School of Accounting

Multiple Directorships and Financial and Non-Financial Reporting Measures: Evidence from Australia

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This thesis is presented for the Degree of
Doctor of Philosophy
of
Curtin University

Date: December 2016

DECLARATION

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

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ABSTRACT

This thesis comprises three separate but interconnected essays that focus on multiple directorships and its impact on financial and non-financial reporting measures of Australian public listed firms.

Given the ongoing debate surrounding the perceived effectiveness of a busy board with multiple directorships on financial reporting quality and corporate social responsibilities (CSR) disclosure, this study consists of three different essays examining multiple board directorships with earnings management, audit fees and corporate social responsibilities to provide important insights into this board characteristic. This thesis attempts to determine whether boards with multiple directorships are effective monitors and able to influence financial reporting quality as a consequence of knowledge spill-over or whether they are too busy to discharge their duties effectively. Using different measures of multiple directorships, results from the first essay suggest that firms with board of directors having higher multiple directorships exhibit lower levels of earnings management. In the second essay, multiple directorships are associated with higher level of audit fees suggesting higher levels of monitoring. Results from both the first and second essays infer that earnings/audit quality strengthens with firms having skilled, knowledgeable and experienced board of directors. In the third essay, results indicate that firms with multiple directorships have a higher level of environmental disclosures. Results therefore validate the applicability of resource dependency theory on the relationship between multiple directorships and earnings management, audit fees and CSR disclosures by suggesting that directors sitting on multiple boards, by sharing experiences, skills, information and other resources enhance the financial and non-financial reporting quality of firms. Consequently firms could actively seek board members with diverse backgrounds, exposure/experiences and other pertinent skill-sets with multiple board memberships as these attributes will, in turn, be beneficial to firm performance.

The first chapter provides the introduction to the thesis where it discusses the motivation and structure of the thesis. Thereafter, main findings are discussed and key contributions from this thesis summarised.

The second chapter explores the relationship between multiple directorships and earnings management. Different types of multiple directorships are investigated along with two prominent models of earnings management, namely the Modified Jones (1995) model and the Kothari (2005) model.

The third chapter investigates the association between multiple directorships and audit fees. Different measurements of multiple directorships are used along with both normal and abnormal audit fees. The results were tested for robustness by using alternative measurement of control variables.

The fourth chapter analyses the link between multiple directorships and corporate social responsibility disclosures (CSR) in Australia. Various measurements of multiple directorships and CSR disclosure are used in this essay to test the robustness of the main results.

Last, the final chapter documents the major conclusions of the thesis and outlines suggestions for future research.

ACKNOWLEDGEMENTS

I would like to express my profound gratitude to my three supervisors, Dr. Nigar Sultana, Dr. Harjinder Singh and Professor Ross Taplin for their unwavering and precious guidance, support, direction and encouragement throughout my PhD studies. Words cannot expressed how thankful I am to the stewardship capabilities of both Dr. Nigar Sultana and Dr. Harjinder Singh, who have been instrumental in the completion of this thesis and the remarkable journey I have experienced over last four years. Dr. Sultana has been the calming influence on me and despite the uncertainties during this PhD journey, her optimistic attitude, vision, composure, magnanimity and expertise steered me towards the timely conclusion of this dissertation. Although Dr. Harjinder Singh came on board only in the final two years of my studies, he has contributed immensely towards the accomplishment of this thesis. His leadership, foresight, proficiency, altruism, persistent guidance and direction has enabled me to fulfill the requirements of a quality and respectable thesis. Special recognition and tribute are accorded to Professor Ross Taplin for his words of wisdom and guidance particularly in the area of statistical analysis and CSR. I am thankful to Professor John Evans, chairperson of my thesis committee for his encouragement and support. I am also grateful to the Head of School, Professor Alina Lee for her support and inspiration over the last couple of years. My special gratitude goes to Mr. Cheow Wing Wong for his ceaseless motivation and his camaraderie over these years. I am also especially grateful to Dr Imran Haider and Dr. Abhijeet Singh, for their helpful suggestions and guidance in this exciting and exhilarating PhD quest. I would like to thank the support and administration staff in the School of Accounting (SoA) under the able leadership of Mrs. Corinna Worth for their kind assistance and Mrs. Jenny Goodison for organizing and providing the necessary facilities and support in CBS HDR unit. On the same token, I would also like to wholeheartedly thank my colleagues in SoA and research mates in CBS HDR unit for their provision of moral support and comradeship during the entire phase of my studies. Lastly and equally important, I wish to convey my sincere appreciation to my family for their patience, sacrifice and for standing by me during this amazing journey.

DEDICATIONS

To my parents who have always inspired me to excel in my studies. To my father, Mr. Tham Kok Sam (Late) and mother, Madam Hew Mee Chen.

To my family here in Perth; Rebecca, Ryan and Tanya who have staunchly and steadfastly persisted as a pillar of strength and support during this rewarding journey.

To my sisters, Doris and Julie and my brother, Derek who have been ardent supporters of my endeavours.

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LIST OF ABBREVIATIONS

AASB	Australian Accounting Standards Board
ASX	Australian Securities Exchange
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CGC	Corporate Governance Council
CLERP	Corporate Law and Economic Reform Program Act 2004
CPA	Certified Practicing Accountants
CSR	Corporate Social Responsibility
CSRD	Corporate Social Responsibility Disclosure
GICS	Global Industry Classification Standard
GRI	Global Reporting Index
IAASB	International Auditing and Assurance Standards Board
IFRS	International Financial Reporting Standards
ISO	International Organisation for Standardization
LSE	London Stock Exchange
NYSE	New York Stock Exchange
OLS	Ordinary Least Squares
SOX	Sarbanes-Oxley Act 2002
S&P	Standard and Poor’s
UK	United Kingdom
USA	United States of America

Chapter 1 INTRODUCTION

1.1 Background and Motivation

This thesis examines whether appointment of directors with multiple board directorships in Australian public listed firms will have an impact on both financial reporting and non-financial reporting measures, specifically earnings management, audit quality and CSR disclosures.

Earnings quality has been area of significant interest to those involved in the financial reporting process including regulators, auditors, preparers' of financial statements, standard setters and financial analysts. The users of financial statements base their decision making on reported earnings which is regarded as the one of the most essential output of the accounting system (Graham, Harvey, & Rajgopal, 2005). Since accounting practices involve the use of judgement and discretion in reported earnings, managers may behave opportunistically to manage earnings for their own self-interest. Managing earnings to report optimistic earnings potentially exposes the users of financial statement of having an unrealistic expectation of future financial performance of a firm (Krishnan, Raman, Yang, & Yu, 2011).

The accounting scandals in the early 2000s led to significant losses of investments from individual shareholders and institutional investors as result of illegal use of accounting practices and methods. The Sarbanes-Oxley Act 2002 was enacted in the USA with stringent requirements placed upon the senior management and external auditors of publicly listed firms in response to these events. In Australia, following legislation from the Sarbanes-Oxley Act 2002, the Corporate Law Reform Program (CLERP 9) Act was introduced in 2004. Other regulatory reforms initiated in Australia include the launching of ASX Australian Securities Exchange Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations (ASX CGC) in 2003. On a global scale, the International Auditing and Assurance Standards Board (IAASB) introduced revised auditing standards on going concern and auditors' responsibility relating to fraud in an audit as means to improve audit procedures and ultimately, financial reporting quality.

Although considerable initiatives have been introduced to enhance corporate governance, regulators continue to be burden with the responsibility in cultivating good corporate governance practices. It has often been argued that directors promote their reputation and status by means of having multiple board seats and being perceived

as monitoring experts (Fama & Jensen, 1983). Past literature on corporate governance structures, especially attributes of the board of directors have a bearing on audit quality and financial reporting quality of a firm. (Carcello, Hermanson, Neal, & Riley Jr., 2002; Goodwin-Stewart & Kent, 2006). For example, Sanchez-Ballesta and Garcia-Meca (2007) find that insider ownership affects the level of earnings quality while Goodwin-Stewart and Kent (2006) discover that existence of audit committee is associated with higher audit quality. Culminating from globalisation of capital markets and increasing investors' confidence, corporate social responsibility (CSR) disclosure has been gaining importance among regulators, researchers, investors and other key stakeholders (Dunn & Sainty, 2009; Hashim & Rahman, 2011; Roy, 2009). In relation to CSR disclosures, many prior researchers attempt to identify its determinants and consequences. Haniffa and Cooke (2002) and Michelon and Parbonetti (2012) find that corporate governance and firm specific factors influences the level of CSR disclosures. Board of directors, consequently, have been widely acknowledged as a major thrust of CSR endeavours.

Studies on board of directors' characteristics have gained global attention and academics have rekindled their interest on a topical area concerning board memberships of directors. A director is defined as holding multiple directorships if that individual maintains board seats in more than one firm or multiple firms. With the growing number of new firms listed on the stock exchanges around the world annually, the demand for knowledgeable, experienced and competent directors has intensified. The demand for directors with reputable backgrounds and experience (in anticipation of knowledge transfer) has also escalated. Questions as to whether such directors are able to discharge their duties effectively has emerged and scholars like Fich and Shivdasani (2006) and P. Jiraporn, Davidson III, DaDalt, and Ning (2009) have argued that directors with many board seats are too busy to fulfil their role effectively as they are overstretched. However, Carpenter and Westphal (2001) dismiss the "busyness" notion, claiming instead that, as the number of board seats a director is holding grows, firms are anticipated to benefit from the relevant experience, skills and knowledge transfer of such directors. This view and contention is shared by Ferris, Jagannathan, and Pritchard (2003) who disagree that the number of directorships should be limited. From the perspective of CSR disclosures, experienced and reputable directors can add value by improving the transparency of the firm by disclosing additional voluntary information (Haniffa & Cooke, 2005).

Further, very few studies investigates the impact of multiple directorships on financial reporting and non-financial reporting measures in Australia and as such this thesis will contribute to the extant literature by examining the influence of multiple directorships of board members on the above-mentioned domain. Finally, as the board of directors are responsible for overseeing the financial reporting, audit practices and improving transparency of a firm, this thesis will be beneficial to the main stakeholders of a firm. Corporate governance structures can be enhanced and this in turn can benefit the capital market participations in terms of higher reported earnings quality and transparency. Policy makers and regulators may introduce new legislation on board memberships for directors and lastly scholars will be provided with a contemporaneous update on studies relating to multiple directorships in Australia.

1.2 Structure of the Thesis and Summary of Major Findings

The thesis presented in this study is organised in the order of a three-essay format. These essays comprise of three separate but interconnected essays that are focussed on multiple directorships and its impact on financial and non-financial reporting for Australian public listed firms. In total, this thesis encompasses five chapters, including this first chapter and the remaining chapters being structured and organised as follow:

Chapter 2 - The first essay explores the relationship between multiple directorships and earnings management in which different types of multiple directorships are investigated along with the two most prominent models of earnings management, namely the Modified Jones (1995) model and the Kothari (2005) model.

The findings from this essay suggests that boards with multiple directorships inhibits earnings management, alluding to the "reputation" hypothesis that directors on multiple boards are eager to preserve their reputational capital by minimising the extent of earnings management in publicly listed firms in Australia. However, the "busyness" factor was evident when the average number of directorships exceeded three board seats, consistent with prior studies on multiple directorships (Fich & Shivdasani, 2006; P. Jiraporn, Singh, & Lee, 2009).

Chapter 3 - The second essay investigates the association between multiple directorships and audit fees in which different types of multiple directorships are

investigated. Different measurements of multiple directorships are used along with normal and abnormal audit fees. The results are tested for robustness by using alternative measurement of control variables.

The empirical results from this essay imply that boards with multiple directorships influence the level of audit quality within publicly listed firms in Australia. The positive association with audit fees indicate that firms with directors that have multiple board seats are keen to safeguard their reputation, reduce litigation risk and enhance future career prospects and appointments by ensuring that external auditors performed their duties to ascertain no material misstatements occur in the financial statements and their opinion reflects the truth and fairness of the financial position of the entity.

Chapter 4 - The third essay analyses the link between multiple directorship and corporate social responsibility disclosures in Australia. Various measurements of multiple directorships and dependent variable (CSR disclosure) are used in this essay to test the robustness of the main results.

This essay focusses on the environment disclosures by publicly listed firms in Australia and evidence from this study signifies that directors with multiple board seats have an influence on the level of CSR disclosure of the firm. The findings from this study are consistent with the earlier two essays in which it reinforces the "reputation" hypothesis of multiple directorships that underpins the framework of resource dependency theory.

The major findings from the three essays are summarised in Table 1.1 depicted below.

Table 1.1
Summary of Key Findings for Each of the Essay

Essay	Hypothesis	Findings
One	Multiple directorship is negatively associated with earnings management	Strong support
Two	Multiple directorships is positively associated with audit quality	Strong support
Three	Multiple directorships is positively associated with environmental disclosures	Moderate/Strong support

1.3 Contributions

This thesis examines three distinct attributes of financial and non-financial reporting for public listed firms in Australia in relation to multiple directorships, an area which have not comprehensively examined in the past. The findings from these essays contribute to the extant literature in the following manner:

This thesis provides an analysis that develops insights into, and identifies, key determinants of multiple directorships. Even though past researches have taken place to identify the determinants of earnings quality and CSR disclosures from a governance-specific standpoint, however, very few studies are connected to multiple directorships.

Prior literatures on multiple directorships have indicated that two major diverging views prevail. Past empirical literatures have indicated that there are two contrasting angles on multiple directorships. The belief that "busy" directors have an overly demanding job and as a result are lax in their duties is widespread in the studies of some scholars (Falato, Kadyrzhanova, & Lei, 2014; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009). The conception that directors endeavour to safeguard their "reputation" and enhance their board appointment possibilities underlines the concept where board members strive to impart and transfer "quality" know-how, skills and experiences to the advantage of the firm that they are serving on (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Sarkar & Sarkar, 2009). The findings from this thesis suggest that directors on multiple boards possess the necessary expertise and competence in improving earnings quality and transparency of the firm.

This thesis is one of the few studies that examine the impact of multiple directorships on organisation outcomes in a holistic way by studying relationship between multiple directorships in different aspects and financial and non-financial reporting measures in the Australian capital market setting. By focussing on the number of board seats that directors hold and personal attributes of these directors, this thesis attempts to provide a profound understanding of the characteristics of the board members with multiple directorships. Findings from this thesis are expected to increase the role of multiple directorships and its impact on financial reporting and non-financial reporting, specifically on environmental disclosure in the Australian setting. These findings therefore assist in identifying specific characteristics of the board members which may have an impact in improving the underlying corporate governance mechanism of the firm. Finally this thesis assists in extending the

understanding of multiple directorships. For example, this thesis provides further evidence that board members with multiple seats impart their skill-sets, knowledge and expertise to the firm by inhibiting earnings management, increases audit quality and has a positive impact on environmental disclosures in publicly listed firms in Australia.

Chapter 2 MULTIPLE DIRECTORSHIPS AND EARNINGS MANAGEMENT

2.1 INTRODUCTION

Earnings management practices raise important ethical issues facing the accounting profession as the corporate world witnessed a series of major accounting scandals in the early 2000s as a result of questionable creative accounting methods and improper use of earnings manipulation techniques. As a response to the prominent corporate collapses in the U.S.A and Australia, regulators have taken steps to improve the corporate governance mechanisms by introducing reforms such the Sarbanes-Oxley Act in 2002 in the USA, the Corporate Law Economic Reform Program (CLERP 9) Act in 2004 including Australian Securities Exchange Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations (Australian Securities Exchange, 2003) in Australia.

Previous literature on earnings quality suggests that reported earnings can be manipulated using two distinct methods. The most common method of managing earnings is through the discretionary accrual choices which are normally executed towards the end of an accounting period popularly known as earnings management. This technique of earnings management typically does not have a direct impact on cash flow. Many studies have been focussed on this technique and one of the more popular measurement of discretionary accrual choices of earnings management is the Modified Jones model (Dechow, Sloan, & Sweeney, 1995). One other method of managing earnings is through the manipulation of real activities which will have an effect on sales, production and investment activities which ultimately have an impact on the cash flow of a particular firm. Utilising the Roychowdhury (2006) model, reducing discretionary expenses on a temporary basis and increasing the level of production output abnormally can have an impact on the reported earnings.

Lately, scholars have placed greater emphasis on studies investigating board characteristics specifically the role of multiple directorships in a firm and whether it is able to affect the level of earnings management within a firm. Multiple directorship is also referred to as interlocked directorship throughout the analysis. Numerous scholars in the past have made an effort to determine whether busy directors have a part to play improving the corporate governance structure of a firm by sharing and transferring their relevant knowledge, experience and skills accumulated from one entity to

another. Certain scholars have a view that directors with many board seats are too busy to fulfil their roles effectively as they are overstretched and overloaded (Core, Holthausen, & Larcker, 1999; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009). On the other hand, there are academics who believe that as the number of board memberships for a director increases, firms are expected to benefit from the relevant experience, skills and knowledge of such director (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Ferris et al., 2003; Stuart & Yim, 2010).

This essay contributes to the literature in several ways. First, this study assists in extending the understanding of multiple directorships, particularly within the context of the Australian capital market. The results conclude that firms with board members with multiple directorships report lower levels of earnings management. Second, the study validates the resource dependency theory as it is found that directors with diverse skills and knowledge can assist in improving earnings quality by inhibiting earnings management. Third, findings from this study are expected to increase the importance of multiple directorships and its constraining role on earnings management in the Australian setting. Fourth, findings from this study provide an update on the existence and extent of earnings management for Australian publicly listed firms. Consequently, findings may also assist regulators in improving existing policies or to assist in development of new policies to regulate appointment of directors to improve earnings quality. For example, findings will help regulators determine which characteristics of board members are associated with reduced levels of earnings management. Attempts by publicly listed firms in the US to limit the number of boards that a director can hold are undertaken, however the evidence and results on the impact on the firm in regards to busyness factor have been mixed so far (Falato et al., 2014). At this stage, no compulsory restriction is placed on the number of multiple directorships a director can hold for public listed firms in Australia although it is advocated that under *Recommendation 2.4,* the majority of the board of a listed firm should be independent directors, with *Recommendation 2.5* suggesting that the chairperson of the board should be an independent director and not the CEO of the firm (Australian Securities Exchange, 2014). Potentially, regulators in Australia may take the route of limiting the numbers of appointments of directors to between two and three board memberships to allow them to be more effective in their respective roles.

2.1.1 Research Questions and Objective

The multiple directorships/ earnings management linkage deserve further investigation as it has been subjected to immense debate in prior earnings quality literature.

The major financial crisis in 2008 afflicting international stock markets such as NYSE (New York Stock Exchange) in the USA, the LSE (London Stock Exchange) in the UK, ASX (Australian Securities Exchange) in Australia and other key stock exchanges in Europe and around the world have elevated uncertainties relating to the earnings reported by publicly listed firms around the globe. It is therefore vital to have a thorough understanding of how board characteristics in particular multiple directorships influences earnings management which would have an impact on current and future earnings reported by a firm. With the continual reforms which are presently taking place in Australia, it is envisaged that this study will eventually prompt regulators to introduce new strategies and recommendations to improve the earnings quality and corporate governance structure of the publicly listed firms here. For example, a study by Boo and Sharma (2008) suggests that boards with more multiple directorships expect elaborate external audit to be carried out to safeguard their reputation capital. On the other hand, Kiel and Nicholson (2006) found no relationship between holding multiple directorships and financial performance of Australian firms, implying that there is no tangible benefits in attracting directors with high number of board seats into a firm. As far as the study of multiple directorships in Australia is concerned, the outcomes are mixed and inconclusive. The primary objective of this study is to provide a comprehensive analysis of the association multiple directorships and earnings management practices in Australian publicly listed firms. One of the unique features of this study is to consider the effect of multiple directorships in several ways and its association, if any, with earnings management. Distinctively this essay will focus on the average number of multiple directorships that a board of director hold, the number of directors who have multiple directorships, the number of directors sitting on multiple board committees and whether there is an existence of a reciprocal interlock. Consistent with the primary objective, this study's main research question is identified as follows:

RQ: Is there an association between multiple directorships with earnings management practices of Australian public listed firms?

In addition to answering this study's main research question, a number of other significant research objectives shall also be investigated. This study also looks into the different number board memberships of a director in a firm and its relationship with earnings management. Further, it also dwells into whether reciprocal director interlock and directors sitting on multiple sub-committees with the level of earnings management.

2.1.2 Significance of the Study

Findings from this study will contribute towards the regulators, board of directors, investors and therefore have several anticipated conclusions.

First, the study is able to assist the regulators to focus on the characteristics or attributes of the board of directors (multiple directorships, shareholdings of board members, existence of reciprocal director interlock, education level of directors) to regulate in order to enhance transparency within a publicly listed firm. Second it contributes to earnings management literature by examining the relationship between board characteristics and earnings management. Investors are able to make an informed decision as to their allocation of funds where firms with higher transparency are expected to yield them better and more secure returns. Third, this study will assist the board of directors to determine the characteristics or board features that will result in lower level of earnings management. Firms may be encouraged to actively seek board members with diverse backgrounds, international experience and pertinent skill-sets to reduce the level of earnings management within a firm.

2.1.3 Essay Outline

This essay is comprised of six major sections which are described below. An overview of this study is provided for under Section 2.1. Under this section, the identification of major research objectives and the study's significance takes place. The organisation of the remaining sections in this essay is as follows. Literature review on earnings management and concept of earnings management is detailed under section 2.2. Subsequently, this study reviews theoretical frameworks applicable in this study and the development of hypothesis, both of which take place under section 2.3. Section 2.4 outlines the research method of the study that includes the measurement for earnings management models (dependent variable) and multiple directorships

(independent variable) used in this study in addition to regression models and related statistical tests. The descriptive analysis of the data point, multivariate and sensitivity analysis are explained in section 2.5. Multivariate analysis undertaken and examinations of all findings on the hypotheses that have been developed are listed in this section. Correspondingly robustness and sensitivity tests are detailed out in section 2.5 together with the summary of the key findings. Lastly, the implications, contributions, limitations and summary of this study are featured in section 2.6.

2.2 LITERATURE REVIEW

2.2.1 Earnings Management

Earnings management is a technique that is being adopted by the management and it represents any action which altered the reported income which do not provide any economic benefit to an organisation and may eventually be harmful and damaging to an organisation on a longer horizon (Merchant, 1989). Healy and Wahlen (1989, p.368) defines earnings management as

‘‘Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting practices.’’

2.2.2 Concept and Definition

The earnings management concept has been defined by researchers in various ways. One of the most prominent scholars in the study of earnings quality, Schipper (1989) has defined earnings management as “a purposeful intervention in the external financial reporting process, with the intent of obtaining some private gain” (Schipper 1989, p.92). Another widely accepted definition of earnings management is “earnings management occurs when managers use judgement in financial reporting and structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers” (Healy and Wahlen 1999, p.368). The universal notion of the above definitions revolves around

the premise of which senior management engage in earnings management to maximise their own benefits at the cost of other stakeholders within the firm.

2.2.3 Incentive to Manage Earnings

Firms manage their earnings using various approaches and these approaches can be grouped into four distinct categories, namely meeting or beating benchmarks set, contractual agreements that are put in place, capital market inducement and lastly regulatory reasons.

