrelation.

#### **4.8. Robust Standard Error**

The diagnostic tests on the panel data detected the presence of cross sectional dependence, heteroskedasticity and autocorrelation in the residual of the AT model. According to Sarafidis, Yamagata and Robertson (2009), time dummies are a popular approach undertaken by researchers to overcome the cross sectional dependence problem. However, Sarafidis et al. (2009) claimed that the time dummies are not effective if all pairs of cross section units do not have identical cross section dependence, which is commonly the case. Researchers generally make this assumption such that time dummies in models purge the cross section dependence (Hoechle, 2007). Petersen (2009) explained that time dummies will remove the cross sectional dependence completely, only if the time effect is fixed. If the time effect is not fixed, cross sectional dependence will remain and a robust standard error clustered by firm can be biased. Accordingly, this thesis corrected for the cross sectional dependence in the AT model by employing the fixed effects panel regression estimates based on Driscoll and Kraay's (1998) standard errors. Driscoll and Kraay's (1998) standard errors is a nonparametric covariance matrix estimator that is robust to cross sectional dependence, heteroskedasticity and autocorrelation (Hoechle, 2007). This procedure was performed using *xtscc* syntax in STATA.

As for the CONACCR model, the diagnostic tests detected the presence of heteroskedasticity and autocorrelation in the residual. Hence, the standard errors in the CONACCR model were estimated based on Rogers (1993) clustered at firm level. Clustering at firm level, also called firm fixed effects, produces an estimator that is robust to cross-sectional heteroskedasticity and within-panel correlation. This technique ensures that valid statistical inference on the coefficient is made.

#### **4.9. Goodness of Fit**

Panel data regression reports three  $R^2$  values; (a)  $R^2$  within, (b)  $R^2$  between and (c)  $R^2$  overall. As explained in section 4.7.3, this thesis ran fixed effects regressions, hence  $R^2$  within is used as a measure of goodness of fit of the models (StataCorp, 2009).

#### **4.10. Summary**

This chapter discusses the research method employed in this thesis. In order to meet the objectives of this thesis, accounting data and corporate governance data were retrieved from Datastream and firms' annual reports. A sample of 300 companies over a seven-year period was selected but reduced after deletion of outliers.

This thesis adopted two measures of conservatism, namely accrual-based conservatism and asymmetric timeliness. In respect of independent variables, inside and outside substantial shareholders were investigated under the ownership concentration. The attributes of board of directors examined in this thesis were extensive covering board composition, board size, board tenure, board financial expertise, multiple directorships and CEO duality. Three attributes of audit committee explored in this thesis were audit committee composition, financial expertise and audit committee meeting. Bumiputera and Chinese ethnic groups on the board of directors and audit committee were identified to investigate their effect on conservatism.

Based on the Hausman specification test, this thesis employed a firm fixed effects model. Diagnostic tests on the data in respect to normality, outliers and

multicollinearity were run. Additionally, diagnostic tests specifically on panel data were carried out to determine an appropriate panel regression model that will produce robust standard errors.

## **CHAPTER FIVE**

### **RESULTS**

#### **5.1. Introduction**

This chapter reports the findings of this thesis. The sections are organised as follows. Section 5.2 presents the descriptive statistics of all variables employed in the regression model. Section 5.3 presents the Pearson and Spearman correlation analysis. Section 5.4 reports the results of the multiple regression models. Section 5.5 presents the results of several additional analyses to identify the robustness of the earlier tests. Section 5.6 presents the results on the moderating effect of ownership concentration. Section 5.7 summarises the overall findings of this thesis.

#### **5.2. Descriptive Statistics**

Table 5.1 reports descriptive statistics for the full sample of 2,031 firm-year observations which were used to run the accrual-based conservatism (CONACCR) model. E/P, R and MTB used in the asymmetric timeliness (AT) model were based on 2012 firm-year observations. The mean value of the CONACCR is -0.006 lower than the mean value of accrual-based conservatism for US firms at 0.010 reported by both A. S. Ahmed and Duellman (2007) and G. V. Krishnan and Visvanathan (2008). Different institutional factors, such as ownership structure, might have driven this discrepancy, as Malaysian firms' ownership structure is highly concentrated to large shareholders in contrast to widely held ownership structure in US.

The descriptive statistics showed that the mean ownership by insiders (OCIN) was 31.03% and mean ownership by outsiders (OCOUT) was 22.48%. Mean value of OCIN found in this thesis (and previously documented by other Malaysian studies) is far higher than those reported by studies in other countries. For instance, LaFond and Roychowdhury (2008) who examined US firms, reported a mean ownership of 4.5% for top five managers and Baek et al. (2009) examined firms listed in Standard & Poor index reported that top five managers in the firms hold an average of 1.88%

of equity shares and the mean ownership of the blockholding is 7.61%. High shareholdings by the insiders obtained in this thesis impose concerns whether they used their controlling power for personal benefit as argued by Yeo et al. (2002).

**Table 5.1**  
**Descriptive Statistics**

Variable	Mean	Median	Std. Dev.	Min	Max
CONACCR	-0.006	-0.008	0.053	-0.254	0.281
E/P	0.144	0.174	0.449	-2.416	2.542
R	0.162	0.110	0.624	-1.780	3.280
OCIN (%)	31.029	32.580	20.917	0.000	81.230
OCOUT (%)	22.477	14.490	23.727	0.000	92.500
BID	0.401	0.375	0.112	0.000	1.000
BS	7.683	7.000	1.889	3.000	17.000
BT	6.763	6.000	4.328	0.000	31.000
BF	0.267	0.250	0.157	0.000	1.000
BSHIP	0.480	0.500	0.290	0.000	1.000
ACID	0.696	0.670	0.125	0.000	1.000
ACF	0.369	0.330	0.190	0.000	1.000
ACM	4.693	5.000	0.962	2.000	10.000
BBR	0.371	0.333	0.237	0.000	1.000
ACBR	0.409	0.330	0.285	0.000	1.000
BCR	0.531	0.571	0.264	0.000	1.000
ACCR	0.525	0.500	0.297	0.000	1.000
TA (RM'000)	1,160,000	247,000	3,500,000	21,200	44,000,000
PROF	0.052	0.045	0.084	-0.341	0.537
LEV	0.087	0.036	0.117	0.000	0.693
SGROW (%)	9.096	6.910	29.100	-91.720	172.630
MTB	1.055	0.836	0.785	-1.776	5.683

Dummy Variables:

BCD=1 (Combined CEO-chairman roles) : 4.8%

AUD=1 (Big 4 audit firms) : 65.5%

CONACCR= Accrual-based conservatism, E/P= Earning price ratio, R= Annual share return, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, ACID= Audit committee composition, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, TA= total assets value, PROF= Profitability, LEV= Leverage, SGROW= Sales growth, MTB= Market to book ratio, BCD= Dummy equal 1 if CEO-Chairman combine; 0 otherwise, AUD= Dummy equal 1 if big four audit firm; 0 otherwise.



The mean value of board composition (BID) indicated that firms had complied with the recommendation of the Malaysian Code on Corporate Governance (MCCG) to have at least one third of the board comprising independent non-executive directors. This mean value of 0.40 however, indicated that 60% of the board composition in Malaysian firms was dominated by the insiders. Also, about 70% of the audit committee members were independent directors following the Malaysian Code on Corporate Governance (MCCG) recommendation that independent directors must dominate the audit committee. However, the minimum zero values of both BID and ACID indicated the non-presence of independent directors on the board of directors and audit committee in some firms. Examination on a yearly basis revealed that the minimum values occurred in 2001 and 2002, which were the transition periods before firms fully complied with the MCCG implemented in 2001. In fact, the compliance deadlines set then by KLSE (now known as Bursa Malaysia) were extended three times during 31 March 2002 to 31 March 2003 (Haron et al., 2005).

The average board size reported in this thesis was eight directors, similar to Haniffa and Hudaib (2006) and Rahman and Ali (2006). The board size is appropriate as exceeding eight is deemed ineffective (Jensen, 1993). The average tenure of independent directors on the board (BT) was seven years, the longest being thirty-one years. An insight into the data showed that the average tenure increased gradually from 2001 to 2007, suggesting that the same independent directors continued to serve the same companies throughout the period. The statistic showed that on average 48% of the board members had more than two outside directorships; implying that half of the board were busy or probably had more experience from their service on other boards. The duality role in Malaysian firms is considered small with only 4.8% of the sample combining the CEO and chairman roles. G. V. Krishnan and Visvanathan (2008) who examined US firms reported that 79% of their sample combined the two roles. There has been an improvement to the leadership structure of Malaysian firms compared to that reported previously. For instance, a statistic of 25.7% was reported for the study period 1996 to 2000 (Haniffa & Hudaib, 2006) and 12% for 2001 (Muniandy, 2007). Despite this fact however, board independence in Malaysian firms is not a guarantee because a majority of substantial shareholders in Malaysian firms sit on the board, and hence may influence decisions of the board.

In respect of financial expertise, on average 37% of the audit committee members had financial expertise (ACF) relative to 27% on the board (BF). The zero minimum value for the BF and ACF indicated that there were firms which did not have financial expertise on their board or audit committee. An analysis of the sample firms showed that 107 firm-year observations (5.27%) did not have financial expertise. A further examination of the data showed that the absence of financial expertise in the audit committee not only occurred in 2001, but continued until 2007. In 2001, 51 firms (17.59%) did not have financial expertise on their audit committee, but this reduced to 11 firms (3.90%) in 2007. This outcome suggests that although it is mandatory for firms to have at least one member of the audit committee with financial expertise, some firms breached the rules. Firms are not required to appoint financial expertise on the board; but since audit committees are required to do so, and the audit committee members are appointed from the board of directors, the rules have indirectly strengthened the board structure. This thesis found that the proportion of financial expertise in the board of directors had increased from an average of 22.38% in 2001 to 29.19% in 2007.

The average number of audit committee meetings (ACM) held per year was about five meetings, and the most frequent was ten meetings per year. Based on the firm-year observations, 43.72% of the observations met four times a year, followed by 38.95% of the observations met five times a year. Less than four meetings a year was represented by 3.34% and more than five meetings a year was represented by 13.98% of the observations. The statistics showed that a majority of the Malaysian firms have active members in the audit committee.

The mean proportion of Chinese directors on the board (BCR) and audit committees (ACCR) were both 0.53. The mean proportions of Bumiputera directors on board (BBR) and audit committee (ACBR) were 0.37 and 0.41 respectively. The values indicated that both board and audit committee were represented by more Chinese than Bumiputera directors. The mean ratio of Bumiputera on the board is consistent with Salleh et al. (2006) of 38% but lower than Rahman and Ali (2006) of 48%. About 66% of the sample was audited by big four audit firms (AUD). This is close to the number reported by Yatim et al. (2006) of 68.8%.

**Table 5.2**  
**Percentage of firms based on Ownership Concentration**

	Dispersed ownership	Concentrated Ownership	Insiders dominant	Outsiders dominant	Insiders and Outsiders dominant	Combination
Full sample (N=2031)	3.25	96.75	52.63	24.42	17.33	2.36
2001 (n=290)	2.41	97.58	50.34	24.14	21.38	1.72
2002 (n=291)	2.41	97.60	52.58	22.34	19.24	3.44
2003 (n=292)	2.74	97.26	52.40	21.92	20.89	2.05
2004 (n=289)	3.81	96.20	54.33	23.88	15.57	2.42
2005 (n=293)	4.44	95.57	52.22	25.60	16.04	1.71
2006 (n=294)	3.74	96.26	53.06	26.19	14.29	2.72
2007 (n=282)	3.19	96.81	53.55	26.95	13.83	2.48

Table 5.2 presents statistics on the percentage of firms with dispersed and concentrated ownership. Following Claessens, Djankov, Fan and Lang (1999), Chu and Cheah (2006) and H. J. A. Ahmed (2009), shareholding below 20 percent was labelled as a dispersed structure. Based on the full sample, only 3.25% of the distributions had dispersed ownership whilst the remaining 96.75% had concentrated ownership. Of the firms with concentrated ownership, 52.63% were dominated by insiders, 24.42% were dominated by outsiders and 17.33% were dominated by both insiders and outsiders. The yearly distributions showed that firms with dispersed ownership remained below 5% and those with concentrated ownership remained above 90% throughout. The information also indicated that insiders were the dominant owners of the firms. This condition warrants investigation to determine whether inside or outside substantial shareholders have a different effect on the conservatism.

To identify if there is any significant difference in conservatism practices between the dispersed and concentrated ownership, t-tests were performed and results were presented in Table 5.3 (Panel A). The test was carried out only for accrual-based conservatism (CONACCR) but not asymmetric timeliness (AT) because AT is not a firm specific measure.

**Table 5.3 (Panel A)**  
**Mean Difference on Accrual-based Conservatism:**  
**Dispersed vs. Concentrated Ownership**

		Mean	<i>t</i> -statistic
	<b>Dispersed vs. Concentrated</b>		
a)	Shareholding below 20%	0.001	
	Shareholding equal and above 20%	-0.006	0.928
b)	Shareholding below 50%	-0.001	
	Shareholding equal and above 50%	-0.009	<b>3.236***</b>

**Table 5.3 (Panel B)**  
**Mean Difference on Accrual-based Conservatism:**  
**Inside vs. Outside Substantial Shareholders**

		Mean	<i>t</i> -statistic
	<b>Outsiders vs. Insiders</b>		
a)	Majority outsiders	-0.002	
	Majority insiders	-0.008	<b>2.324**</b>
b)	Outside dominant owner ( $\geq 20\%$ )	-0.001	
	Inside dominant owner ( $\geq 20\%$ )	-0.010	<b>3.134***</b>

\*\*\* $p < 0.01$ ; \*\* $p < 0.05$

Different categories for ownership concentration were used. First, firms were classified into two: dispersed ownership (shareholding below 20%) and concentrated ownership (shareholding equal and above 20%). Based on this measure, the mean CONACCR of the dispersed ownership was positive (0.001) in contrast to the negative value for the concentrated ownership (-0.006). The mean value suggests that firms that were not closely controlled by the substantial shareholders were more conservative than their counterparts, but the difference was not significant. Second, the measure to split the groups was then changed based on shareholding below 50% versus 50% and above. The cut-off 50% shareholding adopted here follows Chu and Cheah (2006), who specified a shareholding ranging from 20 to 50% as dominant minority while above 50% as a dominant majority. The result showed that the mean difference of the CONACCR between the two groups was significant at the 1% level but both groups displayed negative CONACCR. In order to investigate further this issue, mean CONACCR was observed for firms classified into the 3 groups which were shareholding less than 20%, 20% and above but less than 50% and 50% and above (not tabulated). The analysis showed that increases in shareholding percentage were followed by decreases in the CONACCR mean. This outcome

implied that as the shareholding increased, the demand for accrual-based conservatism was reduced.

This thesis also compared the CONACCR between inside owners and outside owners using two categories, and the results were presented in Table 5.3 (Panel B). The first category was based on a majority shareholding and the second category was based on a sub-sample of firms dominated by only insiders or outsiders using 20% cut-off point of dominant shareholding. In both methods of classification, the mean CONACCR for insiders and outsiders were negative and the mean differences were significant. The test results indicated that while both insiders and outsiders were less conservative, the inside owners were far less conservative than the outside owners.

### **5.3. Correlation Analysis**

Table 5.4 presents correlations between the CONACCR and independent variables. Pearson correlations are shown below the diagonal and Spearman correlations are shown above the diagonal. As compared to the Pearson correlation coefficient, the Spearman correlation reduced sensitivity to extreme values. The positive coefficient for outside substantial shareholders (OCOUT) is consistent with the expectation that outside owners who demand better governance employed higher conservatism. The negative coefficient for inside substantial shareholders (OCIN) is consistent with the expectation that inside owners employed lower conservatism. Board attributes that had significant associations with the CONACCR measure were board composition (BID) and board size (BS). Audit committee attributes significantly correlated with the CONACCR measure were audit committee composition (ACID), financial expertise (ACF) and audit committee meeting (ACM). All control variables: auditor (AUD), firm size (TA), sales growth (SGROW), profitability (PROF) and leverage (LEV) were significantly correlated with CONACCR. The inverse relationships between BS and CONACCR are consistent with the argument that large board size reflects weak board, thus employ less conservatism. The positive sign on BID is

**Table 5.4**  
**Pearson (Spearman) Correlations below (above) the diagonal\***

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1 CONACCR	1	<b>-0.12</b>	<b>0.06</b>	0.01	0.01	-0.03	0.02	<b>-0.09</b>	0.01	<b>-0.06</b>	<b>-0.06</b>	<b>0.07</b>	0.04	-0.04	<b>0.07</b>	<b>-0.06</b>	<b>-0.07</b>	-0.03	<b>-0.15</b>	<b>0.16</b>	<b>0.08</b>
2 OCIN	<b>-0.11</b>	1	<b>-0.63</b>	<b>-0.12</b>	0.02	<b>-0.12</b>	0.03	<b>-0.05</b>	<b>0.08</b>	0.00	0.01	-0.04	<b>-0.33</b>	<b>0.35</b>	<b>-0.27</b>	<b>0.28</b>	-0.03	<b>-0.20</b>	0.02	0.00	<b>-0.05</b>
3 OCOUT	0.04	<b>-0.73</b>	1	0.02	0.01	0.04	<b>0.05</b>	<b>0.17</b>	-0.02	-0.03	-0.02	0.01	<b>0.29</b>	<b>-0.36</b>	<b>0.21</b>	<b>-0.27</b>	<b>0.13</b>	<b>0.23</b>	0.03	<b>0.15</b>	0.00
4 BID	<b>0.07</b>	<b>-0.13</b>	0.01	1	<b>0.05</b>	0.03	0.02	<b>-0.26</b>	<b>0.07</b>	<b>0.31</b>	<b>-0.11</b>	<b>0.10</b>	<b>0.19</b>	<b>-0.15</b>	<b>0.09</b>	<b>-0.10</b>	0.02	0.03	0.00	<b>-0.04</b>	0.03
5 BT	-0.01	0.03	<b>0.06</b>	0.01	1	<b>-0.15</b>	<b>0.18</b>	<b>0.09</b>	<b>-0.05</b>	-0.01	<b>-0.15</b>	-0.02	<b>-0.05</b>	-0.01	<b>0.05</b>	<b>-0.05</b>	<b>0.05</b>	<b>0.28</b>	<b>0.09</b>	<b>0.15</b>	<b>0.11</b>
6 BF	-0.01	<b>-0.14</b>	<b>0.06</b>	<b>0.08</b>	<b>-0.19</b>	1	<b>-0.07</b>	<b>-0.17</b>	<b>0.06</b>	<b>0.06</b>	<b>0.55</b>	0.04	-0.01	-0.02	<b>0.05</b>	<b>-0.06</b>	0.03	-0.03	-0.03	<b>-0.07</b>	<b>-0.04</b>
7 BSHIP	0.00	0.01	<b>0.08</b>	0.01	<b>0.16</b>	<b>-0.07</b>	1	0.04	<b>0.12</b>	0.03	<b>-0.08</b>	<b>-0.04</b>	0.01	-0.03	0.01	-0.01	<b>0.08</b>	<b>0.21</b>	0.00	<b>0.09</b>	<b>0.08</b>
8 BS	<b>-0.13</b>	<b>-0.05</b>	<b>0.17</b>	<b>-0.31</b>	<b>0.09</b>	<b>-0.19</b>	<b>0.05</b>	1	<b>-0.10</b>	<b>0.05</b>	<b>-0.12</b>	0.00	<b>0.07</b>	<b>-0.11</b>	<b>0.06</b>	<b>-0.08</b>	<b>0.08</b>	<b>0.27</b>	<b>0.08</b>	<b>0.12</b>	0.00
9 BCD	0.01	<b>0.07</b>	<b>-0.06</b>	<b>0.07</b>	0.00	<b>0.06</b>	<b>0.12</b>	<b>-0.11</b>	1	<b>-0.07</b>	<b>0.08</b>	0.04	<b>-0.07</b>	<b>0.10</b>	<b>-0.09</b>	<b>0.11</b>	0.03	0.01	-0.03	0.03	0.04
10 ACID	<b>-0.04</b>	-0.04	-0.01	<b>0.36</b>	-0.03	<b>0.07</b>	0.01	0.00	<b>-0.05</b>	1	-0.01	<b>0.07</b>	<b>0.07</b>	-0.01	<b>0.06</b>	-0.03	-0.01	<b>0.07</b>	<b>0.05</b>	<b>-0.05</b>	<b>0.09</b>
11 ACF	<b>-0.06</b>	-0.02	-0.02	<b>-0.07</b>	<b>-0.19</b>	<b>0.54</b>	<b>-0.05</b>	<b>-0.08</b>	<b>0.06</b>	0.04	1	<b>-0.06</b>	<b>-0.09</b>	<b>0.10</b>	<b>-0.06</b>	<b>0.09</b>	-0.01	<b>-0.20</b>	0.00	-0.03	-0.04
12 ACM	<b>0.04</b>	-0.04	0.03	<b>0.08</b>	-0.01	0.04	<b>-0.05</b>	0.03	0.03	<b>0.06</b>	<b>-0.05</b>	1	<b>0.09</b>	-0.04	<b>0.07</b>	-0.02	<b>-0.14</b>	<b>0.12</b>	0.02	-0.04	<b>0.06</b>
13 BBR	0.03	<b>-0.36</b>	<b>0.36</b>	<b>0.21</b>	<b>-0.06</b>	<b>0.10</b>	<b>0.05</b>	<b>0.05</b>	<b>-0.06</b>	<b>0.13</b>	<b>-0.05</b>	<b>0.13</b>	1	<b>-0.79</b>	<b>0.71</b>	<b>-0.65</b>	<b>0.04</b>	<b>0.22</b>	-0.02	<b>-0.06</b>	<b>0.15</b>
14 BCR	-0.02	<b>0.38</b>	<b>-0.45</b>	<b>-0.16</b>	-0.01	<b>-0.09</b>	-0.04	<b>-0.08</b>	<b>0.08</b>	<b>-0.06</b>	<b>0.07</b>	<b>-0.06</b>	<b>-0.80</b>	1	<b>-0.58</b>	<b>0.73</b>	<b>-0.14</b>	<b>-0.24</b>	0.02	-0.04	-0.02
15 ACBR	0.04	<b>-0.29</b>	<b>0.26</b>	<b>0.13</b>	<b>0.06</b>	<b>0.10</b>	0.02	<b>0.05</b>	<b>-0.08</b>	<b>0.11</b>	<b>-0.07</b>	<b>0.08</b>	<b>0.75</b>	<b>-0.60</b>	1	<b>-0.88</b>	<b>-0.08</b>	<b>0.21</b>	-0.03	<b>-0.06</b>	<b>0.11</b>
16 ACCR	-0.03	<b>0.31</b>	<b>-0.32</b>	<b>-0.12</b>	<b>-0.05</b>	<b>-0.09</b>	-0.02	<b>-0.06</b>	<b>0.11</b>	<b>-0.06</b>	<b>0.08</b>	-0.03	<b>-0.67</b>	<b>0.75</b>	<b>-0.88</b>	1	-0.01	<b>-0.23</b>	0.01	0.01	<b>-0.06</b>
17 AUD	<b>-0.06</b>	<b>-0.05</b>	<b>0.14</b>	0.04	<b>0.07</b>	0.01	<b>0.08</b>	<b>0.08</b>	0.03	-0.01	0.00	<b>-0.12</b>	<b>0.05</b>	<b>-0.15</b>	<b>-0.07</b>	-0.01	1	<b>0.09</b>	<b>0.08</b>	<b>0.09</b>	<b>-0.06</b>
18 TA	<b>-0.05</b>	<b>-0.22</b>	<b>0.31</b>	-0.01	<b>0.30</b>	-0.02	<b>0.25</b>	<b>0.30</b>	0.04	0.04	<b>-0.17</b>	<b>0.14</b>	<b>0.21</b>	<b>-0.22</b>	<b>0.20</b>	<b>-0.22</b>	<b>0.09</b>	1	<b>0.16</b>	<b>0.12</b>	<b>0.33</b>
19 SGROW	<b>-0.15</b>	0.02	0.03	-0.04	0.04	-0.03	0.01	<b>0.09</b>	0.00	0.04	0.04	0.02	-0.01	0.01	-0.02	0.00	<b>0.07</b>	<b>0.12</b>	1	<b>0.08</b>	<b>0.06</b>
20 PROF	<b>0.16</b>	<b>-0.05</b>	<b>0.19</b>	-0.03	<b>0.15</b>	<b>-0.06</b>	<b>0.07</b>	<b>0.11</b>	0.02	-0.02	-0.04	-0.02	-0.03	<b>-0.07</b>	-0.02	-0.02	<b>0.10</b>	<b>0.14</b>	<b>0.05</b>	1	<b>-0.12</b>
21 LEV	<b>0.07</b>	-0.04	0.00	0.03	<b>0.11</b>	0.00	<b>0.09</b>	<b>0.06</b>	0.00	<b>0.10</b>	<b>-0.05</b>	<b>0.07</b>	<b>0.14</b>	<b>-0.06</b>	<b>0.09</b>	<b>-0.06</b>	<b>-0.06</b>	<b>0.40</b>	<b>0.04</b>	<b>-0.06</b>	1

\*Bold text indicates significance at the 5% level or better

consistent with the expectation that a board represented by more independent directors employed higher conservatism. Additionally, frequent audit committee meetings were positively related to conservatism. Surprisingly, negative signs on ACID, ACF and AUD suggest that they led to lower conservatism. Coefficient signs on ethnic groups on both board and audit committee (ACBR and ACCR) were contrary to those predicted. However, since simple correlation does not consider the joint effect of other variables, it should be interpreted with caution as it is subject to omitted variables bias.

Inside substantial shareholders (OCIN) were found to be inversely correlated with the proportion of independent directors on the board (BID), board financial expertise (BF) and board size (BS) but positively related to CEO duality (BCD). This evidence suggests that the higher the proportion of substantial shares held by the insiders, the lower the number of independent directors on the board, the lesser the number of directors with financial expertise, the smaller is the board size and the more likely for the firm to combine the roles of the CEO and chairman of the board. The inverse association between OCIN and total assets suggests that insiders were dominant in smaller firms. In terms of ethnicity, both on board and audit committee, inside substantial shareholders (OCIN) were inversely related to Bumiputera directors but positively related to Chinese directors. It suggests that greater numbers of inside substantial shareholders were Chinese.