One of the most common motivations of managing earnings is to fulfil or surpass earnings expectations or targets established by the management or analysts. Managers engage in earnings management so that undesirable market reactions can be eluded as a result of earnings setback (DeFond & Park, 2001; Skinner & Sloan, 2002). Findings from past literature suggests that firms that regularly meet or beat earnings targets benefit from a valuation premium on their share price (Bartov, Givoly, & Hayn, 2002; Kasznik & McNichols, 2002). Additionally, it was discovered that the most frequent incentives used to establish CEO remuneration are target based incentive plans (D. Holland & Ramsay, 2003). Consequently, prior literature suggest that a correlation exists between manipulating earnings to meet or beat earnings expectations and CEO compensation, in particular bonus payments or equity-based compensation which are linked to firm's financial performance (Q. Cheng & Warfield, 2005; Matsunaga & Park, 2001). Debt or loan contracts established between a firm and a lender have been identified as one of the main areas of research to identify the existence of earnings management practices by firm. Empirical results from previous literature indicate that the presence of a relationship between breaches of loan contracts and the degree of earnings management (L. DeAngelo & DeAngelo, 1994; DeFond & Jiambalvo, 1994; Sweeney, 1994). Similarly, findings on senior executive remuneration contracts also imply that there is an association between earnings management activities of firms and the structure of the overall compensation packages of these high ranking executives (Bergstresser & Philippon, 2006; Healy, 1985; Holthausen, Larcker, & Sloan, 1995). Numerous past studies have lend support to the view that senior executives manage their firms earnings when shares are being offered to the public either through the process of initial public offering (IPO) or additional capital raising activities subsequent to the IPO to artificially inflate and improve the firm's valuation (Aharony, Lin, & Loeb, 1993; DuCharme, Malatesta, & Sefeik, 2004; Shivakumar, 2000).

To a certain extent, regulatory or political issues have been established to be one of the motives for managing earnings by managers. In an earlier study by Han and Wang (1998), compelling evidence were found in which oil firms engaged in income-decreasing earnings management practices to bring down their reported earnings. As a result, these firms managed to shelter themselves from the politically delicate circumstances arising from Persian Gulf crisis even though they are expected to benefit financially from the situation. Comparably, Lim and Matolcsy (1999) find that Australian firms subject to price controls manage their earnings to circumvent the regulations imposed.

2.2.4 Determinants of Earnings Management

Previous research has recognised a number of determinants that has an impact on earnings management (Sanchez-Ballesta & Garcia-Meca, 2007). These determinants can be classified into three broad categories: (1) firm related factors; (corporate governance related factors; (3) regulators, legislators and key stakeholders.

2.2.4.1 Firm Related Factors

Past empirical research in earnings management has explored a number of diverse firm characteristics that may have an impact on its magnitude of earnings management. More precisely, it is found that firm size, the leverage or debt level of a firm, firm's financial performance and industry influence the extent of earnings management.

Prior empirical findings on the effect on firm size on earnings management practices produces contradictory outcomes. A positive relationship of firm size with the level of earnings management has been confirmed in a number of past studies, especially when larger firms are compelled to conform to the expectations of the analysts and investors to account for a predictable level of earnings consistently and minimisation of political pressure and scrutiny (Dechow, Ge, & Schrand, 2010; Watts & Zimmerman, 1978). Conversely, other researchers discovered that smaller firms have tendency to engage in earnings management compared to large firms because of higher likelihood of avoiding scrutiny from regulators (Bathke, Lorek, & Willinger, 1989; K. Holland & Jackson, 2004; Sanchez-Ballesta & Garcia-Meca, 2007).

Divergent views associated with the impact of highly geared firms on earnings management behaviour has been found in prior studies on leverage degree of firm.

Some scholars have concluded that firms with high level of leverage are exposed to risks of violating its debt agreements and as such may lead to higher level of cost of capital (Karim, Lacina, & Rutledge, 2006). Prior studies on highly geared firms have revealed that such firms have aggressively engaged in earnings management to circumvent breaching of debt covenants (Dechow & Skinner, 2000; Elayan, Li, & Meyer, 2008; Erickson, Hanlon, & Maydew, 2004; Watts & Zimmerman, 1978). Lastly, Jensen (1986) did not find any relationship between debt level and the extent of earnings management per se inferring that highly indebted firms restrict a firm's operating capacity as the free cash flow will tend to be limited.

Akerlof (1970) observed that commercially successfully firms have an added incentive to differentiate themselves from less successful firms to obtain the best financial terms to reduce their cost of capital. One stream of researchers postulate that profitable firms are more inclined to engage in earnings management practices as they are expected to meet or surpass earnings objectives in comparison to less profitable firms or firms that are incurring losses (Chan, Chen, & Yu, 2015; Degeorge, Patel, & Zeckhauser, 1999; Roychowdhury, 2006). On the contrary, some scholars suggests less profitable firm tend to manipulate their financial performance on the pretext of securing additional external funding to improve their ailing cash situation (Ashari, Koh, Tan, & Wong, 1994; Athanasakou, Strong, & Walker, 2007; Hermann & Inoue, 1996; White, 1970).

An overwhelming number of researchers have determined that industry that a firm is operating in will have an effect on its earnings management practices (Achleitner, Guenther, Kaserer, & Siciliano, 2014; Nelson, 2002; Osma, 2008; Robbins, Turpin, & Polinski, 1993). The risk profile differs from one industry to another and as such the inherent risk level will vary from a firm in a Telecommunications industry as opposed to a firm in an Information Technology industry.

2.2.4.2 Corporate Governance Factors

Past studies on corporate governance related factors to earnings management focusses on various areas such as characteristics of the board of directors, engagement of Big Four auditors, industry specialist auditor and CEO duality. However,

conclusions from many of the previous research on the magnitude of earnings management have been varied.

Although not many empirical researches have been conducted to investigate the relationship between the education level of directors and the level of earnings management, it is one interesting area that is worth examining. Kanter (1977) posits that the level of education reflects knowledge that is treasured and appreciated by the general public. According to (G. Becker, 1964) and (Judge, Cable, Boudreau, & Bretz, 1995) the extent of education signifies investments that are generated in distinct know-how which is manifested as human capital. Prior research also points towards increased in overall compensation to individual in terms of remuneration, promotional prospects and career contentment and education is seen as a pivotal instrument to recognise an individual success and achievement (Judge et al., 1995; Pfeffer & Ross, 1982).

Conyon and Peck (1998) state that if independent directors either hold an insignificant number of shares or has no shareholdings, their motivation to monitor management and hence protect shareholder interests, may somewhat decline. Similarly, it was found that independent directors who sit on multiple boards are more likely to be involved in firms that have poor financial reporting quality and engages in earnings management (Beasley, 1996; Davidson, Goodwin-Stewart, & Kent, 2005; Klein, 2002a). However, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by Rosenstein and Wyatt (1990) who concluded that the level of positive share price reactions are associated when then percentage of independent board of directors are higher. This was confirmed by Jaggi and Gul (2009) that firms that have greater proportion of board independence are a better deterrent of aggressive earnings management practices.

Prior empirical research indicates that a Big Four auditor possesses superior quality in terms of enhanced audit planning, assessment of risk, identifying the proper audit procedures, evidence gathering process and finally providing the appropriate audit opinion. Scholars commonly used a dummy variable to classify audit firms as either a Big Four or a non-Big four being the proxy for outstanding audit quality (Simon & Francis, 1988; Simunic, 1980). Considerable empirical evidence suggests that the presence of Big Four auditors enhances the quality of a firm's financial reporting (Fan & Wong, 2005; Francis, 1984; Francis & Yu, 2009; Teoh & Wong, 1993).

It is evident that industry specialised auditors have enhanced industry experience and expertise which allow them to perform at a greater and more effective level in contrast to non-industry specialist auditors given the extensive training and facilities that were provided (Dopuch & Simunic, 1980). Industry specialist auditors have been found to be efficacious deterrent of earnings management techniques employed by management of client firms in comparison to non-industry specialists based on previous literature (K. Y. Chen, Wu, & Zhou, 2006; Ferdinand A. Gul, Fung, & Jaggi, 2009; Jaggi, Gul, & Lau, 2012; Krishnan, 2003). Fama and Jensen (1983) contend that the board of directors represents the most effective internal control mechanism when it comes to monitoring the conduct and behaviour of senior management within a firm. However, existing literature examining board's independence on firm's performance and earnings quality yielded varied findings.

Empirical evidence to date has produce inconclusive results when it comes to CEO duality and firm performance. Certain researchers have argued that CEO duality may reduce the independence and vigilance of the board and as such may have an adverse effect on the firm's financial performance (Rechner & Dalton, 1991). On the other extreme, advocates of CEO duality find that there is weak or no positive association of CEO duality with firm's performance (Cannella Jr & Lubatkin, 1993; L. Donaldson & Davis, 1991a; Mallette & Fowler, 1992). Additionally it is also found that segregating the duty of the chairman and CEO will not on its own, gives rise to better financial performance of a firm (Krause, Semadeni, & Cannella Jr, 2014).

2.2.4.3 Regulators, Legislators and Key Stakeholders

Contradictory findings on the impact of proportion of shares held by board members on the level of earnings management were established from previous researches. Sanchez-Ballesta and Garcia-Meca (2007) find that a non-linear association exists between insider ownership and discretionary accruals. The results implied that insider ownership appears to behave as a regulating mechanism (Berle & Means, 1932; Jensen & Meckling, 1976). On a similar token, a negative correlation is found between abnormal accruals and managerial shareholdings (Warfield, Wild, & Wild, 1995). On the contrary, a study by Nagar, Nanda et al. (2003) find that CEO's compensation and shares held is positively associated with firm's voluntary disclosure of financial accounting data. This was consistent with (Healy, 1985)

study that suggest that CEOs engage in earnings management to augment their bonus payout.

Varied outcomes on the influence of institutional shareholdings on the level of earnings management and eventually financial reporting quality have rendered the effect to be inconclusive. Past scholars have determined that institutional shareholdings have an impact on the extent of earnings management and earnings quality (Agrawal & Knoeber, 1996; R. Chung, Firth, & Kim, 2002; Koh, 2003). R. Chung et al. (2002) discover that large institutional shareholdings were successful in limiting earnings management activities. In a similar vein, Koh (2007) posits that institutional ownerships with a long-term perspective restrict earnings management behaviours among firms that engage in managing their earnings to achieve or surpass earnings targets. The above examples would deter management from engaging in earnings management especially if those activities diminish the firm value in the longer term. Conversely, firms with substantial institutional ownerships maybe prompted to reduce their shareholdings drastically in view of poor earnings or earnings that have not met its expectations and as such apply additional pressure on the part of the management to manage earnings to steer clear of reporting a less than favourable results (Black & Coffee, 1994; Bushee, 1998; Porter, 1992).

2.3 THEORETICAL PERSPECTIVE AND HYPOTHESIS DEVELOPMENT

2.3.1 Theoretical Perspective - Corporate Governance

The research literature encompassing corporate governance entails five fundamental theories. These theories include agency theory, resource dependency theory, stewardship theory, stakeholder theory and institutional theory. For the objective of this particular essay, the focus is placed on agency theory and resource dependency which are more relevant towards this study and discuss briefly on their relationship with the corporate governance structures of organisations.

Agency Theory

The concept of agency theory was mooted by Berle and Means (1932) who defined the notion of separation of ownership and control resulting in potential conflict of interest between shareholders and management when ownership extensively dispersed among shareholders. Subsequently, Jensen and Meckling (1976) systematically put together a theoretical framework by integrating components from agency theory, property rights theory and finance theory and arrive at the theory of the ownership structure of the firm.

An agency relationship occurs when the principal (owners of a firm) delegates responsibilities to the agent (managers of a firm) to carry out duties and services on the behalf of the principal (Fama & Jensen, 1983; Jensen & Meckling, 1976). Agency theory suggests that an agent/manager that does not hold any stake in the firm is expected to act in their own interest. Concurrently, the principals/shareholders are assumed to embrace a sole objective of maximising their investment in the firm through dividend payments and increase in share price. As a result, agency problem is created and under such circumstances, both principal and agent inevitably incur bonding and monitoring costs to realign their different interests, giving rise to these agency costs (Fama & Jensen, 1983; Jensen & Meckling, 1976). Prior literature on corporate governance structures such as the board of directors, audit committee, other board committees, existence of internal audit department and external auditing function have been identified to be essential tools to control and monitor the actions of a firm's management and to lessen any potential agency disputes that may arise (Dalton, Daily, Johnson, & Ellstrand, 1999; Fama & Jensen, 1983; Kosnik, 1987). The presence of any form of earnings manipulations suggests that existence conflict of

interests between the principals and the agents. Henceforth, the segregation of control within a firm and ownership will ultimately give rise to managerial behaviours to maximising their own personal interests to the detriment of the firm, reinforcing the agency theory (Koh, 2003).

Resource Dependency Theory

Corporate governance structures such as board of directors, audit committee, internal auditor and external auditors serves as a vital link between a firm and critical resources in which a firm requires to augment its financial performance (Pfeffer & Salancik, 1978). These linkages essentially explain the notion of resource dependency theory from the perspective of corporate governance. It is reasoned that this nexus of relationships are significant factors of a corporation's success (Hillman & Dalziel, 2003). Employing resource dependency theory, prior literature have determined that busy directors are associated with a broader network of connection and are likely to deal with a range of challenges that large public firms would confront imply that their abilities are valued with the rising literature on benefits of multiple directorships (Carpenter & Westphal, 2001; L. Cohen, Frazzini, & Malloy, 2010; Jeffrey L. Coles, Daniel, & Naveen, 2008; Ishii & Xuan, 2014; Stuart & Yim, 2010). Pfeffer and Salancik (1978) for example suggest that interlocked directors linkages may serve to mitigate the impact of environmental uncertainty, a perspective buttressed by the findings of Mizruchi and Stearns (1988). Likewise, the prominence on resource dependency theory which suggests that the ability of an organisation to operate under an environment of uncertainty and complexity linked with its interdependencies is related to the quality and effectiveness of the directors forming the board (Boyd, 1990; Daily, Dalton, & Canella, 2003; Hillman, Canella, & Paetzold, 2000; Pfeffer & Salancik, 1978). Directors in a resource dependence function not only reduce uncertainty but in parallel they contribute resources to a firm in the form of information, skills, access to key stakeholders for example suppliers, buyers, public policy decision makers and social groups (Hillman et al., 2000). Ferris et al. (2003) claim that a director that serves in better performing firms are more likely to end up with increased board memberships in the future (Ferris et al., 2003) as Fama and Jensen (1983) contend that talented directors are rewarded with a higher number of board positions.

2.3.2 Theory Selection

As discussed in the preceding passages, there are five core theories underpinning corporate governance approaches of which two are pertinent to this study.

While is it imperative to note that each of the distinctive theory has its own merits and alternative rationale, this study focusses predominantly on the influence of multiple directorships in different ways on the level of earnings management. Essentially, applying resource dependency theory, it can be contended that firms will pursue avenues to moderate its uncertainties stemming from external pressures such as competition, regulation and social forces by making use of the skills, information and other resources from its connected board members (Boyd, 1990; Pfeffer & Salancik, 1978). Distinctively for this study, it is envisaged that board members with multiple directorships (with their diverse background, wide-ranging skills, knowledge and expertise) are more effective in curtailing earnings management and henceforth improve earnings quality. Hence, it provides an appropriate ground to embrace resource dependency theory as the fundamental theory for this study.

2.3.3 Hypothesis Development

Directors who hold board seats in more than one firm or multiple firms are categorised as having multiple directorships. Prior literature on multiple directorships suggest that directors with many outside directorships is a symbol of "reputation", possessing the required abilities, experience, skills and knowledge to perform his duty (Fama, 1980). It has been argued that directors advance their reputation and status by means of having multiple board seats and being seen as monitoring experts (Fama & Jensen, 1983).

Multiple directorships as part of the board of directors characteristic have been an area of active research over the last decades. The evidence substantiating multiple directorships in a firm i.e. busy or "overboard" directors are mixed with two schools of thoughts representing the "Busyness" Hypothesis and "Reputation" Hypothesis. Consistent with the reputation busyness "hypothesis, with the numbers of board seats of a director increases, the director have a tendency to be "overloaded" and overstretched. Consequently, firms with "busy" directors are less effective due to the expanded time commitment related to having multiple board appointments and likely to negatively affect the firm's performance (Fich & Shivdasani, 2006). On the other

extreme, the "Reputation" hypothesis suggests that as the number of boards that a director is sitting on increases, firms are expected to benefit from the experience, skills and knowledge of such director. Thus, consistent with the "reputation" hypothesis, multiple board appointments can add value to an organisation by sharing their expertise, knowledge and experience gained because such directors are determine to preserve or enhance their reputation by provision of sound and effective advice (Fama & Jensen, 1983). The notion in reinforcing the "reputation" hypothesis is that busy directors are tied with a broader network of connection and are likely to tackle a range of challenges of a listed firm suggests that their abilities are held with esteemed with increasing coverage on the advantages of multiple directorships (Carpenter & Westphal, 2001; L. Cohen et al., 2010; Jeffrey L. Coles et al., 2008; Ishii & Xuan, 2014; Stuart & Yim, 2010). In line with the reputation hypothesis it was found that a director that serves in better performing firms are more likely to end up with increased board memberships in the future (Ferris et al., 2003) as Fama and Jensen (1983) contend that talented directors are compensated with a higher number of board positions. On the other hand, directors may overcommit and overstretched themselves as they take on multiple directorships in different boards which arguably will result in them being less effective as monitors of firms and are associated with weak corporate governance (Fich & Shivdasani, 2006). Similarly, it was found that when selection of new directors involves the CEO, the CEO will incline to select directors who have a tendency to monitor the management less aggressively and are sitting on multiple boards (Shivdasani & Yermack, 1999). In addition, Core et al (1999) discovered that when a director held multiple board seats, the CEO compensation tends to be higher while Jiraporn et al. (2009) discovered that consistent with the "over commitment" notion, busier directors are more predisposed to missing board meetings than those with less board seats. In line with the "busyness" hypothesis, past studies found boards with directors having multiple board seats with lower firm valuation and acquiring firms with busy boards exhibit higher negative returns (Fich & Shivdasani, 2006). A number of past researches undertaken in determining whether cross membership within multiple boards has an influence in improving quality of earnings amongst other areas of interest (Hashim & Rahman, 2011; Ong, Ong, & Wan, 2003; Pombo & Gutierrez, 2011).

A study conducted by Hashim and Rahman (2011) on public listed firms in Malaysia find evidence that as the presence of multiple directorship increases, the

reported earnings quality is higher, suggesting a positive relationship between multiple directorships and earnings quality. In a recent study, Elyasiani and Zhang (2015) find that bank holding firms with a higher number of directors holding multiple directorships experienced better financial performance. Consistent with the findings from the above studies, an empirical research undertaken for public listed firms in India corroborated that boards that are diligent and with directors having a greater number of board seats are positively correlated with financial performance (Ghosh, 2007).

On the other hand, another study find that boards in which majority of the outside directors hold three or more directorships are associated with frail corporate governance (Fich & Shivdasani, 2006). Further, Falato et al. (2014) describe that directors that are overly busy impair its board monitoring role and adversely affect shareholders value. A similar view is shared by Baccouche and Omri (2014) who find that firms board members with high number of outside directorships is positively associated with higher level of earnings management.

Based on the mixed results from past research indicated above, a non-directional hypothesis is therefore postulated:

H_1: Australian publicly listed companies with multiple directorships have an association with the level of earnings management.

2.4 RESEARCH METHOD

2.4.1 Sample Selection

Although there were numerous studies undertaken in Australia in earnings quality and earnings management assessing various relationships, however there is no one singular study that comprehensively investigate the association between multiple directorships and earnings management in this country. With the numbers of multinational or foreign firms that are increasing in Australia and the sharing of expertise and knowledge of the board across countries and states or continents, this speaks volume of why Australia is selected as the country to have this study in.

The initial sample comprises 1101 publicly listed firms on the ASX as at January 1, 2008 from the SIRCA database. ASX listed firms are chosen because

information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports and the reason SIRCA database is adopted because of the many different corporate governance and financial data that are readily available for the major public listed firms in Australia. ASX listed firms are chosen because information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports.

In line with past empirical studies (Ball, Kothari, & Robin, 2000; M. J. Ferguson, Seow, & Young, 2004) financial institutions, banks, stock brokerages, trusts and investments, and insurance firms are excluded as the financial statements of such firms are subject to different accounting regulations and earnings management models may not be applicable to them. In addition, firms that are not continuously listed on the ASX will also be excluded. As the financial statements of ASX listed firms having headquartered in foreign countries are not usually prepared in accordance with the normal disclosure requirements for other firms listed on the ASX, these firms are excluded from the list, consistent with past practices (Clifford & Evans, 1997). Lastly, exclusions from this study will also comprise of firms that have missing data for the observation period (Klein, 2002a, 2002b).

2.4.2 Source Documentation

The data for this essay are obtained from a number of different sources. The main item of emphasis is earnings management for this essay. Earnings management is calculated based on cross-sectional version of Modified Jones model developed by Dechow et al. (1995). Data for the earnings management model are collected from Morningstar DatAnalysis.

Data for independent and control variables are collected from SIRCA Corporate Governance Database, S&P Capital IQ, and Morningstar DatAnalysis Premium. The main independent variable of this study is multiple directorships which are analysed in different manner (i.e., directors with reciprocal interlock, directors on multiple board committees and different numbers of average multiple directorships).

Whilst the main focus of this study is to examine the impact of multiple directorships on earnings management practices by Australian listed firms, robustness and various sensitivity tests will also be conducted. Data for sensitivity analysis are collected from SIRCA Corporate Governance Database, S&P Capital IQ, and Morningstar DatAnalysis Premium.

2.4.3 Time Period

As one of the major elements of this study is a longitudinal analysis, the time period observed involves analysis covering 2008 to 2012 calendar years. This time-frame is selected because it gravitates in the vicinity of important periods in the financial accounting and corporate governance landscape in Australia. The major events include the introduction of CLERP 9 recommendations as a result of the Sarbanes-Oxley 2002 implementation in the USA, embracing of International Financial Reporting Standards (IFRS) and the changes incorporated into the ASX CGC's corporate governance guidelines in 2007 from the initial version of 2003. The findings from the above-mentioned timespan of five calendar years, therefore, will indicate whether the recommendations related to the corporate governance development in Australia as indicated above have an influence on this specific study on the relationships between various aspects of multiple directorships and earnings management. The time period selected is also meant to collect the timeliest of information available for this particular study. In the next sections, measurements for the dependent variable (earnings management) and independent variables (multiple directorships) are outlined.

2.4.4 Earnings Management

Managers may manipulate reported earnings for the current period using two distinct methods. One of the most common methods being engaged is through discretionary accrual choices which are manipulated to window-dress the financial statements i.e.; using either income increasing or income decreasing earnings management approach. As the primary measure of the dependent variable throughout this essay, the Modified Jones model which was established by Dechow et al. (1995) and the performance adjusted model by Kothari et al. (2005) are utilized. The cross sectional earnings management model of Dechow et al. (1995) is selected because it has been adopted broadly by researchers both in the U.S. (DuCharme et al., 2004; Franz, HassabElnaby, & Lobo, 2014) and Australia (Davidson et al., 2005). The performance adjusted model by Kothari et al. (2005) is picked as an alternative earnings management model as it utilizes the lagged return on assets to control for firm performance. As such it mitigates heteroskedascity issues and prevents

misspecification problems associated with Jones and modified Jones models when it comes to estimating discretionary accruals.

2.4.5 Modified Jones Model

Obtaining the total accruals is the first stage in the measurement of discretionary accruals. The total accruals is arrived at by subtracting the operating cash flow from the net profit of a firm. Thereafter, a process to produce the non-discretionary accruals component of the total accruals is worked out depending on the model adopted, thus allowing total accruals to be broken into a discretionary and a non-discretionary component (Dechow et al., 1995).

The main model used by this study to estimate discretionary accruals using total accruals for main tests is the cross-sectional version of Dechow et al. (1995) modified Jones model using *Equation [1]* as follows:

$$TAC_{it}/TA_{it-1} = \alpha_1(1/TA_{it-1}) + \alpha_2((\Delta SALES_{it}/TA_{it-1}) - (\Delta AR_{it}/TA_{it-1})) + \alpha_3(PPE_{it}/TA_{\text{it-1}}) + \varepsilon_{it} \quad [1]$$

Where:

TAC_{it}	=	Total accruals of firm *i* for time period *t.*
TA_{it-1}	=	Total assets of firm *i* at the end of time period *t-1*.
$\Delta SALES_{it}$	=	Change in net sales of firm i between time period *t-1* and time period *t.*
ΔAR_{it}	=	Change in accounts receivables of firm *i* from the beginning of time period *t* until the end of time period *t.*
PPE_{it}	=	Gross book value of the property plant and equipment of firm *i* at the end of time period *t.*
$\alpha_1, \alpha_2, \alpha_3$	=	Estimated coefficients.
ε_{it}	=	The error term representing discretionary accruals of firm *i* for time period *t.*

2.4.6 Performance Adjusted Kothari Model

The alternative model used by this study to estimate discretionary accruals using total accruals approach is the Kothari et al. (2005) which is defined by *Equation [2]* as follows:

$$TAC_{it}/TA_{it-1} = \alpha_0 + \alpha_1(1/TA_{it-1}) + \alpha_2((\Delta SALES_{it}/TA_{it-1}) - (\Delta AR_{it}/TA_{it-1})) + \alpha_3(PPE_{it}/TA_{it-1}) + \alpha_4(ROA_{it-1}) + \varepsilon_{it} \quad [2]$$

Where:

TAC_{it}	=	Total accruals of firm *i* for time period *t.*
TA_{it-1}	=	Total assets of firm *i* at the end of time period *t-1*.
$\Delta SALES_{it}$	=	Change in net sales of firm i between time period *t-1* and time period *t.*
ΔAR_{it}	=	Change in accounts receivables of firm *i* from the beginning of time period *t* until the end of time period *t.*

PPE_{it}	=	Gross book value of the property plant and equipment of firm *i* at the end of time period *t*.
ROA_{it-1}	=	Rate of return on assets of firm *i* for time period *t-1*.
α_0	=	Constant.
$\alpha_1, \alpha_2, \alpha_3, \alpha_4$	=	Estimated coefficients.
ε_{it}	=	The error term representing discretionary accruals of firm *i* for time period *t.*

2.4.7 Measurement of the Independent Variables

Past literature suggests that the average number of multiple directorships held by board members to assess the extent of multiple directorships of such members is the measure that is extensively used by majority of the researchers (Falato et al., 2014; Ferris et al., 2003; Fich & Shivdasani, 2006; Field, Lowry, & Mkrtchyan, 2013; P. Jiraporn, Singh, et al., 2009). The computation of this measure is arrived at by summing the total of number of directorships held by all members of the board and the total is then divided by the number of the board members at the end of each financial year.

Hence, the main analysis for multiple directorships that is examined is based on the following:

Average number of directors with multiple directorships on the board of firm *i* in year *t.* (*AVE_MUL*$_{it}$*).*

2.4.8 Measurement of the Control Variables

Previous research indicates that that firm-specific and governance variables have influence on earnings management (Aerts, Cheng, & Tarca, 2013; Ali & Zhang, 2015; Badolato, Donelson, & Ege, 2015; Siregar & Utama, 2008). Hence, the following of firm-specific and governance variables i.e. education level of board members (*EDU_PER*$_{it}$), natural log of market capitalisation(*LogMVE*$_{it}$), shareholdings of the board of directors(*SHARE_BOD*$_{it}$), CEO duality*(CEO_DUAL*$_{it}$), existence of audit committee (*AUD_BOD*$_{it}$) industry specialists*(SPECIALIST*$_{it}$) calculated using the Krishnan (2003) model, firm's growth (*MKTCAP_BK*$_{it}$) quantum of leverage(*LEV*$_{it}$), profitability of the firm *(NET_INCOME*$_{it}$), and proportion of shares owned by institutional shareholders (*SHARE_INST*$_{it}$) are analysed in this study.

Education Levels of Board Members

Kanter (1977) infers that the level of education reflects knowledge that is treasured and appreciated by the general public. According to (G. Becker, 1964) and (Judge et al., 1995) the degree of education signifies investments that are generated in distinct know-how which is manifested as human capital. Prior research also points

towards increased in overall compensation to individual in terms of remuneration, promotional prospects and career contentment and education is seen as a pivotal instrument to recognise an individual success and achievement (Judge et al., 1995; Pfeffer & Ross, 1982). Consequently managers that are highly educated are perceived to be risk averse, prudent and are better stewards of an entity. It is anticipated that boards with a higher percentage of directors with advanced degrees (those with Masters' degree or higher) will not engage in aggressive earnings management activities. Hence, this study predicts a negative sign on the variable EDU_PER_{it}.

Firm Size

A positive relationship of firm size with the level of earnings management, and in particular earnings management has been confirmed in a number of past studies, especially when larger firms are compelled to conform to the expectations of the analysts and investors to account for a predictable level of earnings consistently and minimisation of political pressure and scrutiny (Dechow et al., 2010; Watts & Zimmerman, 1978). On the other hand, some researchers discovered that smaller firms have tendency to engage in earnings management compared to large firms because of greater prospect of avoiding scrutiny from the regulators (Bathke et al., 1989; K. Holland & Jackson, 2004; Sanchez-Ballesta & Garcia-Meca, 2007). In line with previous studies (M. J. Ferguson et al., 2004; Frankel, Johnson, & Nelson, 2002), this essay measures firm size as the natural logarithm of market value of equity at the year-end ($LogMVE_{it}$). Due to the conflicting findings, while it is expected that firm size is related to earnings management, the predicted sign on size of firm is however unclear.

Shareholdings of Board of Directors

Sanchez-Ballesta and Garcia-Meca (2007) found that a non-linear association exists between insider ownership and discretionary accruals. The results inferred that insider ownership appears to behave as a regulating mechanism (Berle & Means, 1932; Jensen & Meckling, 1976). On a similar token, a negative correlation is found between abnormal accruals and managerial shareholdings (Warfield et al., 1995). Conversely, a study by Nagar, Nanda et al. (2003) find that CEO's compensation and shares held is positively associated with firm's voluntary disclosure of financial accounting data. This was consistent with (Healy, 1985) study that suggest that CEOs engage

in earnings management to augment their bonus payout. If board members manage earnings to increase their overall remuneration, the relationship between the shareholdings of board members and earnings management is expected to be positive. Because of the contradictory findings above, no direction of the prediction is made.

CEO Duality

CEO duality occurs when a single individual assumes the position of board chairmanship and chief executive officer running a particular organisation (Rechner & Dalton, 1991). Empirical evidence to date has produce inconclusive results when it comes to CEO duality and firm performance. On the one hand, researchers argue that CEO duality may reduce the independence and vigilance of the board and as such may have an adverse effect on the firm's financial performance (Rechner & Dalton, 1991). On the other hand, advocates of CEO duality find that there is weak or no positive association of CEO duality with firm's performance (Cannella Jr & Lubatkin, 1993; L. Donaldson & Davis, 1991a; Mallette & Fowler, 1992). Additionally it is also found that segregating the duty of the chairman and CEO will not on its own, gives rise to better financial performance of a firm (Krause et al., 2014). Given the inconsistent findings above, no direction is predicted for this variable.

Industry Specialist Auditor

Industry specialist auditors have been found to be efficacious deterrent of earnings management techniques employed by management of client firms in comparison to non-industry specialists based on previous literature (K. Y. Chen et al., 2006; Ferdinand A. Gul et al., 2009; Jaggi et al., 2012; Krishnan, 2003). It is evident that industry specialised auditors have enhanced industry experience and expertise which allow them to perform at a greater and more effective level in contrast to non-industry specialist auditors given the extensive training and facilities that were provided (Dopuch & Simunic, 1980).

Past scholars have applied numerous proxies in measuring this auditor attribute. The proxies commonly used include market shares of specialist auditor, market leadership and dominance of the auditors involved (Craswell, Francis, & Taylor, 1995; Defond, Raghunandan, & Subramanyam, 2002; Yardley, Kauffman, Cairney, & Albrecht, 1992). For the purpose of this study, the auditor's industry

market share is calculated by estimating the auditor's portfolio shares. Based on the previous study by Krishnan (2003), if the market share of a specific auditor exceeds 15% in any category of the industry, that auditor is deemed to be an industry specialist auditor. It is expected that firms with industry audit specialists is negatively associated with the level of earnings management.

Firms with Independent Board Members

Fama and Jensen (1983) contend that the board of directors represents the most effective internal control mechanism when it comes to monitoring the conduct and behaviour of senior management within a firm. However, existing literature examining board's independence on firm's performance and earnings quality yielded varied findings.

Conyon and Peck (1998) state that if independent directors either hold an insignificant number of shares or has no shareholdings, their motivation to monitor management and hence protect shareholder interests, may somewhat decline. Similarly, it was found that independent directors who sit on multiple boards are more likely to be involved in firms that have poor financial reporting quality and engages in earnings management (Beasley, 1996; Davidson et al., 2005; Klein, 2002a)

However, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by Rosenstein and Wyatt (1990) who concluded that the level of positive share price reactions are associated when then percentage of independent board of directors are higher. This was confirmed by Jaggi and Gul (2009) that firms that have greater proportion of board independence are a better deterrent of aggressive earnings management practices. Given the differing views on board independence, no predicted direction is made.

Audit Committee

Audit committee remains one of the most important board committees formed by publicly listed firms for the purposes of check and balance and enormous studies have been revolved around this corporate governance variable. It has been recommended by Australian Securities Exchange (ASX) that the top 500 publicly listed firms by market capitalisation to have an audit committee (Australian Securities Exchange, 2014). However, previous empirical evidence on audit committee has found

to be inconclusive. On one hand, Baxter and Cotter (2009) found evidence that existence of audit committee reduces earnings management. However, the findings from Peasnell, Pope, and Young (2005) have not justified any relationship between the presence of an audit committee and earnings management. With the majority of the studies suggesting that audit committee improves corporate governance and in turn reduces earnings management, a negative direction is predicted.

Firm Leverage

In the domain of finance, the term "leverage" is a technique used to gauge and assess the level of financial risk and accessibility of financial resources within a firm and it signifies the debt structure of a particular firm. Firms with high level of leverage are exposed to risks of violating its debt agreements and as such may lead to higher level of cost of capital (Karim et al., 2006).

Prior studies on highly geared firms have revealed that such firms have aggressively engaged in earnings management to circumvent breaching of debt covenants (Dechow & Skinner, 2000; Elayan et al., 2008; Erickson et al., 2004; Watts & Zimmerman, 1978). Despite the divergent views relating to the impact of highly geared firms on earnings management behaviour, this study expects that it is correlated with earnings management in a positive manner with the majority of the prior empirical studies suggesting likewise.

Firm Growth

Previous empirical evidence suggest that that fast growing firms will engage in earnings management techniques to keep up with the pace of growth within its industry or sector (Abbott & Parker, 2000; Abbott, Parker, & Peters, 2004; Skinner & Sloan, 2002). This essay uses the ratio of market to book value of equity ($MKTCAPBK_{it}$) as a measure of firm's growth, an approach which is in harmony with prior literature (Chi, Lisic, & Pevzner, 2011; Jaggi et al., 2012). The direction of this essay predicts a positive association of $MKTCAP\_BK_{it}$ with the level of earnings management given the overwhelming support that firm's growth rate is evidently associated with earnings management characteristics (Dechow, Kothari, & Watts, 1998; Firth, Fung, & Rui, 2007; McNichols, 2000).

Firm Performance

In one of the earlier studies from Akerlof (1970), it was observed that commercially successfully firms have an added incentive to differentiate themselves from less successful firms to obtain the best financial terms to reduce their cost of capital. This essay measures firm performance by employing an accounting ratio value of net income before extraordinary items scaled by lagged total assets.

On one hand, researchers postulate that profitable firms are more inclined to engage in earnings management practices as they are expected to meet or surpass earnings objectives in comparison to less profitable firms or firms that are incurring losses (Chan et al., 2015; Degeorge et al., 1999; Roychowdhury, 2006). However, some scholars suggests less profitable firm tend to manipulate their financial performance on the pretext of securing additional external funding to improve their ailing cash situation (Ashari et al., 1994; Athanasakou et al., 2007; Hermann & Inoue, 1996; White, 1970)

Although this study predicts that the firm performance has an association with earnings management, the expected sign or direction of the linkage is still uncertain.

Institutional Shareholdings

Past scholars have determined that institutional shareholdings have an impacton the extent of earnings management and earnings quality (Agrawal & Knoeber, 1996; R. Chung et al., 2002; Koh, 2003). R. Chung et al. (2002) find that large institutional shareholdings were successful in limiting earnings management activities. In a similar vein, Koh (2007) posits that institutional ownerships with a long-term perspective restrict earnings management behaviours among firms that engage in managing their earnings to achieve or surpass earnings targets. On the other extreme, firms with substantial institutional ownerships maybe prompted to reduce their shareholdings drastically in view of poor earnings or earnings that have not met its expectations and as such apply additional pressure on the part of the management to manage earnings to steer clear of reporting a less than favourable results (Black & Coffee, 1994; Bushee, 1998; Porter, 1992). The above mixed results seemed to suggest that it is inconclusive to determine whether the quantum of institutional shareholders will have an impact on the earnings management and ultimately financial reporting quality.

Industry Effects

For the objective of this essay, as the sample firms have the tendency to be focussing on a few industries, industry effects are controlled. Barth, Cram, and Nelson (2001) suggest that this variable can be used to control the diverse earnings management habits between industries and/or sectors. The variable $INDUSTRY_{it}$ is scored one (1) if firm *i* in the time period *t* is listed within the GICS (Global Industry Classification Standard) taxonomy otherwise the variable $INDUSTRY_{it}$ is scored zero (0) as part of the measurement in this study. Consistent with prior studies on earnings management, this essay will utilize nine (9) broad industry categories which include Energy, Materials, Industrials, Consumer Discretionary, Consumer Staples, Health Care, Information Technology, Telecommunications Services and Utilities.

Year Effects

As a means to control for the fixed year effects, year dummies ($YEAR_{it}$) are also being introduced in this study. As inferred by a study from (Achleitner et al., 2014), the scale of earnings management fluctuate annually. $YEAR_{it}$ characterises an indicator variable that regulates temporal differences of reporting periods for firm-year observations with firm *i* scored one (1) if financial data relates to time period *t*; otherwise scored zero (0). For the purpose of this study, a five year observation window comprising of 2008, 2009, 2010, 2011, and 2012 calendar years are examined.

2.4.9 Regression Model

This study uses multiple regression analyses to test and analyse the relationship between the selected independent variable have on earnings management. The hypothesis of this essay is tested officially through this multivariate technique. The main model used by this this essay to estimate discretionary accruals using total accruals for main test is the cross-sectional version of Dechow et al. (1995) modified Jones model.

In order to separate the abnormal portion of the discretionary accruals, the following regression for every industry and year is run using the defined *Equation [3]* as follows:

$$MJ\_DAC_{it} = \beta_0 + \beta_1 AVE\_MUL_{it} + \beta_2 INT\_REC_{it} + \beta_3 SUB\_DIR_{it} + \beta_4 EDU\_PER_{it} + \beta_5 LogMVE_{it} + \beta_6 SHARE\_BOD_{it} + \beta_7 CEO\_DUAL_{it} + \beta_8 SPECIALIST_{it} + \beta_9 AUD\_BOD_{it} + \beta_{10} LEV_{it} + \beta_{11} MKTCAP\_BK_{it} + \beta_{12} NET\_INCOME_{it} + \beta_{13} SHARE\_INST_{it} + \beta_{14} \sum INDUSTRY_{it} + \beta_{15} \sum YEAR_{it} + \varepsilon_{it} \quad [3]$$

Where:

MJ_DAC_{it}	=	Absolute value of discretional accruals of firm *i* for time period *t* calculated using the cross-sectional version of the modified Jones model established by Dechow, Sloan and Sweeney (1995).
AVE_MUL_{it}	=	Average number of directors with multiple directorships on the board of firm *i* in year *t.*
INT_REC_{it}	=	An indicator variable where firm *i* is scored one (1) if the director has reciprocal interlock; otherwise scored zero.
SUB_DIR_{it}	=	An indicator variable where firm *i* in year t is scored one (1) if the director sits on more than one sub-committee; otherwise scored zero (0).
EDU_PER_{it}	=	An indicator variable where firm *i* is scored one (1) where firm *i* has director(s) with "masters' degree or higher"; otherwise scored zero.
$LogMVE_{it}$	=	Natural logarithm of market value of equity for firm *i* in year *t*.
$SHARE\_BOD_{it}$	=	Proportion of share owned by the board of directors of firm *i* in year *t*.
CEO_DUAL_{it}	=	An indicator variable where firm *i* is scored one (1) if the same individual occupies the roles of chairperson of the board and chief executive officer (CEO) at the end of time period *t*; otherwise scored zero (0).
$SPECIALIST_{it}$	=	Auditee *i* in time period *t* is scored one (1) if the incumbent auditor *j* in time period *t* is an industry specialist in industry *k*; otherwise auditee *i* in time period *t* is scored zero (0).
AUD_BOD_{it}	=	An indicator variable where firm *i* is scored one (1) if firm has audit committee; otherwise scored zero.
LEV_{it}	=	Ratio of total debt of firm *i* at the end of time period t to the total assets of firm *i* at the end of time period *t.*
$MKTCAP\_BK_{it}$	=	Ratio of total market capitalization of firm *i* at the end of time period *t* to the total book value of assets of firm *i* at the end of time period *t*.
NET_INCOMEit	=	Income before extraordinary items (IBEI) scaled by lagged total assets of firm *i* in year *t.*
$SHARE\_INST_{it}$	=	Proportion of share owned by institutional shareholders of firm i at time period t.
$\sum INDUSTRY_{it}$	=	$ENERGY_{it}$ +$MATERIALS_{it}$ + $INDUSTRIALS_{it}$ + $CONSUMER\ DISCRETIONARY_{it}$ + $CONSUMER\ STAPLES_{it}$ + $HEALTH\ CARE_{it}$ + $INFORMATION\ TECHNOLOGY_{it}$ + $TELECOMMUNICATION\ SERVICES_{it}$ + $UTILITIES_{it}$
$ENERGY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the energy industry and zero (0) if otherwise in 2008.
$MATERIALS_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the materials industry and zero (0) if otherwise in 2008.
$INDUSTRIALS_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the industrials industry and zero (0) if otherwise in 2008.
$CONSUMER\ DISCRETIONARY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the consumer discretionary industry and zero (0) if otherwise in 2008.
$CONSUMER\ STAPLES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the consumer staples industry and zero (0) if otherwise in 2008.
$HEALTH\ CARE_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the health care industry and zero (0) if otherwise in 2008.
$INFORMATION\ TECHNOLOGY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the energy industry and zero (0) if otherwise in 2008.
$TELECOMMUNICATION\ SERVICES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the telecommunication services industry and zero (0) if otherwise in 2008.
$UTILITIES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the utilities industry and zero (0) if otherwise in 2008.
$YEAR_{it}$	=	Series of indicator variables corresponding to the financial year the data firm *i* is obtained.
β	=	Coefficients on independent and control variables 0 through 13.
ε_{it}	=	The error term.

The variable of interest is AVE_MUL_{it}. The coefficient on AVE_MUL_{it} is predicted to be significant in the above EQ. The variable of interest is the average number of directors with multiple directorships on the board of a specific firm, a popular measurement that is used in many of the studies revolving busy boards and board interlocks.

The first set of regressions to test the hypotheses H_1 of this study are performed in Section 2.5 by regressing independent and control variables in *Equation [3]* against the earnings management proxy measure MJ_DAC_{it}, which is the cross-sectional version of Dechow et al. (1995) modified Jones model to estimate discretionary accruals.

2.5 ANALYSIS

2.5.1 Cleaning of the Data

Prior to data analysis, data screening checks are undertaken for each of the variables used in the study. Such checks include accuracy of the data entry, missing values and normality assessments. In regards to the accuracy of data entry and missing values, a data authentication check is undertaken on a sample basis, by revisiting data already entered. In total approximately fifteen (15) percent of the data set is examined in this manner. There were no errors noted.

Further, each continuous variable in this study is tested for normality by examining the kurtosis, variable's skewness and Kolmogorov-Smirnov p-values. The inclusion of some variables that did not give rise to normal distributions is justified by the previous studies (Barton & Simko, 2002; Gopalan & Jayaraman, 2011; F. A. Gul, Jaggi, & Krishnan, 2007). To provide a finer linear fit with the dependent variable, control variables such firm size are logarithmically transformed in agreement with prior literature on earnings management (D. A. Cohen & Zarowin, 2010; Eldenberg, Gunny, Hee, & Soderstrom, 2011; Osma, 2008).

2.5.2 Sample Selection Process and Industry Breakdown

This section provides a detailed description of how the final sample is chosen for this study. The discussion concentrates on two key aspects; sample selection and industry breakdown. The final usable pooled sample of firm-year observations from 2008 to 2012 is 1815 (363 firms multipled by five years).

The initial sample comprises 1101 publicly listed firms on the Australian Securities Exchange (ASX*)* as at January 1, 2008 from the SIRCA database. Consistent with past empirical studies (Ball et al., 2000; M. J. Ferguson et al., 2004) financial institutions (161), trusts and investments (42) are excluded as the financial statements of such firms are subject to different accounting regulations and earnings management models may not be not applicable to them. In addition, firms that are not continuously listed on the ASX (413) will also be excluded to avoid unwarranted influences resulting from unforeseen share price movements due to intermittent listing on ASX for the observation period under study as well firms which have their IPO in the preceding or same year (19). According to Craswell (1999), these firms need to be removed because they have not met the data requirements. In line with prior literature, as financial statements of ASX listed firms having headquarters in foreign nations (51) are not usually prepared in accordance with the normal disclosure requirements for other firms listed on the ASX, they are excluded from the list (Clifford & Evans, 1997). Last, exclusions from this study will include firms having missing data (52) for the observation period (Klein, 2002a, 2002b).