The outside substantial shareholders (OCOUT) were positively related to board tenure (BT), board financial expertise (BF) and board size (BS) but inversely related to CEO duality (BCD). This evidence suggests that the higher the proportion of substantial shares held by outsiders, independent directors stayed on the firms' board for a longer term, board size was larger and the more likely for the firm to separate the CEO and Chairman roles. In contrast to the insiders, a higher proportion of outside substantial shareholders was positively associated with Bumiputera ratios but negatively related to Chinese ratios. The relationship indicates that firms dominated by outsiders had more Bumiputera directors on the board.

CEO duality (BCD) had an inverse relationship with the Bumiputera ratios (BBR and ACBR) but was positively related to the Chinese ratios (ACBR and ACCR). It

suggests that a board or audit committee dominated by the Bumiputera directors preferred a separate leadership structure whereas the dominant Chinese directors adopted the combined structure. Correlation between total assets (TA) and board size (BS) suggests that firms that grew in size had more directors on the board. Also, as the size of the board increased, the more active the audit committee became.

The positive correlation between the proportion of independent directors on the board and audit committee (BID and ACID) with Bumiputera ratio (BBR and ACBR) implied the domination of Bumiputera directors in the composition of the independent directors. The negative relationship between BID and ACID with Chinese ratio suggests otherwise.

## 5.4. Multivariate Analysis

Two sets of regression models representing two measures of conservatism were employed to test the hypotheses in this thesis. First, the regression model of CONACCR is explained and followed by the regression model of AT. Results on the hypothesis testing for both measures are presented after Section 5.4.2, according to the hypothesis and independent variables. The final section of this chapter summarises the results.

### 5.4.1. Accrual-based Conservatism (CONACCR)

The following empirical model was employed to test the effect of ownership concentration (H1), board attributes (H2-H5), audit committee attributes (H6-H8) and ethnicity of directors (H9-H10) on CONACCR. Also included were control variables which might have an influence on conservatism practices namely auditor, total assets, profitability, leverage and sales growth.

$$\begin{aligned} \text{CONACCR}_{it} = & \beta_0 + \beta_1 \text{OCIN}_{it} + \beta_2 \text{OCOUT}_{it} + \beta_3 \text{BID}_{it} + \beta_4 \text{BS}_{it} + \beta_5 \text{BT}_{it} + \beta_6 \text{BF}_{it} + \\ & \beta_7 \text{BSHIP}_{it} + \beta_8 \text{BCD}_{it} + \beta_9 \text{ACID}_{it} + \beta_{10} \text{ACF}_{it} + \beta_{11} \text{ACM}_{it} + \beta_{12} \text{BBR}_{it} + \beta_{13} \text{ACBR}_{it} + \\ & \beta_{14} \text{BCR}_{it} + \beta_{15} \text{ACCR}_{it} + \beta_{16} \text{AUD}_{it} + \beta_{17} \text{TA}_{it} + \beta_{18} \text{PROF}_{it} + \beta_{19} \text{LEV}_{it} + \beta_{20} \text{SGROW}_{it} + \\ & \varepsilon_{it} \end{aligned}$$



Table 5.5 presents the results of the firm fixed effect regression for CONACCR. The reported t-statistics for the CONACCR model were estimated based on Rogers's (1993) method and were robust for heteroskedasticity and autocorrelation. The  $F$ -value of the model was statistically significant at the 1% level and the  $R^2$  within was 11.03%.

**Table 5.5**  
**Results of Accrual-based Conservatism**

Variables	Predicted sign	Coefficients	$t$ -statistic
constant		0.197	1.12
<b>OCIN</b>	-	-0.001	<b>-2.71***</b>
<b>OCOUT</b>	+	-0.001	<b>-2.17**</b>
BID	+	0.026	0.9
BS	-	-0.005	-0.42
BT	+	0.001	0.95
BF	+	0.014	0.58
BSHIP	-	-0.014	-0.99
BCD	-	-0.004	-0.14
ACID	+	-0.011	-0.71
ACF	+	0.005	0.38
ACM	+	0.002	1.37
<b>BBR</b>	-	0.094	<b>2.08**</b>
ACBR	-	-0.027	-0.77
BCR	+	0.066	1.55
ACCR	+	-0.023	-0.69
AUD	+	0.004	0.57
TA	-	-0.012	-1.29
<b>PROF</b>	+	0.178	<b>7.15***</b>
LEV	+	0.037	1.27
<b>SGROW</b>	-	0.000	<b>-2.17**</b>
$F$ -value			<b>4.41***</b>
$R^2$ within			.1103
N			2031

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, SGROW= Sales growth.

### 5.4.2. Asymmetric Timeliness (AT)

The following regression model was employed to test the effect of ownership concentration (H1), board attributes (H2-H5), audit committee attributes (H6-H8) and directors' ethnicity (H9-H10) on asymmetric timeliness (AT). Independent variables included in the AT model were similar to those in CONACCR, except MTB was used in place of SGROW.

$$E_{it}/P_{it-1} = \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \beta_4 OCIN_{it} + \beta_5 OCIN_{it} * R_{it} + \beta_6 OCIN_{it} * D_{it} + \beta_7 OCIN_{it} * R_{it} * D_{it} + \beta_8 OCOUT_{it} + \beta_9 OCOUT_{it} * R_{it} + \beta_{10} OCOUT_{it} * D_{it} + \beta_{11} OCOUT_{it} * R_{it} * D_{it} + \text{Board Attributes, Audit Committee Attributes, Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

As explained in section 4.6.2, this thesis estimated  $E_{it}/P_{it-1}$  and  $R_{it}$  on a three-year backward accumulation as suggested by Roychowdhury and Watts (2007). Regression was also run using one-year estimate of asymmetric timeliness from Basu's (1997) original model and shown in Appendix A, column (a). The results were similar except that more significant findings were found in the three-year estimates reported in Table 5.6. The regression model was estimated based on a firm fixed effect regression; and standard errors were corrected based on Driscoll and Kraay's (1998) method so that they are robust to cross-sectional dependence, heteroskedasticity and autocorrelation (Hoechle, 2007). The  $F$ -value of the model was statistically significant at the 1% level and the  $R^2$  within was 23.74%.

The results in Table 5.6 depict the interaction of independent variables with each item in Basu's (1997) original model. Due to the lengthy list of interactions, only main variables are shown in the table. The full list of the regression results is shown in the Appendix A, column (b). Explanatory variables that interact with  $R$  (e.g.:  $BID * R$ ) represents their timeliness in recognising good news into earnings. Variables that interact with  $RD$  (e.g.:  $BID * RD$ ) represent the incremental effect of recognizing bad news relative to good news into earnings; called asymmetric timeliness. If the variable leads to more conservatism, the coefficient on its interaction with  $R$  (e.g.  $BID * R$ ) is expected to be negative. Coefficient on its interaction with  $RD$  (e.g.  $BID * RD$ ) is expected to be positive.

**Table 5.6**  
**Results of Asymmetric Timeliness**

Variables	Predicted signs	Coefficients	<i>t</i> -statistic
OCIN*R	+	-0.002	<b>-1.76*</b>
OCIN*RD	-	-0.001	-0.7
OCOUT*R	-	-0.001	-1.34
OCOUT*RD	+	-0.002	-0.4
BID*R	-	-0.421	<b>-4.96***</b>
<b>BID*RD</b>	+	1.351	<b>3.23***</b>
BS*R	+	-0.089	<b>-2.83***</b>
BS*RD	-	-0.169	-0.83
BT*R	-	0.006	<b>1.92*</b>
BT*RD	+	-0.002	-0.31
BF*R	-	-1.017	<b>-8.31***</b>
<b>BF*RD</b>	+	0.571	<b>2.07**</b>
BSHIP*R	+	-0.058	-1.29
BSHIP*RD	-	-0.075	-1.1
BCD*R	+	-0.101	<b>-4.87***</b>
BCD*RD	-	0.038	0.51
ACID*R	-	0.130	<b>1.73*</b>
<b>ACID*RD</b>	+	-0.355	<b>-4.12***</b>
ACF*R	-	0.412	<b>4.25***</b>
ACF*RD	+	0.199	0.88
ACM*R	-	0.043	<b>2.87***</b>
ACM*RD	+	-0.042	-0.82
BBR*R	+	-0.283	-1.35
<b>BBR*RD</b>	-	0.848	<b>5.88***</b>
ACBR*R	+	0.211	1.35
<b>ACBR*RD</b>	-	-0.803	<b>-2.14**</b>
BCR*R	-	-0.224	-1.33
<b>BCR*RD</b>	+	0.461	<b>2.71***</b>
ACCR*R	-	0.100	0.81
<b>ACCR*RD</b>	+	-0.664	<b>-2.18**</b>
AUD*R	-	-0.172	<b>-2.69***</b>
<b>AUD*RD</b>	+	0.218	<b>2.85***</b>
TA*R	+	0.028	1.46
TA*RD	-	0.056	1.15
PROF*R	-	0.474	<b>1.91*</b>
PROF*RD	+	-0.392	-0.53
LEV*R	-	-0.265	-1.34
<b>LEV*RD</b>	+	-0.639	<b>-3.89***</b>
MTB*R	+	0.082	<b>6.35***</b>
<b>MTB*RD</b>	-	-0.202	<b>-11.13***</b>
<i>F</i> - value			<b>27.02***</b>
<i>R</i> <sup>2</sup> within			.2374
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy equal 1 if R is negative; 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BS= Natural logarithm of board size, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

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### 5.4.3. Ownership Concentration and Conservatism (H1)

Results in Table 5.5 showed that inside substantial shareholders (OCIN) were negatively related to CONACCR and significant at the 1% level. This finding implies that inside owners led to lower conservatism and they did not use conservatism as a governance tool. This result is consistent with the argument that inside dominant shareholders create agency conflict; and thus support the outcome of the adverse effect of insiders ownership in Malaysian firms; for instance, high ownership by insiders led to financial distress status (S. N. Abdullah, 2006b), produced lower levels of corporate social responsibility (Ghazali, 2007) and reduced financial performance (Haniffa & Hudaib, 2006; Ming & Gee, 2008).

The coefficient on outside substantial shareholders (OCOUT) was significant at the 5% level but the sign was the opposite of that expected. Lower conservatism practices by OCOUT suggest that they did not employ higher conservatism to promote better governance. This finding suggests that outside substantial shareholders in Malaysia did not exercise their governance role through higher demand of accounting conservatism. These results confirmed that substantial shareholders in Malaysia, regardless of whether they are insiders or outsiders, adopted less conservative accounting.

Table 5.6 showed findings as in CONACC, where OCIN and OCOUT led to lower AT reflected by the negative coefficients on OCIN\*RD and OCOUT\*RD. Their effect however, was not significant suggesting that inside and outside substantial shareholders had no direct influence on asymmetric timeliness. OCIN led to slower

recognition of good news into earnings as reflected by the negative coefficient of  $OCIN \times R$ , but the effect was marginal.

The results from the CONACCR measure supported Hypothesis 1a that inside substantial shareholders were less conservative. Also, based on the CONACCR measure, Hypothesis 1b was rejected because the significant negative association obtained on outside substantial shareholders was contrary to expectations. Based on the AT measure, both hypotheses were rejected because neither relationship was significant.

#### **5.4.4. Board of Directors' characteristics and Conservatism (H2-H5)**

CONACCR is expected to be positively associated to board composition (BID), board tenure (BT) and board financial expertise (BF) because these characteristics reflect strong governance mechanisms. Also, board size (BS), multiple directorships (BSHIP) and CEO duality (BCD) are predicted to have inverse relationships with CONACCR as these characteristics reflect weak governance mechanisms. The results showed that the coefficient signs on all of the board attributes were as expected, but none of them were significant.

In contrast, BID was positively associated with AT ( $BID \times RD$ ) and significant at the 1% level. The effect of BT on good news ( $BT \times R$ ) was significant at the 10% level. The positive sign on the coefficient suggests that longer tenure led to faster recognition of good news into earnings, contrary to conservatism practices. Nevertheless, BT had no significant effect on AT ( $BT \times RD$ ). BF was positively related to AT ( $BF \times RD$ ), significant at the 5% level. This indicates that the higher the proportion of board members with financial expertise, the higher conservatism practices were adopted. The effect of BS and BSHIP on AT ( $BS \times RD$  and  $BSHIP \times RD$ ) were consistent with the expectation, but the relationships were not significant. Nevertheless, a negative significant coefficient for  $BS \times R$  suggested that a larger board led to slower recognition of good news into earnings. As reflected by the negative coefficient, CEO duality was found to be more conservative in the

recognition of good news ( $BCD \cdot R$ ) but not significantly associated with AT ( $BCD \cdot RD$ ).

Hypotheses 2 to 5 were not supported if based on the CONACCR measure. However, Hypothesis 2 with regards to board composition and Hypothesis 4b with regards to board financial expertise were supported based on the AT measure.

#### **5.4.5. Audit Committee characteristics and Conservatism (H6-H8)**

CONACCR is expected to be positively related to the proportion of independent directors on the audit committee (ACID), audit committee financial expertise (ACF) and audit committee meeting (ACM). With the exception of ACID, the coefficients sign on ACF and ACM were as predicted but all were not significant.

The negative effect of ACID on AT ( $ACID \cdot RD$ ) was significant at the 1% level, contradicting the expectation that higher proportions of independent directors on audit committee contribute to higher conservatism practices. Previously it was argued that, independent directors on the audit committee are expected to employ higher conservatism because they represent strong governance. However, the result showed that more independent directors on the audit committee led to lower conservatism.

ACF was positively related but not significantly with AT ( $ACF \cdot RD$ ). This implies that the merit of financial expertise to oversee the financial reporting process was not strong enough to influence conservatism practices. No significant association was found between ACM and AT ( $ACM \cdot RD$ ). The findings also showed that all the audit committee attributes led to faster recognition of good news into earnings, as reflected by the positive coefficients for  $ACID \cdot R$ ,  $ACF \cdot R$  and  $ACM \cdot R$ .

Hypotheses 6 was rejected in the CONACCR model because it was not significant, whilst it was rejected in the AT model because the direction of relationship was the opposite of that expected. Hypotheses 7 and 8 were rejected in both the CONACCR and AT models.

#### **5.4.6. Ethnicity and Conservatism (H9-H10)**

Turning to the effect of ethnicity, the positive coefficient on ethnic groups on board suggest that higher proportions of Bumiputera (BBR) and Chinese (BCR) directors on boards led to higher conservatism. Interestingly, the same ethnic groups on audit committee however, behaved differently because higher proportions of Bumiputera (ACBR) and Chinese (ACCR) directors on the audit committees led to lower conservatism. The direction of relationships between the ethnic groups and conservatism was similar in CONACCR and AT, except that only BBR was found significant in CONACCR whilst all the ethnic variables were significant in AT. Significant relationship between BBR and CONACCR suggest that Bumiputera directors on the board play an important role in the governance of the firms, as they significantly led to more CONACCR. The mixed results supported Hypotheses 9b and 10a but cause the rejection of Hypotheses 9a and 10b.

#### **5.4.7. Control Variables and Conservatism**

Out of five control variables, profitability (PROF) and sales growth (SGROW) were significantly associated with CONACCR while auditor (AUD), leverage (LEV) and market to book ratio (MTB) were significantly related to AT. PROF was not significantly associated with AT but the significant positive coefficient for PROF\*R suggested that profitable firms led to faster recognition of good news into earnings. Except LEV, the other coefficient signs are consistent with the previous studies notably A. S. Ahmed et al. (2002) and G. V. Krishnan and Visvanathan (2008). A positive coefficient on PROF is consistent with the argument that profitable firms are willing to be more conservative, while loss making firms are reluctant because conservatism will further reduce their earnings. A positive coefficient on AUD is consistent with previous evidence that big audit firms were more conservative in order to protect their reputation and to minimise legal action should earnings be overstated. A negative association between LEV and AT was surprising because it contradicted previous evidence and the prediction that creditors demand higher conservatism to protect their interest. The significant negative coefficient on MTB

support the findings of Roychowdhury and Watts (2007) and LaFond and Roychowdhury (2008) that firms with growth opportunities were less conservative.

## **5.5. Additional analyses**

Several additional tests were carried out to identify the credibility of the initial results. Using dummy variable as an alternative measure, this additional analysis re-examined board size (BS), audit committee independence (ACID), audit committee financial expertise (ACF), audit committee meeting (ACM) and leverage (LEV).

### **5.5.1. Board Size measured using binary variables**

This thesis reported in the initial analysis that board size (BS) was not significantly related to both CONACRR and AT. An insight into the data revealed that 51% of the observations had less than eight board members and 33% had more than eight members. The remaining 16% observations had the ideal eight members on board suggested by Jensen (1993). This variation could possibly explain the insignificant effect of BS on accounting conservatism when BS was measured using continuous variable.

This thesis repeated the regression analysis where BS was measured as a dummy variable, labelled as DUMMY\_BS. Dummy variable coded 1 is for large BS (>8 members) and 0 for small BS (<=8 members). Eight members was used as the cut-off point following Jensen's (1993) suggestion that exceeding eight is ineffective. The coefficient on DUMMY\_BS using that measure (not tabulated) was positive and insignificant. The dummy variable was then changed to include eight as large BS. Specifically, dummy variable coded 1, if BS is equal and above eight ( $\geq 8$ ), and 0 if otherwise ( $< 8$ ). As reported in Table 5.7 and Table 5.8, the coefficients were negative but still not significant. These results, therefore confirm the initial evidence that BS is not a significant factor influencing accounting conservatism. Results on the other variables are similar to the initial analysis. The full list of the AT results are shown in the Appendix B.



Table 5.7

**Results of Accrual-based Conservatism: Board Size using Binary Variables**

Variables	Predicted sign	Coefficients	t-statistic
Constant		0.189	1.07
OCIN	-	-0.001	<b>-2.73***</b>
OCOUT	+	-0.001	<b>-2.19**</b>
BID	+	0.028	0.95
<b>DUMMY_BS</b>	-	-0.001	-0.2
BT	+	0.001	0.97
BF	+	0.015	0.61
BSHIP	-	-0.014	-0.96
BCD	-	-0.003	-0.11
ACID	+	-0.012	-0.77
ACF	+	0.004	0.33
ACM	+	0.002	1.36
BBR	-	0.095	<b>2.06**</b>
ACBR	-	-0.027	-0.76
BCR	+	0.068	1.57
ACCR	+	-0.023	-0.7
AUD	+	0.004	0.57
TA	-	-0.012	-1.3
PROF	+	0.178	<b>7.14***</b>
LEV	+	0.037	1.26
SGROW	-	0.000	<b>-2.18**</b>
F-value			<b>4.54***</b>
R <sup>2</sup> within			.1102
N			2031

\*\*\*p&lt;0.01; \*\*p&lt;0.05; \* p&lt;0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, DUMMY\_BS= dummy equal 1 if board size equal and above 8; 0 otherwise, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, SGROW= Sales growth.

Table 5.8

**Results of Asymmetric Timeliness: Board Size using Binary Variables**

Variables	Predicted Sign	Coefficients	t-statistic
OCIN*R	+	-0.002	<b>-1.99**</b>
OCIN*RD	-	-0.002	-0.75
OCOUT*R	-	-0.001	-1.34
OCOUT*RD	+	-0.002	-0.44
BID*R	-	-0.365	<b>-6.25***</b>
BID*RD	+	1.436	<b>3.3***</b>
DUMMY_BS*R	+	0.024	0.75
<b>DUMMY_BS*RD</b>	-	-0.048	-0.75
BT*R	-	0.006	<b>1.85*</b>
BT*RD	+	-0.001	-0.17

Variables	Predicted Sign	Coefficients	t-statistic
BF*R	-	-0.988	<b>-9.1***</b>
BF*RD	+	0.645	<b>2.2**</b>
BSHIP*R	+	-0.036	-0.77
BSHIP*RD	-	-0.100	-1.4
BCD*R	+	-0.089	<b>-4.36***</b>
BCD*RD	-	0.061	0.68
ACID*R	-	0.107	1.35
ACID*RD	+	-0.414	<b>-3.59***</b>
ACF*R	-	0.404	<b>4.38***</b>
ACF*RD	+	0.190	0.83
ACM*R	-	0.041	<b>2.71***</b>
ACM*RD	+	-0.043	-0.81
BBR*R	+	-0.336	-1.54
BBR*RD	-	0.962	<b>7.01***</b>
ACBR*R	+	0.221	1.35
ACBR*RD	-	-0.841	<b>-2.28**</b>
BCR*R	-	-0.231	-1.27
BCR*RD	+	0.538	<b>3.06***</b>
ACCR*R	-	0.088	0.68
ACCR*RD	+	-0.679	<b>-2.2**</b>
AUD*R	-	-0.187	<b>-2.69***</b>
AUD*RD	+	0.233	<b>2.87***</b>
TA*R	+	0.021	1.14
TA*RD	-	0.056	1.17
PROF*R	-	0.527	<b>1.93*</b>
PROF*RD	+	-0.529	-0.66
LEV*R	-	-0.256	-1.33
LEV*RD	+	-0.661	<b>-4.24***</b>
MTB*R	+	0.079	<b>5.56***</b>
MTB*RD	-	-0.197	<b>-8.5***</b>
F- value			<b>25.50***</b>
R <sup>2</sup> within			.2358
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board independence, DUMMY\_BS= Dummy equals 1 if board size equal and above 8; 0 if otherwise, BT= Board tenure, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee members with financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equals 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

### **5.5.2. Audit Committee Independence using binary variables**

The measurement for audit committee composition (ACID) reported in the initial analysis was treated as a linear variable. The initial result suggested that a higher proportion of independent directors on the audit committee led to lower conservatism. This finding contradicted the prediction that outside directors who provide strong governance would employ more conservatism to monitor the management.

In order to confirm the credibility of the results, this thesis repeated the regression model with alternative measures of independence; using 100% threshold and majority threshold. Similar measures were employed by A. Klein (2002) and Bedard et al. (2004) and they found that one of the measures was significantly related to effectiveness. The use of 100% threshold is consistent with the Deli and Gillan's (2000) argument that non existence of independent directors on audit committee makes the whole process non-independent. Saleh et al. (2007) employed the 100% threshold by using a dummy variable; 1 for all members are independent and 0 otherwise.

Results shown in Table 5.9 maintain the initial finding that ACID had no influence on the CONACCR. Results shown in Table 5.10 maintain the initial result that ACID reduced AT. Specifically, firms with 100% independent directors in its audit committee produced less conservative reporting as reflected by positive coefficient on good news (DUMMY\_ACID\*R) and negative coefficient on asymmetric timeliness (DUMMY\_ACID\*RD), and both effects were significant at the 1% level.

The second measure for the dummy variable is from using a majority threshold consistent with the Malaysian Code on Corporate Governance that requires independent directors to be the majority members of the audit committee. A dummy variable was assigned as 1 for majority independence (equal and more than 51%) and 0 otherwise. Results in Table 5.10 revealed that no significance. The full list of the AT results are shown in the Appendix C.

**Table 5.9**  
**Results of Accrual-based Conservatism:**  
**Audit Committee Composition using Binary Variables**

Variables	Predicted sign	(a) Dummy = 1 All independent		(b) Dummy = 1 Majority independent	
		Coefficients	<i>t</i> -statistic	Coefficients	<i>t</i> -statistic
constant		0.205	1.16	0.201	1.15
OCIN	-	-0.001	<b>-2.68***</b>	-0.001	<b>-2.68***</b>
OCOUT	+	-0.001	<b>-2.13**</b>	-0.001	<b>-2.14**</b>
BID	+	0.019	0.74	0.022	0.87
BS	-	-0.007	-0.54	-0.006	-0.49
BT	+	0.001	0.93	0.001	0.94
BF	+	0.014	0.59	0.014	0.56
BSHIP	-	-0.014	-0.99	-0.014	-1
BCD	-	-0.003	-0.11	-0.003	-0.13
<b>DUMMY_ACID</b>	+	0.002	0.25	-0.003	-0.68
ACF	+	0.004	0.28	0.005	0.38
ACM	+	0.002	1.34	0.002	1.36
BBR	-	0.092	<b>2.05**</b>	0.093	<b>2.04**</b>
ACBR	-	-0.028	-0.8	-0.027	-0.77
BCR	+	0.065	1.51	0.066	1.53
ACCR	+	-0.023	-0.68	-0.022	-0.68
AUD	+	0.003	0.5	0.003	0.53
TA	-	-0.012	-1.34	-0.012	-1.33
PROF	+	0.177	<b>7.1***</b>	0.177	<b>7.15***</b>
LEV	+	0.037	1.25	0.037	1.27
SGROW	-	0.000	<b>-2.18**</b>	0.000	<b>-2.18**</b>
<i>F</i> -value			<b>4.39***</b>		<b>4.40***</b>
<i>R</i> <sup>2</sup> within			.1099		.1101
N			2031		2031

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BS= Natural logarithm of board size, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, DUMMY\_ACID (a)= Dummy equals 1 if all audit committee members are independent; 0 otherwise, DUMMY\_ACID (b)= Dummy equals 1 if majority audit committee members are independent; 0 otherwise, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, SGROW= Sales growth.