Table 2.1
Sample Selection and Industry Breakdown (Essay1)

Panel A: Sample Selection	
Initial sample size of SIRCA firms listed on ASX as at January 1, 2008	1101
Exclusions:	
Firms with overseas headquarters	(51)
Firms in the financial sector	(161)
Investment trusts	(42)
Firms with IPO in the preceding / same year	(19)
Total number excluded:	(273)
Excluded due to non-continuous data	(413)
Excluded due to missing data	(52)
Final usable sample (2008)	363
Final usable sample (2008 to 2012) =365*5	**1815**

Panel B: Sample firm breakdown by industry

ASX Industry	No of Firms	% of Sample
Consumer Discretionary	240	13.2%
Consumer Staples	75	4.1%
Energy	255	14.0%
Health Care	170	9.4%
Industrials	290	16.0%
Information Technology	145	8.0%
Materials	590	32.5%
Telecommunication Services	25	1.4%
Utilities	25	1.4%
Total	1815	100%

2.5.3 Descriptive Statistics

Table 2.2 below provides the descriptive statistics of all dependent, independent and control variables that are used in this study. The absolute value of discretionary earnings management calculated using the Dechow et al. (1995) modified Jones model and Kothari et al. (2005) performance adjusted model has a mean (median) of -0.109(0) and -0.084(0) respectively. These findings represent an average earnings management to be in vicinity of 10% of total assets can be construed as significant (Davidson et al., 2005; S. C. Hall, Agrawal, & Agrawal, 2013)The main independent variable in Table 2 (AVE_MUL_{it}) has a mean (median) of 2.267 (2.125) with a standard deviation of 1.010. This suggests that the board members in the sample have, on average, at least 2 directorships in their portfolio. In addition, it also infers that the average board memberships in the sample ranges from 1.5 (25 percentile) to 2.8 (75 percentile). Table 2.2 reveals that there are 47.4% firms which have at least one director sitting on more than one sub-committee within the firm (SUB_DIR_{it}). The majority of the firms (79.3%) have an audit committee during the observation period. For firm size ($LogMVE_{it}$) Table 2.2 reports the mean and median as 7.937 (7.833). In the same table, the firm size in the sample varies from 7.210 (25 percentile) to 8.598 (75 percentile). Additionally, the proportion of the shares owned by the board of directors ($SHARE\_BOD_{it}$) has a mean (median) of 0.12 (0.033) and a standard deviation of 0.181 with the shareholdings vary between 0.2% (25 percentile) to 15.8% (75 percentile). As evident in other similar Australian corporate governance studies (Kiel & Nicholson, 2003; D. Sharma, 2004) on CEO duality (CEO_DUAL_{it}), only 9.4% of the sample firms have a CEO who concurrently assumes the role of the chairman of the board suggesting that such arrangement is not popular or common in Australia. Out of the total sample firms under study, about 35% are audited by a specialist auditor. Further, Table 2.2 illustrates that leverage (LEV_{it}) has a mean (median) of 0.514 (0.338) of which the debt level hovers between 12.9% (25 percentile) to 52.5% (75 percentile). Meanwhile, the firm growth proxy ($MKTCAP\_BK_{it}$) has a mean (median) of 1.891 (0.871) and a standard deviation of 5.263. For net income before extraordinary items (NET_INCOME_{it}), the mean (median) is -0.296 (0.018) with a standard deviation of 2.052, suggesting that on average the firms in the sample are barely breaking even. Finally, Table 2.2 describes the institutional shareholdings to have a mean (median) of 14.957 (8.51) with a standard deviation of 17.074. The institutional shareholdings vary between 1.9% (25 percentile) to 21.79% (75 percentile).

Table 0.2
Descriptive Statistics

Variable	Mean	Standard Deviation	25 percentile	Median	75 percentile
MJ_DAC_{it}	-0.109	1.342	-0.278	0.000	0.146
KO_DACit	-0.084	1.591	-0.354	0.000	0.249
AVE_MUL_{it}	2.267	1.010	1.500	2.125	2.800
MUL_BOD1_{it}	0.882	-	1.000	1.000	1.000
MUL_BOD2_{it}	0.509	-	0.000	1.000	1.000
MUL_BOD3_{it}	0.186	-	0.000	0.000	0.000
MUL_BOD4_{it}	0.050	-	0.000	0.000	0.000
INT_REC_{it}	0.188	-	0.000	0.000	0.000
SUB_DIR_{it}	0.474	-	0.000	0.000	1.000
EDU_PER_{it}	0.626	-	0.000	1.000	1.000
$LogMVE_{it}$	7.937	1.090	7.212	7.833	8.598
$SHARE\_BOD_{it}$	0.120	0.181	0.002	0.033	0.158
CEO_DUAL_{it}	0.094	-	0.000	0.000	0.000
$SPECIALIST_{it}$	0.350	-	0.000	0.000	1.000
AUD_BOD_{it}	0.793	-	0.000	0.000	1.000
LEV_{it}	0.514	3.480	0.129	0.338	0.522
$MKTCAP\_BK_{it}$	1.891	5.263	0.485	0.871	1.778
NET_INCOME_{it}	-0.296	2.052	-0.157	0.018	0.090
$SHARE\_INST_{it}$	14.957	17.074	1.900	8.510	21.790

Please refer to EQ [3] for the definitions of variable.

2.5.4 Correlation Analysis

Table 2.3 reports the Pearson correlation coefficients among the variables. The table includes the earnings management proxies, absolute value of the discretionary accruals calculated using both the modified Jones model (MJ_DAC_{it}) and the performance adjusted model (KO_DAC_{it}). A comprehensive analysis of correlation coefficients in Table 2.3 highlights a number of observations. First, the main dependent variable (MJ_DAC_{it}) is significantly correlated with some of the control variables, namely SUB_DIR_{it}, $LogMVE_{it}$, AUD_BOD_{it}, $MKTCAP\_BK_{it}$, NET_INCOME_{it} and $SHARE\_INST_{it}$. It is however not significantly correlated with the main independent variable (AVE_MUL_{it}). Second, the main independent variable (AVE_MUL_{it}) is significantly correlated with some of the control variables, namely INT_REC_{it}, $SUB\_DIR_{it,}$ and EDU_PER_{it}. Third, the main independent variable (AVE_MUL_{it}) is also significantly associated with firm size ($LogMVE_{it}$). This is anticipated as larger firms tend to have larger boards which in turn would have directors who have diverse skills and experience accumulated from being board members in many different firms.

Finally, a review of Table 2.3 also suggests that firms with high percentage of institutional shareholdings is *(SHARE_INST$_{it}$)* significantly correlated with larger firms (*LogMVE$_{it}$)*. However, in all instances none of the correlations exceed multi-collinearity limits of 0.80 (Hair, Anderson, Tatham, & Black, 1995). There are no unusual correlations among the variables in the regressions that justify any concern.

Table 2.3
Pearson Correlation

Variable	MJ_DAC_{it}	KO_DAC_{it}	AVE_MUL_{it}	INT_REC_{it}	SUB_DIR_{it}	EDU_PER_{it}	$LogMVE_{it}$	$SHARE\_BOD_{it}$	CEO_DUAL_{it}	$SPECIALIST_{it}$	AUD_BOD_{it}	LEV_{it}	$MKTCAP\_BK_{it}$	NET_INCOME_{it}	$SHARE\_INST_{it}$
MJ_DAC_{it}	1														
KO_DAC_{it}	-	1													
AVE_MUL_{it}	-0.013	-0.034	1												
INT_REC_{it}	0.032	0.009	0.315***	1											
SUB_DIR_{it}	0.050**	-0.007	0.118***	0.005	1										
EDU_PER_{it}	0.019	0.020	0.128***	0.055**	0.079***	1									
$LogMVE_{it}$	0.107***	0.025	0.307***	0.130***	0.239***	0.187***	1								
$SHARE\_BOD_{it}$	0.037	0.014	-0.151***	0.058**	-0.101***	-0.086***	-0.202***	1							
CEO_DUAL_{it}	0.022	0.025	-0.082***	-0.024	-0.014	-0.065***	-0.171***	0.178***	1						
$SPECIALIST_{it}$	0.016	-0.010	0.226***	0.045*	0.120***	0.192***	0.398***	-0.169***	-0.030	1					
AUD_BOD_{it}	0.068***	-0.013	0.070***	0.013	0.467***	0.156***	0.346***	-0.049**	-0.064***	0.227***	1				
LEV_{it}	-0.026	-0.045**	-0.015	-0.018	-0.019	0.014	-0.053**	-0.016	0.006	-0.025	0.0379	1			
$MKTCAP\_BK_{it}$	-0.154***	-0.103***	-0.032	-0.036	-0.062***	0.030	-0.049**	-0.053**	0.023	-0.081***	-0.033	0.543***	1		
NET_INCOME_{it}	0.134***	0.066***	0.013	0.018	0.093***	-0.007	0.118***	-0.006	0.0073	0.083***	0.071***	-0.282***	-0.238***	1	
$SHARE\_INST_{it}$	0.061***	0.030	0.190***	0.020	0.241***	0.141***	0.489***	-0.236***	-0.150****	0.221***	0.242***	-0.019	-0.086***	0.0851***	1

Tests are two tailed. *, **, and *** denote two-tailed significance levels at 10%, 5% and 1% levels, respectively. Please refer to Appendix A for details of variable definitions

2.5.5 Multivariate Regression Results

Results of the multiple regression analysis testing the influence of the main independent variable (namely, the average number multiple directorships of a firm's board) on the absolute value of discretionary accruals across the observation period from 2008 to 2012 are displayed and discussed in the following sections.

2.5.5.1 Impact of Multiple Directorships on Earnings Managements using Modified Jones Model

Table 2.4 summarises the results of the multiple regressions wherein the main independent variable (AVE_MUL_{it}) is regressed against the absolute value of discretionary accruals, calculated using the Modified Jones model (MJ_DAC_{it}). Column 1 displays the results of OLS regression of the independent and control variables are regressed against the absolute value of discretionary accruals. The independent variable (AVE_MUL_{it}) is negatively associated with the level of abnormal discretionary expenses. This suggests that firms with higher average number of multiple directorships inhibit discretionary earnings management and thus reinforces the reputation hypothesis in which there is a knowledge spill-over as result of sharing skills, experiences and good practices across different boards. Further, firm size ($LogMVE_{it}$) is significantly correlated with the level of discretionary accruals, suggesting that larger firms manage their earnings to achieve certain financial objectives. On the other hand, firms which are audited by industry specialist ($SPECIALIST_{it}$) restrict earnings management given the negative and statistically significant results indicated in Column 1. Further, it was found that high growth firms ($MKTCAP\_BK_{it}$) tend to manage their earnings compared to firms which are relatively more stable. Consistent with earnings management literature, the leverage (LEV_{it}) quantum is significantly associated with the level of abnormal discretionary expenses. Finally, firms that report profitable earnings (NET_INCOME_{it}) tend to involve in managing their earnings as evident from the findings in this study.

2.5.6 Sensitivity Analysis

To corroborate the robustness of the findings from this essay, sensitivity tests are carried out. For the objectives of the main analysis, the essay hinges on the cross-sectional version of Dechow et al. (1995) modified Jones model to estimate discretionary accruals being analysed. The most common measurement used as a

measure of multiple directorship is the average number of directors with multiple directorships on the board (Ferris, Jagannathan et al. 2003, Fich and Shivdasani 2006, Jiraporn, Singh et al. 2009, Field, Lowry et al. 2013, Falato, Kadyrzhanova et al. 2014).

The main analysis in section 2.5.5.1 is then re-performed using the performance adjusted model introduced by Kothari et al. (2005) as part of the robustness test in section 2.5.6.1. Finally, other measurements of multiple directorship that are being employed as part of the sensitivity analysis of this essay is detailed under section 2.5.7.

2.5.6.1 Alternative Measure of Earnings Management calculated using Kothari (2005) Model

To further corroborate the main findings additional analyses are performed using a different dependent variable. In addition to the Modified Jones model, the performance adjusted Kothari et al. (2005) model is utilised. In order to separate the abnormal portion of the discretionary accruals, the following regression for every industry and year is run using the defined *Equation [4]* as follows:

$$KO\_DAC_{it} = \beta_0 + \beta_1 AVE\_MUL_{it} + \beta_2 INT\_REC_{it} + \beta_3 SUB\_DIR_{it} + \beta_4 EDU\_PER_{it} + \beta_5 LogMVE_{it} + \beta_6 SHARE\_BOD_{it} + \beta_7 CEO\_DUAL_{it} + \beta_8 SPECIALIST_{it} + \beta_9 AUD\_BOD_{it} + \beta_{10} LEV_{it} + \beta_{11} MKTCAP\_BK_{it} + \beta_{12} NET\_INCOME_{it} + \beta_{13} SHARE\_INST_{it} + \beta_{14} \sum INDUSTRY_{it} + \beta_{15} \sum YEAR_{it} + \varepsilon_{it} \quad [4]$$

Table 2.4 column 2 details the results of the multiple regressions wherein the main independent variable (AVE_MUL_{it}) is regressed together against the absolute value of performance adjusted model established by Kothari et al. (2005).

To further corroborate the main findings, additional analyses are performed for the dependent variable. In addition to Modified Jones model, performance adjusted model established by Kothari et al. (2005) is used to test the robustness of the results. Column 2 displays the results of OLS regression of all independent and control variables are regressed against the absolute value of discretionary accruals (KO_DAC_{it}) using the performance adjusted Kothari et al. (2005) model. The main independent variable (AVE_MUL_{it}) continues to be significantly negatively associated with the level of abnormal discretionary expenses. This finding is consistent with the main results displayed in Table 2.4 and confirms the robustness of the earlier test

undertaken. Similar results were obtained for firms that report profitable earnings, validating the robustness of the earlier test with Modified Jones model. The adjusted R^2 is consistent with earlier Australian studies on earnings management (Coulton, Taylor, & Taylor, 2005).

Table 2.4
Multivariate Regression Results – Impact of Multiple Directorships on Earnings Management -Using Dechow, Sloan and Sweeney (1995) Model & Kothari, Leone & Wesley (2005) Model

VARIABLES	(1) MJ_DAC_{it}	(2) KO_DAC_{it}
AVE_MUL_{it}	-0.0623**	-0.0891*
	(-2.277)	(-1.932)
INT_REC_{it}	0.0729	0.0369
	(0.767)	(0.434)
SUB_DIR_{it}	0.0223	-0.00425
	(0.317)	(-0.0528)
EDU_PER_{it}	0.0428	0.0299
	(0.583)	(0.383)
$LogMVE_{it}$	0.157***	0.0608
	(3.900)	(1.275)
$SHARE\_BOD_{it}$	0.396	0.144
	(1.515)	(0.533)
CEO_DUAL_{it}	0.147	0.167
	(1.079)	(1.194)
$SPECIALIST_{it}$	-0.127**	-0.121
	(-2.139)	(-1.517)
AUD_BOD_{it}	0.0810	-0.0461
	(0.687)	(-0.355)
LEV_{it}	0.0438***	0.0155
	(2.685)	(0.717)
$MKTCAP\_BK_{it}$	0.0484**	0.0350*
	(2.398)	(1.743)
NET_INCOME_{it}	0.0742***	0.0418***
	(2.703)	(2.838)
$SHARE\_INST_{it}$	-0.0000	0.00230
	(-0.0542)	(1.093)
Constant	-1.135***	-0.291
	(-3.945)	(-0.889)
Industry Fixed Effects	Included	Included
Year Fixed Effect	Included	Included
Observations	1,815	1,815
Adjusted R-squared	0.051	0.017
F test	0.000	0.01

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix A for variable definitions.

2.5.7 Additional Measures of Multiple Directorships

The following section will discuss the sensitivity tests of the main results in the previous section.

For the purposes of the sensitivity tests, four different types of multiple directorship measurements are included, namely MUL_BOD1_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than one board; otherwise scored zero (0)], MUL_BOD2_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than two boards; otherwise scored zero (0)], MUL_BOD3_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the

director sits on more than three boards; otherwise scored zero (0)] and MUL_BOD4_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than four boards; otherwise scored zero (0)].

2.5.8 Additional Analyses using Different Measures of Multiple Directorships

To further corroborate the main results, alternative measures of multiple directorships are used. Four different types of multiple directorship measurements are included in the sensitivity tests as depicted in Table 2.5. Column 1 displays the results of OLS regression of the alternative independent and control variables are regressed against the absolute value of discretionary accruals using the Modified Jones Model (MJ_DAC_{it}). The alternative independent variable (MUL_BOD1_{it}) is not significantly associated with the level of abnormal discretionary expenses. This suggests that firms with low level of average number of multiple directorships do not curtail or inhibit discretionary earnings management and as such the knowledge spill-over effect is not evident.

In Column 2, the alternative independent variable (MUL_BOD2_{it}) is significantly negatively associated with the level of earnings management. This suggests that firms with average number of multiple directorships between two and three curtail discretionary earnings management and reinforces the reputation hypothesis in which directors dutifully impart their skills and knowledge to the benefit of the firm (Fama & Jensen, 1983; Sarkar & Sarkar, 2009). The remaining variables that were significantly related to the main independent variable in Table 4 remain significant, confirming the robustness of the results. In Column 3 and 4 where the directors are sitting on more than three and four boards respectively, the results were similar to that of Column 1 where there is no significant relationship between the multiple directorships and earnings management. These results indicate that the "Busyness" hypothesis prevails where firms that have average directorship in excess of three on their boards have too much on their plate and as a result are not able to act as effective monitors (Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009).

Table 2.5
Multivariate Regression Results – Impact of Multiple Directorships on Earnings Management - Using Dechow, Sloan and Sweeney (1995) Model – Additional Analysis

VARIABLES	(1) MJ_DAC_{it}	(2) MJ_DAC_{it}	(3) MJ_DAC_{it}	(4) MJ_DAC_{it}
MUL_BOD1_{it}	-0.177			
	(-1.428)			
MUL_BOD2_{it}		-0.143**		
		(-2.245)		
MUL_BOD3_{it}			-0.0839	
			(-1.304)	
MUL_BOD4_{it}				-0.0722
				(-0.597)
INT_REC_{it}	0.0484	0.0696	0.0438	0.0350
	(0.537)	(0.741)	(0.453)	(0.367)
SUB_DIR_{it}	0.0195	0.0246	0.0145	0.0130
	(0.278)	(0.350)	(0.207)	(0.185)
EDU_PER_{it}	0.0467	0.0468	0.0398	0.0386
	(0.627)	(0.639)	(0.541)	(0.522)
$LogMVE_{it}$	0.146***	0.157***	0.153***	0.149***
	(3.776)	(3.958)	(3.783)	(3.773)
$SHARE\_BOD_{it}$	0.411	0.400	0.421	0.423
	(1.590)	(1.544)	(1.616)	(1.615)
CEO_DUAL_{it}	0.142	0.140	0.153	0.151
	(1.031)	(1.035)	(1.122)	(1.108)
$SPECIALIST_{it}$	-0.134**	-0.130**	-0.137**	-0.140**
	(-2.231)	(-2.144)	(-2.290)	(-2.340)
AUD_BOD_{it}	0.0931	0.0836	0.0871	0.0880
	(0.793)	(0.712)	(0.739)	(0.748)
LEV_{it}	0.0440***	0.0431***	0.0440***	0.0438***
	(2.690)	(2.661)	(2.691)	(2.680)
$MKTCAP\_BK_{it}$	0.0482**	0.0478**	0.0485**	0.0483**
	(2.388)	(2.382)	(2.402)	(2.394)
NET_INCOME_{it}	0.0748***	0.0746***	0.0750***	0.0748***
	(2.728)	(2.723)	(2.734)	(2.727)
Constant	-1.037***	(0.0601)	-1.218***	-1.187***
	(-3.299)	(-4.132)	(-4.053)	(-4.046)
Industry Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Observations	1,815	1,815	1,815	(-0.179)
Adjusted R-squared	0.052	0.052	0.051	0.050
F test	0	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses. ***Significant at 10% level, **Significant at 5% level, *Significant at 1% level. See Appendix A for variable definitions.

As an additional robustness test, similar tests were undertaken using an alternative dependent variable (KO_DAC_{it}), the performance adjusted model established by Kothari et al. (2005). The results as illustrated in Table 2.6 were similar to that of the earlier additional test using the Modified Jones (1995) model in which the alternative independent variable (MUL_BOD2_{it}) is significantly negatively associated with the level of earnings management, indicating that firms with average number of multiple directorships between two and three inhibit discretionary earnings management.

Table 2.6
Multivariate Regression Results – Impact of Multiple Directorships on Earnings Management – Using Kothari, Leone & Wesley (2005) Model – Additional Analysis

VARIABLES	(1) KO_DAC_{it}	(2) KO_DAC_{it}	(3) KO_DAC_{it}	(4) KO_DAC_{it}
MUL_BOD1_{it}	-0.0858			
	(-0.592)			
MUL_BOD2_{it}		-0.159*		
		(-1.735)		
MUL_BOD3_{it}			-0.184	
			(-1.341)	
MUL_BOD4_{it}				-0.223
				(-1.314)
INT_REC_{it}	-0.0172	0.0190	0.00709	-0.00641
	(-0.220)	(0.221)	(0.0853)	(-0.0812)
SUB_DIR_{it}	-0.0155	-0.00496	-0.0135	-0.0158
	(-0.190)	(-0.0617)	(-0.167)	(-0.192)
EDU_PER_{it}	0.0289	0.0334	0.0256	0.0221
	(0.362)	(0.426)	(0.329)	(0.282)
$LogMVE_{it}$	0.0462	0.0579	0.0605	0.0518
	(1.037)	(1.217)	(1.204)	(1.152)
$SHARE\_BOD_{it}$	0.184	0.160	0.172	0.172
	(0.675)	(0.588)	(0.638)	(0.617)
CEO_DUAL_{it}	0.169	0.160	0.179	0.174
	(1.188)	(1.156)	(1.262)	(1.236)
$SPECIALIST_{it}$	-0.140*	-0.129	-0.131	-0.135*
	(-1.732)	(-1.595)	(-1.622)	(-1.680)
AUD_BOD_{it}	-0.0307	-0.0400	-0.0404	-0.0409
	(-0.240)	(-0.309)	(-0.312)	(-0.320)
LEV_{it}	0.0156	0.0147	0.0159	0.0156
	(0.717)	(0.675)	(0.737)	(0.717)
$MKTCAP\_BK_{it}$	0.0348*	0.0344*	0.0354*	0.0351*
	(1.725)	(1.715)	(1.760)	(1.736)
NET_INCOME_{it}	0.0429***	0.0425***	0.0429***	0.0423***
	(2.941)	(2.853)	(2.934)	(2.897)
$SHARE\_INST_{it}$	0.00217	0.00244	0.00207	0.00200
	(1.042)	(1.146)	(0.995)	(0.956)
Constant	-0.283	-0.384	-0.440	-0.381
	(-0.807)	(-1.126)	(-1.198)	(-1.137)
Industry Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Observations	1,815	1,815	1,815	1,815
Adjusted R-squared	0.015	0.016	0.016	0.015
F test	0.01	0.01	0.01	0.01

Above results are based on OLS with Huber-White robust t-statistics in parentheses. ***Significant at 10% level, **Significant at 5% level, *Significant at 1% level. See Appendix A for variable definitions.

Further partitioning tests were undertaken segregating firms adopting income increasing and income decreasing abnormal accruals. The findings in Table 2.7 under column 1 provide evidence that firms that engaged in income increasing abnormal accruals have a negative significant relationship with the average number of multiple directorships. In column 1, similar results were obtained for industry audit specialists, confirming the earlier main results in which industry audit specialists act as deterrent to earnings management for firms adopting income increasing abnormal accruals. Additionally, in column 1, it is found that firms with higher proportion of institutional shareholdings restrain income-increasing earnings management activities. Under column 2, the findings suggest that larger firms engage in income-decreasing earnings

management actions. Likewise, profitable firms behave in a similar manner in accordance to the results obtained.

Table 2.7
Multivariate Regression Results – Analysis on Income Increasing and Income Decreasing Using Modified Jones Model

VARIABLES	(1) MJ_DAC_{it} *(Increase)*	(2) MJ_DAC_{it} *(Decrease)*
AVE_MUL_{it}	-0.0673**	-0.0414
	(-2.562)	(-1.005)
INT_REC_{it}	0.0934	-0.0330
	(0.883)	(-0.226)
SUB_DIR_{it}	-0.0199	0.0406
	(-0.195)	(0.479)
EDU_PER_{it}	-0.0229	0.0439
	(-0.254)	(0.484)
$LogMVE_{it}$	0.0128	0.240***
	(0.431)	(3.056)
$SHARE\_BOD_{it}$	0.261	0.244
	(0.626)	(1.197)
CEO_DUAL_{it}	0.106	0.0596
	(0.520)	(0.388)
$SPECIALIST_{it}$	-0.132**	-0.00213
	(-2.174)	(-0.0259)
AUD_BOD_{it}	0.104	0.169
	(0.684)	(1.024)
LEV_{it}	0.00154	0.0513
	(0.184)	(0.333)
$MKTCAP\_BK_{it}$	0.000788	-0.0641
	(0.0740)	(1.540)
NET_INCOME_{it}	0.0338	0.0780**
	(1.141)	(2.054)
$SHARE\_INST_{it}$	-0.00419**	0.00251
	(-2.580)	(1.115)
Constant	0.875***	-3.088***
	(4.218)	(-5.400)
Industry Fixed Effects	Included	Included
Year Fixed Effects	Included	Included
Observations	917	898
Adjusted R-squared	0.046	0.131
F test	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses. ***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.See Appendix A for variable definitions.

2.5.9 Key Findings from Sensitivity Tests

The key findings from the sensitivity tests in Tables 2.5 to 2.7 can be summarised as follows:

First, consistent with the main results, firms with average multiple directorships between two and three memberships are more effective in combating earnings management. Second, larger firms are found to be engaging in earnings management compared to smaller firms, consistent with the literature on earnings management. Third, from the results, it is evident that industry specialised auditors are more effective in constraining earnings management across all the different measures of multiple directorships. These results lend support to the main tests that were undertaken. Fourth, firms with greater debt levels tend to actively involves in earnings management with the significant positive association across the different measures of multiple

directorships under the Modified Jones model. Fifth, the empirical results indicate that high growth firms are more prone to earnings management, consistent with the bulk of the literature on this particular area. Finally, firms with profitable earnings tend to engage in earnings management, in line with the main results, confirming the robustness of these tests undertaken.

2.6 IMPLICATIONS AND CONTRIBUTIONS

2.6.1 Implications of the Study

Findings provide valuable insights into understanding the determinants of earnings management, and the influence of multiple directorships on earnings management. Results provide important inferences for key stakeholders including regulators, investors, scholars and corporate management. Implications for key stakeholders are discussed below.

Although regulatory policies such as CLERP 9 in Australia were introduced in the middle of 2000s after the financial and accounting scandals to improve the financial reporting quality, none were related to the maximum number of directorships in a public listed firm that a director can undertake. This study was put in place to examine whether there is a need to limit the number of directorships that a director should hold in a public listed firm in view of the busyness factor that may have an impact on the director's effectiveness as a monitor. In connection with directors with multiple board seats, many past scholars have attempted to determine whether busy directors play a part in improving the corporate governance structure of a firm by sharing and transferring their relevant knowledge, experience and skills from one firm to another.

On the one hand, there were researchers who believed that there directors with many board seats are too busy to fulfil their role effectively as they are overstretched and overloaded (Core et al., 1999; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009) implying the "busyness" hypotheses. On the other hand, we have scholars that are of the opinion that that as the number of boards that a director is sitting on increases, firms are expected to benefit from the relevant experience, skills and knowledge of such director (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Ferris et al., 2003; Stuart & Yim, 2010) suggesting the "reputation" hypothesis. There were efforts by publicly listed firms in the US to limit the number of boards that a director can hold, however the evidence and results on the impact on the firm in regards to busyness

factor have been mixed so far (Falato et al., 2014). No mandatory restriction is placed on the number of multiple directorships a director can hold for public listed firms in Australia although it is suggested that the under *Recommendation 2.4* that the majority of the board of a listed firm should be independent directors with *Recommendation 2.5* suggesting that the chairperson of the board should be an independent director and not the CEO of the firm (Australian Securities Exchange, 2014). Potentially, regulators in Australia may take the route of limiting the numbers of appointments of directors who hold excessive board seats to enable them to be more effective in their respective roles.

Investors are inclined to rely on publicly available earnings and related accounting information to reach decisions as to either continue to invest further, divest their shareholdings or maintain their investment in a specific listed firm (Hillman & Dalziel, 2003; Klein, 1998; Vafeas, 1999). However after the spectacular collapses of large public listed firms in the early 2000s both in USA and Australia, investors began to question about the quality of the accounting information that are available in the financial statements of public listed firms. One approach that is available to investors to form an opinion on the quality of the financial report is the reputation of the members of the board of directors whose responsibilities include ensuring the quality of the earnings reported. Prior literature suggest that directors holding multiple directorships do not necessarily be ineffective monitors but offer other advantages over directors who hold less directorships (Field et al., 2013).

The findings from this study also reveal that industry audit specialists in their provision of superior and effective audit work, enhances the quality of the audit and consequently the earnings reported. This finding suggests that investors in the Australian securities exchange may consider public listed firms engaging industry audit specialists given the conclusions here that it assists in improving the reported earnings quality.

An essential principal underlining agency theory suggests that an agent/manager that does not hold any stake in the firm is expected to act in their own interest (J. R. Cohen, Krishnamoorthy, & Wright, 2002; Udayasankar & Das, 2007). To inhibit opportunistic behaviour from the corporate management, principals frequently depend on monitoring tools to align the interests between the principals and agents (Dalton et al., 1999; Fama & Jensen, 1983; Kosnik, 1987). These monitoring tools may possibly be derived from the board characteristics of a firm and corporate governance mechanism put together by the firm. As pointed out earlier in this essay,

multiple directorships is deemed to be one monitoring instrument used in limiting opportunistic behavior by corporate management and consequently enhances reported earnings quality and firm's performance (Ferris et al., 2003). While there are studies that suggest that boards with experienced directors who hold multiple board seats are able to positively contribute and share their know-how and knowledge to firms that they are overseeing, the contrasting view is that having a "busy" board is associated with weak corporate governance as the board members may not have sufficient time or dedicated enough to monitor corporate management. The latter view considers that given the busyness of the directors on the board, corporate management will participate in opportunistic behaviour to advance and promote their own (corporate management) self-interests as the monitoring mechanism is no longer effective (P. Jiraporn, Singh, et al., 2009). The outcomes of this study imply that experienced and knowledgeable directors who have accumulated abundant knowledge are likely to discourage earnings management within a firm in view of the negative significant multiple directorships/earnings management association. These findings suggest that the firm, under the stewardship of skilled, experienced and knowledgeable directors constrain the opportunistic behaviour of the corporate management and hence validates the resource dependency theory. One other popular monitoring tool that is put in place is the use of industry specialist auditors. The results also find that industry specialist auditors inhibit and lessens the impact of earnings management and it is one avenue to minimise the opportunistic behaviour of the corporate management (Fan & Wong, 2005; Francis, 1984; Francis & Yu, 2009; Teoh & Wong, 1993).

From the findings of this study, scholars may also focus on governance related specific determinants like directors with multiple board memberships instead. The findings suggest that there is a benefit in nominating directors with broad experience, skills and knowledge which can be transferred and applied in a different firm. For scholars planning to work on future research on similar topic, perhaps it is beneficial to concentrate on a firm's board characteristics instead of concentrating only on monitoring tools like the engagement of Big Four auditors or industry audit specialisation to assess the earnings quality of a particular firm. It is nevertheless important to include these corporate governance mechanisms as it is proven to be also negatively correlated with the level of earnings management.

2.6.2 Major Contributions of the Study

Two distinct views have been observed in the past empirical studies on multiple directorships. The first perspective is of the opinion that "busy" directors are overburdened and as a result negligent in their duties is accounted for in the studies of some scholars (Falato et al., 2014; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009). The contradicting view of Carpenter and Westphal (2001) and Sarkar and Sarkar (2009) hinges on the premise that directors are mindful of their reputation with a view to enhance their board appointment possibilities underlines the concept in which board members strive to impart and transfer "quality" know-how, skills and experiences to benefit the firm in which their services are provided.

This study assists in extending the understanding of multiple directorships, particularly within the context of the Australian capital market. For example, this study concludes that multiple directorships influences earnings management practices in publicly listed firms in Australia.

Second, it assists in addressing some of the unanswered empirical questions related to multiple directorships and concurrently increasing the understanding of the influence of different characteristics of a director who has multiple board seats. Specifically, analysis develops insights into, and identifies, key determinants of multiple directorships. Even though extensive studies were undertaken to identify the determinants of earnings management from a governance-specific standpoint however very few studies were linked to multiple directorships.

Third, it is believed that this is one of the limited studies that examine the relationship between multiple directorships in different aspects and earnings management in Australia capital market setting. By focussing on the number of board seats that a director hold and other board characteristics of these directors, this study provides a more profound understanding of the characteristics of the board members who hold multiple directorships and the extent to which earnings management are executed in a public listed firm.

Fourth, it is expected that the findings contributes towards increasing the role of multiple directorships and its impact on curbing and reducing earnings management in the Australian setting. More importantly, this study provides further evidence that board members with multiple seats (up to three board memberships) impart their skill-sets, knowledge and expertise to the firm by limiting and driving down earnings management within a firm. Concurrently it validates the resource dependency theory

in which the sharing of knowledge and expertise is evident with the negative association with earnings management. These findings therefore assist in identifying specific characteristics of the board members which may have an impact in improving the underlying corporate governance mechanism of the firm.

Finally, it contributes towards the awareness and understanding of the Australian capital market that is beneficial to major stakeholders of the listed firm. For instance, findings will help regulators determine which characteristics of board members are most likely to lead to lower level of earnings management. This information can then enable regulators assess whether ASX guidelines and recommendations are likely to benefit the firms and society if new recommendations pertaining to the characteristics of director are imposed. Findings may also assist regulators in improving existing policies to ensure the desired outcome is attained, or to help in development of new policies to strengthen the current standards governing financial reporting quality.

Overall, this study provides valuable insights and underlines potential opportunities for future research. However, this research is not without limitations as with any positivist empirical study.

2.6.3 Limitations of the Study

While this study has numerous of strengths, it is not without its limitations. First, this study did not consider the use of real earnings management model for the identification of earnings management, an area which can be considered for future research and a comparison with the real earnings management philosophy.

Second, although an extensive range of control variables in this study to assess the influence on earnings management have been employed, it is likely that other factors which are not controlled for in the analysis may have an impact on financial reporting quality. Nevertheless, the effect of the exclusion of such variables may have only a negligible consequence given the fact that the purpose of the study is to examine the relationship between multiple directorships and earnings management and not investigating its causality.

Third, the data collected for the variables meant for this study to test the hypotheses are collected from annual reports of the publicly listed firms, limiting the amount and type of data that could be collected. For example, some proprietary information that can be utilised for this study may not be publicly available.

Fourth, this study confined only to Australia and its institutional settings may differ from that of another country and as such limit the potential to generalize the outcome of this study to another nation.

While it is acknowledged that there are limitations within this study, the strength of the study and important implications of the findings cannot be ignored as indicated earlier on the significance of this research.

2.6.4 Summary of the Study

Regulators and researchers in the past have attempted to establish a link between boards with multiple directorships and earnings management. While there were some studies that have confirmed the relationship, there were also other studies that disputed the linkage between busy boards and earnings management. This study which was based on the Australian capital market concentrating on the public listed firms has concluded that there is a relationship between board with multiple directorships and earnings management.

The empirical tests have yielded insightful results. Particularly, the general findings suggest that directors with multiple board seats are likely to discourage firms in engaging in aggressive earnings management. Contrary to the "busyness" hypothesis, directors that hold multiple board seats are likely to discourage and curtail earnings management within a firm.

Although studies involving multiple directorships and earnings management have been conducted in the past, this study adds to the extant literature and contributes in a number of ways. Concurrently, the personal characteristics of board member who holds multiple directorships researched highlighted some helpful insights which may have meaningful implications for different major stakeholders of the firms (e.g., scholars, practitioners, corporate management, investors and regulators). Moving forward, in expanding the understanding and awareness of multiple directorships and earnings management, and the relationship between the two concepts, this study makes an attempt to emphasize a variety of different routes for prospective useful empirical research.

Chapter 3 MULTIPLE DIRECTORSHIPS AND AUDIT FEES

3.1 INTRODUCTION

A useful comprehension of circumstances giving rise to external auditors compromising audit quality is essential for investors, scholars and regulators. One possible avenue that has received notable research attention is the domain of corporate governance and how it affects the level of audit fees/audit quality. Based on the above premise, this study will examine specifically the relationship between multiple directorships and audit fees for public listed firms in Australia.

The motivation from this study stems from intensified regulatory interest around the world after the accounting scandals involving Enron, World.Com in the U.S.A, Parmalat in Europe took place the early 2000's triggering huge losses of investors' funds. These major corporate collapses have prompted the regulators to initiate steps to improve the corporate governance mechanisms by introducing reforms such the Sarbanes-Oxley Act in 2002 in the USA, the Corporate Law Economic Reform Program (CLERP 9) Act in 2004 including Australian Securities Exchange Corporate Governance Council's Principles of Good Corporate Governance and Best Practice Recommendations (Australian Securities Exchange, 2003) in Australia. A number of recommendations have been established as a result of the reforms initiated and that includes the formation of audit committees, having independent board members and having a different individual fulfilling the role of CEO and the chairperson of the board. In addition to the above, new auditing standards have been introduced and henceforth, there is a shift towards the emphasis of the role and quality of external auditors as a key monitoring mechanism in improving financial reporting quality of firms.

Previous literature on audit fees suggests that corporate governance structures, especially the attributes of the board of directors have an impact on the audit quality and eventually the financial reporting quality of a firm. (Carcello et al., 2002; Goodwin-Stewart & Kent, 2006). There has been heightened interest for academics investigating board characteristics and its effect on the level of audit quality within a firm of late. In the past many academic have make an attempt to establish whether directors play a role improving the corporate governance structure of a firm by sharing and transferring their relevant knowledge, experience and skills accumulated from one

entity to another. Particularly for this study, the focus is on the relationship between multiple directorships and the level of audit fees. From the perspective of multiple directorships, it has been argued that directors with a large number of board seats are too busy to fulfil their role effectively as they are overstretched (Core et al., 1999; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009). On the other hand, some scholars are convinced that as number of boards for a director increases, firms are expected to benefit from the relevant experience, skills and knowledge transferred from that director (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Ferris et al., 2003; Stuart & Yim, 2010).

The research on this area is deemed to be inconclusive thus far with the varied findings as narrated above. In addition, studies concerning the impact of multiple directorships on audit quality are few and far between. The analysis of the influence of multiple directorships of board members on the magnitude audit fees will thus contribute to the extant literature. Finally, as the board of directors is responsible for overseeing the financial reporting and audit practices, it would be suitable in this study to investigate the association between board characteristics in particular multiple directorships and audit fees.

3.1.1 Research Questions and Objective

The multiple directorships/ audit fees linkage deserve further investigation as it has been subjected to immense debate in prior earnings quality literature.

Uncertainties relating to the earnings reported by publicly listed firms around the globe have increased after major financial crisis in 2008 battered international markets such as Dow Jones, Nasdaq in the USA, the London Stock Exchange in the UK, ASX in Australia and other major stock exchanges around the world. As such, it is vital to have a thorough understanding of how board characteristics in particular multiple directorships have an impact on audit quality which would have an impact on current and future earnings reported by a firm. With the continuous reforms which are presently taking place in Australia, it is envisaged that this study will eventually prompt regulators to introduce new strategies and recommendations to improve the audit/earnings quality and corporate governance structure of the publicly listed firms here. For example, a study by Boo and Sharma (2008) suggests that boards with more multiple directorships expect elaborate external audit to be carried out to safeguard their reputation capital. On the other hand, Kiel and Nicholson (2006) found no

relationship between holding multiple directorships and financial performance of Australian firms, implying that there is no tangible benefits in attracting directors with high number of board seats into a firm. As far as the study of multiple directorships in Australia is concerned, the outcomes are mixed and inconclusive. The primary objective of this study is to provide a comprehensive analysis of the association multiple directorships and audit fees in Australian publicly listed firms. One of the unique features of this study is to consider the effect of multiple directorships in several ways and its association, if any, with audit fees. Distinctively this essay will focus on the average number of multiple directorships that a board of director hold, the number of directors who have multiple directorships, the number of directors sitting on multiple board committees and whether there is an existence of a reciprocal interlock.

Consistent with the primary objective, this study's main research questions are identified as follows:

RQ1: Is there an association between multiple directorships with audit fees of Australian public listed firms?

The second research question in this study to further analyse the association between multiple directorship and abnormal audit fees is:

RQ2: Is there an association between multiple directorships with abnormal audit fees of Australian public listed firms?

In addition to answering this study's main research questions, a number of other significant research objectives shall also be investigated. This study also looks into the different number board memberships of a director in a firm and its relationship with audit fees. Further, it also dwells into whether reciprocal director interlock and directors sitting on multiple sub-committees are associated with the level of audit fees.

3.1.2 Significance of the Study

Findings from this study will contribute towards the regulators, board of directors, investors and therefore have several anticipated conclusions.

First, the study is able to assist the regulators to focus on the characteristics or attributes of the board of directors (multiple directorships, shareholdings of board members, existence of reciprocal director interlock, gender of the board, education level of directors) to regulate in order to enhance transparency within a publicly listed firm.

Second it contributes to audit fees literature by examining the relationship between board characteristics and audit fees. Investors are able to make an informed decision as to their allocation of funds where firms with higher transparency are expected to yield them better and more consistent returns.

Third, this study will assist the board of directors to determine the characteristics or board features that ascertain the work of the external auditors are not compromised and as such lead to higher level of audit quality. Firms may be encouraged to actively seek board members with diverse backgrounds, international experience and pertinent skill-sets whom will ultimately assist in safeguarding the financial integrity within a firm.

3.1.3 Essay Outline

This essay is comprised of six major sections which are described below. An overview of this study is provided for under Section 3.1. Under this section, the identification of major research objectives and the study's significance takes place.
The organisation of the remaining sections in this essay is as follows. Literature review on audit fees and key determinants of audit fees are detailed under section 3.2. Subsequently, this study reviews theoretical frameworks applicable in this study and the development of hypothesis takes place under section 3.3. Section 3.4 outlines the research method of the study that includes the measurement for audit fees models (dependent variable) and multiple directorships (independent variable) used in this study in addition to regression models and related statistical tests. The descriptive analysis of the data point, multivariate and sensitivity analysis are explained in section 3.5. Multivariate analysis undertaken and examinations of all findings on the hypotheses that have been developed are listed in this section. Correspondingly robustness and sensitivity tests are detailed out in section 3.5 together with the summary of the key findings. Lastly, the implications, contributions, limitations and summary of this study are featured in section 3.6.

3.2 LITERATURE REVIEW

3.2.1 Auditor's Function in the Financial Reporting Process

The external auditor's core function and role has been identified as supplying an independent assurance to the users of the financial statement in terms of the truth and fairness of the information that are represented in the reports (Al-Ajmi, 2009; C. L. Becker, Defond, Jiambalvo, & Subramanyam, 1998; Palmrose, 1988; Simunic, 1980). It is common knowledge that the external audit function is grounded on the basis of agency theory and an agency relationship occurs when the principal (owners of a firm) entrusts its agents (managers of a firm) to carry out duties and services on the behalf of the principal (Fama & Jensen, 1983; Jensen & Meckling, 1976). Agency theory hypothesize that an agent/manager that does not maintain any shareholdings in the firm is expected to act in their own interest. Simultaneously, the principals/shareholders are presumed to embrace a singular objective of maximising their investment in the firm through dividend payments and increase in share price. Consequently, agency problem is created and under such circumstances, both principal and agent inevitably incur bonding and monitoring costs to realign their different interests, giving rise to these agency costs (Fama & Jensen, 1983; Jensen & Meckling, 1976). To realign the interest of the agents and the principals, the use of an external auditor would be one mechanism that is deployed by the owners/principal. The use of an external party to validate the credibility of the financial information produced by the managers by way of expressing an audit opinion is deemed to be the one of the cornerstones of the audit function (Fama & Jensen, 1983; Jensen & Meckling, 1976).

Finally, the audited financial statements will then be regarded as more reliable and beneficial to the different users and stakeholders of the firm that are reliant on such information for their rationale of decision-making. Henceforth it is evident that an external audit function performs a vital role in the provision of information and communication in the commercial and financial sphere.

3.2.2 Determinants of Audit Fees

Previous research has identified a number of determinants that has an influence on audit fees (Hay, Knechel, & Wong, 2006). These determinants can be categorised into three broad classifications: (1) firm related factors; (corporate governance related factors; (3) regulators, legislators and key stakeholders.

3.2.2.1 Firm Related Factors

Past empirical research in audit fees has explored a number of diverse firm characteristics that may have an impact on its magnitude of audit fees. More precisely, it is found that firm size, the leverage or debt level of a firm, firm's financial performance and industry influence the extent of audit fees.

A positive relationship of firm size with the level of audit fees has been confirmed in a number of past studies and it has been established that the main determinant of audit fees is firm size and it is anticipated to have a positive relationship with audit fees (Simunic, 1980). For the purpose of measuring the firm size, this essay utilizes the natural logarithm of total assets at the year-end in unison with prior empirical studies (Abbott, Parker, Peters, & Raghunandan, 2003b; Beck & Mauldin, 2014; Craswell & Francis, 1999; Defond et al., 2002; Goodwin-Stewart & Kent, 2006).

Divergent views associated with the impact of highly geared firms on audit fees behaviour has been found in prior studies on leverage degree of firm. Some scholars have concluded that firms with high level of leverage are exposed to risks of violating its debt agreements and as such may lead to higher level of cost of capital (Karim et al., 2006). Prior studies on highly geared firms have revealed that such firms have aggressively engaged in earnings management to circumvent breaching of debt covenants (Dechow & Skinner, 2000; Elayan et al., 2008; Erickson et al., 2004; Watts & Zimmerman, 1978). As such, external auditors are compelled to spend extra effort and time in safeguarding the veracity of the financial statements as firms with greater level of debt have higher risk of going under (Simunic, 1980).