**Table 5.10**  
**Results of Asymmetric Timeliness:**  
**Audit Committee Composition using Binary Variables**

	Predicted Sign	(a) Dummy = 1 All independent		(b) Dummy = 1 Majority independent	
		Coefficients	<i>t</i> -statistic	Coefficients	<i>t</i> -statistic
OCIN*R	+	-0.002	-1.58	-0.002	-1.64
OCIN*RD	-	-0.002	-0.71	-0.002	-0.65
OCOUT*R	-	-0.001	-1.23	-0.001	-1.21

		(a) Dummy = 1 All independent		(b) Dummy = 1 Majority independent	
	Predicted Sign	Coefficients	t-statistic	Coefficients	t-statistic
OCOUT*RD	+	-0.002	-0.39	-0.001	-0.34
BID*R	-	-0.394	<b>-4.74***</b>	-0.400	<b>-5.01***</b>
BID*RD	+	1.226	<b>2.94***</b>	1.167	<b>2.58**</b>
BS*R	+	-0.099	<b>-3.11***</b>	-0.088	<b>-3.45***</b>
BS*RD	-	-0.188	-0.87	-0.216	-1.09
BT*R	-	0.005	<b>1.7*</b>	0.006	<b>1.77*</b>
BT*RD	+	-0.001	-0.1	0.001	0.08
BF*R	-	-1.025	<b>-8.86***</b>	-1.011	<b>-8.65***</b>
BF*RD	+	0.576	<b>2.04**</b>	0.595	<b>2.08**</b>
BSHIP*R	+	-0.053	-1.24	-0.052	-1.18
BSHIP*RD	-	-0.100	-1.48	-0.117	-1.52
BCD*R	+	-0.118	<b>-5.12***</b>	-0.088	<b>-4.2***</b>
BCD*RD	-	0.055	0.73	0.000	0
DUMMY_ACID*R	-	1.160	<b>8.02***</b>	0.050	1.47
<b>DUMMY_ACID*RD</b>	+	-1.176	<b>-4.16***</b>	0.054	0.88
ACF*R	-	0.391	<b>4.25***</b>	0.404	<b>4.15***</b>
ACF*RD	+	0.236	0.97	0.265	1.15
ACM*R	-	0.046	<b>3.02***</b>	0.042	<b>2.94***</b>
ACM*RD	+	-0.041	-0.78	-0.040	-0.75
BBR*R	+	-0.288	-1.38	-0.262	-1.18
BBR*RD	-	0.853	<b>5.6***</b>	0.771	<b>3.97***</b>
ACBR*R	+	0.240	1.49	0.194	1.17
ACBR*RD	-	-0.874	<b>-2.37**</b>	-0.818	<b>-2.25**</b>
BCR*R	-	-0.229	-1.38	-0.202	-1.15
BCR*RD	+	0.487	<b>3.1***</b>	0.424	<b>2.23**</b>
ACCR*R	-	0.121	0.98	0.084	0.66
ACCR*RD	+	-0.717	<b>-2.42**</b>	-0.656	<b>-2.23**</b>
AUD*R	-	-0.172	<b>-2.76***</b>	-0.177	<b>-2.87***</b>
AUD*RD	+	0.214	<b>2.74***</b>	0.227	<b>2.87***</b>
TA*R	+	0.028	1.49	0.031	<b>1.73*</b>
TA*RD	-	0.058	1.22	0.061	1.28
PROF*R	-	0.474	<b>1.99**</b>	0.466	<b>1.96*</b>
PROF*RD	+	-0.402	-0.54	-0.447	-0.59
LEV*R	-	-0.282	-1.38	-0.278	-1.42
LEV*RD	+	-0.604	<b>-3.9***</b>	-0.656	<b>-3.79***</b>
MTB*R	+	0.079	<b>5.42***</b>	0.081	<b>5.98***</b>
MTB*RD	-	-0.188	<b>-11.11***</b>	-0.188	<b>-11.31***</b>
F-value			<b>9.53***</b>		<b>1.53***</b>
R <sup>2</sup> within			.2384		.2411
N			2012		2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board

composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, DUMMY\_ACID (a)= Dummy equals 1 if all audit committee members are independent, 0 otherwise, DUMMY\_ACID (b)= Dummy equals 1 if majority audit committee members are independent; 0 otherwise, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

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### **5.5.3. Financial Expertise on Audit Committee**

The initial analysis reported that financial expertise on the audit committee (ACF) was not significantly related to conservatism. This result is inconsistent with the governance role of financial expertise. Also, it does not support the findings of Bedard et al. (2004) and Rahmat et al.(2009) that ACF is an important governance mechanism.

While this thesis examined both board financial expertise (BF) and ACF in one model, it is important to note that Bedard et al. (2004) and Rahmat et al. (2009) explored only ACF in their study. Insignificant findings in this thesis may possibly be due to the fact that BF is stronger in explaining conservatism practices, hence reducing the impact of ACF on conservatism. Analysis was repeated after excluding BF from the regression model to confirm if ACF is an important mechanism.

As shown in Table 5.11, the significant positive effect of ACF on AT (ACF\*RD) affirmed that financial expertise is an important attribute to enhance the quality of the financial reports. The results, therefore support the findings of Davidson et al. (2004) that investors appreciate firms that appoint financial expertise in the audit committees. A similar test was carried out on CONACCR, but ACF was not significant, similar to the earlier finding. The full list of the AT results are shown in the Appendix D.

**Table 5.11**  
**Results of Asymmetric Timeliness: Excluding Board Financial Expertise**

	Predicted signs	Coefficients	<i>t</i> -statistic
OCIN*R	+	-0.001	-1.02
OCIN*RD	-	-0.002	-0.94
OCOUT*R	-	-0.001	-0.98
OCOUT*RD	+	-0.002	-0.57
BID*R	-	-0.430	<b>-5.65***</b>
BID*RD	+	1.431	<b>3.39***</b>
BS*R	+	0.031	1.47
BS*RD	-	-0.191	-0.89
BT*R	-	0.008	<b>2.1**</b>
BT*RD	+	-0.002	-0.31
BSHIP*R	+	-0.056	-0.86
BSHIP*RD	-	-0.051	-0.56
BCD*R	+	-0.076	<b>-5.32***</b>
BCD*RD	-	0.006	0.09
ACID*R	-	0.125	0.88
ACID*RD	+	-0.397	<b>-5.72***</b>
ACF*R	-	-0.049	-0.54
<b>ACF*RD</b>	+	0.435	<b>2.17**</b>
ACM*R	-	0.005	0.38
ACM*RD	+	-0.012	-0.2
BBR*R	+	-0.225	-1.05
BBR*RD	-	0.899	<b>6.31***</b>
ACBR*R	+	0.200	1.31
ACBR*RD	-	-0.791	<b>-2.18**</b>
BCR*R	-	-0.148	-0.97
BCR*RD	+	0.488	<b>2.13**</b>
ACCR*R	-	0.026	0.22
ACCR*RD	+	-0.571	<b>-1.84*</b>
AUD*R	-	-0.179	<b>-2.82***</b>
AUD*RD	+	0.214	<b>3.41***</b>
TA*R	+	0.013	0.65
TA*RD	-	0.073	1.45
PROF*R	-	0.453	<b>2.02**</b>
PROF*RD	+	-0.429	-0.57
LEV*R	-	-0.286	-1.38
LEV*RD	+	-0.677	<b>-3.09***</b>
MTB*R	+	0.090	<b>7.02***</b>
MTB*RD	-	-0.196	<b>-9.24***</b>
<i>F</i> - value			<b>2.33***</b>
<i>R</i> <sup>2</sup> within			.2156
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative; 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board

composition, BS= Natural logarithm of board size, BT= Board tenure, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

#### 5.5.4. Audit Committee Meeting using binary variables

The initial analysis showed that audit committee meeting (ACM) had no significant influence on the conservatism practices. The regression analysis was repeated using a dummy variable to measure frequency of audit committee meeting held by firms. This approach follows Bedard et al.'s (2004) suggestion that there may be a threshold in the number of meeting for the audit committee to be efficient.

Following J. W. Lin et al. (2006), dummy 1 was assigned for four or more meetings ( $\geq 4$  meetings) and 0 otherwise; labelled as DUMMY\_ACM. Table 5.12 presents results for CONACCR but DUMMY\_ACM remained insignificant. Results presented in Table 5.13 for asymmetric timeliness, indicate that a threshold of 4 meetings is indeed reflective of an effective number of meetings as the coefficient now became significant at the 5% level. The results on other variables were similar to the initial analysis. The full list of the AT results are shown in the Appendix E.

**Table 5.12**  
**Results of Accrual-based Conservatism:**  
**Audit Committee Meeting using Binary Variables**

Variables	Predicted sign	Coefficients	t-statistic
constant		0.207	1.16
OCIN	-	-0.001	<b>-2.74***</b>
OCOUT	+	-0.001	<b>-2.21**</b>
BID	+	0.026	0.91
BS	-	-0.005	-0.42
BT	+	0.001	0.92
BF	+	0.015	0.6
BSHIP	-	-0.014	-1
BCD	-	-0.004	-0.15
ACID	+	-0.011	-0.68
ACF	+	0.005	0.37
<b>DUMMY_ACM</b>	+	0.005	0.67
BBR	-	0.095	<b>2.09**</b>
ACBR	-	-0.027	-0.77
BCR	+	0.066	1.54



Variables	Predicted sign	Coefficients	t-statistic
ACCR	+	-0.022	-0.66
AUD	+	0.004	0.56
TA	-	-0.012	-1.31
PROF	+	0.177	<b>7.1***</b>
LEV	+	0.038	1.28
SGROW	-	0.000	<b>-2.16**</b>
F-value			<b>4.37***</b>
R <sup>2</sup> within			.1096
N			2031

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, DUMMY\_ACM= Dummy equals 1 if number of audit committee meetings held is four and more; 0 otherwise, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, SGROW= Sales growth.

**Table 5.13**  
**Results of Asymmetric Timeliness:**  
**Audit Committee Meeting using Binary Variables**

	Predicted signs	Coefficients	t-statistic
OCIN*R	+	-0.002	<b>-1.68*</b>
OCIN*RD	-	-0.002	-1.13
OCOUT*R	-	-0.001	-1.06
OCOUT*RD	+	-0.002	-0.55
BID*R	-	-0.396	<b>-4.46***</b>
BID*RD	+	1.309	<b>3.42***</b>
BS*R	+	-0.075	<b>-2.27**</b>
BS*RD	-	-0.199	-1.02
BT*R	-	0.006	<b>1.77*</b>
BT*RD	+	-0.003	-0.43
BF*R	-	-0.942	<b>-9.45***</b>
BF*RD	+	0.492	1.46
BSHIP*R	+	-0.067	-1.38
BSHIP*RD	-	-0.055	-0.77
BCD*R	+	-0.100	<b>-4.5***</b>
BCD*RD	-	0.025	0.35
ACID*R	-	0.165	<b>1.9*</b>
ACID*RD	+	-0.414	<b>-4.09***</b>
ACF*R	-	0.399	<b>4.1***</b>
ACF*RD	+	0.180	0.86
DUMMY_ACM*R	-	-0.036	-0.63
<b>DUMMY_ACM*RD</b>	+	0.260	<b>2.33**</b>
BBR*R	+	-0.254	-1.15
BBR*RD	-	0.823	<b>7.52***</b>
ACBR*R	+	0.219	1.33

	Predicted signs	Coefficients	<i>t</i> -statistic
ACBR*RD	-	-0.794	<b>-2.25**</b>
BCR*R	-	-0.225	-1.36
BCR*RD	+	0.485	<b>3.29***</b>
ACCR*R	-	0.116	0.9
ACCR*RD	+	-0.690	<b>-2.27**</b>
AUD*R	-	-0.189	<b>-2.85***</b>
AUD*RD	+	0.231	<b>2.7***</b>
TA*R	+	0.032	1.58
TA*RD	-	0.047	0.89
PROF*R	-	0.490	<b>1.95*</b>
PROF*RD	+	-0.421	-0.55
LEV*R	-	-0.276	-1.12
LEV*RD	+	-0.598	<b>-2.87***</b>
MTB*R	+	0.086	<b>6.87***</b>
MTB*RD	-	-0.201	<b>-9.66***</b>
<i>F</i> - value			<b>16.23***</b>
<i>R</i> <sup>2</sup> within			.2363
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative; 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, DUMMY\_ACM= Dummy equals 1 if number of audit committee meetings held is four and more; 0 otherwise, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

### 5.5.5. Leverage using binary variables

Initial results showed that leverage (LEV) significantly reduced AT. This effect is contrary to previous evidence and inconsistent with the argument that a creditor, who needs to secure the promised payment, will demand higher conservatism to control unnecessary or excessive distribution of firm's earnings to managers or shareholders. Therefore, this thesis employed an alternative measure of leverage using a dummy variable to distinguish levered firms and non-levered firms. A dummy was assigned as 1 for levered firms and 0 for unlevered firms; labelled as DUMMY\_LEV. The results for CONACCR in Table 5.14 showed that the coefficient on LEV was

positive but not significant. Thus, using a dummy variable did not change the initial result on the effect of LEV on CONACCR.

The results presented in Table 5.15 showed that the debt holders demanded more asymmetric timeliness as reflected by the positive coefficient between LEV and AT (DUMMY\_LEV\*RD). This finding confirmed that debt holders demand higher conservatism to reduce conflict between them and the shareholders. The full list of the AT results are shown in the Appendix F.

**Table 5.14**  
**Results of Accrual-based Conservatism: Leverage using Binary Variables**

Variables	Predicted sign	Coefficients	t-statistic
constant		0.162	0.94
OCIN	-	-0.001	<b>-2.72***</b>
OCOUT	+	-0.001	<b>-2.18**</b>
BID	+	0.024	0.85
BS	-	-0.006	-0.47
BT	+	0.001	0.84
BF	+	0.015	0.62
BSHIP	-	-0.015	-1.06
BCD	-	-0.004	-0.17
ACID	+	-0.010	-0.65
ACF	+	0.005	0.36
ACM	+	0.002	1.4
BBR	-	0.093	<b>2.09**</b>
ACBR	-	-0.027	-0.76
BCR	+	0.065	1.54
ACCR	+	-0.023	-0.71
AUD	+	0.003	0.53
TA	-	-0.010	-1.11
PROF	+	0.175	<b>7.2***</b>
<b>DUMMY_LEV</b>	+	0.006	1.51
SGROW	-	0.000	<b>-2.25**</b>
F-value			<b>4.44***</b>
R <sup>2</sup> within			.1087
N			2031

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, DUMMY\_LEV= Dummy equals 1 for levered firms; 0 otherwise, SGROW= Sales growth.

**Table 5.15**  
**Results of Asymmetric Timeliness: Leverage using Binary Variables**

Variables	Predicted signs	Coefficients	<i>t</i> -statistic
OCIN*R	+	-0.002	<b>-1.87*</b>
OCIN*RD	-	0.000	-0.11
OCOUT*R	-	-0.001	-1.41
OCOUT*RD	+	-0.001	-0.25
BID*R	-	-0.533	<b>-6.1***</b>
BID*RD	+	1.399	<b>2.92***</b>
BS*R	+	-0.135	<b>-3.94***</b>
BS*RD	-	-0.133	-0.72
BT*R	-	0.005	<b>1.75*</b>
BT*RD	+	-0.005	-0.99
BF*R	-	-1.091	<b>-8.55***</b>
BF*RD	+	0.715	<b>2.44**</b>
BSHIP*R	+	-0.081	<b>-1.87*</b>
BSHIP*RD	-	-0.051	-0.75
BCD*R	+	-0.053	<b>-2.04**</b>
BCD*RD	-	-0.005	-0.06
ACID*R	-	0.228	<b>2.22**</b>
ACID*RD	+	-0.473	<b>-5.69***</b>
ACF*R	-	0.392	<b>4.16***</b>
ACF*RD	+	0.082	0.42
ACM*R	-	0.036	<b>2.69***</b>
ACM*RD	+	-0.031	-0.62
BBR*R	+	-0.236	-1.2
BBR*RD	-	0.708	<b>4.43***</b>
ACBR*R	+	0.224	1.41
ACBR*RD	-	-0.753	<b>-2.06**</b>
BCR*R	-	-0.276	<b>-1.84*</b>
BCR*RD	+	0.485	<b>2.56**</b>
ACCR*R	-	0.198	1.6
ACCR*RD	+	-0.732	<b>-2.35**</b>
AUD*R	-	-0.193	<b>-3.16***</b>
AUD*RD	+	0.245	<b>3.36***</b>
TA*R	+	0.045	<b>2.82***</b>
TA*RD	-	-0.002	-0.05
PROF*R	-	0.458	<b>1.9*</b>
PROF*RD	+	-0.350	-0.45
DUMMY_LEV*R	-	-0.175	<b>-2.86***</b>
<b>DUMMY_LEV*RD</b>	+	0.191	<b>4.59***</b>
MTB*R	+	0.075	<b>5.17***</b>
MTB*RD	-	-0.203	<b>-13.35***</b>
<i>F</i> - value			<b>28.73***</b>
<i>R</i> <sup>2</sup> within			.2321
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Dummy equal 1 if CEO-chairman combine; 0 otherwise, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm; 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, DUMMY\_LEV= Dummy equals 1 for levered firms; 0 otherwise, MTB= Market to book value.

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## 5.6. Moderating effect of Ownership Concentration (H11)

The following empirical model was employed to test the moderating effect of concentrated ownership (OCIN and OCOUT) on the relationship between firms' governance (GOV) and conservatism (CONACCR or AT).

### Accrual-based Conservatism (CONACCR)

$$\begin{aligned} \text{CONACCR}_{it} = & \beta_0 + \beta_1 \text{OCIN}_{it} + \beta_2 \text{OCOUT}_{it} + \beta_3 \text{GOV}_{it} + \beta_4 \text{OCIN}_{it} * \text{GOV}_{it} + \beta_5 \\ & \text{OCOUT}_{it} * \text{GOV}_{it} + \beta_6 \text{BT}_{it} + \beta_7 \text{BSHIP}_{it} + \beta_8 \text{BBR}_{it} + \beta_9 \text{ACBR}_{it} + \\ & \beta_{10} \text{BCR}_{it} + \beta_{11} \text{ACCR}_{it} + \beta_{12} \text{TA}_{it} + \beta_{13} \text{PROF}_{it} + \beta_{14} \text{LEV}_{it} + \\ & \beta_{15} \text{SGROW}_{it} + \varepsilon_{it} \end{aligned}$$

### Asymmetric Timeliness (AT)

$$\begin{aligned} E_{it}/P_{it-1} = & \beta_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 R_{it} * D_{it} + \beta_4 \text{OCIN}_{it} + \beta_5 \text{OCIN}_{it} * R_{it} + \beta_6 \text{OCIN}_{it} * D_{it} \\ & + \beta_7 \text{OCIN}_{it} * R_{it} * D_{it} + \beta_8 \text{OCOUT}_{it} + \beta_9 \text{OCOUT}_{it} * R_{it} + \beta_{10} \text{OCOUT}_{it} * D_{it} + \\ & \beta_{11} \text{OCOUT}_{it} * R_{it} * D_{it} + \beta_{12} \text{GOV}_{it} + \beta_{13} \text{GOV}_{it} * R_{it} + \beta_{14} \text{GOV}_{it} * D_{it} + \\ & \beta_{15} \text{GOV}_{it} * R_{it} * D_{it} + \beta_{16} \text{GOV}_{it} * \text{OCIN}_{it} + \beta_{17} \text{GOV}_{it} * \text{OCOUT}_{it} + \\ & \beta_{18} \text{GOV}_{it} * \text{OCIN}_{it} * R_{it} + \beta_{19} \text{GOV}_{it} * \text{OCIN}_{it} * D_{it} + \beta_{20} \text{GOV}_{it} * \text{OCIN}_{it} * R_{it} * D_{it} + \\ & \beta_{21} \text{GOV}_{it} * \text{OCOUT}_{it} * R_{it} + \beta_{22} \text{GOV}_{it} * \text{OCOUT}_{it} * D_{it} + \\ & \beta_{23} \text{GOV}_{it} * \text{OCOUT}_{it} * R_{it} * D_{it} + \text{BT} + \text{BSHIP} + \text{Ethnicity \& Control} \\ & \text{Variables}_{it} + \varepsilon_{it} \end{aligned}$$

Table 5.16 presents the results for CONACCR model. Column (a) shows the results on the main effect of GOV on CONACCR and column (b) shows the results on the moderating relationship. In column (a), the main effect of GOV on CONACCR was insignificant whilst OCIN and OCOUT significantly led to lower CONACCR. The

insignificant coefficient on GOV could be due to the dominant power of the concentrated owners.

Column (b) shows the influence of concentrated owners on firms' governance; the main focus is GOV, OCIN\*GOV and OCOUT\*GOV. The results suggest that when GOV was not influenced by the concentrated owners, GOV had a positive but weak effect on CONACCR. However, when GOV was interacted with OCOUT (GOV\*OCOUT), the coefficient turned into negative. The finding implies that in firms with outside concentrated owners, the firms' governance led to lower CONACCR. No significant finding was obtained on the effect of OCIN on GOV.

**Table 5.16**  
**Results of Accrual-based Conservatism:**  
**Main Effect and Moderating Effect**

Variables	Predicted sign	(a) Main effect		(b) Moderating effect	
		Coefficients	t-statistic	Coefficients	t-statistic
Constant		0.198	1.1	0.119	0.620
OCIN	-	-0.001	<b>-2.87***</b>	0.000	0.180
OCOUT	+	-0.001	<b>-2.2**</b>	0.001	1.470
<b>GOV</b>	+	0.023	1.12	0.148	<b>1.930*</b>
<b>OCIN*GOV</b>	-			-0.002	-1.220
<b>OCOUT*GOV</b>	-			-0.003	<b>-2.330**</b>
BT	+	0.001	1	0.001	1.030
BSHIP	-	-0.012	-0.83	-0.013	-0.950
BBR	-	0.099	<b>2.19**</b>	0.085	<b>1.840*</b>
ACBR	-	-0.028	-0.79	-0.028	-0.780
BCR	+	0.069	1.61	0.058	1.320
ACCR	+	-0.023	-0.71	-0.024	-0.740
TA	-	-0.012	-1.33	-0.011	-1.160
PROF	+	0.177	<b>7.12***</b>	0.178	<b>7.120***</b>
LEV	+	0.037	1.27	0.034	1.170
SGROW	-	0.000	<b>-2.16**</b>	0.000	<b>-2.220**</b>
F-value			<b>6.04***</b>		<b>6.00***</b>
R <sup>2</sup> within			.1066		.1123
N			2031		2031

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, GOV= Firms' aggregate governance measure, BT= Board tenure, BSHIP= Board multiple directorships, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, SGROW= Sales growth.

Table 5.17 presents the results for AT model. In column (a), GOV had a strong positive association with AT whilst OCIN and OCOUT were not significant. The findings suggest that firms' governance had significant power to encourage early recognition of bad news in relative to good news into earnings.

Further, interaction effect between GOV and both OCIN and OCOUT were made to observe if the effect of GOV on AT changes with the influence of the concentrated owners. The main focus is OCIN\*GOV\*RD and OCOUT\*GOV\*RD for asymmetric timeliness on the recognition of bad news into earnings, relative to good news; and OCIN\*GOV\*R and OCOUT\*GOV\*R on the recognition of good news into earnings. Results in column (b) showed that without the influence of the concentrated owners, GOV led to more conservatism. Specifically, GOV significantly led to slower recognition of good news into earnings (GOV\*R) and faster recognition of bad news relative to good news into earnings (GOV\*RD). The magnitude of the coefficients on GOV was bigger than those in the main effect in column (a). When GOV was interacted with OCIN and OCOUT, the firms' conservatism became lower, as shown by the negative coefficient on OCIN\*GOV\*RD and OCOUT\*GOV\*RD. The finding suggests that the concentrated owners influenced the firms' governance to employ lower conservatism.

Overall, Hypothesis 11a was not supported in the CONACCR model but was supported in the AT model. Hypothesis 11b was supported in the CONACCR and AT models.