Simunic (1980) posits that profitability is viewed as a gauge of inherent risk as external auditors may be exposed to litigations in the event they negligently issued an opinion on a financial statement that is not representative of the truth and fairness view of the financial position of the firm. As profitability is a measure of firm performance, managers are inclined to report positive and optimistic financial results when it is not the case. It increases the risk of the firm and consequently external auditors would be required to dedicate more effort and resources to minimise the risk to an acceptable level. A majority of studies have determined that industry that a firm is operating in will have an effect on its audit and earnings quality. The risk profile differs from one industry to another and as such the

inherent risk level will vary from a firm in a Telecommunications industry as opposed to a firm in an Information Technology industry.

3.2.2.2 Corporate Governance Factors

Previous studies on corporate governance related factors to audit fees focusses on various areas such as characteristics of the board of directors, existence of audit committee, diligence of audit committee members, engagement of Big Four auditors, industry specialist auditor and CEO duality. However, conclusions from many of the previous research on the magnitude of audit fees have been rather diverse.

Although it is uncommon in prior literature investigating the relationship between the education level of directors and the quantum of audit fees, it is one interesting area that is worth examining. Kanter (1977) postulate that the level of education reflects knowledge that is treasured and appreciated by the general public. According to (G. Becker, 1964) and (Judge et al., 1995) the extent of education signifies investments that are generated in distinct know-how which is manifested as human capital. Earlier research also points towards increased in overall compensation to individual in terms of remuneration, promotional prospects and career contentment and education is seen as a pivotal instrument to recognise an individual success and achievement (Judge et al., 1995; Pfeffer & Ross, 1982).

Conyon and Peck (1998) state that if independent directors either hold an insignificant number of shares or has no shareholdings, their motivation to monitor management and hence protect shareholder interests, may somewhat decline. Similarly, it was found that independent directors who sit on multiple boards are more likely to be involved in firms that have poor financial reporting quality (Beasley, 1996; Davidson et al., 2005; Klein, 2002a). However, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by Rosenstein and Wyatt (1990) who find significant level of positive share price reactions when the percentage of independent board of directors are higher. This was confirmed by Jaggi and Gul (2009) that firms that have greater proportion of board independence are better monitors and hence are more motivated to pursue higher quality financial reporting.

Past empirical research indicates that a Big Four auditor possesses superior quality in terms of enhanced audit planning, assessment of risk, identifying the proper

audit procedures, evidence gathering process and finally providing the appropriate audit opinion. Scholars commonly used a dummy variable to classify audit firms as either a Big Four or a non-Big four being the proxy for outstanding audit quality (Simon & Francis, 1988; Simunic, 1980). Considerable empirical evidence suggests that the presence of Big Four auditors enhances the quality of a firm's financial reporting (Fan & Wong, 2005; Francis, 1984; Francis & Yu, 2009; Teoh & Wong, 1993).

It is evident that industry specialised auditors have enhanced industry experience and expertise which allow them to perform at a greater and more effective level in contrast to non-industry specialist auditors given the extensive training and facilities that were provided (Dopuch & Simunic, 1980). Industry specialist auditors have been found to be efficacious deterrent of audit fees techniques employed by management of client firms in comparison to non-industry specialists based on previous literature (K. Y. Chen et al., 2006; Ferdinand A. Gul et al., 2009; Jaggi et al., 2012; Krishnan, 2003). Fama and Jensen (1983) contend that the board of directors represents the most effective internal control mechanism when it comes to monitoring the conduct and behaviour of senior management within a firm. However, existing literature examining board's independence on firm's performance and earnings quality yielded varied findings. Empirical evidence to date has produce inconclusive results when it comes to CEO duality and firm performance. Certain researchers have argued that CEO duality may reduce the independence and vigilance of the board and as such may have an adverse effect on the firm's financial performance (Rechner & Dalton, 1991). On the other extreme, advocates of CEO duality find that there is weak or no positive association of CEO duality with firm's performance (Cannella Jr & Lubatkin, 1993; L. Donaldson & Davis, 1991a; Mallette & Fowler, 1992). Additionally it is also found that segregating the duty of the chairman and CEO will not on its own, gives rise to better financial performance of a firm (Krause et al., 2014).

3.2.2.3 Regulators, Legislators and Key Stakeholders

Contradictory findings on the impact of proportion of shares held by board members on the level of audit fees were established from previous researches. Sanchez-Ballesta and Garcia-Meca (2007) find that a non-linear association exists between insider ownership and discretionary accruals. The results implied that insider

ownership appears to behave as a regulating mechanism (Berle & Means, 1932; Jensen & Meckling, 1976). On a similar token, a negative correlation is found between abnormal accruals and managerial shareholdings (Warfield et al., 1995). On the contrary, a study by Nagar, Nanda et al. (2003) find that CEO's compensation and shares held is positively associated with firm's voluntary disclosure of financial accounting data.

The introduction of CLERP 9 in 2003 after Sarbanes Oxley Act 2002 was initiated by the USA has an impact on the audit quality for the publicly listed firms in Australia. Some of the recommendation under ASX Corporate Governance Principles and Recommendations (Australian Securities Exchange, 2003) includes the formation of an audit committee for the top 500 largest firms by market capitalisation and structuring of the audit committee to consist mainly of independent directors, an independent chairperson and they are financially literate. Clout, Chapple, and Gandhi (2013) find in their study that post-CLERP 9, the earnings quality of public listed firms in Australia have improved as a result of the recommendations by ASX Corporate Governance Council on board independence and financial knowledge of board members.

3.3 THEORETICAL PERSPECTIVE AND HYPOTHESES DEVELOPMENT

3.3.1 Theoretical Perspective – Corporate Governance

There are essentially five major theories underlining the research literature of corporate governance: agency theory, resource dependency theory, stewardship theory, stakeholder theory and institutional theory. For the purposes of this particular essay, the main focal point revolves around resource dependency, agency theory and stewardship theory which are deemed to be more applicable towards this study. Subsequently their relationship with the corporate governance structures of organisations is examined.

Agency Theory

Berle and Means (1932) pioneered and defined the concept of separation of ownership and control in the early twentieth century. As this separation inevitably results in potential conflict of interest between shareholders and management when ownership is extensively scattered among many shareholders, the notion of agency

theory was established. Thereafter, a theoretical framework was methodically devised by amalgamating components from agency theory, property rights theory and finance theory and concluding with the theory of the ownership structure of the firm (Jensen & Meckling, 1976). When the principal (owners of a firm) assigns responsibilities to the agent (managers of a firm) to discharge duties in lieu of the principal, an agency relationship take places (Fama & Jensen, 1983; Jensen & Meckling, 1976). Agency theory argues that an agent/manager not having any stake/shareholdings in the firm is expected to act in their self-interest. Simultaneously, the principals/shareholders are presumed to embrace a singular objective of maximising their investment in the firm through payment of dividend and growth in share price. Unavoidably, this scenario will generate agency problem with both principal and agent incurring bonding and monitoring costs to re-calibrate their different interests, resulting in agency costs (Fama & Jensen, 1983; Jensen & Meckling, 1976). Agency theory in itself provides a somewhat realistic perspective which organisational scholars can make use of to further their research on the diverse range of principal-agent relationship concerns that a firm faces (Eisenhardt, 1989). Corporate governance structures are seen to be critical means to resolve agency issues under an agency theory backdrop (Jensen & Meckling, 1976). Former literature dwelling on corporate governance mechanisms for example the board of directors, audit committee, other sub-committees, presence of external auditing function and internal audit departments are acknowledged as important monitors of a firm's management and to diminish any likely agency disputes that may surfaced (Dalton et al., 1999; Fama & Jensen, 1983; Kosnik, 1987). Consequently the agency theory is supported because the segregation of control within a firm and ownership may bring about managerial behaviours that maximises their own personal interests that possibly be damaging to the firm (Koh, 2003). Because of the differing interests between the management and the owners of the firm, the engagement of external auditors (especially Big4 or industry specialists auditors) to provide reasonable assurance on the financial statements will minimise agency conflicts and leads to higher audit fees.

Resource Dependency Theory

Past literature on resource dependency theory have debated that busy directors are linked with a broader network of connection and are likely to deal with a range of challenges that large public firms would confront imply that their abilities are valued

with the rising literature on benefits of multiple directorships (Carpenter & Westphal, 2001; L. Cohen et al., 2010; Jeffrey L. Coles et al., 2008; Ishii & Xuan, 2014; Stuart & Yim, 2010). For instance, Pfeffer and Salancik (1978) alluded that interlocked directors linkages can serve to alleviate the impact of environmental uncertainty, a viewpoint that is supported by findings of Mizruchi and Stearns (1988). Correspondingly, the emphasis on resource dependency theory which suggests that the ability of an organisation to operate under an environment of uncertainty and complexity associated with its interdependencies is directly related to the quality and effectiveness of the directors that form the board (Boyd, 1990; Daily et al., 2003; Hillman et al., 2000; Pfeffer & Salancik, 1978). In a resource dependence role, directors do not only reduce uncertainty but at the same time they also contribute resources to a firm in terms of information, skills, access to key stakeholders for example suppliers, buyers, public policy decision makers and social groups (Hillman et al., 2000). It was also found that a director that serves in better performing firms are more likely to end up with increased board memberships in the future (Ferris et al., 2003) as Fama and Jensen (1983) argues that capable directors are compensated with a higher number of board positions.

Under the backdrop of corporate governance, the application of resource dependency theory infers that effectiveness of corporate governance mechanism may bring about the generation of additional resources within a firm. The enhanced reputation of the board of directors can influence the valuation of a firm with the positive contribution from skilled and knowledgeable directors through their expertise and connections. Hillman and Dalziel (2003) describes these additional resources generated as board capital which can be categorised as human and social capital (Certo, 2003). Given the widely acknowledged studies on the association between the board capital and financial performance of a firm, resource dependency is considered to be a main theory in corporate governance (Dalton et al., 1999; Pfeffer, 1972). Experienced, knowledgeable directors with their wide and varied skill-sets will utilise the expertise of audit specialists and Big 4 auditors that ultimately gives rise to higher audit fees and audit quality to protect their reputational capital.

Stewardship Theory

Stewardship theory espouses that managers seek other considerations (besides financial rewards) that include a sense of worth, altruism, a good reputation, a job well

done and a sense of purpose. This theory suggest that senior managers (including directors of firms) are motivated by a need to achieve and gain personal satisfaction by exercising responsibility and authority to be recognised by their peers and superiors (Davis, Schoorman, & Donaldson, 1997; L. Donaldson & Davis, 1991b; Jacobs, 2004). Stewardship theory evolved from the initial study of organisational theorists which emphasizes on the psychological aspect of human characteristics and behaviour (McGregor, 1960). Human beings are presumed to work towards striving for acceptance and personal growth in an organisation a vital principle of stewardship theory which is ultimately synchronised with the firm's objectives and goals. The basic tenet of stewardship theory is that a manager essentially desires to be a respectable steward of the firm's resources, implying that self-financial interests may not be necessarily be the main motivation (Barney, 1990; L. Donaldson & Davis, 1991a).

From a corporate governance perspective, stewardship theory suggests that since managers' main motivation is to derive work satisfaction and fulfilment rather than monetary incentives, the demands and needs for the board of directors to oversee the management's performance will likely diminish. As such, stewardship theory assumes that a strong corporate governance structure plays a reduced role in realigning the interest of the principal and the agent as the managers will tend to be good stewards who will act in the best interest of the organisation (Barney, 1990; L. Donaldson & Davis, 1991a). The proponents of stewardship theory argue that managers will engage experienced and competent external auditors to obtain sufficient appropriate evidence to safeguard the integrity of the financial statements of the entity and henceforth improving audit quality.

3.3.2 Theory Selection

As emphasised in the preceding passages, there are three main theories underpinning corporate governance approaches in this study on the multiple directorships and audit fees.

This study centred on the impact of multiple directorships on the level of audit fees. As such, in adopting resource dependency theory, it can be argued that firms will strive for opportunities to minimise its uncertainties culminating from external pressures such as competition, regulation and social forces by utilising the skills, information and other resources from its board members that are interlocked with one another (Boyd, 1990; Pfeffer & Salancik, 1978). For this study in particular, it is

argued that directors with multiple board seats (with their rich and multifarious background, wide-ranging skills, knowledge and expertise) are striving for superior audit quality which gives rise to higher audit fees and henceforth improve earnings quality. Hence, it provides a proper avenue of nominating resource dependency theory as the underlying theory for this study.

3.3.3 Hypotheses Development

Past literature on multiple directorships suggest that directors with sizeable outside directorships is an indication of "reputation", having the required abilities, experience, skills and knowledge to perform his duty (Fama, 1980). Fama and Jensen (1983) contend that directors advance their reputation and status by means of having multiple board seats and being seen as monitoring experts.

Extensive research has been placed on director interlock or multiple directorships as an attribute of board of directors spanning several decades. Although much investigation has been delved into this characteristic, the support for having multiple directorships in a firm is somewhat inconclusive. Two opposing schools of thoughts have emerged as a result of these studies, one embodying the "Busyness" Hypothesis and the other epitomises the "Reputation" Hypothesis. The "busyness" hypothesis rationalised that as the numbers of board seats of a director increases, that director has an inclination to be "overloaded" and to some degree overstretched. The resulting effect is that firms with "busy" directors are considered to be less effective as a consequent of overextended time commitment associated with multiple board appointments and are likely to adversely affect the firm's performance (Fich & Shivdasani, 2006). The "Reputation" hypothesis on the other hand suggests that as the number of boards that a director is sitting on increases, firms are expected to benefit from the experience, skills and knowledge of such director. Hence, in line with the "reputation" hypothesis, multiple board appointments is capable of adding value to an organisation by imparting their expertise, knowledge and experience gained as these directors are more likely to maintain or enhance their reputation by provision of sound and effective advice (Fama & Jensen, 1983).

In justifying the "busyness" factor, directors are prone to overstretching and overcommitting themselves as they assume multiple directorships in different boards. As a result, it is argued that these directors become less effective as monitors of firms and are associated with weak corporate governance (Fich & Shivdasani, 2006).

Conversely, busy directors linked with a wider network of connection are more likely to cope with a variety of challenges that large public firms would encounter suggesting that their abilities are appreciated, supporting the belief of the advantages of having multiple directorships (Carpenter & Westphal, 2001; L. Cohen et al., 2010; Jeffrey L. Coles et al., 2008; Ishii & Xuan, 2014; Stuart & Yim, 2010). Ferris et al. (2003) find that a director that serves in better performing firms are more likely to be rewarded with increased board memberships in the future as Fama and Jensen (1983) argues that competent and talented directors are compensated with a higher number of board positions.

Carcello et al. (2002) find evidence of significant positive relationship between audit fees and multiple directorships, measured in terms of the average number of board memberships of directors. This study argues that the expertise and knowledge of directors sitting on multiple boards contribute to enhanced audit quality which in turn leads to higher earnings quality reported by the firm Conversely, a study from Abbott, Parker, Peters, and Raghunandran (2003) have not provided any conclusive evidence that multiple directorship is associated with higher level of audit fees.

Based on the mixed results from past researches indicated above, a non-directional hypothesis is therefore postulated:

H_1: Australian publicly listed companies with multiple directorships have an association with the level of audit fees.

Past empirical study on the association of abnormal audit fees have found that positive abnormal audit fees is negatively related to audit quality (J. H. Choi, Kim, & Zang, 2010). This is an indication that external auditors may compromise their independence in return for a premium audit fees from their clients.
Conversely, Eshleman and Gou (2014) find evidence consistent with the view that positive abnormal audit fees are indication that external auditors provide extra effort in their audit engagement given the positive association of audit quality with the level of abnormal audit fees.

As a result of the varied evidence from past researches denoted above, a non-directional hypothesis is therefore postulated:

H_2: Australian publicly listed companies with multiple directorships have an association with the level of abnormal audit fees.

3.4 RESEARCH METHOD

3.4.1 Sample Selection

Although there were prior studies undertaken in Australia on audit quality and audit fees assessing various relationships, there is no singular study that comprehensively investigates the association between multiple directorships and audit fees. With the numbers of multinational or foreign firms that are increasingly setting up its operations in Australia and the sharing of expertise and knowledge of the board across countries and states or continents, Australia is selected as the country to have this study in.

The initial sample comprises 1101 publicly listed firms on the Australian Securities Exchange (ASX*)* as at January 1, 2008 from the SIRCA database. ASX listed firms are chosen because information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports and the reason SIRCA database is adopted because of the many different corporate governance and financial data that are readily available for the major public listed firms in Australia. ASX listed firms are chosen because information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports and/or sustainability reports.

In line with past empirical studies (Ball et al., 2000; M. J. Ferguson et al., 2004) financial institutions, banks, stock brokerages, trusts and investments, and insurance firms are excluded as the financial statements of such firms are subject to different accounting regulations and audit fees models may not be applicable to them. In addition, firms that are not continuously listed on the ASX will also be excluded. As the financial statements of ASX listed firms having headquartered in foreign countries are not usually prepared in accordance with the normal disclosure requirements for other firms listed on the ASX, these firms are excluded from the list, consistent with past practices (Clifford & Evans, 1997). Lastly, exclusions from this study will include firms that have missing data for the observation period (Klein, 2002a, 2002b).

3.4.2 Source Documentation

The data for this essay are obtained from a number of different sources. The main item of emphasis is audit fees for this essay. Audit fees are collected from archival data from the annual reports of public listed firms. Public listed firms were selected because information on audit fees is readily available from the annual report where a detailed breakdown in accordance to Australian Accounting Standards Board (AASB) 101 is provided.

Data for independent and control variables are collected from SIRCA Corporate Governance Database, S&P Capital IQ, and Morningstar DatAnalysis Premium. The main independent variable of this study is multiple directorships which are analysed in different manner (i.e., directors on multiple boards that are independent, directors on multiple boards and directors on multiple boards that are higher educated).

Whilst the main focus of this study is to examine the impact of multiple directorships on audit fees practices by Australian listed firms, robustness and various sensitivity tests will also be conducted. Data for sensitivity analysis are also collected from SIRCA Corporate Governance Database, S&P Capital IQ, and Morningstar DatAnalysis Premium.

3.4.3 Time Period

The time period observed involves analysis covering 2008 to 2012 calendar years being one of the major elements of this study is a longitudinal analysis. This time-frame is selected because it gravitates in the vicinity of important periods in the financial accounting and corporate governance landscape in Australia. The major events include the introduction of CLERP 9 recommendations as a result of the Sarbanes Oxley 2002 implementation in the USA, embracing of International Financial Reporting Standards (IFRS) and the changes incorporated into the ASX CGC's corporate governance guidelines in 2007 from the initial version of 2003. The findings from the above-mentioned timespan of five calendar years, therefore, will indicate whether the recommendations related to the corporate governance development in Australia as indicated above have an influence on this specific study on the relationships between various aspects of multiple directorships and audit fees. The time period selected is also meant to collect the timeliest of information available for this particular study. In the next sections, measurements for the

dependent variable (audit fees) and independent variables (multiple directorships) are outlined.

3.4.4 Measurement of Audit Fees

Audit fees are measured in various ways according to earlier literature on this subject. Prior empirical studies measures the audits using the following methods, namely natural logarithm of audit fees, audit fees deflated by total assets and change in audit fees. Audit fees data in the audit fee modeling literature traditionally requires transformation due to linearity issues (Hair et al., 1995; Simunic, 1980). As such, to ascertain a better linear fit so that subsequent OLS regression can be carried out with greater confidence. The most dominant method in recent studies utilizes the natural logarithm of audit fees (Abbott et al., 2003; Carcello et al., 2002; Geiger & Rama, 2003; F. A. Gul et al., 2007; Mayhew & Willkins, 2003; Niemi, 2005). Henceforth, for the purposes of this essay, the measurement of dependent variable used is the natural logarithm of audit fees.

3.4.5 Measurement of the Independent Variables

Past literature suggests that the average number of multiple directorships held by board members to assess the extent of multiple directorships of such members is the measure that is extensively used by majority of the researchers (Falato et al., 2014; Ferris et al., 2003; Fich & Shivdasani, 2006; Field et al., 2013; P. Jiraporn, Singh, et al., 2009). The computation of this measure is arrived at by summing the total of number of directorships held by all members of the board and the total is then divided by the number of the board members at the end of each financial year.

Hence, the main analysis for multiple directorships that is examined is based on the following:

Average number of directors with multiple directorships on the board of firm *i* in year *t.* (*AVE_MUL*$_{it}$*).*

3.4.6 Measurement of the Control Variables

Previous research indicates that that firm-specific and governance variables have influence on audit fees (Abbott et al., 2003; Abbott et al., 2003b; Beck & Mauldin, 2014; Carcello et al., 2002; Goodwin-Stewart & Kent, 2006; Srinidhi, He, &

Firth, 2014). Past researches on audit fees have utilised a number of control variables to account for cross-sectional variation related to firm complexity, its inherent risk and its size (Boo & Sharma, 2008; Carcello et al., 2002; A. Ferguson, Francis, & Stokes, 2006).

Audit fee models from past empirical studies have been used as a basis for the selection of control variables used in this essay. A brief justification of the necessity to include the control variables are provided in the subsequent sections. Hence, the following of firm-specific and governance variables i.e. education level of board members (EDU_PER_{it}), proportion of female directors (GEN_PER_{it}) natural log of total assets ($LogTA_{it}$), shareholdings of the board of directors ($SHARE\_BOD_{it}$), CEO duality (CEO_DUAL_{it}), existence of audit committee (AUD_BOD_{it}) industry specialists($SPECIALIST_{it}$) calculated using the Krishnan (2003) model,), proportion of independent directors (PRO_INDBD_{it}), number of audit committee meetings (AC_MEET_{it}), existence of financial experts on audit committee ($FINEXPAC_{it}$), quantum of leverage (LEV_{it}), and natural log of non-audit fees (LN_NAF_{it}), number of subsidiaries (SUB_{it}), number of business segments (SEG_{it}), current assets deflated by total assets (CA_TA_{it}) and return on assets (ROA_{it}) are analysed in this study.

Education Levels of Board Members

Kanter (1977) suggests that the level of education reflects knowledge that is treasured and appreciated by the general public. According to G. Becker (1964) and Judge et al. (1995) the degree of education signifies investments that are generated in distinct know-how which is manifested as human capital. This is evident in a study by T. W. Cheng, Chan, and Leung (2010) that top executives possess academic or professional credentials have the relevant intellectual capabilities and competence to manage a firm effectively. Prior research also points towards increased in overall compensation to individual in terms of remuneration, promotional prospects and career contentment and education is seen as a pivotal instrument to recognise an individual success and achievement (Judge et al., 1995; Pfeffer & Ross, 1982). Consequently, managers that are better educated are seen to be risk averse, prudent and are better stewards of an entity.

As such, it is anticipated that boards with a higher percentage of directors with advanced degree (those with Masters' degree or higher) will have a positive relationship with audit fees/audit quality given the expectation that educated board

members desire for higher audit quality by engaging Big4 auditors or industry audit specialists, resulting in higher audit fees.