**Table 5.17**  
**Results of Asymmetric Timeliness:**  
**Main Effect and Moderating Effect**

	Predicted signs	(a) Main effect		(b) Moderating effect	
		Coefficients	t-statistic	Coefficients	t-statistic
OCIN*R	+	-0.001	-0.9	-0.033	<b>-5.31***</b>
OCIN*RD	-	-0.002	-1.19	0.047	<b>4.34***</b>
OCOUT*R	-	0.000	0.27	-0.023	<b>-2.42**</b>
OCOUT*RD	+	-0.003	-0.77	0.027	1.63
GOV*R	-	-0.839	<b>-6.18***</b>	-3.717	<b>-5.43***</b>
GOV*RD	+	1.666	<b>3.93***</b>	5.524	<b>4.92***</b>
OCIN*GOV*R	+			0.065	<b>5.31***</b>
OCIN*GOV*RD	-			-0.097	<b>-4.77***</b>
OCOUT*GOV*R	+			0.047	<b>2.54**</b>
OCOUT*GOV*RD	-			-0.058	<b>-2.09**</b>
BT*R	-	0.001	0.34	-0.003	-0.71
BT*RD	+	0.005	0.65	0.010	1.26
BSHIP*R	+	-0.021	-0.24	0.046	0.47
BSHIP*RD	-	-0.085	-0.58	-0.153	-1.16
BBR*R	+	-0.310	-1.43	-0.336	<b>-2.23**</b>
BBR*RD	-	1.158	<b>8.23***</b>	1.103	<b>6.03***</b>
ACBR*R	+	-0.059	-0.29	0.001	0
ACBR*RD	-	0.550	<b>3.4***</b>	0.435	<b>2.23**</b>
BCR*R	-	0.312	1.52	0.367	<b>1.79*</b>
BCR*RD	+	-1.007	<b>-2.55**</b>	-1.054	<b>-2.4**</b>
ACCR*R	-	0.062	0.39	0.037	0.22
ACCR*RD	+	-0.676	<b>-2.29**</b>	-0.636	<b>-1.88*</b>
TA*R	+	0.011	0.51	-0.007	-0.33
TA*RD	-	0.061	1.33	0.071	<b>1.68*</b>
PROF*R	-	0.445	<b>2.03**</b>	0.458	<b>2.3**</b>
PROF*RD	+	-0.386	-0.53	-0.360	-0.55
LEV*R	-	-0.264	-0.99	-0.086	-0.39
LEV*RD	+	-0.681	<b>-3.18***</b>	-0.969	<b>-4.04***</b>
MTB*R	+	0.072	<b>4.28***</b>	0.067	<b>5.21***</b>
MTB*RD	-	-0.163	<b>-4.81***</b>	-0.148	<b>-8.2***</b>
F- value			<b>16.11***</b>		<b>176.60***</b>
R <sup>2</sup> within			.2039		.2240
N			2012		2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

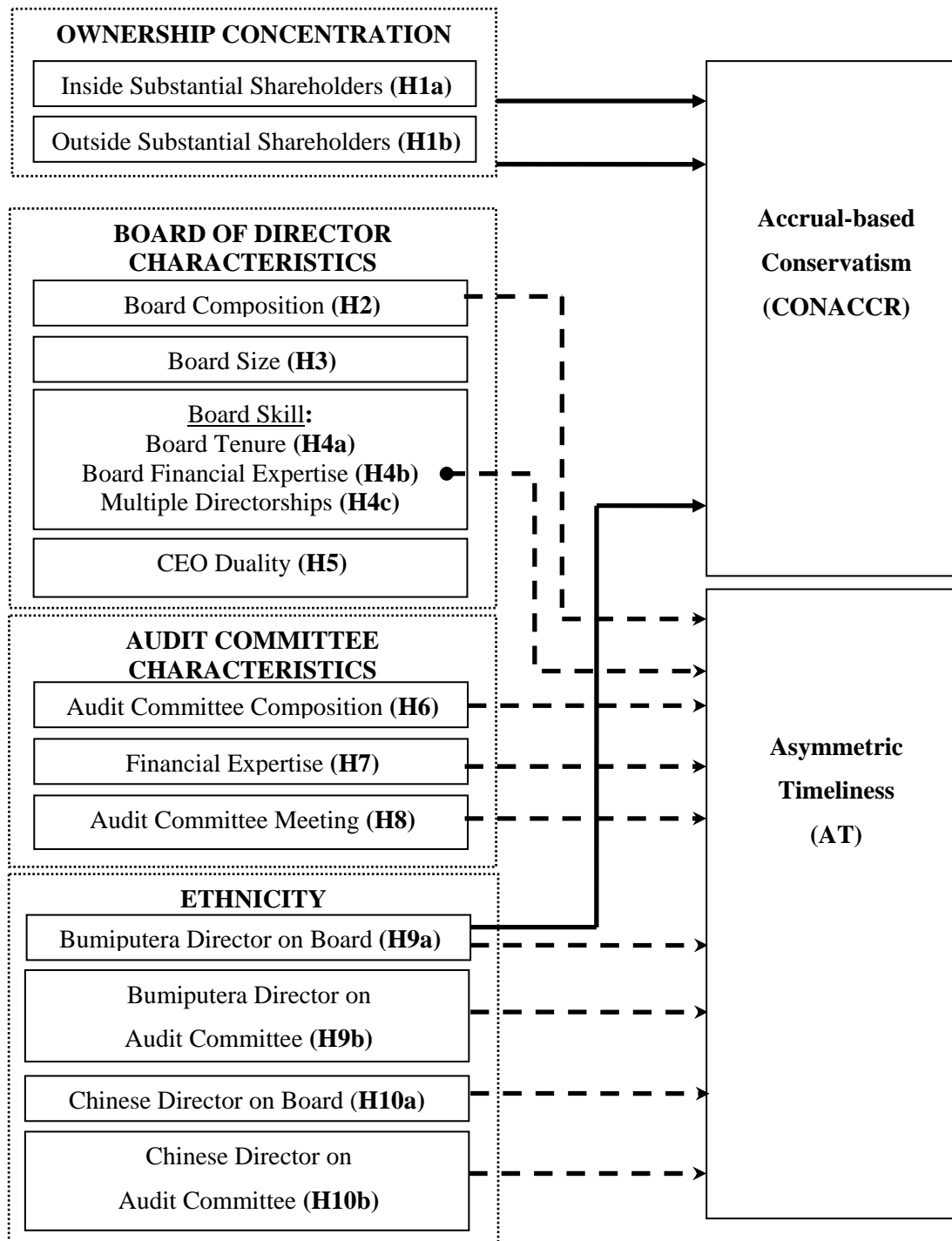
R= Stock return, D= dummy 1 if R is negative; 0 otherwise, RD = R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, GOV= Firms' aggregate governance measure, BT= Board tenure, BSHIP= Board multiple directorships, BBR= Ratio Bumiputera on board, ACBR= Ratio Bumiputera on audit committee, BCR= Ratio Chinese on board, ACCR= Ratio Chinese on audit committee, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.



## 5.7. Summary

The earlier section of this chapter presented the descriptive statistics on the data used in this thesis. The descriptive analysis showed that Malaysian listed firms had successfully complied with the best practices of corporate governance recommended in the Malaysian Code on Corporate Governance. Figure 5.1 shows the lines connecting variables that have significant effect on accounting conservatism. Overall, results in this thesis showed that concentrated owners had a strong influence on the accrual-based conservatism (CONACCR) relative to the asymmetric timeliness (AT). None of the board and audit committee attributes had a significant effect on CONACCR. However, BID, BF and ACID were significantly related to AT. These results suggest that internal governance mechanisms influenced conservative accounting depending on whether conservatism is measured using an accounting based or a market based approach.

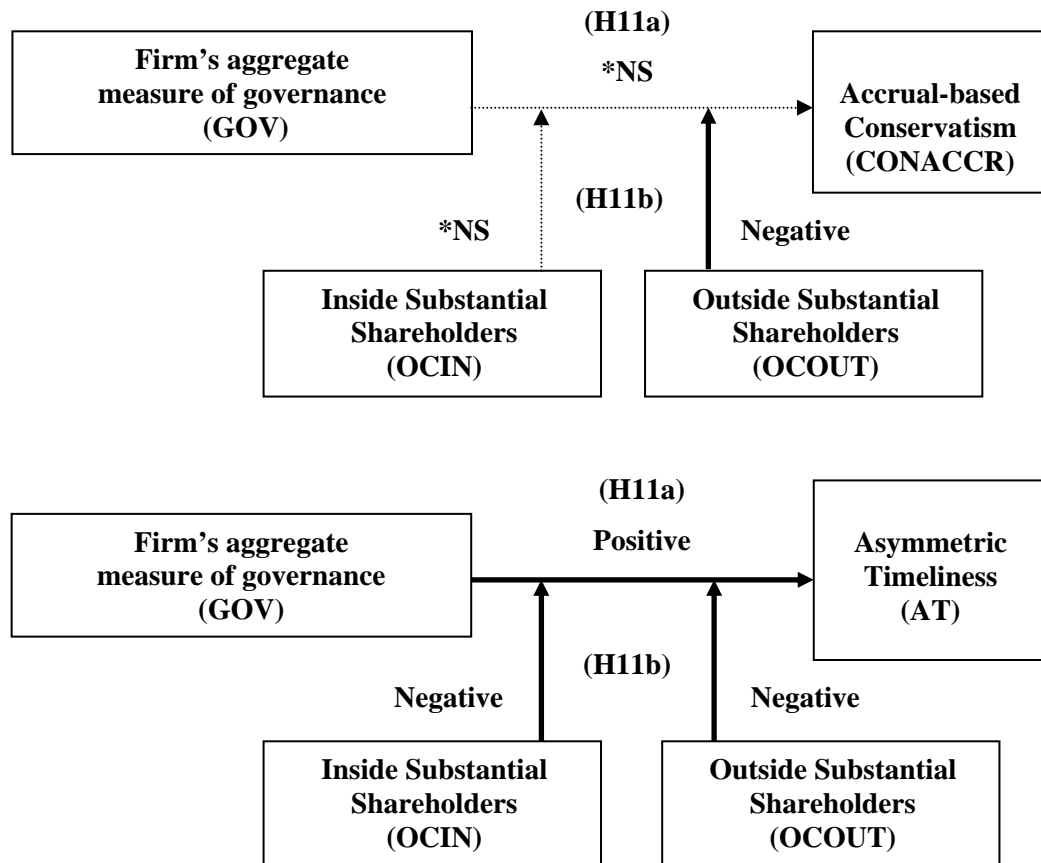
Additional analysis was performed on BS, ACID, ACF, ACM and LEV to confirm the initial results. Whilst BS remained insignificant in the additional analysis, the strong negative coefficient on wholly independent directors on the audit committee confirmed the earlier finding that independent directors on the audit committee led to lower asymmetric timeliness. This thesis found that firms that held at least four meetings a year were positively related to asymmetric timeliness, suggesting that use of a dichotomous measure is better able to detect the importance of frequent meeting in producing quality financial reports. Additional analysis on the proportion of financial expertise on the audit committee suggests that it is not necessary to appoint financial experts on audit committee if there was already financial expertise on the board. The effect of LEV on conservatism is proven when LEV was measured as dichotomous variable to classify levered and unlevered firms. The result is consistent with the previous evidence that debt holders would demand higher conservatism to protect their interest. Mixed evidence on the relationship between ethnic groups and conservatism seems to suggest that ethnicity is not the real influence on conservatism.



**Figure 5.1: Results Summary of Hypothesis 1 to Hypothesis 10**

Results from testing Hypothesis 11 shown in Figure 5.2, indicated that firms' governance had a weak positive effect on CONACCR; when it was not influenced by the concentrated owners. However, the firms' governance led to lower conservatism when it was interacted with the outside substantial shareholders. The firms'

governance had a strong positive association on asymmetric timeliness but when it was interacted with the inside substantial shareholders and outside substantial shareholders, both led the firms' governance to employ less asymmetric timeliness. The results confirmed the argument that concentrated ownership constrains an effective function of firms' governance mechanisms.



(\* NS = Not significant)

**Figure 5.2: Results Summary of Hypothesis 11(a) and 11(b)**

Overall, most of the hypotheses are supported in the asymmetric timeliness as compared to the accrual-based conservatism, supporting the Givoly et al.'s (2007) claim that relying on only one measure of conservatism may lead to incorrect conclusions.

## **CHAPTER SIX**

### **DISCUSSION AND CONCLUSIONS**

#### **6.1. Introduction**

The previous chapter presented the results of the hypotheses testing and the summary of the results is presented in Table 6.1. This chapter provides a more detailed discussion of the findings and provides further insight into the effect of ownership concentration, attributes of board of directors and audit committee; and ethnicity on the conservatism practices. It is followed by discussion on the moderating effect of ownership concentration on the relationship between firms' governance and conservatism.

The chapter is organised as follows. Section 6.2 discusses the results on ownership concentration, section 6.3 discusses the results on board of director's characteristics and section 6.4 discusses the findings on audit committee characteristics. Section 6.5 discusses findings on ethnicity. Section 6.6 discusses results on the moderating effect of ownership concentration on the relationship between firms' governance and conservatism. Section 6.7 presents the conclusions of the findings and section 6.8 discusses the implications of this thesis. Section 6.9 presents the limitations of this thesis. This chapter ends with section 6.10 on areas for future research.

**Table 6.1**  
**Summary of Hypotheses Testing**

		Predicted Sign	Findings		Additional analysis	
	Hypotheses		CONACCR	AT	CONACCR	AT
<b>H1a</b>	<u>Inside Substantial Shareholders (OCIN)</u> Proportion of substantial shareholding by insiders is inversely related to conservative accounting.	-	- (S)	- (NS)		
<b>H1b</b>	<u>Outside Substantial Shareholders (OCOUT)</u> Proportion of substantial shareholding by outsiders is positively related to conservative accounting.	+	- (S)	- (NS)		
<b>H2</b>	<u>Board Composition (BID)</u> Proportion of independent directors on the board is positively related to conservative accounting.	+	+ (NS)	+ (S)		
<b>H3</b>	<u>Board Size (BS)</u> Board size is inversely related to conservative accounting.	-	- (NS)	- (NS)	- (NS)	- (NS)
<b>H4a</b>	<u>Board Tenure (BT)</u> Directors' tenure is positively related to conservative accounting.	+	+ (NS)	- (NS)		
<b>H4b</b>	<u>Board Financial Expertise (BF)</u> Proportion of financial expertise on the board is positively related to conservative accounting.	+	+ (NS)	+ (S)		

		Predicted Sign	Findings		Additional analysis	
	Hypotheses		CONACCR	AT	CONACCR	AT
<b>H4c</b>	<u>Multiple Directorships (BSHIP)</u> Proportion of directors with multiple directorships is inversely related to conservative accounting.	-	- (NS)	- (NS)		
<b>H5</b>	<u>CEO Duality (BCD)</u> CEO Duality is inversely related to conservative accounting.	-	- (NS)	+ (NS)		
<b>H6</b>	<u>Audit Committee Composition (ACID)</u> Proportion of independent directors on the audit committee is positively related to conservative accounting.	+	- (NS)	- (S)	- (NS)	- (S)
<b>H7</b>	<u>Audit Committee Financial Expertise (ACF)</u> Proportion of financial expertise on the audit committee is positively related to conservative accounting.	+	+ (NS)	+ (NS)	+ (NS)	+ (S)
<b>H8</b>	<u>Audit Committee Meeting (ACM)</u> Frequency of audit committee meeting is positively related to conservative accounting.	+	+ (NS)	- (NS)	+ (NS)	+ (S)
<b>H9a</b>	<u>Bumiputera on Board (BBR)</u> Proportion of Bumiputera members on the board is inversely related to conservative accounting.	-	+ (S)	+ (S)		

		Predicted Sign	Findings		Additional analysis	
	Hypotheses		CONACCR	AT	CONACCR	AT
H9b	<u>Bumiputera on Audit Committee (ACBR)</u> Proportion of Bumiputera members on the audit committee is inversely related to conservative accounting.	-	- (NS)	- (S)		
H10a	<u>Chinese on Board (BCR)</u> Proportion of Chinese members on the board is positively related to conservative accounting.	+	+ (NS)	+ (S)		
H10b	<u>Chinese on Audit Committee (ACCR)</u> Proportion of Chinese members on the audit committee is positively related to conservative accounting.	+	- (NS)	- (S)		
H11a	<u>Main effect of GOV</u> There is a positive relationship between firm's governance and conservatism.	+	+ (NS)	+ (S)		
H11b	<u>Moderating effect of ownership concentration</u> The power of the concentrated owners, represented by the percentage of ownership, negatively moderates the positive effect of the firms' governance on conservatism.	-	- (S)	- (S)		

**S= Significant; NS= Not significant**

## **6.2. Ownership Concentration (H1)**

Following agency theory, managerial ownership is regarded as an effective tool to reduce agency conflict between managers and shareholders. Although it is a beneficial tool in firms with diffused ownership, the same is not true if the firms' ownership structure is concentrated to the large shareholders. In fact, evidence has shown that managerial ownership exceeding a certain point would be detrimental to the firms (Korczak & Korczak, 2009).

Literature documented the merit of accounting conservatism to reduce agency conflict as its application can constrain opportunistic behaviour and increase firm value that ultimately protects the interest of the minority shareholders (Watts, 2003). As predicted, this thesis finds that an increase in the percentage of shareholding by insiders leads to a decrease in accrual-based conservatism. LaFond and Roychowdhury (2008) who found similar relationship argued it as consistent with the substitution effect. As managers become owners, their interest is aligned with the shareholders, thus the demand for conservatism as a monitoring tool is reduced. They made this contention on the grounds that US firms, having a dispersed ownership structure, used managerial ownership to reduce high agency conflict between the managers and shareholders. Arguably, the substitution effect may not apply in firms with highly concentrated ownership because manager-shareholder conflict is no longer apparent, and the more pronounced conflict is between the majority and minority shareholders. The findings of Leuz et al. (2003) that Malaysia is one of the three Southeast Asian countries in the common law group having the worst earnings management ratings, is plausibly an indication of entrenchment activities in Malaysian firms. Haniffa and Hudaib (2006) suggested that high managerial ownership is unsuitable in the Malaysian business environment due to the risk of misallocation of firms' resources at the expense of the minority shareholders. Hence, an entrenchment effect is a possible explanation for the result obtained in this thesis because insiders do not need a mechanism that constrains their behaviour, so they can conceal their expropriation activities (Korczak & Korczak, 2009; Kothari et al., 2009). Where controlling shareholders adopt less conservatism, this means that they can conceal their behaviour, thus confirming the argument made by Bidin



(2009) on the risk that controlling shareholders extract firms' wealth for their own interest. Consistent findings were presented by Hu, Tam and Tan (2010) for Chinese companies as the concentrated owners significantly reduced firm performance. The findings in this thesis strongly support Haniffa and Hudaib's (2006) suggestion that necessary actions need to be taken to ensure that insiders do not misappropriate firm resources, thus damaging firm value.

The inverse relationship between outside substantial shareholders and accrual-based conservatism found in this thesis is contrary to expectation. Outside substantial shareholders are seen as an effective governance mechanism because they would demand transparent and quality financial information to secure their huge investment in the firm. Previous studies also showed the governance role of outside shareholders to improve earnings informativeness (Yeo et al., 2002) and employ higher conservatism (A. S. Ahmed & Duellman, 2007). Further, Malaysian studies showed that outside shareholders reduce managers' remuneration (S. N. Abdullah, 2006c) and reduce occurrence of financial distress status (S. N. Abdullah, 2006b). The results in this thesis however, suggest that they fail to promote better governance through higher conservatism practices. Similar arguments were made by Ming and Gee (2008) that outside majority shareholders are not effective in their monitoring role.

Despite the contradictions apparent from the above empirical findings, the reverse effect obtained in this thesis may be influenced by the use of different means of measurement. This thesis uses substantial shareholding held by outsiders as the proxy for outside concentrated ownership while the abovementioned studies identified the outsiders from large shareholders and from directors' ownerships. As defined in section 4.5.1, substantial shareholders are those who hold more than 5% equity including their indirect interest via nominees. Since this thesis focuses on concentrated ownership, the use of large shareholders or directors' shareholding may understate the measure of concentration intended. Specifically, large shareholding is ranked based on high to low percentage of shareholding, regardless of securities accounts belonging to the same person. S. N. Abdullah (2006b) employed the same measure used in this thesis but with a sample period from 1999 to 2001. Recovery from financial crisis during that period may encourage the outside shareholders to

play a more prominent role to avoid huge investment loss if firms are subject to distress.

Despite the findings on the accrual-based measure, ownership concentration has no effect on asymmetric timeliness. Similar findings were obtained by Haniffa and Hudaib (2006) that ownership concentration increases accounting return but not the market return. This result is also consistent with Dalton and Dalton's (2005) argument that managers sometimes have less direct control on the market measure of accounting.

### **6.3. Board of Directors' characteristics (H2 – H5)**

#### **6.3.1. Board Composition (H2)**

Supporting the agency theory, this thesis found a significant positive association between board composition and asymmetric timeliness. As a higher proportion of independent directors leads to higher conservatism, this finding supports the claim that outside directors significantly enhanced board effectiveness and reduced uncertainty (Fama & Jensen, 1983; Pfeffer & Salancik, 2003). The results are consistent with Beekes et al.'s (2004) and A. S. Ahmed and Duellman's (2007) evidence on UK and US firms respectively. It is also consistent with the results of other accounting research, outside directors reduced financial statement fraud (Beasley, 1996), reduced earnings management (Benkraiem, 2009; Peasnell et al., 2006), improved audit quality (Salleh et al., 2006) and reduced abnormal accruals (Koh et al., 2007).

Board composition had no influence on accrual-based conservatism. This finding suggests that effectiveness depends on the measure of conservatism; market based or income statement based. In other words, independent directors were effective to monitor market based accounting but lack the power to impact on the income statement base of accounting. Significant influence of independent directors on market based measure was also reported by Ameer et al. (2010) for Malaysian

sample as they showed that independent directors significantly increased Tobin's Q, which is a market based measure of firm value.

Although this thesis did not find an association between board composition and accrual-based conservatism, thus conflicting with A. S. Ahmed and Duellman (2007) and G. V. Krishnan and Visvanathan (2008), it is however, consistent with existing evidence for Malaysian firms. Malaysian studies reported that independent directors were not related to firm performance (S. N. Abdullah, 2004), financial distress status (S. N. Abdullah, 2006b), earnings management (Rahman & Ali, 2006) and financial restatements (S. N. Abdullah et al., 2010). Therefore, board independence may not imply the board as expertise or diligence in monitoring management as argued in agency theory (Jensen & Meckling, 1976) rather is perceived as a provider of service and 'window to the world' for the firm as argued in resource dependence theory (Pfeffer & Salancik, 2003).

The effectiveness of independent directors in countries with a concentrated ownership structure has been a focal discussion in Asian corporate governance literature (see: Barton et al., 2004; P. Klein et al., 2005). Some evidence showed that controlling owners simply chose a weak governance structure when they appointed less independent directors to the board (Hu et al., 2010; Setia-Atmaja, 2009). In Malaysian firms, the presence of independent directors on the board, although reflecting good governance practice, may in fact reflect controlling shareholders choosing directors that favour their interest. S. N. Abdullah et al. (2010) showed that, for sample firms that restated the accounts, their nomination committee was less independent with high managerial ownership. If members in the nomination committee are dominated by the insiders, more likely they will nominate and appoint directors that can go along with them. This thesis found that the majority of Malaysian firms' boards were dominated by inside shareholders who might use their power as controlling owners to overrule board decisions. Since managers have more control over accounting-based measures than the market-based measures (Dalton & Dalton, 2005), plausibly shareholders controlling power on accrual-based conservatism reported earlier in this thesis dominated power of the independent directors. As a result, independent directors become ineffective because their monitoring role is jeopardised by the interference of the management (S. N.

Abdullah, 2004; Rahman & Ali, 2006). This may explain why independent directors were not effective in influencing accrual-based conservatism relative to asymmetric timeliness.

### **6.3.2. Board Size (H3)**

The Malaysian Code on Corporate Governance and Bursa Malaysia Listing requirements are silent on the number of directors that should sit on the board. However, they encourage firms to evaluate the board size to allow active and effective participation from the board members. The result in this thesis showed that board size did not determine conservatism practices in Malaysian firms. This finding is not consistent with previous evidence that board size was related to earnings management (Rahman & Ali, 2006), firm performance (Cheng, 2008; Guest, 2009), voluntary disclosure (Akhtaruddin et al., 2009) or financial distress status (Chang, 2009).

Results in this thesis however, are consistent with Bonn et al. (2004) who found insignificant association between board size and firm performance. Bonn et al. (2004) recognised that board size is only a factual number of directors, and do not reflect the directors' skill and knowledge that are more valuable for a board to function effectively. This thesis observed that financial expertise on the board is the factor that had a strong positive impact on asymmetric timeliness. Hence, size of the board is not an issue if the board members possessed the relevant skill to monitor the financial reporting process.

### **6.3.3. Board Skill (H4a – H4c)**

This thesis examined board tenure, board financial expertise and multiple directorships to proxy for board skill. This thesis found that financial expertise was the only skill that enhanced the accounting conservatism.

This thesis found that directors with longer tenure were faster in recognising good news which will be turned into earnings. Longer tenure did not significantly affect

asymmetric timeliness, but the negative coefficient provided a hint that it reduced conservatism. This finding implies that independent directors who stayed on the firm's board for too long did not enhance their ability to monitor. Previous research had questioned the independence of the outside directors in Malaysia; since their appointment was made by the owners, which in Malaysia's case means the controlling shareholders; or their appointment dependent on the availability of talented individuals. (S. N. Abdullah, 2004). Firms may decide to hold the independent directors for a longer term because talented persons are not easily available or the management has established a good relationship with the directors so does not want to let them go. This phenomena is consistent with the expertise hypothesis, that longer tenure enhanced directors' experience and competency, but the management-friendliness hypothesis suggests that the risk may outweigh the benefit when the independence of the senior directors is impaired, as they become too close to the executive directors (Vafeas, 2003). Independent directors who have been serving on the board for a longer period may be influenced by the management, especially when a Malaysian firms' board is dominated by the inside controlling shareholders. Possibly, the directors' long service itself helps the controlling shareholders to pursue their own agenda and does not relate firm-specific knowledge to the provision of quality financial reports.

A significant relationship between financial expertise and asymmetric timeliness signifies the importance of accounting knowledge for directors to control manipulation or produce transparent financial information. This result supports previous studies that highlighted the importance of financial experts (e.g.: Rahmat et al., 2009; Rose & Rose, 2008). This finding also indicated that to achieve quality financial reports, financial expertise is the relevant skill, relative to longer tenure and multiple directorships. Directors that are equipped with financial knowledge can understand and detect any irregular issues in overseeing the preparation of the financial statements. A finding consistent with Lanfranconi and Robertson (2002) who noted that lack of accounting knowledge would lead to financial failure of the firm. The results in this thesis suggest that longer tenure and multiple directorships are obscure in providing better monitoring, especially in observing matters relating to the financial reports.

This thesis found that multiple directorships had no significant influence on conservatism, but the direction of the relationship suggests that multiple directorships adversely affected the quality of the financial reports. Arguments on the benefit of multiple directorships is essentially mixed, one suggests that participating in many boards makes directors busy and less effective in monitoring the management (Ferris et al., 2003) whilst others argue that it broadens the directors' knowledge (Schnake et al., 2005). However, Schnake and Williams (2008) later argued that when directors were busy serving on many boards, they could not deliver their knowledge effectively. Empirical evidence mostly supports the latter argument, with multiple directorships found to be associated with lower conservatism (A. S. Ahmed & Duellman, 2007) and higher earnings management (Sarkar et al., 2008). Similarly, evidence in Malaysia showed that multiple directorships are not a healthy practice as they reduced market performance (Haniffa & Hudaib, 2006). Saleh et al. (2005) reported that multiple directorships detected earnings management but only in firms with negative earnings. The direction of the relationship found in this thesis is consistent with the above evidence but it was not a vital factor that could affect the incidence of accounting conservatism in Malaysian firms.

#### **6.3.4. CEO Duality (H5)**

This thesis identified that the board leadership structure of Malaysian listed firms follows agency theory rather than stewardship theory. As reflected by almost 95% of the sample, the separate roles adopted for CEO and chairman indicated that Malaysian firms emphasized effective monitoring rather than effective leadership as discussed by Daily and Dalton (1997). The separate structure is also favourable to the practitioner and financial communities (Daily & Dalton, 1997). Separating the CEO-chairman roles is not mandated by the Malaysian Code on Corporate Governance, but if the roles are combined there should be a strong independent element on the board and the decision to combine should be publicly explained. The concern that CEO may dominate the board as argued by Jensen (1993) was not prominent in Malaysian listed firms, as compared to firms in other countries like US, where almost 80% of firms combined the roles of CEO and chairman.

As predicted, the result shows that the coefficient on CEO duality was negative and consistent in accrual-based conservatism and asymmetric timeliness models, but none of them were statistically significant. The results suggest that conservatism practices in Malaysian firms were not determined by the CEO or/and chairman leadership structure. This result is not surprising because empirical evidence on the CEO duality effect is indeed mixed. Some studies supported the agency theory (Dechow et al., 1995; A. Klein, 2002; G. V. Krishnan & Visvanathan, 2008; Rahman & Haniffa, 2005), while others supported the stewardship theory (Brickley et al., 1997; Farooque et al., 2007). There are also studies that failed to support either theory; for instance, CEO duality was insignificant with accounting conservatism (A. S. Ahmed & Duellman, 2007) and earnings management (Cornett et al., 2008). This suggests that no one theory is superior in all circumstances.

The results from this thesis supported the findings of Dahya, Garcia et al. (2009) and affirmed that though separating the two roles had been a major practice in Malaysian firms, it did not have a demonstrably favourable effect on the financial reports. S. N. Abdullah (2004, 2006a) and S. N. Abdullah et al. (2010) who examined Malaysian firms also obtained similar outcome. Some studies argued that CEO duality does not produce the expected result because it was affected by other factors. For instance, the structure was influenced by the complexity of firms' operation and governance characteristics of the individual firm (Faleye, 2007), firms decision to separate or combine the roles was determined by family controlled factors (Lam & Lee, 2008) and the effect of CEO duality on performance dependent on the firms' performance level (Ramdani & Witteloostuijn, 2010). In the Malaysian context, a separate leadership structure does not promise board independence because the board is still influenced by the inside controlling shareholders who are sitting on the board. Coombes and Wong (2004) suggested that the chairman must be able to challenge the CEO without fear of giving offence but this is unlikely to happen in Malaysian firms as inside controlling shareholders are dominant on the board of Malaysian firms. As discussed in Horner (2010), the board has a certain amount of ownership power when the members of the board hold equity shares of the firm. In Malaysian firms' board, the power of the inside directors must be excessive because they hold substantial ownership in the firms. Hence, their controlling power may have superseded the merit of separating the board leadership structure. Although the

insiders chose to apply separate board leadership structure in the firms, they still have the power to appoint the board's chairman and may choose a person who is within their circle of trust. As a result, separate leadership structure has no influence on conservatism.

## **6.4. Audit Committee characteristics (H6 – H8)**

### **6.4.1. Audit Committee Composition (H6)**

This thesis found that the proportion of independent directors on the audit committee and wholly independent audit committees were inversely related to asymmetric timeliness. An audit committee represented by a majority of independent directors showed a positive sign but the effect was not significant. Hence, the recommendation of the best practice guideline to have a majority of independent directors on the audit committee did not improve accounting conservatism. Also, results in this thesis indicated that increasing the number of independent directors on the audit committee led to lower conservatism.

Although outside directors are associated with strong governance, the findings in this thesis suggest that independent directors on the audit committee were ineffective. This result is consistent with S. N. Abdullah et al.'s (2010) findings that an increase in the proportion of independent directors on the audit committee led to a higher probability of financial misstatement. Contradicting results between board composition and audit committee composition suggest that these two mechanisms reacted differently towards conservatism practices. This result is puzzling because independent directors on the audit committee were also independent directors on the board. The result could be driven by the nature of the job undertaken by the independent directors in respect to the committee they served. Based on responsibility, directors on the board have wider roles within the operation of the business, in addition to just monitoring the financial reporting process. The roles of directors on the audit committee are limited to the financial statement matters including reviewing the outcome from the audits. In this context, independent directors on the board possessed more knowledge about the firm which then led to



higher conservatism. According to Zain and Subramaniam (2007), independent directors who have limited knowledge about the firms' business are not effective unless the resource person who is the head of the internal audit function is strong and well-resourced. Based on this point, it raises concerns whether independent directors appointed to the audit committee were those having a good understanding about the business or were merely selected randomly; or maybe directors that had not been a good fit for other committees. If this is true, directors who were appointed to the audit committee might not have the competency to monitor the financial statements. This is an alarm to the relevant authorities that the status of being independent from the management is not a guarantee of better monitoring. Consistent with DeZoort and Steven (2001), this thesis believes that the competency of the independent directors should be assessed based on the committee they serve, as roles of the committees vary. Since the audit committee is responsible for monitoring the process of the financial reports, having outside directors with financial expertise would enhance their governance role, as evident from Mustafa and Youssef (2010). The independent audit committee members lead to lower conservatism could also be driven by the influence of the inside concentrated owners, as reported by Zain and Subramaniam (2007) that independent audit committee members were not free from management influence. Other possible explanation is taken from the finding of Pomeroy and Thornton (2008) that independent directors of the audit committee were effective only in improving audit quality, but not financial statement quality; and thus explain the lower conservatism practices of the independent directors on audit committees reported in this thesis.

#### **6.4.2. Audit Committee Financial Expertise (H7)**

Financial expertise measures in this thesis followed G. V. Krishnan and Visvanathan (2008) who defined financial experts as directors who have qualification or experience in accounting or finance. Initially, financial expertise on the audit committee was not significantly associated with asymmetric timeliness. However, after excluding board financial expertise from the regression model, the coefficient on audit committee financial expertise became significant. This change in result is not likely to be due to a multicollinearity problem as the correlation between

financial expertise on the board and those on the audit committee as shown in Table 5.4 was less than 0.9. The result suggests that board financial expertise was stronger in determining the conservatism practices, than the financial expertise on the audit committee. However, when board financial expertise was excluded from the model, financial expertise on the audit committee effectively performed a governance role leading to more conservatism practices. Excluding board financial expertise from the model was intended to facilitate the observation of the effect of audit committee financial expertise on conservatism. The results imply that financial expertise on the board and audit committee are two important mechanisms for effective monitoring of the financial reporting. However, when firms appointed financial expertise to both board and audit committee, those that represent the board show an outstanding role. It is presumed that being financial experts is an added bonus to the board members as they already have wider knowledge about the firm's business. This finding also implied that board financial expertise is enough to promote quality financial reports, even when there is no financial expertise on the audit committee.

The results in this thesis are consistent with McMullen and Raghunandan (1996), Rose and Rose (2008), Dickins et al. (2009) and Rahmat et al.(2009) that knowledge or experience in accounting among the audit committee members enhances the quality of the financial statements.

#### **6.4.3. Audit Committee Meeting (H8)**

Initially, this thesis did not find any association between frequency of audit committee meetings and conservatism practices when it is treated as a linear variable. However, when audit committee meeting was assigned the status of dummy variable, using a threshold of 4 meetings, it was significantly related to asymmetric timeliness. This finding is consistent with evidence reported by Anderson et al. (2004), Abbott et al. (2004) and Owens-Jackson et al. (2009), and hence showing that frequent meetings improved the quality of the financial statements. On the flip side, G. V. Krishnan and Visvanathan (2008) and Rahmat et al. (2009) failed to find significance in the frequency of meetings, perhaps because they did not identify the threshold of meeting frequency to detect efficiency.

Findings in this thesis showed that the minimum number of 4 meetings per year is a useful recommendation to improve accounting conservatism. This thesis also highlighted the importance of correct measurement in the analysis to ensure that the contribution of a particular factor is appreciated. Although mixed evidence obtained by previous studies were based on a similar measures i.e. total number of meetings held per year, this thesis considers variation in the data distributions of respective studies might be sensitive to one selected measure, so that changing it to a stronger proxy would improve its predictive ability.

## **6.5. Ethnicity (H9 – H10)**

Gray (1988) proposed that the individualism concept relates to conservatism practices. A review on Malaysian studies showed no uniform evidence to suggest the individualism level of the Bumiputera and Chinese ethnic groups. Hence, on the basis of individualism, it is difficult to predict the effect of the ethnic groups on conservatism. However, the political hypothesis argued by Ball et al. (2003) and the compensation incentive hypothesis evidence by Yen et al. (2007) led to the prediction that Bumiputera directors adopt lower conservative accounting whilst the Chinese directors adopt higher conservative accounting.

Results from this thesis, however indicated that the effects of Bumiputera directors and Chinese directors on conservatism were similar. However, the two ethnic groups' attitudes towards conservatism differed depending on whether they served on the board or audit committee. Specifically, this thesis showed that higher proportion of Bumiputera directors or Chinese directors on the board led to higher asymmetric timeliness. In contrast, a higher proportion of Bumiputera directors or Chinese directors on the audit committee led to lower asymmetric timeliness. Contrasting results on the ethnic groups between the board and audit committee implies that ethnicity per se did not determine conservatism; and the results are inconsistent with the individualism concept. Also, the results did not support the political hypothesis and compensation or tax incentives hypothesis.

Haniffa and Cooke (2002) also found contradictory results when they developed their prediction based on the individualism concept. They argued that the result could be influenced by other intervening factors, such as government policy, economic incentives and religion. Tsakumis (2007) noted that the individualism concept may be flawed because the direction of conservatism in his study was not consistent with the level of individualism showed on his sample study. Mixed results from this thesis suggest that the level of individualism, political and compensation or tax incentives did not explain the conservatism practices of the ethnic groups. Instead of ethnicity per se, plausibly other factors could explain directors' attitude on conservatism. A. Abdullah (2001) and Fontaine and Richardson (2005) found that Bumiputera and Chinese ethnic groups did not differ except in terms of religiosity; and this factor is yet to be explored on its relation with conservatism.

#### **6.6. Moderating effect of ownership concentration on the relationship between firms' governance and conservatism (H11)**

The results show that firms' governance is effective when there is no interference from the concentrated owners. However, as evident in the CONACCR and AT models, the firms' governance led to lower conservatism when it is interacted with the concentrated owners. Inside substantial shareholders did not moderate the effect of firms' governance on CONACCR possibly because they have a strong direct impact on the CONACCR, regardless of the firms' governance. In contrast, the inside and outside substantial shareholders had no direct impact on asymmetric timeliness, therefore they used their controlling power to influence the firms' governance to speed up the recognition of good news into earnings; and delay the recognition of bad news into earnings. The outcome is advantageous to the concentrated owners because they are less restricted from pursuing personal agenda and their expropriation activities are conceal from the financial reports.

This findings are consistent with Dahya, Dimitrov et al. (2009) who reported that firm value was higher when the firms' board were independent of controlling shareholders. Further, the results of this thesis support Cho and Kim (2007) and V.

Z. Chen et al. (2011) that concentrated owners hinder the firms' governance from function effectively. Also, confirms the argument that corporate governance in Asian countries is ineffective due to their high concentrated ownership (Allen, 2000; Globerman et al., 2011) and the copying of best practices from the developed countries does not work in countries where firms' ownership is highly concentrated. (V. Z. Chen et al., 2011).

This thesis affirmed that although Malaysian listed firms are seen adopting good governance structure, it is however, only in appearance. For instance, Allen (2000) pointed out that independent directors who are being appointed by the controlling shareholders may not be independent in fact. The mechanisms employed are in fact ineffective because they are subject to the control of the concentrated owners.

## **6.7. Conclusions**

Concentrated ownership has remained in Malaysia for quite a long time. The literature has discussed this issue since M. H. Lim (1981) and it continues to be a focal issue until the present time (see: Tam & Tan, 2007). This condition implies that it is quite impossible, to suggest these controlling owners should sell their shares in the market, and to apply dispersed ownership in practice. There is a lack of supporting mechanisms such as takeover markets, effective board of directors, laws and enforcement that will left managerial opportunism unchecked (Young et al., 2008). The controlling owners are "immortal" as a result of weak investor protection, poor monitoring from the debt holders, ineffective governance mechanisms and also the lower accounting conservatism found in this thesis. Previous studies documented that accounting conservatism is effective to reduce managerial opportunistic behaviours. However, this thesis found that accounting conservatism was not a useful tool in monitoring the controlling shareholders because they would choose to apply less conservative financial reports. Based on the two measures of conservatism; accrual-based conservatism and asymmetric timeliness, it was revealed that inside and outside substantial shareholders employed lower conservatism. However, the controlling shareholders had a significant effect only on accrual-based conservatism. Since accrual-based conservatism is an income

statement measure as opposed to asymmetric timeliness, which is a market-based measure, this finding is consistent with Dalton and Dalton's (2005) argument that managers have more control over accounting measures than the market measures.

This thesis found that good governance practices did not improve the quality of the financial statements as none of the board of directors and audit committee attributes influenced accrual-based conservatism. The direction of relationship on the attributes however, signalled that they influenced conservatism but were not strong enough to challenge the power of the controlling shareholders. Significant effects of board composition, board financial expertise, audit committee composition, audit committee financial expertise and frequent audit committee meetings on asymmetric timeliness proved that these structures could function effectively when there were less influenced from the controlling shareholders. These findings provided evidence to the argument made by Vichitsarawong et al. (2010) that corporate governance reforms in Malaysia improved conservatism as measured by asymmetric timeliness.

The insignificant findings on the attributes of board of directors and audit committee in the accrual-based conservatism model suggest that the power of the controlling shareholders on the financial reporting process superseded the monitoring capability of the board and audit committee. These results are not consistent with the US and UK evidence due to the interference of controlling shareholders on the Malaysian firms' board. The results of this thesis showed that concentrated owners had no direct impact on asymmetric timeliness; but the results from the moderating effect suggest that they influence firms' governance so that it leads to lower conservatism. The results provide a clear indication that a good internal governance structure is not effective to monitor the controlling shareholders because these shareholders determine the performance of the governance mechanisms in the firms. The results support Singam (2003) who claimed that, high concentrated ownership make it difficult to achieve sound corporate governance systems in Malaysia. Evidence in this thesis therefore, confirms the Cohen et al.'s (2004) argument that in some cultures, corporate governance mechanisms are not effective tools to control management opportunistic behaviour; and they suggested the court and legal systems as effective governance tools.

In respect to the separate board leadership structure, there was no evidence to suggest that the split structure increased conservatism. However, the negative coefficient on CEO duality signalled that combining the roles was damaging especially in firms where insiders dominate the board. In respect to director's skill, directors who had financial expertise will enhance the quality of the financial statements relative to longer tenure and multiple directorships. Additionally, this thesis showed that financial expertise on the board strongly led to more conservatism, while financial expertise on the audit committee had no influence on conservatism. It may imply that financial expertise on the board is more important than having it on the audit committee. Hence, the adverse effect of independent directors on the audit committee on conservatism may not be caused by their lack of financial expertise but other factors that impede them from performing their oversight role. This thesis highlighted that having majority independent directors on the audit committee did not result in quality financial reports. This result contradicts evidence reported for the US and UK studies on the positive effect of audit committee independence on its effectiveness, but it is supporting Bedard and Gendron's (2010) suggestion that the effectiveness of governance mechanism varies between countries due to their different environments.

Further, this thesis concludes that ethnicity per se did not explain accounting conservatism in Malaysian firms. The results showed that an increase in the proportion of Bumiputera and Chinese directors on the board led to higher accounting conservatism but led to lower conservatism if they were on the audit committee. Hence, the ethnic effects on accounting conservatism neither support the individualism concept nor was it consistent with the political and compensation or tax incentive hypotheses. This evidence indicated that comparing Malaysian financial reports with other countries may be possible, evidence that is favourable to the proponents of harmonisation.

## **6.8. Implications of this thesis**

### **6.8.1. Implications for Theory**

The findings of this thesis imply that there is no one superior theory to support the behaviour of the governance practices in Malaysian firms. Generally, the ownership structure in Malaysian firms follows the agency theory on the use of managerial ownership to reduce agency conflict. Also following agency theory, the structure of the board of directors and audit committee are designed to be consistent with their ability to monitor management.

Results from this thesis showed that the board of directors and audit committee did not determine accrual-based conservatism; while inside and outside substantial shareholders had strong negative effect on accrual-based conservatism. Positive accounting theory suggests firms to employ accounting conservatism to reduce agency conflict; but results in this thesis indicate that the decision to apply conservatism is in the hands of the controlling shareholders. The findings are consistent with managerial hegemony theory that a board dominated by management is not effective to reduce agency conflict; and thus does not employ more conservatism.

The significant effect of some of the board and audit committee attributes on asymmetric timeliness suggests that the internal governance mechanisms have some control over measures that are beyond the discretion of the controlling shareholders. It seems that the recommendation of good practice by the agency theory and resource dependence theory are applicable to a certain extent. Nevertheless, the presence of ownership concentration in Malaysian firms impede an effective role of firms' governance as this thesis showed that concentrated owners influenced firms' governance to employ less conservatism.

Results in this thesis further suggest that, to make good governance structure and conservatism workable, they should be accompanied by an effective market



mechanism. That may be an effective method to reduce the total power of the controlling shareholders.

### **6.8.2. Implications for Policy Makers and Regulatory Agencies**

The adverse effect of outside substantial shareholders on conservative accounting suggests that outside investors do not play an active role in improving the quality of financial statements. In fact, their high investment in firms reduced conservatism. The Malaysian Institute of Corporate Governance or Bursa Malaysia must educate and provide awareness to the substantial outside shareholders on their importance to demand for better financial reports. Outsiders who are not involved with the firm's management have no access to managers' private information but have to rely on the financial reports to make investment decisions. Since their wealth depends on the accuracy of the information in the financial reports, they should demand more conservative accounting to ensure that the reported figures reflect the true value of the firm.

In respect of directors' competency, this thesis found that only financial expertise led to more conservatism although previous studies reported the advantage of longer tenure and multiple directorships. Hence, Malaysian Institute of Corporate Governance and Bursa Malaysia should strictly emphasise a balance of the skills of the board members. The Mandatory Accreditation Programme and continuing education program organised by the Bursa Malaysia are good channels for directors to enhance their competencies, but components of the program must be revised regularly to reflect existing condition in Malaysia as reported by empirical evidence.

The effect of the controlling shareholders is huge because they can conceal their opportunistic behaviour from the financial reports by adopting less conservatism. Or, if they have no direct impact on conservatism, the controlling shareholders can influence governance mechanisms in the firm to adopt lower conservatism. Results from this thesis suggest that the regulators must first emphasise the market tools to control agency conflicts in Malaysian firms before strengthening the internal governance structure. According to Thillainathan (1999), limited power of the Bursa

Malaysia listing rules to only suspend or delist firms for breaking its rules, will only compound the damage already suffered by the minority shareholders. The insiders who are the actual offenders remain safe. Evidence in this thesis suggests that the authorities should consider refining the law to increase the punishment of controlling shareholders who violate their fair share of wealth relative to minority shareholders. The regulators should strengthen the enforcement of legal protection of shareholders as its poor enforcement is one of the reasons for highly concentrated ownerships in Asian countries (La Porta et al., 1998; Shleifer & Vishny, 1997). Leuz et al.'s (2003) findings show that the legal system can be effective in reducing earnings management because insiders enjoy less personal control benefits which then reduce their incentive to mask firm performance. Learning from their evidence, this thesis urges the relevant authority to focus on strengthening the law, a system that already exists in Malaysia, rather than implementing mechanisms that can be manipulated by the controlling shareholders.

### **6.8.3. Implications for the Researchers**

Several previous studies on Malaysian firms concluded that ownership concentration and strong governance attributes do not determine the financial reports. However, the outcome from this thesis highlights that using alternative measures for the variables of interest can change our results. This thesis adds to the understanding that concentrated owners had a strong influence on the accrual based measure of accounting but not the market measure of accounting. Firms' governance however, did not determine the accrual based measure of accounting but had a strong influence on the market measure of accounting.

The significant effect of concentrated owners on accrual-based conservatism indicates that closely held firms do not encourage better governance via conservative accounting, and ultimately produce lower quality financial reports. This outcome should encourage researchers to use an appropriate proxy to measure the ownership concentration; otherwise they will draw an incorrect conclusion about the ownership concentration. Researchers should also be aware that financial expertise should include directors having qualifications and experiences in accounting and finance

and not merely focusing on directors who are members of a professional accounting body. This thesis proves that financial expertise by this definition can lead to more conservatism. Nevertheless, the negative effect of independent directors on the audit committee on conservatism requires further investigation. It is unlikely that the finding is caused by the members' lack of expertise in accounting as financial expertise on the audit committee does not influence conservatism when there is financial expertise on the board. Other factors not explored in this thesis may influence their behaviour.

Since this thesis shows that conservatism is not a useful tool to control the behaviour of the controlling shareholders; it should encourage researchers to investigate other mechanisms that can overcome the power of the controlling shareholders. Also, the area of this thesis is worth extending to other emerging markets and transition economies.

#### **6.8.4. Implications for Users of financial statements**

The adverse effect of concentrated owners on accrual-based conservatism indicates that the users should apply caution when relying on the financial statements. The financial analyst in Malaysia may need to perform an outstanding role in monitoring the firms consistent with the Sun and Liu's (2011) findings that firms employed more conservative financial reports when they were closely monitored by the financial analyst. Otherwise, financial analysts may need to apply higher conservatism when assessing the financial position of firms with high concentrated ownership. This thesis also acknowledges for investors that Malaysian financial reports are comparable with those in other countries because ethnicity per se does not appear to explain the conservatism practices of the directors.

Creditors will also benefit from the findings in this thesis because they have better understanding of how characteristics of firms, concentration of the ownership structure and attributes of internal governance affect conservatism. Based on result of this thesis, the creditors must be aware that they cannot simply rely on the

reported financial statements but may demand additional information to assist them in making appropriate decisions.

Auditors should learn from the finding that, internal governance mechanisms in firms with concentrated ownership are not effective in monitoring management. Hence, the auditors should not assume that the reported financial statements to have been closely monitored by the board and audit committee. The auditors should demand more information and perform independent audit tasks to ensure that they enhance the quality of the financial reports. The auditors should also identify what possible factors cause the independent directors on the audit committee to employ less conservatism.

## **6.9. Limitations of this thesis**

This thesis has significantly contributed to our understanding that concentrated owners reduce conservatism practices and they also influence firms' governance to employ less conservatism. However, as with any research, this thesis is subject to a number of limitations as listed below:

1. The sample in this thesis excludes all financial related firms as they are regulated by a different act. Hence, the outcomes from this thesis cannot be generalised to these institutions.
2. This thesis explores three important governance mechanisms namely, ownership concentration, board of directors and audit committee. While this thesis only examined internal governance mechanisms, it is possible that external governance factors not explored in this thesis also determined the conservatism practices.
3. Data used in this thesis were extracted from the annual reports, and hence qualitative nature of the board of directors and audit committee characteristics are not examined. For instance, the relationship between members of the board with those of the audit committee or shareholders is not explored. As such, the

effectiveness of their activities, the scope of reference for the audit committee or support given by the internal auditor on the audit committee, which may have impact on the conservatism practices, are not included in this thesis.

4. This thesis does not explore the possibility of endogeneity between ownership structure and internal governance structures. Similar limitations were also acknowledged by Haniffa and Hudaib (2006) and Korczak and Korczak (2009). However, it is believed that the panel data methodology employed in this thesis mitigates the concerns of an endogeneity problem as the standard errors are corrected for cross sectional dependence, heterogeneity and autocorrelation. Himmelberg, Hubbard and Palia (1999) pointed out that panel data with a fixed effect effectively eliminates potential bias caused by endogeneity. Bhattacharya et al. (2003) further noted that if the standard errors are corrected for the presence of cross sectional dependence, heterogeneity and autocorrelation, the coefficient estimates will not be affected by the endogeneity problem.
5. Research and development and advertising expenditure (R & D) capture economic rent generated by assets in place, growth opportunities and GAAP mandated conservatism (A. S. Ahmed & Duellman, 2007). This thesis does not control for the effect of R & D on conservatism because there are very few companies in the sample with such expenditures. Out of 2031 firm-year observations, 83.65% of the sample have zero R & D. Low innovation expenses in Asia generally and Malaysia in particular were acknowledged in Othman and Ameer (2009). However, it is believed that results in this thesis are not affected by this shortcoming because this thesis employs a firm fixed effects method; notably A. S. Ahmed et al. (2002) showed that using firm fixed effects controls for the effects of GAAP mandated conservatism.
6. As there are various alternative mechanisms to compute an aggregate measure of governance, mechanisms considered in this thesis are limited to the firms' internal governance mechanisms. Whilst this thesis found that concentrated owners have strong negative influence on the internal governance, their control over external mechanisms are open to future research.

Despite the above-mentioned limitations, findings from this thesis have deepened our understanding of the impact of ownership concentration on financial reporting and provided awareness of the effectiveness of internal governance in Malaysian firms. The limitations outlined above both acknowledge their existence, and encourage the need for future research.

## **6.10. Future Research**

Extension of this thesis is possible in the following areas:

1. This thesis provides a clear understanding of how the controlling shareholders, both insiders and outsiders, influence accounting conservatism. This thesis identified that outside controlling shareholders employed lower conservatism but the identity of who these shareholders are, is beyond the scope of this thesis. Further research needs to be undertaken to identify the identity of those shareholders that have a significant negative influence on conservatism. Exploring this issue will help to answer why these outsiders, who are supposed to demand strong governance, lead to lower conservatism.
2. This thesis found that audit committee composition is associated with lower conservatism. This finding is inconsistent with agency theory and resource dependence theory, where outside directors who provide independent judgement are perceived as an effective monitor. Results from this thesis however are limited to the quantitative aspect of the audit committee structure. Applying conservatism requires judgement; hence qualitative factors such as perception or behaviour of the directors or shareholders are relevant. Future studies can complement this result to obtain further insight in this area. For instance, a behavioural study is suitable to investigate factors that influence directors conservative reporting. Additionally, an experimental study to explore the relationship between independent directors and the management will provide an interesting input if their judgement is influenced by management.

3. Mixed findings on ethnicity are not consistent with the individualism concept, and fail to support the political hypothesis and compensation incentive hypothesis. The results from this thesis imply that there could be other factors that influence the directors instead of their ethnicity per se. Ball et al. (2003) stated that the political factors influence the Chinese to report lower earnings but influence Bumiputera to report higher earnings. Future studies may explore this issue further by focusing on government related firms and non-government related firms and examine if their conservatism practices differ. Additionally, future studies may examine if religiosity factors determine conservative reporting as none currently exist in the literature. The findings will provide an understanding to achieve harmonisation of financial reporting.