Gender Diversity of Board Members

Psychological literature on behavioural differences between women and men have been widely documented in the past (Brynes, Miller, & Schafre, 1999; Nettle, 2007) Prior literature suggests that gender differences have an impact on ethical behaviour (McCabe, Ingram, & Dato-on, 2006). Barua, Davidson, Rama, and Thiruvadi (2010) find that female CFO is associated with a higher level of accruals quality in their study of CFO gender suggesting women are more risk averse, conservative and more cautious. On this token, it is expected that female board members strive for higher audit quality, giving rise to increased audit fees. On the other hand, Carter, D'Souza, Simkins, and Simpson (2010) find no association between gender of board members and firms financial performance. In view of the contrasting results, no prediction of the direction is made.

Firm Size

Prior empirical research has established that the major determinant of audit fees is firm size and it is anticipated to have a positive relationship with audit fees (Simunic, 1980).

Consistent with prior empirical studies (Abbott et al., 2003b; Beck & Mauldin, 2014; Craswell & Francis, 1999; Defond et al., 2002; Goodwin-Stewart & Kent, 2006) this essay measures firm size as the natural logarithm of total assets at the year-end ($LogTA_{it}$). Due to overwhelming evidence from prior studies on the relationship between client's firm size and audit fees, it is expected that firm size is positively related to audit fees (A. Ferguson & Stokes, 2002; Francis, 1984; Francis, Reichelt, & Wang, 2005; Lee & Mande, 2005; Srinidhi et al., 2014).

Shareholdings of Board of Directors

Conyon and Peck (1998) state that if outside directors either hold an insignificant number of shares or has no shareholdings, their incentive to monitor management, and hence protect shareholder interests, maybe reduced. The above results inferred that insider ownership appears to behave as a regulating mechanism (Berle & Means, 1932; Jensen & Meckling, 1976). On a same note, a negative

correlation is found between abnormal accruals and managerial shareholdings (Warfield et al., 1995).

On the contrary, a study by Nagar, Nanda et al. (2003) find that CEO's compensation and shares held is positively associated with firm's voluntary disclosure of financial accounting data. Because of the contradictory findings above, no direction of the prediction is made.

CEO Duality

CEO duality occurs when a single individual assumes the position of board chairmanship and chief executive officer running a particular organisation (Rechner & Dalton, 1991). Empirical evidence to date has produce inconclusive results when it comes to CEO duality and firm performance. On one hand, researchers argue that CEO duality may reduce the independence and vigilance of the board because of the power and authority vested and as such may have an adverse effect on the firm's financial performance (Rechner & Dalton, 1991). As such, it is expected that firms having CEO duality will have less attention paid to audit quality, leading to lower audit fees. On the other hand, advocates of CEO duality find that there is weak or no positive association of CEO duality with firm's performance (Cannella Jr & Lubatkin, 1993; L. Donaldson & Davis, 1991a; Mallette & Fowler, 1992). Additionally it is also found that segregating the duty of the chairman and CEO will not on its own, gives rise to better financial performance of a firm (Krause et al., 2014). Given the inconsistent findings above, no direction is predicted for this variable.

Industry Specialist Auditor

Based on prior literature, empirical evidence has determined that industry specialist auditors are more successful in curtailing aggressive earnings management activities in comparison to non-industry specialists (K. Y. Chen et al., 2006; Ferdinand A. Gul et al., 2009; Jaggi et al., 2012; Krishnan, 2003). It is evident that industry specialised auditors have enhanced industry experience and expertise which allow them to perform at a greater and more effective level in contrast to non-industry specialist auditors given the extensive training and facilities that were provided (Dopuch & Simunic, 1980).

Past scholars have applied numerous proxies in measuring this auditor attribute. The proxies commonly used include market shares of specialist auditor, market leadership

and dominance of the auditors involved (Craswell et al., 1995; Defond et al., 2002; Yardley et al., 1992). For the purpose of this study, the auditor's industry market share is calculated by estimating the auditor's portfolio shares. Based on the previous study by Krishnan (2003), if the market share of a specific auditor exceeds 15% in any category of the industry, that auditor is deemed to be an industry specialist auditor. Based on the previous studies, it is predicted that firms with industry audit specialists is positively associated with the level of audit fees.

Firms with Independent Board Members

Fama and Jensen (1983) contend that the board of directors represents the most effective internal control mechanism when it comes to monitoring the conduct and behaviour of senior management within a firm. However, existing literature examining board's independence on firm's performance and earnings quality yielded varied findings. It was found that independent directors who sit on multiple boards are more likely to be involved in firms that have poor financial reporting quality and engages in earnings management (Beasley, 1996; Davidson et al., 2005; Klein, 2002a). However, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by Rosenstein and Wyatt (1990) who concluded that the level of positive share price reactions are associated when then percentage of independent board of directors are higher. This was confirmed by Jaggi and Gul (2009) that firms that have greater proportion of board independence bring about higher quality of financial reporting.
Greater board independence may support higher quality audit services as outside directors are more concerned with reliable financial reporting, resulting in increased audit fees. Given the differing views on board independence, no predicted direction is made.

Audit Committee

Audit committee remains one of the most important board committees formed by publicly listed firms for the purposes of check and balance and enormous studies have been revolved around this corporate governance variable. It has been recommended by Australian Securities Exchange (ASX) that the top 500 publicly listed firms by market capitalisation to have an audit committee (Australian Securities Exchange, 2014). However, previous empirical evidence on audit committee has found

to be inconclusive. On one hand, Baxter and Cotter (2009) found evidence that existence of audit committee increases financial reporting quality by inhibiting earnings management. Given the incentives to ensure reliability in financial reporting, it is expected that audit committee comprising of mainly independent board members would strive for enhanced audit quality, bringing about higher audit fees. However, the findings from Peasnell et al. (2005) have not justified any relationship between the presence of an audit committee and enhanced financial reporting quality. With the conflicting results above, no prediction on the direction is made.

Frequency of Audit Committee Meeting

In their study of Australian listed firms, Goodwin-Stewart and Kent (2006) find that the frequency of audit committee meetings results in higher audit quality. They determined that the diligence of the audit committee can complement the external audit activities to enhance the overall audit performance and hence bring about better financial reporting quality as a result. For the purposes of this essay, the frequency of audit meetings is being measured as number of audit committee meetings held during the year. As diligence of audit committee as described above is expected to enhance audit quality and give rise to higher audit fees, it is postulated that a positive direction will take place.

Financial Expertise of Audit Committee

Another corporate governance variable that has an impact on audit quality is the financial expertise of the audit committee. The following definition is used in this essay involving the control variable $FINEXPAC_{it}$: A dichotomous indicator variable indicating the member of the audit committee's financial experience where a score of one (1) will be given to firm *i* if the member has a professional qualifications and/or experience as a public accountant, auditor, principal or CFO; otherwise firm *i* is scored zero (0). A dichotomous indicator variable indicating the member of the audit committee's financial experience where a score of one (1) will be given to firm *i* if the member has experience as a CEO/President of a For-Profit firm; otherwise firm *i* is scored zero (0).These information are derived from the description in the director's report of an annual report.

This variable has been found to be positively associated with higher audit fees and consequently higher audit quality in a study conducted by Goodwin-

Stewart and Kent (2006). For the purposes of this essay, the financial expertise of audit committee $FINEXPAC_{it}$ is measured using a dummy variable given the value of 1 if the audit committee consists of at least one financial expert during the year for firm *i* at time period *t*.

Firm Leverage

In the domain of finance, the term "leverage" is a technique used to gauge and assess the level of financial risk and accessibility of financial resources within a firm and it signifies the debt structure of a particular firm. Firms with high level of leverage are exposed to risks of violating its debt agreements and as such may lead to higher level of cost of capital (Karim et al., 2006).

Prior studies on highly geared firms have revealed that such firms have aggressively engaged in earnings management (hence impacting the quality of financial reports adversely) to circumvent breaching of debt covenants (Dechow & Skinner, 2000; Elayan et al., 2008; Erickson et al., 2004; Watts & Zimmerman, 1978). This study expects that it is correlated with audit fees in a positive manner with the majority of the prior empirical studies suggest likewise (Craswell, Stokes, & Laughton, 2002; Defond et al., 2002; A. Ferguson & Stokes, 2002).

Number of Subsidiaries

A conventional measure of firm complexity comes in the form of the number of subsidiaries under the control of a particular firm. (Craswell et al., 2002; A. Ferguson, Francis, & Stokes, 2003; Francis, 1984; Simon & Francis, 1988; Simunic, 1980). Greater complexity is expected from a firm with a high number of subsidiaries as external auditors are required to spend more time in ensuring that the financial statements are free from material misstatement with the complicated transactions arising from inter-company dealings. As a result, higher audit fees is imposed as knowledgeable and experience auditors would have to step in. For the purposes of this essay, the control variable SQ_SUB_{it} represents the square number of subsidiaries for firm i at time period t.

Business Segments

As a gauge of firm complexity, prior empirical research has utilised the number of business segments (Carcello et al., 2002; Hoistash, Markelevich, &

Barragato, 2007). The basis for the selection of this variable stems from the reasoning that a firm's complexity is anticipated to be higher if it has a larger number of different business segments which it is operating in. As such, it is expected that the audit fees is positively related to the number of business segments as more time and attention would be devoted to comprehend the distinct business segments and operations if the firm. Henceforth, for the purposes of this essay, the variable SEG_{it} represents number of business segments for firm *i* at time period *t*.

Non-Audit Fees

The concern that non-audit services compromises auditor's independence is evident in previous literature on audit quality, arguing that enhanced economic bonding in terms of elevated non-audit services between the client and the external auditors may result in impairing the objectivity of the auditors (M. J. Ferguson et al., 2004; Frankel et al., 2002). On the contrary, H. Chung and Kallapur (2003) find that there is no association between abnormal accruals and non-audit fees. Similarly, prior literature on non-audit services studies do not yield any significant relationship between non-audit service fees and impaired audit independence ((Defond et al., 2002). With the inconsistent results above, no prediction on the direction is formulated.

Return on Assets

Past research suggests that profitability is commonly regarded as a measure of inherent risk in this an auditor may be subjected to lawsuits in the event they negligently issued a clean opinion on a financial statement when it does not reflect a true and fair view of the financial position of the firm (Simunic, 1980).

As profitability is a measure of firm performance, there is tendency on the managers to window-dress financial statements to paint a rosier picture when it is not the case. Inevitably it increases the risk of the firm and consequently external auditors would be required to dedicate more effort and resources to alleviate the risk. Under such circumstance the audit fees are expected to the positively related to ROA. For the aim of this essay, the measure of profitability is the earnings before interest and tax (EBIT) divided by total assets at year end, giving rise to ROA_{it}.

Current Assets Ratio

Another measure of inherent risk that is frequently studied by researchers when it comes to audit fees is the current assets, consisting primarily of inventories and receivables (A. Ferguson et al., 2006; Francis et al., 2005). It has been suggested that audit fees are positively related to inherent risk in an audit engagement especially firms with large and complex inventories and high number of customers/receivables and as such requires greater effort and scrutiny by external auditors. For the purposes of this essay, current assets ratio $CATA_{it}$ is being measured as the total current assets deflated by total assets at year end.

Industry Effects

For the objective of this essay, as the sample firms have the tendency to be focussing on a number of industries, the industry effects are controlled. Past researchers in the domain of audit quality suggest that audit fees differ between industries and/or sectors (Maher, Tiessen, Colson, & Broman, 1992; Palmrose, 1986; Simunic, 1980). The variable $INDUSTRY_{it}$ is scored one (1) if firm i in the time period t is listed within the GICS (Global Industry Classification Standard) taxonomy otherwise the variable $INDUSTRY_{it}$ is scored zero (0) as part of the measurement in this study. Consistent with prior studies on audit fees, this essay will utilize nine (9) broad industry categories which include Energy, Materials, Industrials, Consumer Discretionary, Consumer Staples, Health Care, Information Technology, Telecommunications Services and Utilities.

Year Effects

As a means to control for the fixed year effects, year dummies ($YEAR_{it}$) are also being introduced in this study. As inferred by a study from (Achleitner et al., 2014), the scale of audit fees fluctuate annually. $YEAR_{it}$ characterize an indicator variable that regulate temporal differences of reporting periods for firm-year observations with firm i scored one (1) if financial data relates to time period t; otherwise scored zero (0). For the purpose of this study, a five year observation window comprising of 2008, 2009, 2010, 2011, and 2012 calendar years are examined.

3.4.7 Regression Models

This study uses multiple regression analyses to test and analyse the relationship between the selected independent variable have on audit fees. The hypotheses of this essay are tested officially through this multivariate technique.

Regression analyses are used to test whether firms with the independent variable indicated earlier with have higher audit fees for every industry and year using the defined *Equation [5]* as follows:

$$LogAF_{it} = \beta_0 + \beta_1 AVE\_MUL_{it} + \beta_2 EDU\_PER_{it} + \beta_3 GEN\_PER_{it} + \beta_4 LogTA_{it} + \beta_5 SHARE\_BOD_{it} + \beta_6 CEO\_DUAL_{it} + \beta_7 AUD\_BOD_{it} + \beta_8 SPECIALIST_{it} + \beta_9 PRO\_INDAC_{it} + \beta_{10} ACMEET_{it} + \beta_{11} FINEXPAC_{it} + \beta_{12} LEV_{it} + \beta_{13} Log\_NAF_{it} + \beta_{14} SQ\_SUB_{it} + \beta_{15} SEG_{it} + \beta_{16} CA\_TA_{it} + \beta_{17} ROA_{it} + \beta_{18} \sum INDUSTRY_{it} + B_{19} \sum YEAR_{it} + \varepsilon_{it} \quad [5]$$

Where:

$LogAF_{it}$	=	Natural logarithm of audit fees for firm *i* on year *t*.
AVE_MUL_{it}	=	Average number of directors with multiple directorships on the board of firm *i* in year *t.*
EDU_PER_{it}	=	An indicator variable where firm *i* is scored one (1) where firm *i* has director(s) with "masters' degree or higher"; otherwise scored zero.
GEN_PER_{it}		Proportion of the women on the board of firm *i* in year *t*.
$LogTA_{it}$	=	Natural logarithm of total assets for firm *i* in year *t*.
$SHARE\_BOD_{it}$	=	Proportion of share owned by the board of directors of firm *i* in year *t*.
CEO_DUAL_{it}	=	An indicator variable where firm *i* is scored one (1) if the same individual occupies the roles of chairperson of the board and chief executive officer (CEO) at the end of time period *t*; otherwise scored zero (0).
AUD_BOD_{it}	=	An indicator variable where firm *i* is scored one (1) if firm has audit committee; otherwise scored zero.
$SPECIALIST_{it}$	=	Auditee *i* in time period *t* is scored one (1) if the incumbent auditor *j* in time period *t* is an industry specialist in industry *k*; otherwise auditee *i* in time period *t* is scored zero (0).
PRO_INDAC_{it}	=	The proportion of independent directors on the audit committee for firm *i* at time period *t.*
$ACMEET_{it}$	=	The number of audit committee meetings held during the year for firm *i* at time period *t*.
$FINEXPAC_{it}$	=	A dummy variable given the value of 1 if the audit committee consists of at least one financial expert during the year for firm *i* at time period *t*.
LEV_{it}	=	Ratio of total debt of firm *i* at the end of time period t to the total assets of firm *i* at the end of time period *t.*
Log_NAF_{it}	=	Natural logarithm of non-audit fees of firm *i* in year *t*.
SQ_SUB_{it}	=	Square of number of subsidiaries of firm *i* at the end of time period *t*.
SEG_{it}	=	Number of segments of firm *i* at the end of time period *t*.
CA_TA_{it}	=	Total current assets scaled by total assets of firm i at the end of time period t.
ROA_{it}	=	Return on assets for firm *i* in year *t*.
$\sum INDUSTRY_{it}$	=	$ENERGY_{it}$ +$MATERIALS_{it}$ + $INDUSTRIALS_{it}$ + $CONSUMER\ DISCRETIONARY_{it}$ + $CONSUMER\ STAPLES_{it}$ + $HEALTH\ CARE_{it}$ + $INFORMATION\ TECHNOLOGY_{it}$ + $TELECOMMUNICATION\ SERVICES_{it}$ + $UTILITIES_{it}$
$ENERGY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the energy industry and zero (0) if otherwise in 2008.
$MATERIALS_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the materials industry and zero (0) if otherwise in 2008.

$INDUSTRIALS_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the industrials industry and zero (0) if otherwise in 2008.
$CONSUMER\ DISCRETIONARY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the consumer discretionary industry and zero (0) if otherwise in 2008.
$CONSUMER\ STAPLES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the consumer staples industry and zero (0) if otherwise in 2008.
$HEALTH\ CARE_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the health care industry and zero (0) if otherwise in 2008.
$INFORMATION\ TECHNOLOGY_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the energy industry and zero (0) if otherwise in 2008.
$TELECOMMUNICATION\ SERVICES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the telecommunication services industry and zero (0) if otherwise in 2008.
$UTILITIES_{it}$	=	A dichotomous variable given the score one (1) if the firm *i* is in the utilities industry and zero (0) if otherwise in 2008.
$YEAR_{it}$	=	Series of indicator variables corresponding to the financial year the data firm *i* is obtained.
β	=	Coefficients on independent and control variables 0 through 13.
ε_{it}	=	The error term.

The variable of interest is AVE_MUL_{it}. The coefficient on AVE_MUL_{it} is predicted to be significant in the above EQ model. The variable of interest is the average number of directors with multiple directorships on the board of a specific firm, a popular measurement that is used in multiple studies revolving busy boards and board interlocks.

The first set of regressions to test the hypotheses H_1 of this study are performed in Section 3.5 by regressing independent and control variables in *Equation [5]* against the natural logarithm of audit fees ($LogAF_{it}$).

3.5 ANALYSIS

3.5.1 Cleaning of the Data

Prior to data analysis, data screening checks are undertaken for each of the variables used in the study. Such checks include accuracy of the data entry, missing values and normality assessments. In regards to the accuracy of data entry and missing values, a data authentication check is undertaken on a sample basis, by revisiting data already entered. In total approximately fifteen (15) percent of the data set is examined in this manner. There were no errors noted.

Further, each continuous variable in this study is tested for normality by examining the kurtosis, variable's skewness and Kolmogorov-Smirnov p-value. The inclusion of some variables that did not give rise to normal distributions is justified by the previous studies (Barton & Simko, 2002; Gopalan & Jayaraman, 2011; F. A. Gul et al., 2007).

To provide a finer linear fit with the dependent variable, control variables such firm size logarithmically transformed in agreement with prior literature on audit fees (Craswell et al., 2002; A. Ferguson et al., 2003; Francis, 1984; Francis & Stokes, 1986; Simunic, 1980).

3.5.2 Sample Selection Process and Industry Breakdown

This section provides a detailed description of how the final sample is chosen for this study. The discussion concentrates on two key aspects; sample selection and industry breakdown. The final usable pooled sample of firm-year observations from 2008 to 2012 is 2070 (414 firms multiple by five years).

The initial sample comprises 1101 publicly listed firms on the Australian Securities Exchange (ASX*)* as at January 1, 2008 from the SIRCA database. Consistent with past empirical studies (Ball et al., 2000; M. J. Ferguson et al., 2004) financial institutions (161), trusts and investments (42) are excluded as the financial statements of such firms are subject to different accounting regulations and audit fees models may not be not applicable to them. In addition, firms that are not continuously listed on the ASX (367) will also be excluded to avoid unwarranted influences resulting from unforeseen share price movements due to intermittent listing on ASX for the observation period under study as well firms which have their IPO in the preceding or same year (19). According to Craswell (1999), these firms need to be removed because they have not met the data requirements. Since financial statements of ASX listed firms having headquarters in foreign nations are not usually prepared in accordance with the normal disclosure requirements for other firms listed on the ASX, these firms (51) are excluded from the list, consistent with past practices (Clifford & Evans, 1997). Lastly, exclusions from this study will include firms having missing data (47) for the observation period (Klein, 2002a, 2002b).

Table 3.1
Sample Selection and Industry Breakdown (Essay 2)

Panel A: Sample Selection	
Initial sample size of SIRCA firms listed on ASX as at January 1, 2008	1101
Exclusions:	
Firms with overseas headquarters	(51)
Firms in the financial sector	(161)
Investment trusts	(42)
Firms with IPO in the preceding / same year	(19)
Total number excluded:	(273)
Excluded due to non-continuous data	(367)
Excluded due to missing data	(47)
Final usable sample (2008)	414
Final usable sample (2008 to 2012) =414*5	2070

Panel B: Sample firm breakdown by industry

ASX Industry	No of Firms	% of Sample
Consumer Discretionary	260	12.5%
Consumer Staples	80	3.9%
Energy	275	13.3%
Health Care	175	8.5%
Industrials	340	16.4%
Information Technology	170	8.2%
Materials	695	33.6%
Telecommunication Services	40	1.9%
Utilities	35	1.7%
Total	2070	100%

3.5.3 Descriptive Statistics

Table 3.2 below provides the descriptive statistics of all dependent, independent and control variables that are used in this study. The logarithm of audit fees calculated using the model has a mean (median) of 11.964 (11.700). The main independent variable in Table 3.2 (AVE_MUL_{it}) has a mean (median) of 2.265 (2.111) with a standard deviation of 1.030. This suggests that the board members in the sample have, on average, at least 2 directorships in their portfolio. In addition, it also infers that the average board memberships in the sample ranges from 1.500 (25 percentile) to 2.800 (75 percentile). Table 3.2 reveals that there are 45.7% firms that have at least one director sitting on more than one sub-committee within the firm (SUB_DIR_{it}). The majority of the firms (79.3%) have an audit committee during the observation period. For firm size ($LogTA_{it}$) Table 3.2 reports the mean and median as 18.185 (18.030). Under the same table, the firm size in the sample varies from 16.565 (25 percentile) to 19.767 (75 percentile). Additionally, the proportion of the shares owned by the board of directors ($SHARE\_BOD_{it}$) has a mean (median) of 0.123 (0.036) and a standard deviation of 0.183 with the shareholdings vary between 0.2% (25 percentile) to 16.2% (75 percentile). As evident in other similar Australian corporate governance studies (Kiel & Nicholson, 2003; D. Sharma, 2004) on CEO duality (CEO_DUAL_{it}), only 9.4% of the sample firms have a CEO who concurrently assumes the role of the chairman of the board suggesting that such arrangement is not popular or common in Australia. Out of the total sample firms under study, about 34.2% are audited by a specialist auditor. Further, Table 3.2 illustrates that leverage (LEV_{it}) has a mean (median) of 0.791 (0.339) of which the debt level hovers between 12.3% (25 percentile) to 53.5% (75 percentile). Meanwhile, square of number of subsidiaries (SQ_SUB_{it}) has a mean (median) of 3.644 (2.828) and a standard deviation of 3.152 whereas for number of business segments (SEG_{it}) the mean (median) is 2.114 (2.000)

with a standard deviation of 1.29. In addition, table 3.2 describes current assets (CA_TA_{it}) to have a mean (median) of 0.437 (0.406) with a standard deviation of 0.288. Finally, the return on assets (ROA_{it}) has a mean (median) of -0.296 (0.014) with a standard deviation of 2.888.