## REFERENCE LIST

- Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing*, 23(1), 69-87.
- Abdullah, A. (1992). The influence of ethnic values on managerial practices in Malaysia. *Malaysian Management Review*, 27(1). Retrieved from <http://mgv.mim.edu.my/MMR/9203/frame.htm>
- Abdullah, A. (2001). Cultural dimensions of Anglos, Australians and Malaysians. *Malaysian Management Review*, 36(2). Retrieved from <http://mgv.mim.edu.my/MMR/0112/frame.htm>
- Abdullah, S. N. (2004). Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance*, 4(4), 47-61.
- Abdullah, S. N. (2006a). Board composition, audit committee and timeliness of corporate financial reports in Malaysia. *Corporate Ownership & Control*, 4(2), 33-45.
- Abdullah, S. N. (2006b). Board structure and ownership in Malaysia: The case of distressed listed companies. *Corporate Governance*, 6(5), 582-594.
- Abdullah, S. N. (2006c). Directors' remuneration, firm's performance and corporate governance in Malaysia among distressed companies. *Corporate Governance*, 6(2), 162-174.
- Abdullah, S. N., Yusof, N. Z. M., & Nor, M. N. M. (2010). Financial restatements and corporate governance among Malaysian listed companies. *Managerial Auditing Journal*, 25(6), 526-552.
- Agrawal, A., & Chadha, S. (2005). Corporate governance and accounting scandals. *Journal of Law and Economics*, 48(2), 371-406.
- Agrawal, A., & Knoeber, C. R. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders. *Journal of Financial & Quantitative Analysis*, 31(3), 377-397.
- Ahmad-Zaluki, N. A., & Wan-Hussin, W. N. (2010). Corporate governance and earnings forecasts accuracy. *Asian Review of Accounting*, 18(1), 50-67.
- Ahmad, A. C., Houghton, K. A., & Yusof, N. Z. M. (2006). The Malaysian market for audit services: Ethnicity, multinational companies and auditor choice. *Managerial Auditing Journal*, 21(7), 702-723.



- Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review*, 77(4), 867-890.
- Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of directors characteristics: An empirical analysis. *Journal of Accounting and Economics*, 46(2/3), 411-437.
- Ahmed, H. J. A. (2009). Managerial ownership concentration and agency conflict using logistic regression approach: Evidence from Bursa Malaysia. *Journal of Management Research*, 1(1), 1-9.
- Ahmed, K., Hossain, M., & Adams, M. B. (2006). The effects of board composition and board size on the informativeness of annual accounting earnings. *Corporate Governance: An International Review*, 14(5), 418-431.
- Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees' effectiveness, and corporate voluntary disclosures. *Asian Review of Accounting*, 18(3), 245.
- Akhtaruddin, M., Hossain, M., & Yao, L. (2009). Corporate governance and voluntary disclosure in corporate annual reports of Malaysian listed firms. *Journal of Applied Management Accounting Research*, 7(1), 1-19.
- Al-Murisi, A. L. S. M., & Abdullah, S. N. (1997). Perceived audit committee effectiveness in Malaysia *Malaysian Management Review*, 32(4). Retrieved from <http://mgv.mim.edu.my/MMR/9712/frame.htm>
- Allen, J. (2000). Code convergence in Asia: Smoke or fire? *Corporate Governance International*, 3(1), 23-37.
- Allison, P. D. (2009). *Fixed effects regression models*. California: Sage Publications.
- Ameer, R., & Othman, R. (2008). Insider trading in Malaysia. *Accountants Today : Journal Malaysian Institute of Accountant*, 21(12), 22-25.
- Ameer, R., Ramli, F., & Zakaria, H. (2010). A new perspective on board composition and firm performance in an emerging market. *Corporate Governance*, 10(5), 647-661.
- Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity and the cost of debt. *Journal of Accounting & Economics*, 37(3), 315-342.
- Ariff, A. M., Ibrahim, M. K., & Othman, R. (2007). Determinants of firm level governance: Malaysian evidence. *Corporate Governance*, 7(5), 562-573.

- Azofra, V., Castrillo, L., & Delgado, M. d. M. (2003). Ownership concentration, debt financing and the investment opportunity set as determinants of accounting discretion: Empirical evidence from Spain. *Spanish Journal of Finance and Accounting*(115), 215-255.
- Baddeley, M. C., & Barrowclough, D. V. (2009). *Running regressions: A practical guide to quantitative research in economics, finance and development studies*. New York: Cambridge University Press.
- Baek, H. Y., Johnson, D. R., & Kim, J. W. (2009). Managerial ownership, corporate governance, and voluntary disclosure. *The Journal of Business and Economic Studies*, 15(2), 44-106.
- Ball, R. (2001). Infrastructure requirements for an economically efficient system of public financial reporting and disclosure. In R. E.Litan & R. Herring (Eds.), *Brookings-Wharton Papers on Financial Services* (pp. 127-169). Washington, D.C.: Brookings Institution Press.
- Ball, R., Robin, A., & Sadka, G. (2008). Is financial reporting shaped by equity markets or by debt markets? An international study of timeliness and conservatism. *Review of Accounting Studies*, 13(2/3), 168.
- Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: Properties of accounting income in four East Asian countries. *Journal of Accounting & Economics*, 36(1-3), 235-270.
- Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research*, 44(2), 207-242.
- Baltagi, B. H. (2008). *Econometric analysis of panel data* (4 ed.): John Wiley & Sons, Ltd.
- Banker, R. D., Devaraj, S., Schroeder, R. G., & Sinha, K. K. (2002). Performance impact of the elimination of direct labor variance reporting: A field study. *Journal of Accounting Research*, 40(4), 1013-1036.
- Barton, D., Coombes, P., & Wong, S. C.-Y. (2004). Asia's governance challenge. *The McKinsey Quarterly*, (2), 54-61. Retrieved from <http://0-search.proquest.com.library.ecu.edu.au/docview/224543218>
- Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings. *Journal of Accounting & Economics*, 24(1), 3-37.
- Bauer, R., Guenster, N., & Otten, R. (2004). Empirical evidence on corporate governance in Europe: The effect on stock returns, firm value and performance. *Journal of Asset Management*, 5(2), 91-104.

- Baum, C. F. (2001). Residual diagnostics for cross-section time series regression models. *The Stata Journal*, 1(1), 101-104.
- Baydoun, N., & Willett, R. (1995). Cultural relevance of western accounting systems to developing countries. *Abacus*, 31(1), 67-92.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *The Accounting Review*, 71(4), 443-465.
- Beatty, A., Weber, J., & Yu, J. J. (2008). Conservatism and debt. *Journal of Accounting & Economics*, 45(2/3), 154-174.
- Beaver, W. H., & Ryan, S. G. (2005). Conditional and unconditional conservatism: Concepts and modeling. *Review of Accounting Studies*, 10(2/3), 269-309.
- Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary Accounting Research*, 15(1), 1-24.
- Bedard, J., Chtourou, S. M., & Courteau, L. (2004). The effect of audit committee expertise, independence, and activity on aggressive earnings management. *Auditing*, 23(2), 13-35.
- Bedard, J., & Gendron, Y. (2010). Strengthening the financial reporting system: Can audit committees deliver? *International Journal of Auditing*, 14(2), 174-210.
- Beekes, W., Pope, P., & Young, S. (2004). The link between earnings timeliness, earnings conservatism and board composition: Evidence from the UK. *Corporate Governance: An International Review*, 12(1), 47-59.
- Beneish, M. D., & Press, E. (1993). Costs of technical violation of accounting-based debt covenants. *The Accounting Review*, 68(2), 233-257.
- Benkraiem, R. (2009). Does the presence of independent directors influence accruals management? *Journal of Applied Business Research*, 25(6), 77-86.
- Bhasa, M. P. (2004). Understanding the corporate governance quadrilateral. *Corporate Governance*, 4(4), 7-15.
- Bhattacharya, U., Daouk, H., & Welker, M. (2003). The world price of earnings opacity. *The Accounting Review*, 78(3), 641-678.
- Bidin, A. (2009). Law reform and corporate governance in Malaysia. In J. Gillespie & R. Peerenboom (Eds.), *Regulation in Asia: Pushing back on globalization* (pp. 296-325): Routledge.

- Black, B. S., Jang, H., & Kim, W. (2006). Does corporate governance predict firms' market values? Evidence from Korea. *Journal of Law, Economics and Organization*, 22(2), 366-413.
- Bliss, J. H. (1924). *Management through accounts*. New York: The Ronald Press Company.
- Bonn, I., Yoshikawa, T., & Phan, P. H. (2004). Effects of board structure on firm performance: A comparison between Japan and Australia. *Asian Business & Management*, 3(1), 105-125.
- Bozec, Y., & Bozec, R. (2007). Ownership concentration and corporate governance practices: Substitution or expropriation effects? *Canadian Journal of Administrative Sciences*, 24(3), 182-195.
- Brickley, J. A., Coles, J. L., & Jarrell, G. (1997). Leadership structure: Separating the CEO and chairman of the board. *Journal of Corporate Finance*, 3(3), 189-220.
- Brown, L. D., & Caylor, M. L. (2009). Corporate governance and firm operating performance. *Review of Quantitative Finance and Accounting*, 32(2), 129-144.
- Brown, W. D., He, H., & Teitel, K. (2006). Conditional conservatism and the value relevance of accounting earnings: An international study. *European Accounting Review*, 15(4), 605-626.
- Buchanan, B. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly*, 19(4), 533-546.
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting & Economics*, 32(1-3), 237-333.
- Chang, C. (2009). The corporate governance characteristics of financially distressed firms: Evidence from Taiwan. *Journal of American Academy of Business, Cambridge*, 15(1), 125-132.
- Chen, Q., Hemmer, T., & Zhang, Y. (2007). On the relation between conservatism in accounting standards and incentives for earnings management. *Journal of Accounting Research*, 45(3), 541-565.
- Chen, V. Z., Li, J., & Shapiro, D. M. (2011). Are OECD-prescribed "good corporate governance practices" really good in an emerging economy? *Asia Pacific Journal of Management*, 28(1), 115-138.

- Cheng, S. (2008). Board size and the variability of corporate performance. *Journal of Financial Economics*, 87(1), 157-176.
- Chin, C.-L., Kleinman, G., Lee, P., & Lin, M.-F. (2006). Corporate ownership structure and accuracy and bias of mandatory earnings forecast: Evidence from Taiwan. *Journal of International Accounting Research*, 5(2), 41-62.
- Cho, D.-S., & Kim, J. (2007). Outside directors, ownership structure and firm profitability in Korea. *Corporate Governance : An International Review*, 15(2), 239-250.
- Chu, E. Y., & Cheah, K. G. (2006). Does ownership structure matter? Evidence from Malaysian equity market. *Corporate Ownership & Control*, 4(1), 77-90.
- Chung, R., Firth, M., & Jeong-Bon, K. (2003). Auditor conservatism and reported earnings. *Accounting & Business Research*, 33(1), 19-32.
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (1999). Expropriation of minority shareholders: Evidence from East Asia. *World Bank Policy Research Working Paper No. 2088* Retrieved from <http://ssrn.com/abstract=620647>
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1-2), 81-112.
- Cohen, J. R., Krishnamoorthy, G., & Wright, A. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 23, 87-152.
- Coles, J., Daniel, N., & Naveen, L. (2008). Boards: Does one size fit all. *Journal of Financial Economics*, 87(2), 329-356.
- Coombes, P., & Wong, S. C.-Y. (2004). Chairman and CEO - One job or two? *The McKinsey Quarterly*, (2), 42-47. Retrieved from <http://0-search.proquest.com.library.ecu.edu.au/docview/224540860>
- Cornett, M., Marcus, A., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics*, 87(2), 357-373.
- Cremers, K. J. M., & Nair, V. B. (2005). Governance mechanisms and equity prices. *Journal of Finance*, 60(6), 2859-2894.
- Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87(1), 73-100.

- Dahya, J., Dimitrov, O., & McConnell, J. J. (2009). Does board independence matter in companies with a controlling shareholder? *Journal of Applied Corporate Finance*, 21(1), 67-78.
- Dahya, J., Garcia, L. G., & Bommel, J. v. (2009). One man two hats: What's all the commotion! *The Financial Review*, 44(2), 179-212.
- Daily, C. M., & Dalton, D. R. (1997). CEO and board chair roles held jointly or separately: Much ado about nothing? *The Academy of Management Executive*, 11(3), 11-20.
- Dalton, C. M., & Dalton, D. R. (2005). Boards of directors: Utilizing empirical evidence in developing practical prescriptions. *British Journal of Management*, 16(s1), S91-S97.
- Dargenidou, C., McLeay, S., & Raonic, I. (2007). Ownership, investor protection and earnings expectations. *Journal of Business Finance & Accounting*, 34(1/2), 247-268.
- Davidson, W. N., Xie, B., & Xu, W. (2004). Market reaction to voluntary announcements of audit committee appointments: The effect of financial expertise. *Journal of Accounting and Public Policy*, 23(4), 279-293.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *The Accounting Review*, 70(2), 193-225.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research*, 13(1), 1-36.
- DeFond, M. L. (2010). Earnings quality research: Advances, challenges and future research. *Journal of Accounting & Economics*, 50(2/3), 402-409.
- DeFond, M. L., Hann, R. N., & Hu, X. (2005). Does the market value financial expertise on audit committees of boards of directors? *Journal of Accounting Research*, 43(2), 153-.
- DeFond, M. L., & Subramanyam, K. R. (1998). Auditor changes and discretionary accruals. *Journal of Accounting & Economics*, 25(1), 35-67.
- Deli, D. N., & Gillan, S. L. (2000). On the demand for independent and active audit committees. *Journal of Corporate Finance*, 6(4), 427-445.
- Devine, C. T. (1963). The rule of conservatism reexamined. *Journal of Accounting Research*, 1(2), 127-138.

- DeZoort, F. T., & Steven, E. S. (2001). The effects of corporate governance experience and financial-reporting and audit knowledge on audit committee members' judgments. *Auditing*, 20(2), 31-47.
- Dickins, D., Hillison, W., & Platau, S. (2009). Do financial statement users care about differences in board members' source of financial expertise? Views of financial analysts. *The Journal of Applied Business and Economics*, 9(2), 10-25.
- Dietrich, J. R., Muller, K. A., & Riedl, E. J. (2007). Asymmetric timeliness tests of accounting conservatism. *Review of Accounting Studies*, 12(1), 95-124.
- Ding, Y., Zhang, H., & Zhang, J. (2007). Private vs State ownership and earnings management: Evidence from Chinese listed companies. *Corporate Governance: An International Review*, 15(2), 223-238.
- Doupnik, T. S., & Richter, M. (2004). The impact of culture on the interpretation of "in context" verbal probability expressions. *Journal of International Accounting Research*, 3(1), 1-20.
- Driscoll, J. C., & Kraay, A. C. (1998). Consistent covariance matrix estimation with spatially dependent data. *The Review of Economics and Statistics*, 80(4), 549-560.
- Drobetz, W., Schillhofer, A., & Zimmermann, H. (2004). Corporate governance and expected stock returns: Evidence from Germany. *European Financial Management*, 10(2), 267-293.
- Eriotis, N., Vasiliou, D., & Ventoura-Neokosmidi, Z. (2007). How firm characteristics affect capital structure: An empirical study. *Managerial Finance*, 33(5), 321-331.
- Faleye, O. (2007). Does one hat fit all? The case of corporate leadership structure. *Journal of Management and Governance*, 11(3), 239-259.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law & Economics*, 26(2), 301-326.
- Fan, J. P. H., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting & Economics*, 33(3), 401-425.
- Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *The Accounting Review*, 80(2), 539-561.
- Farooque, O. A., Zijl, T. v., Dunstan, K., & Karim, A. W. (2007). Corporate governance in Bangladesh: Link between ownership and financial

- performance. *Corporate Governance : An International Review*, 15(6), 1453-1468.
- Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of Finance*, 58(3), 1087-1111.
- Fich, E. M., & Shivdasani, A. (2006). Are busy boards effective monitors? *The Journal of Finance*, 61(2), 689-724.
- Financial Accounting Standards Board (FASB). (1980). Statement of financial accounting concepts no. 2 - Qualitative characteristics of accounting information. Norwalk, Connecticut: Financial Accounting Standards Board.
- Fontaine, R., & Richardson, S. (2005). Cultural values in Malaysia: Chinese, Malays and Indians compared. *Cross Cultural Management*, 12(4), 63-77.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of Management Review*, 24(3), 489-505.
- Francis, J. R., & Krishnan, J. (1999). Accounting accruals and auditor reporting conservatism. *Contemporary Accounting Research*, 16(1), 135-165.
- Francis, J. R., & Martin, X. (2010). Acquisition profitability and timely loss recognition. *Journal of Accounting & Economics*, 49(1/2), 161-178.
- Garcia-Meca, E., & Sanchez-Ballesta, J. P. (2009). Corporate governance and earnings management: A meta-analysis. *Corporate Governance : An International Review*, 17(5), 594-610.
- Ghazali, N. A. M. (2007). Ownership structure and corporate social responsibility disclosure: Some Malaysian evidence. *Corporate Governance*, 7(3), 251-266.
- Gibson, M. S. (2003). Is corporate governance ineffective in emerging markets? *Journal of Financial & Quantitative Analysis*, 38(1), 231-250.
- Givoly, D., & Hayn, C. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting & Economics*, 29(3), 287-320.
- Givoly, D., Hayn, C. K., & Natarajan, A. (2007). Measuring reporting conservatism. *Accounting Review*, 82(1), 65-106.



- Globerman, S., Peng, M., & Shapiro, D. (2011). Corporate governance and Asian companies. *Asia Pacific Journal of Management*, 28(1), 1-14.
- Goh, B. W. (2009). Audit Committees, boards of directors, and remediation of material weaknesses in internal control. *Contemporary Accounting Research*, 26(2), 549-579.
- Gomes, A. (2000). Going public without governance: Managerial reputation effects. *Journal of Finance*, 55(2), 615-646.
- Gompers, P., Ishi, J. L., & Metrick, A. (2003). Corporate governance and equity prices. *Quarterly Journal of Economics*, 118(1), 107-155.
- Graham, C., Cannice, M., & Sayre, T. (2002). Analyzing financial analysts: What they look for in financial reports and how they determine earnings' quality. *Journal of Management Research*, 2(2), 63-72.
- Gray, S. J. (1988). Towards a theory of cultural influence on the development of accounting systems internationally. *Abacus*, 24(1), 1-15.
- Greene, W. H. (2008). *Econometric analysis* (6th ed.). New Jersey: Pearson Prentice Hall.
- Grissom, R. J. (2000). Heterogeneity of variance in clinical data. *Journal of Consulting and Clinical Psychology*, 68(1), 155-165.
- Guan, L., Pourjalali, H., Sengupta, P., & Teruya, J. (2005). Effect of cultural environment on earnings manipulation: A five Asia-Pacific country analysis. *Multinational Business Review*, 13(2), 23.
- Guest, P. (2009). The impact of board size on firm performance: Evidence from the UK. *The European Journal of Finance*, 15(4), 385-404.
- Guner, A. B., Malmendier, U., & Tate, G. (2008). Financial expertise of directors. *Journal of Financial Economics*, 88(2), 323-354.
- Haat, M. H. C., Rahman, R. A., & Sakthi, M. (2008). Corporate governance, transparency and performance of Malaysian companies. *Managerial Auditing Journal*, 23(8), 744-778.
- Hadi, A. S. (1992). Identifying multiple outliers in multivariate data. *Journal of the Royal Statistical Society*, 54(3), 761-771.
- Hadi, A. S. (1994). Modification of a method for the detection of outliers in multivariate samples. *Journal of the Royal Statistical Society*, 56(2), 393-396.

- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.): Pearson Prentice Hall.
- Hamilton, L. C. (2009). *Statistics with Stata: Updated for version 10*. Canada: Brooks/Cole, Cengage Learning.
- Hamzah, M. Y. Z., Saufi, R. A., & Wafa, S. A. (2002). Leadership style preferences of Malaysian managers. *Malaysian Management Review*, 37(1), 1-10.
- Haniffa, R., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.
- Haniffa, R., & Hudaib, M. (2006). Corporate governance structure and performance of Malaysian listed companies. *Journal of Business Finance & Accounting*, 33(7/8), 1034-1062.
- Haron, H., Ibrahim, D. D. N., Jeyaraman, K., & Chye, O. H. (2010). Determinants of internal control characteristics influencing voluntary and mandatory disclosures. *Managerial Auditing Journal*, 25(2), 140-159.
- Haron, H., Jantan, M., & Pheng, E. G. (2005). Audit committee compliance with Kuala Lumpur Stock Exchange Listing Requirements. *International Journal of Auditing*, 9(3), 187-200.
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, 53(3), 353-384.
- Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *The Stata Journal*, 7(3), 281-312.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management & Organization*, 13(1/2), 46-74.
- Hofstede, G. (2003). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations* (2 ed.). California: Sage Publications.
- Hope, O.-K. (2003). Firm-level disclosures and the relative roles of culture and legal origin. *Journal of International Financial Management & Accounting*, 14(3), 218-248.
- Horner, S. (2010). Board power, CEO appointments and CEO duality. *Academy of Strategic Management Journal*, 9(2), 43-58.

- Hoyos, R. E. D., & Sarafidis, V. (2006). Testing for cross-sectional dependence in panel-data models. *The Stata Journal*, 6(4), 482-496.
- Hsio, C. (2003). *Analysis of panel data*: Cambridge University Press.
- Hu, H., Tam, O., & Tan, M. (2010). Internal governance mechanisms and firm performance in China. *Asia Pacific Journal of Management*, 27(4), 727-749.
- Hui, K., Matsunaga, S., & Morse, D. (2009). The impact of conservatism on management earnings forecasts. *Journal of Accounting & Economics*, 47(3), 192-207.
- Iskandar, T. M., & Pourjalali, H. (2000). Cultural influences on the development of accounting practices in Malaysia. *Asian Review of Accounting*, 8(2), 126-147.
- Ismail, K. N. I. K., & Abdullah, S. N. (1999). Earnings quality and accounting conservatism: A survey on Malaysian financial analysts. *Malaysian Management Review*, 34(2). Retrieved from <http://mgv.mim.edu.my/MMR/9912/frame.htm>
- Iyengar, R. J., & Zampelli, E. M. (2010). Does accounting conservatism pay? *Accounting and Finance*, 50(1), 121-142.
- Jaccard, J., & Turrisi, R. (2003). Interaction effects in multiple regression, *Sage University Papers Series on Quantitative Applications in the Social Science* (2nd ed.): Thousand Oaks, CA: Sage.
- Jager, P. d. (2008). Panel data techniques and accounting research. *Meditari Accountancy Research*, 16(2), 53-68.
- Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, 48(3), 831-880.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305-360.
- Jesudason, J. V. (1989). *Ethnicity and the economy: The state, Chinese business, and multinationals in Malaysia*. Singapore: Oxford University Press.
- Johl, S., Jubb, C. A., & Houghton, K. A. (2007). Earnings management and the audit opinion: Evidence from Malaysia. *Managerial Auditing Journal*, 22(7), 688-715.

- Jonas, G. J., & Blanchet, J. (2000). Assessing quality of financial reporting. *Accounting Horizons*, 14(3), 353-363.
- Judge, W. Q., & Zeithaml, C. P. (1992). Institutional and strategic choice perspectives on board involvement in the strategic decision process. *Academy of Management Journal*, 35(4), 766-794.
- Juri, K. A. M. (1999). *The relationship between cultural values and innovativeness: A study of Malay and Chinese entrepreneurs in Malaysia*. Unpublished masters dissertation, University of Malaya, Kuala Lumpur.
- Kallunki, J.-P., Sahlstrom, P., & Zerni, M. (2007). Propensity to switch auditors and strictness of legal liability environment: The role of audit mispricing. *International Journal of Auditing*, 11(3), 165-185.
- Keasey, K., & Wright, M. (1993). Issues in corporate accountability and governance: An editorial. *Accounting and Business Research*, 23(91A), 291-303.
- Khanchel, I. (2007). Corporate governance: Measurement and determinant analysis. *Managerial Auditing Journal*, 22(8), 740-760.
- Kim, M., & Kross, W. (2005). The ability of earnings to predict future operating cash flows has been increasing-not decreasing. *Journal of Accounting Research*, 43(5), 753-780.
- Kirk, D. J., & Siegel, A. (1996). How directors and auditors can improve corporate governance. *Journal of Accountancy*, 181(1), 53-57.
- Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection and performance in emerging markets. *Journal of Corporate Finance*, 10(5), 703-728.
- Klassen, K. J. (1997). The impact of inside ownership concentration on the trade-off between financial and tax reporting. *The Accounting Review*, 72(3), 455-474.
- Klein, A. (1998). Firm performance and board committee structure. *Journal of Law and Economics*, 41(1), 275-303.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting & Economics*, 33(3), 375-400.
- Klein, P., Shapiro, D., & Young, J. (2005). Corporate governance, family ownership and firm value: The Canadian evidence. *Corporate Governance : An International Review*, 13(6), 769-784.

- Koh, P.-S., Laplante, S. K., & Tong, Y. H. (2007). Accountability and value enhancement roles of corporate governance. *Accounting and Finance*, 47(2), 305-333.
- Korczak, A., & Korczak, P. (2009). Corporate ownership and the information content of earnings in Poland. *Applied Financial Economics*, 19(9), 703-717.
- Kosnik, R. D. (1987). Greenmail: A study of board performance in corporate governance. *Administrative Science Quarterly*, 32(2), 163-185.
- Kothari, S. P., Shu, S., & Wysocki, P. D. (2009). Do managers withhold bad news? *Journal of Accounting Research*, 47(1), 241-276.
- Krishnamurti, C., Sevic, A., & Sevic, Z. (2005). Legal environment, firm-level corporate governance and expropriation of minority shareholders in Asia. *Economic Change and Restructuring*, 38(1), 85-111.
- Krishnan, G. V., & Visvanathan, G. (2008). Does the SOX definition of an accounting expert matter? The association between audit committee directors' accounting expertise and accounting conservatism. *Contemporary Accounting Research*, 25(3), 827-857.
- Krishnan, G. V., & Visvanathan, G. (2009). Do auditors price audit committee's expertise? The case of accounting versus nonaccounting financial experts. *Journal of Accounting, Auditing & Finance*, 24(1), 115-.
- Krishnan, J., & Lee, J. E. (2009). Audit committee financial expertise, litigation risk, and corporate governance. *Auditing*, 28(1), 241-261.
- Kung, F.-H., Cheng, C.-L., & James, K. (2010). The effects of corporate ownership structure on earnings conservatism: Evidence from China. *Asian Journal of Finance & Accounting*, 2(1), 47-67.
- Kwon, Y. K. (2005). Accounting conservatism and managerial incentives. *Management Science*, 51(11), 1626-1632.
- Kwon, Y. K., Newman, D. P., & Suh, Y. S. (2001). The demand for accounting conservatism for management control. *Review of Accounting Studies*, 6(1), 29-51.
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- LaFond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research*, 46(1), 101-135.

- LaFond, R., & Watts, R. L. (2008). The information role of conservatism. *Accounting Review*, 83(2), 447-478.
- Lam, T. Y., & Lee, S. K. (2008). CEO duality and firm performance: Evidence from Hong Kong. *Corporate Governance*, 8(3), 299-316.
- Lanfranconi, C. P., & Robertson, D. A. (2002). Corporate financial reporting: The role of the board of directors. *Ivey Business Journal*, 67(1), 1-3.
- Lara, J. M. G., Osma, B. G., & Neophytou, E. (2009). Earnings quality in ex-post failed firms. *Accounting and Business Research*, 39(2), 119-138.
- Lara, J. M. G., Osma, B. G., & Penalva, F. (2007). Board of directors' characteristics and conditional accounting conservatism: Spanish evidence. *European Accounting Review*, 16(4), 727-755.
- Larmou, S., & Vafeas, N. (2010). The relation between board size and firm performance in firms with a history of poor operating performance. *Journal of Management & Governance*, 14(1), 61-85.
- Lasfer, M. A. (2006). The interrelationship between managerial ownership and board structure. *Journal of Business Finance and Accounting*, 33(7/8), 1006-1033.
- Lee, P. J., Taylor, S. J., & Taylor, S. L. (2006). Auditor conservatism and audit quality: Evidence from IPO earnings forecasts. *International Journal of Auditing*, 10(3), 183-199.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis. *Journal of Finance*, 58(4), 1445-1468.
- Leng, C. A. (2008). The impact of internal and external monitoring measures on firm's dividend payout: Evidence from selected Malaysian public listed companies. *Corporate Ownership & Control*, 5(3), 126-138.
- Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: An international comparison. *Journal of Financial Economics*, 69(3), 505-527.
- Lim, L. Y. (1998). Cultural attributes of Malays and Malaysian Chinese: Implications for research and practice. *Malaysian Management Review*, 33(2). Retrieved from <http://mgv.mim.edu.my/MMR/9812/frame.htm>
- Lim, M. H. (1981). *Ownership and control of the one hundred largest corporations in Malaysia*. Kuala Lumpur: Oxford University Press.

- Lin, H. (2006). Accounting discretion and managerial conservatism: An intertemporal analysis. *Contemporary Accounting Research*, 23(4), 1017-1041.
- Lin, J. W., Li, J. F., & Yang, J. S. (2006). The effect of audit committee performance on earnings quality. *Managerial Auditing Journal*, 21(9), 921-933.
- Lipton, M., & Lorsch, J. W. (1992). A modest proposal for improved corporate governance. *The Business Lawyer*, 48(1), 59-77.
- Mace, M. L. G. (1971). *Directors: Myth and reality*. Boston: Harvard University Press.
- Maher, M., & Andersson, T. (2002). Corporate governance: Effects of firm performance and economic growth. In J. A. McCahery, P. Moerland, T. Raaijmakers & L. Renneboog (Eds.), *Corporate governance regimes: Convergence and diversity* (pp. 386-418). New York: Oxford University Press.
- Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure: Evidence from Singapore. *Journal of Corporate Finance*, 7(3), 235-256.
- Malaysian Accounting Standards Board (MASB). (2007). Framework for the preparation and presentation of financial statements: Malaysian Accounting Standards Board.
- Mallette, P., & Fowler, K. L. (1992). Effects of board composition and stock ownership on the adoption of "poison pills". *Academy of Management Journal*, 35(5), 1010-1035.
- McCabe, M., & Nowak, M. (2008). The independent director on the board of company directors. *Managerial Auditing Journal*, 23(6), 545-566.
- McMullen, D. A., & Raghunandan, K. (1996). Enhancing audit committee effectiveness. *Journal of Accountancy*, 182(2), 79-81.
- Menon, K., & Williams, J. D. (1994). The use of audit committees for monitoring. *Journal of Accounting and Public Policy*, 13(2), 121-139.
- Méon, P.-G., & Weill, L. (2005). Does better governance foster efficiency? An aggregate frontier analysis. *Economics of Governance*, 6(1), 75-90.
- Miller, R. G. (1997). *Beyond ANOVA: Basics of applied statistics*. London: Chapman & Hall.

- Ming, T. C., & Gee, C. S. (2008). The influence of ownership structure on the corporate performance of Malaysian public listed companies. *ASEAN Economic Bulletin*, 25(2), 195-208.
- Muniandy, B. (2007). CEO duality, audit committee effectiveness and audit risks. *Managerial Auditing Journal*, 22(7), 716-728.
- Mustafa, S. T., & Youssef, N. B. (2010). Audit committee financial expertise and misappropriation of assets. *Managerial Auditing Journal*, 25(3), 208-225.
- Othman, R., & Ameer, R. (2009). Determinants and persistence of research and development investments. *International Journal of Emerging Markets*, 4(3), 275-292.
- Owens-Jackson, L. A., Robinson, D., & Shelton, S. W. (2009). The association between audit committee characteristics, the contracting process and fraudulent financial reporting. *American Journal of Business*, 24(1), 57-65.
- Pae, J., Thornton, D. B., & Welker, M. (2005). The link between earnings conservatism and the price-to-book ratio. *Contemporary Accounting Research*, 22(3), 693-717.
- Pascoe, J., & Rachagan, S. (2005). Key developments in corporate law reform in Malaysia. *Singapore Journal of Legal Studies*, 93-113.
- Patel, C., Harrison, G. L., & McKinnon, J. L. (2002). Cultural influences on judgments of professional accountants in auditor-client conflict resolution. *Journal of International Financial Management & Accounting*, 13(1), 1.
- Peasnell, K., Pope, P., & Young, S. (2005). Board monitoring and earnings management: Do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting*, 32(7/8), 1311-1346.
- Peasnell, K., Pope, P., & Young, S. (2006). Do outside directors limit earnings management? *Corporate Finance Review*, 10(5), 5-10.
- Penman, S. H., & Zhang, X.-J. (2002). Accounting conservatism, the quality of earnings, and stock returns. *The Accounting Review*, 77(2), 237-264.
- Perera, M. H. B. (1989). Towards a framework to analyse the impact of culture on accounting. *International Journal of Accounting*, 24, 42-56.
- Pesaran, M. H. (2004). General diagnostic tests for cross section dependence in panels., *CESIFO working paper no. 1229* (pp. 1-40): University of Cambridge.



- Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies*, 22(1), 435-480.
- Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*. California: Stanford University Press.
- Pietra, R. D., Grambovas, C., Raonic, I., & Riccaboni, A. (2008). The effects of board size and 'busy' directors on the market value of Italian companies. *Journal of Management & Governance*, 12(1), 73-91.
- Pirie, S., & Smith, M. (2008). Stock prices and accounting information: Evidence from Malaysia. *Asian Review of Accounting*, 16(2), 109-133.
- Pissaris, S., Jeffus, W., & Gleason, K. C. (2010). The joint impact of executive pay disparity and corporate governance on corporate performance. *Journal of Managerial Issues*, 22(3), 306-329.
- Pomeroy, B., & Thornton, D. B. (2008). Meta-analysis and the accounting literature: The case of audit committee independence and financial reporting quality. *European Accounting Review*, 17(2), 305-330.
- Rachagan, S. (2006). Agency costs in controlled companies. *Singapore Journal of Legal Studies*, 264-284.
- Rachagan, S. (2010). Enhancing corporate governance in listed companies with concentrated shareholdings. *Journal of Financial Crime*, 17(4), 430-440.
- Raghunandan, K., & Rama, D. V. (2007). Determinants of audit committee diligence. *Accounting Horizons*, 21(3), 265-279.
- Rahman, R. A., & Ali, F. H. M. (2006). Board, audit committee, culture and earnings management: Malaysian evidence. *Managerial Auditing Journal*, 21(7), 783-804.
- Rahman, R. A., & Haniffa, R. (2005). The effect of role duality on corporate performance in Malaysia. *Corporate Ownership & Control*, 2(2), 40-47.
- Rahmat, M. M., Iskandar, T. M., & Saleh, N. M. (2009). Audit committee characteristics in financially distressed and non-distressed companies. *Managerial Auditing Journal*, 24(7), 624-638.
- Raman, D. N. I. K. J., & Saidin, S. F. (2009). Audit committee characteristics and quality of unaudited financial accounts. *Singapore Management Review*, 31(2), 19-33.

- Ramdani, D., & Witteloostuijn, A. v. (2010). The impact of board independence and CEO duality on firm performance: A quantile regression analysis for Indonesia, Malaysia, South Korea and Thailand. *British Journal of Management*, 21(3), 607-626.
- Rees, B. (2004). Discussion of the timeliness of income recognition by European companies: An analysis of institutional and market complexity. *Journal of Business Finance & Accounting*, 31(1/2), 149-165.
- Rezaee, Z. (2003, February). High-quality financial reporting: The six-legged stool. *Strategic Finance*, 84, 26-30.
- Richardson, S. A., Sloan, R. G., Soliman, M. T., & Tuna, I. (2005). Accrual reliability, earnings persistence and stock prices. *Journal of Accounting & Economics*, 39(3), 437-485.
- Roe, M. J. (2003). *Political determinants of corporate governance: Political context, corporate impact*. Oxford: Oxford University Press.
- Rogers, W. (1993). Regression standard errors in clustered samples, *Stata Technical Bulletin* 13 (pp. 19-23): Stata Corporation.
- Rose, A. M., & Rose, J. M. (2008). Management attempts to avoid accounting disclosure oversight: The effects of trust and knowledge on corporate directors' governance ability. *Journal of Business Ethics*, 83(2), 193-205.
- Roychowdhury, S., & Watts, R. L. (2007). Asymmetric timeliness of earnings, market-to-book and conservatism in financial reporting. *Journal of Accounting & Economics*, 44(1/2), 2-31.
- Rutherford, M. A., & Buchholtz, A. K. (2007). Investigating the relationship between board characteristics and board information. *Corporate Governance*, 15(4), 576-584.
- Ryan, S. G. (2006). Identifying conditional conservatism. *European Accounting Review*, 15(4), 511-525.
- Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2005). Earnings management and board characteristics: Evidence from Malaysia. *Jurnal Pengurusan*, 24(4), 77-103.
- Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2007). Audit committee characteristics and earnings management: Evidence from Malaysia. *Asian Review of Accounting*, 15(2), 147-163.

- Salleh, Z., Stewart, J., & Manson, S. (2006). The impact of board composition and ethnicity on audit quality: Evidence from Malaysian companies. *Malaysian Accounting Review*, 5(2), 61-83.
- Sanchez-Ballesta, J. P., & Garcia-Meca, E. (2007). Ownership structure, discretionary accruals and the informativeness of earnings. *Corporate Governance: An International Review*, 15(4), 677-691.
- Sarafidis, V., Yamagata, T., & Robertson, D. (2009). A test of cross section dependence for a linear dynamic panel model with regressors. *Journal of Econometrics*, 148(2), 149-161.
- Sarkar, J., Sarkar, S., & Sen, K. (2008). Board of directors and opportunistic earnings management: Evidence from India. *Journal of Accounting, Auditing & Finance*, 23(4), 517-551.
- Satkunasingam, E., & Shanmugam, B. (2006). The consequences of culture on shareholder activism in Malaysia. *Journal of Applied Management Accounting Research*, 4(1), 45-56.
- Schiehll, E. (2006). Ownership structure, large inside/outside shareholders and firm performance: Evidence from Canada. *Corporate Ownership & Control*, 3(3), 96-112.
- Schnake, M. E., Fredenberger, W. B., & Williams, R. J. (2005). The influence of board characteristics on the frequency of 10-K investigations of firms in the financial services sector. *Journal of Business Strategies*, 22(2), 101-117.
- Schnake, M. E., & Williams, R. J. (2008). Multiple directorships and corporate misconduct : The moderating influences of board size and outside directors. *Journal of Business Strategies*, 25(1), 1-13.
- Schuler, R. S., & Rogovsky, N. (1998). Understanding compensation practice variations across firms: The impact of national culture. *Journal of International Business Studies*, 29(1), 159-177.
- Schultz, J. J., & Lopez, T. J. (2001). The impact of national influence on accounting estimates: Implications for international accounting standard-setters. *The International Journal of Accounting*, 36(3), 271-290.
- Securities and Exchange Commission. (2003). *Disclosure Required by Sections 406 and 407 of the Sarbanes-Oxley Act of 2002*. Washington DC: SEC.
- Securities Commission. (2007). *Malaysian code on corporate governance (Revised 2007)*. Kuala Lumpur: Securities Commission.

- Selvarajah, C., & Meyer, D. (2008). One nation, three cultures: Exploring dimensions that relate to leadership in Malaysia. *Leadership & Organization Development Journal*, 29(8), 693-712.
- Sen, P. K. (2005). Reported earnings quality under conservative accounting and auditing. *Journal of Accounting, Auditing & Finance*, 20(3), 229-256.
- Sendut, H. (1991). Managing in a multicultural society- The Malaysian experience. *Malaysian Management Review*, 26(1). Retrieved from <http://mgv.mim.edu.my/MMR/9104/frame.htm>
- Setia-Atmaja, L. (2009). Governance mechanisms and firm value: The impact of ownership concentration and dividends. *Corporate Governance : An International Review*, 17(6), 694-709.
- Setia-Atmaja, L. (2010). Dividend and debt policies of family controlled firms. *International Journal of Managerial Finance*, 6(2), 128-142.
- Shim, D. S. (2006). Governance in the markets: Malaysian perspective. *Journal of Financial Crime*, 13(3), 300-322.
- Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-488.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Shuto, A., & Takada, T. (2010). Managerial ownership and accounting conservatism in Japan: A test of management entrenchment effect. *Journal of Business Finance & Accounting*, 37(7/8), 1-26.
- Singam, K. (2003). Corporate governance in Malaysia. *Bond Law Review*, 15(1), 314-344. Retrieved from <http://epublications.bond.edu.au/blr/vol15/iss1/13>
- Solomon, J. (2007). *Corporate governance and accountability* (2nd. ed.): John Wiley & Sons, Ltd.
- Sori, Z. M., Mohmad, S., & Hamid, M. A. A. (2001, July). Audit committee: The institutional investors's perspective. *Akauntan Nasional*, 14, 16-18.
- Specter, C. N., & Solomon, J. S. (1990). The human resource factor in Chinese management and reform: Comparing the attitudes and motivations of future managers in Shanghai, China, Baltimore, Maryland and Miami, Florida. *International Studies of Management and Organizations*, 20(1), 69-83.

- StataCorp. (2009). *Stata longitudinal-data/panel-data reference manual release 11*. College Station, TX: StataCorp LP.
- Sterling, R. R. (1967). Conservatism: The fundamental principle of valuation in traditional accounting. *Abacus*, 3(2), 109-132.
- Strong, N., & Walker, M. (1993). The explanatory power of earnings for stock returns. *The Accounting Review*, 68(2), 385-399.
- Sun, J., & Liu, G. (2011). The effect of analyst coverage on accounting conservatism. *Managerial Finance*, 37(1), 5-20.
- Suto, M. (2003). Capital structure and investment behaviour of Malaysian firms in the 1990s: A study of corporate governance before the crisis. *Corporate Governance*, 11(1), 25-39.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tam, O. K., & Tan, M. G.-S. (2007). Ownership, governance and firm performance in Malaysia. *Corporate Governance*, 15(2), 208-222.
- Tamam, E., Hassan, M. S., & Said, M. Y. (1996). Are malay middle-level executives more collectivistic than individualistic? *Malaysian Management Review*, 31(4). Retrieved from <http://mgv.mim.edu.my/MMR/9612/frame.htm>
- Thillainathan, R. (1999). A review of corporate governance in Malaysia with special reference to shareholders and creditor rights. *Malaysian Journal of Economic Studies*, 35(1/2), 161-198.
- Tsakumis, G. T. (2007). The influence of culture on accountants' application of financial reporting rules. *Abacus*, 43(1), 27-48.
- Tsakumis, G. T., Campbell, D. R., & Douppnik, T. S. (2009). IFRS: Beyond the standards. *Journal of Accountancy*, 207(2), 34-39.
- Vafeas, N. (2000). Board structure and the informativeness of earnings. *Journal of Accounting and Public Policy*, 19(2), 139-160.
- Vafeas, N. (2003). Length of board tenure and outside director independence. *Journal of Business Finance & Accounting*, 30(7/8), 1043-1064.
- Vichitsarawong, T., Eng, L., & Meek, G. (2010). The impact of the Asian financial crisis on conservatism and timeliness of earnings: Evidence from Hong Kong, Malaysia, Singapore, and Thailand. *Journal of International Financial Management & Accounting*, 21(1), 32-61.

- Volpe, R., & Woodlock, P. (2008). A survey of board financial literacy. *Corporate Finance Review*, 12(5), 16-21.
- Watts, R. L. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons*, 17(3), 207-221.
- Watts, R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *The Accounting Review*, 53(1), 112-134.
- Wooldridge, J. M. (2002). *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT Press.
- Wooldridge, J. M. (2003). *Introductory econometrics: A modern approach* (2nd ed.). Ohio: Thompson
- Yatim, P., Kent, P., & Clarkson, P. (2006). Governance structures, ethnicity, and audit fees of Malaysian listed firms. *Managerial Auditing Journal*, 21(7), 757-782.
- Yen, J. W., Chun, L. S., Abidin, S. Z., & Noordin, B. A. A. (2007). Earnings management practices between Government linked and Chinese family linked companies. *International Journal of Economics and Management*, 1(3), 387-406.
- Yeo, G. H. H., Tan, P. M. S., Ho, K. W., & Chen, S. (2002). Corporate ownership structure and the informativeness of earnings. *Journal of Business Finance & Accounting*, 29(7/8), 1023-1046.
- Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective. *The Journal of Management Studies*, 45(1), 196-220.
- Zain, M. M., & Subramaniam, N. (2007). Internal auditor perceptions on audit committee interactions: A qualitative study in Malaysian public corporations. *Corporate Governance*, 15(5), 894-908.
- Zawawi, D. (2008). Cultural dimensions among Malaysian employees. *International Journal of Economics and Management*, 2(2), 409-426.
- Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting & Economics*, 45, 27-54.
- Zhuang, J., Webb, D., Edwards, D., & Capulong, M. V. (2001). Corporate governance and finance in East Asia: A study of Indonesia, Republic of Korea, Malaysia, Philippines and Thailand: Volume 1. Available from

[http://www.adb.org/Documents/Books/Corporate\\_Governance/Vol1/default.  
asp](http://www.adb.org/Documents/Books/Corporate_Governance/Vol1/default.asp)

# APPENDICES

## APPENDIX A Results of Asymmetric Timeliness

$$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

	Predicted signs	(a) One-year estimate		(b) Three-year estimate	
		Coefficients	t-statistic	Coefficient s	t-statistic
constant		-1.307	<b>-8.89***</b>	-0.937	-0.55
R		0.034	0.16	0.050	0.13
D		-0.056	-0.46	-0.306	-1.02
RD		-0.734	<b>-2.72***</b>	-0.829	-1.21
OCIN		0.002	<b>4.2***</b>	0.007	<b>4.93***</b>
OCIN*R	+	0.000	-0.6	-0.002	<b>-1.76*</b>
OCIN*D		-0.001	-1.35	-0.004	<b>-8.49***</b>
OCIN*RD	-	-0.002	<b>-1.82*</b>	-0.001	-0.7
OCOUT		0.002	<b>3.57***</b>	0.004	<b>3.92***</b>
OCOUT*R	-	-0.001	-1.56	-0.001	-1.34
OCOUT*D		-0.001	<b>-1.85*</b>	-0.003	<b>-3.2***</b>
OCOUT*RD	+	-0.001	-0.83	-0.002	-0.4
BID		-0.087	-1.36	-0.133	<b>-2.14**</b>
BID*R	-	-0.020	-0.15	-0.421	<b>-4.96***</b>
BID*D		-0.021	-0.52	0.058	0.32
BID*RD	+	-0.124	-0.32	1.351	<b>3.23***</b>
BS		0.004	0.08	-0.055	-0.98
BS*R	+	0.009	0.16	-0.089	<b>-2.83***</b>
BS*D		0.016	0.63	-0.160	<b>-2.73***</b>
BS*RD	-	0.041	0.29	-0.169	-0.83
BT		-0.002	<b>-1.89*</b>	-0.001	-0.47
BT*R	-	0.010	<b>2.56**</b>	0.006	<b>1.92*</b>
BT*D		0.003	<b>1.88*</b>	0.001	0.45
BT*RD	+	-0.007	-1.32	-0.002	-0.31
BF		-0.043	-0.6	0.211	<b>2.13**</b>
BF*R	-	-0.139	-0.88	-1.017	<b>-8.31***</b>
BF*D		0.100	0.86	-0.607	<b>-2.37**</b>
BF*RD	+	0.310	<b>4.08***</b>	0.571	<b>2.07**</b>
BSHIP		0.048	0.91	0.180	<b>3.74***</b>
BSHIP*R	+	-0.090	-1.59	-0.058	-1.29
BSHIP*D		0.010	0.54	-0.024	-0.65
BSHIP*RD	-	0.207	<b>3.72***</b>	-0.075	-1.1
BCD		0.026	0.71	0.230	<b>2**</b>
BCD*R	+	0.017	0.42	-0.101	<b>-4.87***</b>
BCD*D		-0.027	-1.61	-0.120	<b>-3.68***</b>



	Predicted signs	(a) One-year estimate		(b) Three-year estimate	
		Coefficients	<i>t</i> -statistic	Coefficient s	<i>t</i> -statistic
BCD*RD	-	-0.043	-0.61	0.038	0.51
ACID		0.009	0.18	-0.207	<b>-3.83***</b>
ACID*R	-	-0.084	-0.8	0.130	<b>1.73*</b>
ACID*D		-0.081	<b>-1.83*</b>	0.048	0.49
ACID*RD	+	0.053	0.28	-0.355	<b>-4.12***</b>
ACF		-0.067	-1.38	-0.095	<b>-1.68*</b>
ACF*R	-	0.356	<b>5.26***</b>	0.412	<b>4.25***</b>
ACF*D		0.028	0.53	0.377	<b>2.46**</b>
ACF*RD	+	-0.540	<b>-2.81***</b>	0.199	0.88
ACM		-0.003	-0.89	-0.031	<b>-4.15***</b>
ACM*R	-	0.006	0.76	0.043	<b>2.87***</b>
ACM*D		0.005	0.75	0.011	0.51
ACM*RD	+	0.007	0.18	-0.042	-0.82
BBR		-0.192	<b>-2.23**</b>	-0.061	-0.37
BBR*R	+	0.117	0.99	-0.283	-1.35
BBR*D		0.078	1.02	-0.166	-1.41
BBR*RD	-	0.075	0.51	0.848	<b>5.88***</b>
ACBR		0.102	<b>4.81***</b>	0.020	0.13
ACBR*R	+	-0.179	-1.35	0.211	1.35
ACBR*D		-0.139	<b>-1.84*</b>	0.064	0.36
ACBR*RD	-	-0.005	-0.03	-0.803	<b>-2.14**</b>
BCR		0.002	0.02	-0.225	<b>-2.83***</b>
BCR*R	-	-0.123	-0.93	-0.224	-1.33
BCR*D		0.008	0.11	0.004	0.03
BCR*RD	+	0.320	<b>3.07***</b>	0.461	<b>2.71***</b>
ACCR		0.038	0.85	0.067	0.53
ACCR*R	-	-0.076	-0.47	0.100	0.81
ACCR*D		-0.038	-0.52	-0.142	-0.71
ACCR*RD	+	0.055	0.38	-0.664	<b>-2.18**</b>
AUD		0.003	0.21	0.054	1.05
AUD*R	-	-0.084	<b>-2.46**</b>	-0.172	<b>-2.69***</b>
AUD*D		-0.063	<b>-3.53***</b>	-0.072	<b>-2.42**</b>
AUD*RD	+	0.071	1.4	0.218	<b>2.85***</b>
TA		0.069	<b>5.16***</b>	0.066	0.73
TA*R	+	0.008	0.6	0.028	1.46
TA*D		0.005	<b>1.66*</b>	0.045	<b>3.12***</b>
TA*RD	-	0.025	1.01	0.056	1.15
PROF		0.342	<b>7.1***</b>	0.155	0.88
PROF*R	-	-0.165	-0.84	0.474	<b>1.91*</b>
PROF*D		0.068	1.26	-0.005	-0.02
PROF*RD	+	0.449	<b>1.77*</b>	-0.392	-0.53
LEV		-0.324	<b>-3.47***</b>	-0.313	<b>-2.65***</b>
LEV*R	-	0.319	1.45	-0.265	-1.34

	Predicted signs	(a) One-year estimate		(b) Three-year estimate	
		Coefficients	<i>t</i> -statistic	s	<i>t</i> -statistic
LEV*D		0.008	0.1	-0.556	<b>-3.14***</b>
LEV*RD	+	-0.778	<b>-3.32***</b>	-0.639	<b>-3.89***</b>
MTB		-0.031	<b>-7.37***</b>	-0.162	<b>-3.88***</b>
MTB*R	+	0.013	0.5	0.082	<b>6.35***</b>
MTB*D		0.020	1.37	0.040	<b>1.77*</b>
<i>F</i> - value			8.25***		27.02***
<i>R</i> <sup>2</sup> within			.1472		.2374
N			2002		2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

## APPENDIX B

### Results of Asymmetric Timeliness: Board Size using Binary Variables

$$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

Variables	Predicted Sign	Coefficients	t-statistic
constant		-1.138	-0.7
R		0.019	0.06
D		-0.465	<b>-1.68*</b>
RD		-1.189	-1.35
OCIN		0.007	<b>5.1***</b>
OCIN*R	+	-0.002	<b>-1.99**</b>
OCIN*D		-0.004	<b>-10.24***</b>
OCIN*RD	-	-0.002	-0.75
OCOUT		0.004	<b>3.99***</b>
OCOUT*R	-	-0.001	-1.34
OCOUT*D		-0.003	<b>-3.51***</b>
OCOUT*RD	+	-0.002	-0.44
BID		-0.134	<b>-1.9*</b>
BID*R	-	-0.365	<b>-6.25***</b>
BID*D		0.152	0.63
BID*RD	+	1.436	<b>3.3***</b>
DUMMY_BS		-0.044	-1.6
DUMMY_BS*R	+	0.024	0.75
DUMMY_BS*D		0.000	0.01
<b>DUMMY_BS*RD</b>	-	-0.048	-0.75
BT		-0.001	-0.44
BT*R	-	0.006	<b>1.85*</b>
BT*D		0.001	0.47
BT*RD	+	-0.001	-0.17
BF		0.204	<b>2.25**</b>
BF*R	-	-0.988	<b>-9.1***</b>
BF*D		-0.550	<b>-2.27**</b>
BF*RD	+	0.645	<b>2.2**</b>
BSHIP		0.171	<b>3.9***</b>
BSHIP*R	+	-0.036	-0.77
BSHIP*D		-0.010	-0.24
BSHIP*RD	-	-0.100	-1.4
BCD		0.235	<b>2.05**</b>
BCD*R	+	-0.089	<b>-4.36***</b>
BCD*D		-0.100	<b>-3.36***</b>
BCD*RD	-	0.061	0.68
ACID		-0.214	<b>-3.6***</b>
ACID*R	-	0.107	1.35
ACID*D		0.005	0.05
ACID*RD	+	-0.414	<b>-3.59***</b>

Variables	Predicted Sign	Coefficients	t-statistic
ACF		-0.099	<b>-2.09**</b>
ACF*R	-	0.404	<b>4.38***</b>
ACF*D		0.365	<b>2.34**</b>
ACF*RD	+	0.190	0.83
ACM		-0.028	<b>-4.01***</b>
ACM*R	-	0.041	<b>2.71***</b>
ACM*D		0.009	0.37
ACM*RD	+	-0.043	-0.81
BBR		-0.035	-0.21
BBR*R	+	-0.336	-1.54
BBR*D		-0.160	-1.24
BBR*RD	-	0.962	<b>7.01***</b>
ACBR		0.034	0.22
ACBR*R	+	0.221	1.35
ACBR*D		0.061	0.32
ACBR*RD	-	-0.841	<b>-2.28**</b>
BCR		-0.209	<b>-2.11**</b>
BCR*R	-	-0.231	-1.27
BCR*D		0.022	0.13
BCR*RD	+	0.538	<b>3.06***</b>
ACCR		0.085	0.64
ACCR*R	-	0.088	0.68
ACCR*D		-0.153	-0.73
ACCR*RD	+	-0.679	<b>-2.2**</b>
AUD		0.062	1.08
AUD*R	-	-0.187	<b>-2.69***</b>
AUD*D		-0.081	<b>-2.45**</b>
AUD*RD	+	0.233	<b>2.87***</b>
TA		0.070	0.8
TA*R	+	0.021	1.14
TA*D		0.037	<b>3.49***</b>
TA*RD	-	0.056	1.17
PROF		0.136	0.8
PROF*R	-	0.527	<b>1.93*</b>
PROF*D		-0.031	-0.09
PROF*RD	+	-0.529	-0.66
LEV		-0.320	<b>-2.68***</b>
LEV*R	-	-0.256	-1.33
LEV*D		-0.564	<b>-3.1***</b>
LEV*RD	+	-0.661	<b>-4.24***</b>
MTB		-0.161	<b>-3.96***</b>
MTB*R	+	0.079	<b>5.56***</b>
MTB*D		0.040	<b>1.69*</b>
MTB*RD	-	-0.197	<b>-8.5***</b>
F- value			<b>25.50***</b>

Variables	Predicted Sign	Coefficients	<i>t</i> -statistic
$R^2$ within			.2358
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board independence, DUMMY\_BS= Dummy equals 1 if board size more and equal 8, 0 if otherwise, BT= Board tenure, BCD= Combine CEO-Chairman roles, ACID= Audit committee independence, ACF= Audit committee members with financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equals 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

# APPENDIX C

## Results of Asymmetric Timeliness:

### Audit Committee Composition using Binary Variables

$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$					
Predicted			Dummy1=	Dummy1=	
Sign			All independent	Majority independent	
		Coefficients	t-statistic	Coefficients	t-statistic
constant		-0.052	-0.03	-0.910	-0.56
R		-1.020	<b>-2.68***</b>	0.045	0.13
D		-1.037	<b>-2.51**</b>	-0.335	-1.2
RD		0.158	0.19	-1.041	-1.46
OCIN		0.007	<b>4.78***</b>	0.007	<b>4.85***</b>
OCIN*R	+	-0.002	-1.58	-0.002	-1.64
OCIN*D		-0.004	<b>-6.62***</b>	-0.004	<b>-9.99***</b>
OCIN*RD	-	-0.002	-0.71	-0.002	-0.65
OCOUT		0.004	<b>3.84***</b>	0.004	<b>3.87***</b>
OCOUT*R	-	-0.001	-1.23	-0.001	-1.21
OCOUT*D		-0.003	<b>-2.68***</b>	-0.003	<b>-3.14***</b>
OCOUT*RD	+	-0.002	-0.39	-0.001	-0.34
BID		-0.240	<b>-3.12***</b>	-0.105	-1.08
BID*R	-	-0.394	<b>-4.74***</b>	-0.400	<b>-5.01***</b>
BID*D		0.097	0.56	-0.018	-0.11
BID*RD	+	1.226	<b>2.94***</b>	1.167	<b>2.58**</b>
BS		-0.067	-1.2	-0.052	-0.95
BS*R	+	-0.099	<b>-3.11***</b>	-0.088	<b>-3.45***</b>
BS*D		-0.166	<b>-2.77***</b>	-0.175	<b>-2.78***</b>
BS*RD	-	-0.188	-0.87	-0.216	-1.09
BT		-0.001	-0.37	-0.001	-0.39
BT*R	-	0.005	<b>1.7*</b>	0.006	<b>1.77*</b>
BT*D		0.001	0.46	0.002	0.64
BT*RD	+	-0.001	-0.1	0.001	0.08
BF		0.223	<b>2.4**</b>	0.190	<b>2.17**</b>
BF*R	-	-1.025	<b>-8.86***</b>	-1.011	<b>-8.65***</b>
BF*D		-0.614	<b>-2.45**</b>	-0.598	<b>-2.35**</b>
BF*RD	+	0.576	<b>2.04**</b>	0.595	<b>2.08**</b>
BSHIP		0.182	<b>3.62***</b>	0.164	<b>3.31***</b>
BSHIP*R	+	-0.053	-1.24	-0.052	-1.18
BSHIP*D		-0.032	-0.9	-0.026	-0.71
BSHIP*RD	-	-0.100	-1.48	-0.117	-1.52
BCD		0.251	<b>2.15**</b>	0.217	<b>2.06**</b>
BCD*R	+	-0.118	<b>-5.12***</b>	-0.088	<b>-4.2***</b>
BCD*D		-0.132	<b>-4.02***</b>	-0.127	<b>-4.05***</b>
BCD*RD	-	0.055	0.73	0.000	0

	Predicted Sign	Dummy1= All independent		Dummy1= Majority independent	
		Coefficients	t-statistic	Coefficients	t-statistic
DUMMY_ACID		-0.780	<b>-6.23***</b>	-0.159	<b>-5.15***</b>
DUMMY_ACID*R	-	1.160	<b>8.02***</b>	0.050	1.47
DUMMY_ACID*D		0.716	<b>3.85***</b>	0.124	<b>3.12***</b>
<b>DUMMY_ACID*RD</b>	+	-1.176	<b>-4.16***</b>	0.054	0.88
ACF		-0.106	<b>-2.1**</b>	-0.065	-1.1
ACF*R	-	0.391	<b>4.25***</b>	0.404	<b>4.15***</b>
ACF*D		0.382	<b>2.51**</b>	0.376	<b>2.62***</b>
ACF*RD	+	0.236	0.97	0.265	1.15
ACM		-0.034	<b>-4.45***</b>	-0.030	<b>-4.49***</b>
ACM*R	-	0.046	<b>3.02***</b>	0.042	<b>2.94***</b>
ACM*D		0.015	0.64	0.012	0.54
ACM*RD	+	-0.041	-0.78	-0.040	-0.75
BBR		-0.091	-0.53	-0.062	-0.38
BBR*R	+	-0.288	-1.38	-0.262	-1.18
BBR*D		-0.153	-1.21	-0.178	-1.54
BBR*RD	-	0.853	<b>5.6***</b>	0.771	<b>3.97***</b>
ACBR		0.014	0.09	0.019	0.13
ACBR*R	+	0.240	1.49	0.194	1.17
ACBR*D		0.055	0.29	0.054	0.3
ACBR*RD	-	-0.874	<b>-2.37**</b>	-0.818	<b>-2.25**</b>
BCR		-0.219	<b>-3.06***</b>	-0.185	<b>-2.9***</b>
BCR*R	-	-0.229	-1.38	-0.202	-1.15
BCR*D		0.020	0.14	0.003	0.02
BCR*RD	+	0.487	<b>3.1***</b>	0.424	<b>2.23**</b>
ACCR		0.055	0.44	0.044	0.4
ACCR*R	-	0.121	0.98	0.084	0.66
ACCR*D		-0.149	-0.74	-0.147	-0.77
ACCR*RD	+	-0.717	<b>-2.42**</b>	-0.656	<b>-2.23**</b>
AUD		0.051	1.05	0.057	1.14
AUD*R	-	-0.172	<b>-2.76***</b>	-0.177	<b>-2.87***</b>
AUD*D		-0.074	<b>-2.57**</b>	-0.071	<b>-2.52**</b>
AUD*RD	+	0.214	<b>2.74***</b>	0.227	<b>2.87***</b>
TA		0.058	0.65	0.063	0.73
TA*R	+	0.028	1.49	0.031	<b>1.73*</b>
TA*D		0.046	<b>3.08***</b>	0.046	<b>3.47***</b>
TA*RD	-	0.058	1.22	0.061	1.28
PROF		0.143	0.82	0.145	0.87
PROF*R	-	0.474	<b>1.99**</b>	0.466	<b>1.96*</b>
PROF*D		-0.013	-0.04	-0.016	-0.05
PROF*RD	+	-0.402	-0.54	-0.447	-0.59
LEV		-0.317	<b>-3.13***</b>	-0.299	<b>-2.71***</b>
LEV*R	-	-0.282	-1.38	-0.278	-1.42
LEV*D		-0.543	<b>-3.05***</b>	-0.569	<b>-3.04***</b>

		Dummy1= All independent		Dummy1= Majority independent	
	Predicted Sign	Coefficients	<i>t</i> -statistic	Coefficients	<i>t</i> -statistic
LEV*RD	+	-0.604	<b>-3.9***</b>	-0.656	<b>-3.79***</b>
MTB		-0.159	<b>-3.72***</b>	-0.163	<b>-3.85***</b>
MTB*R	+	0.079	<b>5.42***</b>	0.081	<b>5.98***</b>
MTB*D		0.046	<b>2.19**</b>	0.047	<b>2.07**</b>
MTB*RD	-	-0.188	<b>-11.11***</b>	-0.188	<b>-11.31***</b>
F-value			<b>9.53***</b>		<b>1.53***</b>
$R^2$ within			.2384		.2411
N			2012		2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, DUMMY\_ACID= Dummy equals 1 if all audit committee members are independent, 0 otherwise, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.



# APPENDIX D

## Results of Asymmetric Timeliness: Excluding Board Financial Expertise

$$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

	Predicted signs	Coefficients	t-statistic
constant		-0.860	-0.48
R		0.111	0.24
D		-0.423	-1.16
RD		-1.248	-1.52
OCIN		0.007	<b>4.95***</b>
OCIN*R	+	-0.001	-1.02
OCIN*D		-0.003	<b>-8.18***</b>
OCIN*RD	-	-0.002	-0.94
OCOUT		0.004	<b>4.21***</b>
OCOUT*R	-	-0.001	-0.98
OCOUT*D		-0.003	<b>-3.08***</b>
OCOUT*RD	+	-0.002	-0.57
BID		-0.153	<b>-3.14***</b>
BID*R	-	-0.430	<b>-5.65***</b>
BID*D		0.055	0.29
BID*RD	+	1.431	<b>3.39***</b>
BS		-0.098	<b>-2.05**</b>
BS*R	+	0.031	1.47
BS*D		-0.073	-1.47
BS*RD	-	-0.191	-0.89
BT		-0.004	-1.36
BT*R	-	0.008	<b>2.1**</b>
BT*D		0.002	0.73
BT*RD	+	-0.002	-0.31
BSHIP		0.165	<b>3.28***</b>
BSHIP*R	+	-0.056	-0.86
BSHIP*D		-0.019	-0.42
BSHIP*RD	-	-0.051	-0.56
BCD		0.202	1.75*
BCD*R	+	-0.076	<b>-5.32***</b>
BCD*D		-0.111	<b>-3.49***</b>
BCD*RD	-	0.006	0.09
ACID		-0.227	<b>-2.96***</b>
ACID*R	-	0.125	0.88
ACID*D		0.043	0.32
ACID*RD	+	-0.397	<b>-5.72***</b>
ACF		0.020	0.39
ACF*R	-	-0.049	-0.54
ACF*D		0.083	1.27
<b>ACF*RD</b>	+	0.435	<b>2.17**</b>

	Predicted signs	Coefficients	<i>t</i> -statistic
ACM		-0.014	<b>-2.48**</b>
ACM*R	-	0.005	0.38
ACM*D		-0.008	-0.39
ACM*RD	+	-0.012	-0.2
BBR		-0.146	-0.7
BBR*R	+	-0.225	-1.05
BBR*D		-0.116	-0.87
BBR*RD	-	0.899	<b>6.31***</b>
ACBR		0.051	0.28
ACBR*R	+	0.200	1.31
ACBR*D		0.071	0.35
ACBR*RD	-	-0.791	<b>-2.18**</b>
BCR		-0.312	<b>-3.32***</b>
BCR*R	-	-0.148	-0.97
BCR*D		0.050	0.3
BCR*RD	+	0.488	<b>2.13**</b>
ACCR		0.132	0.85
ACCR*R	-	0.026	0.22
ACCR*D		-0.133	-0.64
ACCR*RD	+	-0.571	<b>-1.84*</b>
AUD		0.061	1.17
AUD*R	-	-0.179	<b>-2.82***</b>
AUD*D		-0.085	<b>-2.22**</b>
AUD*RD	+	0.214	<b>3.41***</b>
TA		0.068	0.73
TA*R	+	0.013	0.65
TA*D		0.040	<b>3.68***</b>
TA*RD	-	0.073	1.45
PROF		0.184	1.18
PROF*R	-	0.453	<b>2.02**</b>
PROF*D		-0.046	-0.15
PROF*RD	+	-0.429	-0.57
LEV		-0.331	<b>-2.16**</b>
LEV*R	-	-0.286	-1.38
LEV*D		-0.564	<b>-3.56***</b>
LEV*RD	+	-0.677	<b>-3.09***</b>
MTB		-0.164	<b>-3.88***</b>
MTB*R	+	0.090	<b>7.02***</b>
MTB*D		0.044	<b>1.73*</b>
MTB*RD	-	-0.196	<b>-9.24***</b>
<i>F</i> - value			<b>2.33***</b>
<i>R</i> <sup>2</sup> within			.2156
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

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**APPENDIX E**  
**Results of Asymmetric Timeliness:**  
**Audit Committee Meeting using Binary Variables**

$$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

	Predicted signs	Coefficients	t-statistic
constant		-1.012	-0.58
R		0.113	0.26
D		-0.228	-0.71
RD		-0.918	-1.25
OCIN		0.007	<b>5.14***</b>
OCIN*R	+	-0.002	<b>-1.68*</b>
OCIN*D		-0.004	<b>-7.63***</b>
OCIN*RD	-	-0.002	-1.13
OCOUT		0.004	<b>3.88***</b>
OCOUT*R	-	-0.001	-1.06
OCOUT*D		-0.003	<b>-2.68***</b>
OCOUT*RD	+	-0.002	-0.55
BID		-0.148	<b>-2.67***</b>
BID*R	-	-0.396	<b>-4.46***</b>
BID*D		0.071	0.38
BID*RD	+	1.309	<b>3.42***</b>
BS		-0.065	-1.17
BS*R	+	-0.075	<b>-2.27**</b>
BS*D		-0.152	<b>-2.59**</b>
BS*RD	-	-0.199	-1.02
BT		-0.001	-0.54
BT*R	-	0.006	<b>1.77*</b>
BT*D		0.001	0.29
BT*RD	+	-0.003	-0.43
BF		0.164	<b>1.92*</b>
BF*R	-	-0.942	<b>-9.45***</b>
BF*D		-0.569	<b>-2.16**</b>
BF*RD	+	0.492	1.46
BSHIP		0.181	<b>3.75***</b>
BSHIP*R	+	-0.067	-1.38
BSHIP*D		-0.029	-0.79
BSHIP*RD	-	-0.055	-0.77
BCD		0.227	<b>1.96*</b>
BCD*R	+	-0.100	<b>-4.5***</b>
BCD*D		-0.119	<b>-3.37***</b>
BCD*RD	-	0.025	0.35
ACID		-0.234	<b>-4.3***</b>
ACID*R	-	0.165	<b>1.9*</b>
ACID*D		0.063	0.5

	Predicted signs	Coefficients	<i>t</i> -statistic
ACID*RD	+	-0.414	<b>-4.09***</b>
ACF		-0.092	<b>-2.08**</b>
ACF*R	-	0.399	<b>4.1***</b>
ACF*D		0.363	<b>2.28**</b>
ACF*RD	+	0.180	0.86
DUMMY_ACM		0.072	1.08
DUMMY_ACM*R	-	-0.036	-0.63
DUMMY_ACM*D		-0.040	-1.18
<b>DUMMY_ACM*RD</b>	+	0.260	<b>2.33**</b>
BBR		-0.081	-0.48
BBR*R	+	-0.254	-1.15
BBR*D		-0.162	-1.15
BBR*RD	-	0.823	<b>7.52***</b>
ACBR		0.008	0.05
ACBR*R	+	0.219	1.33
ACBR*D		0.074	0.4
ACBR*RD	-	-0.794	<b>-2.25**</b>
BCR		-0.208	<b>-2.64***</b>
BCR*R	-	-0.225	-1.36
BCR*D		-0.006	-0.04
BCR*RD	+	0.485	<b>3.29***</b>
ACCR		0.032	0.26
ACCR*R	-	0.116	0.9
ACCR*D		-0.124	-0.62
ACCR*RD	+	-0.690	<b>-2.27**</b>
AUD		0.064	1.3
AUD*R	-	-0.189	<b>-2.85***</b>
AUD*D		-0.081	<b>-2.94***</b>
AUD*RD	+	0.231	<b>2.7***</b>
TA		0.063	0.7
TA*R	+	0.032	1.58
TA*D		0.044	<b>3.92***</b>
TA*RD	-	0.047	0.89
PROF		0.154	0.86
PROF*R	-	0.490	<b>1.95*</b>
PROF*D		0.006	0.02
PROF*RD	+	-0.421	-0.55
LEV		-0.321	<b>-2.42**</b>
LEV*R	-	-0.276	-1.12
LEV*D		-0.539	<b>-2.94***</b>
LEV*RD	+	-0.598	<b>-2.87***</b>
MTB		-0.165	<b>-3.64***</b>
MTB*R	+	0.086	<b>6.87***</b>
MTB*D		0.044	1.64
MTB*RD	-	-0.201	<b>-9.66***</b>

	Predicted signs	Coefficients	<i>t</i> -statistic
<i>F</i> - value			<b>16.23***</b>
<i>R</i> <sup>2</sup> within			.2363
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, ACID= Audit committee independence, ACF= Audit committee financial expertise, DUMMY\_ACM= Dummy equals 1 if audit committee meeting is four and more, 0 otherwise, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, LEV= Leverage, MTB= Market to book value.

# APPENDIX F

## Results of Asymmetric Timeliness: Leverage using Binary Variables

$$E_{it}/P_{it-1} = \alpha_0 + \beta_1 R_{it} + \beta_2 D_{it} + \beta_3 RD_{it} + \beta_4 OCIN_{it} + \beta_5 R_{it} * OCIN_{it} + \beta_6 D_{it} * OCIN_{it} \\ + \beta_7 RD_{it} * OCIN_{it} + \beta_8 OCOUT_{it} + \beta_9 R_{it} * OCOUT_{it} + \beta_{10} D_{it} * OCOUT_{it} \\ + \beta_{11} RD_{it} * OCOUT_{it} + \text{Board Attributes, Audit Committee Attributes,} \\ \text{Ethnicity \& Control Variables}_{it} + \varepsilon_{it}$$

	Predicted signs	Coefficients	t-statistic
constant		-0.279	-0.17
R		-0.015	-0.05
D		0.031	0.15
RD		0.035	0.05
OCIN		0.007	<b>4.7***</b>
OCIN*R	+	-0.002	<b>-1.87*</b>
OCIN*D		-0.003	<b>-6.13***</b>
OCIN*RD	-	0.000	-0.11
OCOUT		0.004	<b>3.29***</b>
OCOUT*R	-	-0.001	-1.41
OCOUT*D		-0.003	<b>-2.46**</b>
OCOUT*RD	+	-0.001	-0.25
BID		-0.110	-1.43
BID*R	-	-0.533	<b>-6.1***</b>
BID*D		0.036	0.22
BID*RD	+	1.399	<b>2.92***</b>
BS		-0.033	-0.58
BS*R	+	-0.135	<b>-3.94***</b>
BS*D		-0.192	<b>-3.07***</b>
BS*RD	-	-0.133	-0.72
BT		0.001	0.32
BT*R	-	0.005	<b>1.75*</b>
BT*D		-0.001	-0.2
BT*RD	+	-0.005	-0.99
BF		0.246	<b>2.54**</b>
BF*R	-	-1.091	<b>-8.55***</b>
BF*D		-0.616	<b>-2.32**</b>
BF*RD	+	0.715	<b>2.44**</b>
BSHIP		0.201	<b>4.58***</b>
BSHIP*R	+	-0.081	<b>-1.87*</b>
BSHIP*D		-0.031	-0.72
BSHIP*RD	-	-0.051	-0.75
BCD		0.211	<b>1.91*</b>
BCD*R	+	-0.053	<b>-2.04**</b>
BCD*D		-0.093	<b>-2.64***</b>
BCD*RD	-	-0.005	-0.06
ACID		-0.238	<b>-4.03***</b>
ACID*R	-	0.228	<b>2.22**</b>
ACID*D		0.057	0.57
ACID*RD	+	-0.473	<b>-5.69***</b>

	Predicted signs	Coefficients	<i>t</i> -statistic
ACF		-0.084	-1.51
ACF*R	-	0.392	<b>4.16***</b>
ACF*D		0.314	<b>2.28**</b>
ACF*RD	+	0.082	0.42
ACM		-0.028	<b>-3.76***</b>
ACM*R	-	0.036	<b>2.69***</b>
ACM*D		0.013	0.55
ACM*RD	+	-0.031	-0.62
BBR		-0.100	-0.67
BBR*R	+	-0.236	-1.2
BBR*D		-0.173	-1.58
BBR*RD	-	0.708	<b>4.43***</b>
ACBR		0.029	0.22
ACBR*R	+	0.224	1.41
ACBR*D		0.079	0.47
ACBR*RD	-	-0.753	<b>-2.06**</b>
BCR		-0.228	<b>-4.78***</b>
BCR*R	-	-0.276	<b>-1.84*</b>
BCR*D		0.000	0
BCR*RD	+	0.485	<b>2.56**</b>
ACCR		0.046	0.42
ACCR*R	-	0.198	1.6
ACCR*D		-0.104	-0.53
ACCR*RD	+	-0.732	<b>-2.35**</b>
AUD		0.066	1.3
AUD*R	-	-0.193	<b>-3.16***</b>
AUD*D		-0.073	<b>-3.01***</b>
AUD*RD	+	0.245	<b>3.36***</b>
TA		0.025	0.29
TA*R	+	0.045	<b>2.82***</b>
TA*D		0.032	<b>2.68***</b>
TA*RD	-	-0.002	-0.05
PROF		0.177	1.05
PROF*R	-	0.458	<b>1.9*</b>
PROF*D		0.015	0.04
PROF*RD	+	-0.350	-0.45
DUMMY_LEV		0.051	<b>2.07**</b>
DUMMY_LEV*R	-	-0.175	<b>-2.86***</b>
DUMMY_LEV*D		-0.071	<b>-2.25**</b>
<b>DUMMY_LEV*RD</b>	+	0.191	<b>4.59***</b>
MTB		-0.155	<b>-4.14***</b>
MTB*R	+	0.075	<b>5.17***</b>
MTB*D		0.029	1.37
MTB*RD	-	-0.203	<b>-13.35***</b>
<i>F</i> - value			<b>28.73***</b>



	Predicted signs	Coefficients	<i>t</i> -statistic
$R^2$ within			.2321
N			2012

\*\*\*p<0.01; \*\*p<0.05; \* p<0.10

R= Stock return, D= dummy 1 if R is negative and 0 otherwise, RD= R\*D, OCIN=Inside substantial shareholders, OCOUT= Outside substantial shareholders, BID= Board composition, BS= Natural logarithm of board size, BT= Board tenure, BF= Board financial expertise, BSHIP= Board multiple directorships, BCD= Combine CEO-Chairman roles, ACID= Audit committee independence, ACF= Audit committee financial expertise, ACM= Audit committee meeting, BBR= Ratio Bumiputera on board, BCR= Ratio Chinese on board, ACBR= Ratio Bumiputera on audit committee, ACCR= Ratio Chinese on audit committee, AUD= Dummy equal 1 if big four audit firm, 0 otherwise, TA= Natural logarithm of total assets (Firm size), PROF= Profitability, DUMMY\_LEV= Dummy equals 1 for levered firms, 0 otherwise, MTB= Market to book value.