Table 3.2
Descriptive Statistics

Variable	Mean	Standard Deviation	25 percentile	Median	75 percentile
$LogAF_{it}$	11.964	1.495	10.859	11.700	12.753
LN_NAF_{it}	7.801	5.326	0.000	9.935	11.722
NUM_MUL_{it}	2.911	2.255	1.000	3.000	4.000
AVE_MUL_{it}	2.265	1.030	1.500	2.111	2.800
PRO_MUL_{it}	0.500	0.295	0.250	0.500	0.750
MUL_BOD1_{it}	0.884	0.320	1.000	1.000	1.000
MUL_BOD2_{it}	0.503	0.500	0.000	1.000	1.000
MUL_BOD3_{it}	0.185	0.388	0.000	0.000	0.000
MUL_BOD4_{it}	0.051	0.219	0.000	0.000	0.000
EDU_PER_{it}	0.633	0.482	0.000	1.000	1.000
GEN_PER_{it}	0.044	0.092	0.000	0.000	0.000
$LogTA_{it}$	18.185	2.536	16.565	18.030	19.767
$SHARE\_BOD_{it}$	0.123	0.183	0.002	0.036	0.162
CEO_DUAL_{it}	0.095	0.294	0.000	0.000	0.000
AUD_BOD_{it}	0.768	0.422	1.000	1.000	1.000
$SPECIALIST_{it}$	0.342	0.475	0.000	0.000	1.000
PRO_INDBD_{it}	0.553	0.240	0.400	0.600	0.750
$ACMEET_{it}$	2.646	2.183	1.000	2.000	4.000
$FINEXPAC_{it}$	0.586	0.493	0.000	1.000	1.000
LEV_{it}	0.791	7.606	0.123	0.339	0.531
LN_NAF_{it}	7.801	5.326	0.000	9.935	11.722
SQ_SUB_{it}	3.644	3.152	2.000	2.828	4.359
SEG_{it}	2.114	1.299	1.000	2.000	3.000
CA_TA_{it}	0.437	0.288	0.220	0.406	0.609
ROA_{it}	-0.296	2.888	-0.113	0.014	0.078

Please refer to Equation [5] for the definitions of variable.

3.5.4 Correlation Analysis

Table 3.3 reports the Pearson correlation coefficients among the variables. The table includes the dependent variable, namely the natural logarithm audit fees ($LogAF_{it}$). A comprehensive analysis of correlation coefficients in Table 3.3 highlights a number of observations. First the independent variable ($LogAF_{it}$) is significantly correlated with the main independent variable (AVE_MUL_{it}) and with a number of control variables ($EDU\_PER_{it,}$ GEN_PER_{it},$SPECIALIST_{it}$, $SHARE\_BOD_{it}$, CEO_DUAL_{it}, AUD_BOD_{it}, $SPECIALIST_{it}$, PRO_INDBD_{it}, LEV_{it}, SQ_SUB_{it}. $SEG_{it,}$ $CA\_TA_{it,}$ *and* ROA_{it}) as indicated in Table 3.3. Second, the main independent variable (AVE_MUL_{it}) is significantly correlated with various control variables, namely EDU_PER_{it}, GEN_PER_{it}, $SPECIALIST_{it}$, $SHARE\_BOD_{it}$, CEO_DUAL_{it} AUD_BOD_{it}, $SPECIALIST_{it}$, PRO_INDBD_{it} and SQ_SUB_{it}. Third, the main independent variable (AVE_MUL_{it}) is also significantly associated with firm size ($LogTA_{it}$). This is anticipated as larger firms tend to have larger boards which in turn would have directors who have diverse skills and experience accumulated from being board members in many different firms. Finally, a review of Table 3.3 also suggests that firms with higher audit fees ($LogAF_{it}$) are significantly correlated with larger firms ($LogTA_{it}$). However, in all instances none of the correlations exceed multi-collinearity limits of 0.80 (Hair et al., 1995). There are no unusual correlations among the variables in the regressions that justify any concern.

Table 3.3
Pearson Correlation

Variable	$LogAF_{it}$	AVE_MUL_{it}	EDU_PER_{it}	GEN_PER_{it}	$LogTA_{it}$	$SHARE\_BOD_{it}$	CEO_DUAL_{it}	AUD_BOD_{it}	$SPECIALIST_{it}$	PRO_INDBD_{it}	$ACMEET_{it}$	$FINEXPAC_{it}$	LEV_{it}	LN_NAF_{it}	SQ_SUB_{it}	SEG_{it}	CA_TA_{it}	ROA_{it}
$LogAF_{it}$	1																	
AVE_MUL_{it}	0.294***	1																
EDU_PER_{it}	0.195***	0.08***	1															
GEN_PER_{it}	0.235***	0.081***	0.17	1														
$LogTA_{it}$	0.768***	0.294***	0.178***	0.201***	1													
$SHARE\_BOD_{it}$	-0.124***	-0.151***	-0.064***	-0.043*	-0.172***	1												
CEO_DUAL_{it}	-0.14***	-0.068***	-0.06***	0.015	-0.129***	0.2***	1											
AUD_BOD_{it}	0.438***	0.071***	0.14***	0.11***	0.428***	-0.069***	-0.114***	1										
$SPECIALIST_{it}$	0.455***	0.219***	0.152***	0.131***	0.411***	-0.184***	-0.05**	0.218***	1									
PRO_INDBD_{it}	0.311***	0.165***	0.11***	0.113***	0.279***	-0.265***	-0.104***	0.199***	0.208***	1								
$ACMEET_{it}$	0.609***	0.18***	0.209***	0.177***	0.591***	-0.126***	-0.124***	0.641***	0.373***	0.266***	1							
$FINEXPAC_{it}$	0.378***	0.109***	0.14***	0.123***	0.377***	-0.088***	-0.131***	0.651***	0.232***	0.139***	0.481***	1						
LEV_{it}	-0.048**	0.017	-0.029	-0.018	-0.153***	-0.014	-0.011	0.019	-0.037*	-0.023	-0.041*	-0.017	1					
LN_NAF_{it}	0.557***	0.197***	0.142***	0.142***	0.554***	-0.076***	-0.091***	0.34***	0.324***	0.224***	0.426***	0.317***	-0.037*	1				
SQ_SUB_{it}	0.588***	0.203***	0.126***	0.175***	0.569***	-0.148***	-0.083***	0.272***	0.324***	0.207***	0.47***	0.251***	-0.045**	0.397***	1			
SEG_{it}	0.449***	0.122***	0.003	0.103***	0.401***	0.004	-0.011	0.214***	0.194***	0.155***	0.283***	0.163***	-0.036*	0.329***	0.446***	1		
CA_TA_{it}	-0.115***	-0.098***	-0.036*	-0.036	-0.298***	0.107***	0.001	0.007	-0.057***	-0.016	-0.063***	-0.042**	0.098***	-0.038*	-0.118***	-0.050**	1	
ROA_{it}	0.098***	0.017	0.003	0.038*	0.237***	0.026	0.011	0.038*	0.061***	-0.009	0.078***	0.018	-0.373***	0.117***	0.069***	0.074***	-0.120***	1

Tests are two tailed. *, **, and *** denote two-tailed significance levels at 10%, 5% and 1% levels, respectively. Please refer to Appendix B for details of variable definitions.

3.5.5 Multivariate Regression Results

A multiple regression analysis is considered to be appropriate as the emphasis is on examining the effect of multi variables on natural logarithm of audit fees as the dependent variable for the purposes of this essay. Specifically to this study, OLS regression is deemed to be the dominant technique when the model comprises of both continuous and dichotomous variables (Hutcheson & Sofroniou, 1999). Results of the multiple regression analysis testing the influence of the main independent variable (namely, the average number multiple directorships of a firm's board) on audit fees across the observation period from 2008 to 2012 are displayed and discussed in the following sections.

3.5.6 Impact of Average Multiple Directorships on the Audit Fees

Table 3.4 summarises the results of the multiple regressions wherein the main independent variable (AVE_MUL_{it}) is regressed against natural logarithm of audit fees ($LogAF_{it}$). Column 1 displays the results of OLS regression of the alternative independent and control variables are regressed against audit fees. The main independent variable (AVE_MUL_{it}) is positively associated with the level of audit fees. This suggests that firms with higher average number of multiple directorships encourages greater audit efforts from external auditors to increase financial reporting quality and thus reinforces the reputation hypothesis in which there is a knowledge spill-over as result of sharing skills, experiences and good practices across different boards. Further, firm size ($LogTA_{it}$) is significantly correlated with audit fees, suggesting that larger firms engages external auditors that are experienced, knowledgeable to validate their financial statements so as to present a true and fair view of the financial position of the firm. In addition to that, it suggest that larger firms are also prepared to spend more audit fees to ensure that the external auditors work have been completed at a superior level of quality thus enhancing the credibility of financial statement. This positive significant relationship is in line with majority of audit fees studies in the past (Craswell et al., 1995; L. E. DeAngelo, 1981; Francis, 1984; Goodwin-Stewart & Kent, 2006; Simunic, 1980). Similarly, the results also imply that firm with educated board members (EDU_PER_{it}) and a higher proportion of female directors (GEN_PER_{it}) encourage higher audit/earnings quality with the positive significant results for both these variable.

Some interesting results are noted for firms with CEO duality (CEO_DUAL_{it}). Firm with the same executive having the role of chairmanship and chief executive position experience a lower level of audit fees as they are concerned with overall expense and ultimately profitability of the firm and therefore not in favour of pursuing additional assurance from the work of external auditors.

In addition, firms which are audited by industry specialist ($SPECIALIST_{it}$) with a higher proportion of shareholdings ($SHARE\_BOD_{it}$) and higher proportion independent board members (PRO_INDBD_{it}) foster greater level of audit quality given the positive and statistically significant results indicated in Column 1. Further, firms with diligent audit committee members ($ACMEET_{it}$), high level of debt (LEV_{it}) and with high non-audit services (LN_NAF_{it}) are also positively correlated with audit fees, consistent with prior literature in the audit fees domain (Goodwin-Stewart & Kent, 2006). Moreover, the positive significant association with audit fees for the number of subsidiaries (SQ_SUB_{it}), the number of business segments (SEG_{it}) and current assets (CA_TA_{it}) also confirm that the higher the complexity and inherent risk of the firm the more attention is paid to the audit quality of that particular firm.

These results are also in line with most of the previous studies on these variables (Carcello et al., 2002; A. Ferguson & Stokes, 2002; Goodwin-Stewart & Kent, 2006). Finally, the results on the return of assets (ROA_{it}) in which the profitability of a firm is negative and significantly correlated with audit fees, infers that external auditors pay more attention to firms that are less profitable to minimise their exposure to any lawsuits or loss in the event the client goes under.

The adjusted R^2 is consistent with earlier Australian studies on audit fees. (Francis, 1984).

Table 3.4
Multivariate Regression Results – Impact of Multiple Directorships on Audit Fees – Average, Proportion and Number of Multiple Directorships

VARIABLES	(1) $LogAF_{it}$	(2) $LogAF_{it}$	(3) $LogAF_{it}$
AVE_MUL_{it}	0.0801***		
	(3.371)		
PRO_MUL_{it}		0.174**	
		(2.499)	
NUM_MUL_{it}			0.0782***
			(5.972)
EDU_PER_{it}	0.110***	0.105***	0.0753*
	(2.822)	(2.703)	(1.958)
GEN_PER_{it}	0.534**	0.535**	0.390*
	(2.531)	(2.522)	(1.840)
$LogTA_{it}$	0.288***	0.291***	0.265***
	(10.06)	(10.08)	(9.197)
$SHARE\_BOD_{it}$	0.307**	0.279**	0.319**
	(2.437)	(2.231)	(2.559)
CEO_DUAL_{it}	-0.159***	-0.157***	-0.121**
	(-2.718)	(-2.665)	(-2.060)
AUD_BOD_{it}	0.0153	0.0150	0.0470
	(0.237)	(0.226)	(0.729)
$SPECIALIST_{it}$	0.331***	0.339***	0.313***
	(6.699)	(6.852)	(6.521)
PRO_INDBD_{it}	0.310***	0.328***	0.316***
	(3.420)	(3.559)	(3.491)
$ACMEET_{it}$	0.0694***	0.0678***	0.0598***
	(4.555)	(4.408)	(4.240)
$FINEXPAC_{it}$	0.0239	0.0205	-0.0004
	(0.516)	(0.441)	(-0.000777)
LEV_{it}	0.00351**	0.00379**	0.00224
	(2.263)	(2.354)	(1.593)
LN_NAF_{it}	0.0253***	0.0257***	0.0257***
	(4.125)	(4.152)	(4.210)
SQ_SUB_{it}	0.0549***	0.0555***	0.0520***
	(5.294)	(5.305)	(5.326)
SEG_{it}	0.0974***	0.0977***	0.0860***
	(6.546)	(6.492)	(6.103)
CA_TA_{it}	0.204**	0.201**	0.198**
	(2.398)	(2.350)	(2.434)
ROA_{it}	-0.0236***	-0.0236***	-0.0212***
	(-2.693)	(-2.716)	(-2.868)
Constant	5.257***	5.298***	5.723***
	(11.44)	(11.38)	(12.40)
Industry Fixed Effects	Included	Included	Included
Year Fixed Effects	Included	Included	Included
Observations	2,070	2,070	2,070
Adjusted R-squared	0.706	0.705	0.711
F test	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix B for variable definitions.

3.5.7 Sensitivity Analysis

To corroborate the robustness of the findings from this essay, sensitivity tests are carried out. For the objectives of the main analysis, the essay hinges on natural logarithm of audit fees model as the measurement of the dependent variable. The most common measurement used as a gauge of multiple directorship is the average number of directors with multiple directorships on the board (Ferris, Jagannathan et al. 2003, Fich and Shivdasani 2006, Jiraporn, Singh et al. 2009, Field, Lowry et al. 2013, Falato, Kadyrzhanova et al. 2014).

The main analysis in 3.5.6 is then re-performed using the different measurement of independent variable for multiple directorships i.e.; the proportion and number of multiple directorships under section 3.5.8. As for the dependent variable, audit fee expectation model that separates the expected audit fee (normal audit fee) and the unexpected component is used, which is the abnormal audit fee which is detailed under section 3.5.9. Finally, other measurements of multiple directorship that are being employed as part of the sensitivity analysis of this essay are detailed under sections 3.5.10 to 3.5.11.

3.5.8 Alternative Measure of Audit Fees

To further corroborate the main findings, additional analyses are performed using a different independent variable. In addition to average number of multiple directorships, proportion of directors with multiple directorships and also the number of directors with multiple directorships.

These additional variables are used to replace main independent variable, AVE_MUL_{it} individually to further corroborate the main results obtained. Firstly, the following regression model to examine whether audit fees are affected by the proportion of directors with multiple board memberships (PRO_MUL_{it}) for every industry and year is run using the defined *Equation [6]* as follows:

$$\begin{aligned} LogAF_{it} = {} & \beta_0+\beta_1 PRO\_MUL_{it} +\beta_2 EDU\_PER_{it}+\beta_3 GEN\_PER_{it}+ \beta_4 LogTA_{it}+ \\ & \beta_5 SHARE\_BOD_{it}+\beta_6 CEO\_DUAL_{it}+\beta_7 AUD\_BOD_{it}+ \\ & \beta_8 SPECIALIST_{it} + \beta_9 PRO\_INDAC_{it} + \beta_{10} ACMEET_{it} + \\ & \beta_{11} FINEXPAC_{it} + \beta_{12} LEV_{it}+\beta_{13} Log\_NAF_{it} + \beta_{14} SQ\_SUB_{it} + \\ & \beta_{15} SEG_{it}+\beta_{16} CA\_TA_{it}+\beta_{17} ROA_{it}+\beta_{18}\sum INDUSTRY_{it}+\beta_{19}\sum YEAR_{it}+\varepsilon_{it} \end{aligned} \quad [6]$$

In Table 3.4, column 2 details the results of the multiple regressions wherein the alternative independent variable (PRO_MUL_{it}) is regressed against the natural logarithm of audit fees $(LogAF_{it})$.

To further corroborate the main findings, additional analyses for the main independent variable are performed. In addition to average number of multiple directorships, a different independent variable (PRO_MUL_{it}) is utilised to test the robustness of the results. Column 2 displays the results of OLS regression of all independent and control variables are regressed against $LogAF_{it}$. The alternative independent variable (PRO_MUL_{it}) is significantly associated with the level of audit fees. This finding is consistent with the main results displayed in Table 3.4 and confirms the robustness of the earlier test undertaken.

Table 3.4 column 2 details the results of the multiple regressions wherein the alternative independent variable (PRO_MUL_{it}) is regressed against the natural logarithm of audit fees $(LogAF_{it})$.

Similar results were obtained for all the variables in the main test, validating the robustness of the earlier test with AVE_MUL_{it}. Thereafter, an alternative regression model to examine whether audit fees are affected by the number of directors with multiple board memberships (NUM_MUL_{it}) for every industry and year is run using the defined *Equation [7]* as follows:

$$\begin{aligned} LogAF_{it} = {} & \beta_0+\beta_1 NUM\_MUL_{it} +\beta_2 EDU\_PER_{it}+\beta_3 GEN\_PER_{it}+ \\ & \beta_4 LogTA_{it}+\beta_5 SHARE\_BOD_{it}+\beta_6 CEO\_DUAL_{it}+\beta_7 AUD\_BOD_{it}+ \\ & \beta_8 SPECIALIST_{it} + \beta_9 PRO\_INDAC_{it} + \beta_{10} ACMEET_{it} + \\ & \beta_{11} FINEXPAC_{it} + \beta_{12} LEV_{it}+\beta_{13} Log\_NAF_{it}+\beta_{14} SQ\_SUB_{it} + \\ & \beta_{15} SEG_{it}+\beta_{16} CA\_TA_{it}+\beta_{17} ROA_{it}+\beta_{18}\sum INDUSTRY_{it}+\beta_{19}\sum YEAR_{it}+\varepsilon_{it} \end{aligned} \quad [7]$$

In Table 3.4, column 3 details the results of the multiple regressions wherein the alternative independent variable (NUM_MUL_{it}) is regressed against the natural logarithm of audit fees $(LogAF_{it})$. To further corroborate the main findings, additional analyses are performed for the main independent variable. In addition to average number of multiple directorships, a different independent variable is utilised (NUM_MUL_{it}) to test the robustness of the results. Column 3 displays the results of OLS regression of all independent and control variables are regressed against $LogAF_{it}$. The alternative independent variable (NUM_MUL_{it}) is significantly associated with the level of audit fees. This finding is consistent with the main results displayed in Table 3.4 and confirms the robustness of the earlier test undertaken.

Table 3.4 column 3 details the results of the multiple regressions wherein the alternative independent variable (NUM_MUL_{it}) is regressed against the natural logarithm of audit fees ($LogAF_{it}$). Similar results were obtained for majority of the variables (i.e.; educated members, female board members, size of firm, audit specialists, board independence, firm's leverage, non-audit services, complexity of the firm, inherent risk and profitability) in the main test, validating the robustness of the earlier test with AVE_MUL_{it}.

In addition to the analysis on the different independent variables described above, further tests are undertaken to determine whether there is any impact on the firms with high audit fees as compared to those with lower audit fees. Prior literature suggests that firm with high audit fees are associated with enhanced audit quality (Palmrose, 1986). The mean of the logarithm of audit fees is used to distinguish between high and low audit fees i.e., audit fees above the mean will be considered as high and fees below the mean will be considered as low audit fees. From the results obtained under Table 3.5, it is noted that the firms with higher audit fees is significantly associated in a positive manner with the average multiple directorships. The remaining control variables like firm size, audit specialists, firm's leverage, number of subsidiaries and segments remained positively associated with higher audit fees. This suggests that firms with multiple directorships demand greater level of assurance through additional work and effort from external auditors resulting in a higher level of audit fees.

Table 3.5
Multivariate Regression Results – Impact of Multiple Directorships on Audit Fees – High and Low Audit Fees

VARIABLES	(1) $LogAF_{it}$	(2) $LogAF_{it}$
AVE_MUL_{it}	0.0680*	0.0358
	(1.830)	(1.341)
EDU_PER_{it}	0.0806	0.0571*
	(1.088)	(1.725)
GEN_PER_{it}	0.551	0.532***
	(1.345)	(3.701)
$LogTA_{it}$	0.323***	0.116***
	(9.486)	(7.143)
$SHARE\_BOD_{it}$	0.0366	0.181**
	(0.139)	(2.063)
CEO_DUAL_{it}	-0.118	-0.0642*
	(-0.659)	(-1.796)
AUD_BOD_{it}	-0.391	0.179***
	(-1.421)	(3.659)
$SPECIALIST_{it}$	0.197**	0.280***
	(2.566)	(8.550)
PRO_INDBD_{it}	0.0988	0.131
	(0.566)	(1.438)
$ACMEET_{it}$	0.0227	0.0321***
	(1.459)	(2.812)
$FINEXPAC_{it}$	-0.0326	-0.0291
	(-0.440)	(-0.907)
LEV_{it}	0.358**	-0.00183*
	(2.161)	(-1.692)
LN_NAF_{it}	0.0302**	0.0123***
	(2.132)	(3.716)
SQ_SUB_{it}	0.0271***	0.0164
	(3.257)	(1.316)
SEG_{it}	0.0786***	0.0315**
	(4.317)	(2.178)
CA_TA_{it}	0.207*	0.0381
	(1.671)	(0.662)
ROA_{it}	-0.358*	-0.0125**
	(-1.767)	(-2.356)
Constant	5.659***	8.541***
	(9.095)	(31.15)
Industry Fixed Effects	Included	Included
Year Fixed Effects	Included	Included
Observations	896	1,174
Adjusted R-squared	0.487	0.399
F test	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix B for variable definitions.

3.5.9 Alternative Measure of Audit Fees - Abnormal Audit Fees

To further corroborate the main findings, additional analysis is carried out using a different dependent variable. In addition to natural logarithm of audit fees, abnormal audit fees are used. The different types of abnormal audit fees used are unsigned, high abnormal audit fees and low abnormal audit fees. These additional variables are used to replace main independent variable, $LogAF_{it}$ individually to further corroborate the main results obtained.

An audit expectation model is specified in order to break down the actual audit fees into two separate components. The first is the expected component i.e. the normal audit fee and the unexpected component which is the abnormal audit fees (J. H. Choi et al., 2010).

The following regression model to examine whether abnormal audit fees are affected by the average number of directors with multiple board memberships (AVE_MUL_{it}) for every industry and year is run using the defined *Equation [8]* as follows:

$$AB\_AF_{it} = \beta_0+\beta_1 AVE\_MUL_{it} +\beta_2 EDU\_PER_{it}+\beta_3 GEN\_PER_{it}+ \beta_4 LogTA_{it}+ \beta_5 SHARE\_BOD_{it}+\beta_6 CEO\_DUAL_{it}+\beta_7 AUD\_BOD_{it}+ \beta_8 SPECIALIST_{it}+ \beta_9 PRO\_INDAC_{it} + \beta_{10} ACMEET_{it} + \beta_{11} FINEXPAC_{it}+ \beta_{12} LEV_{it}+ \beta_{13} Log\_NAF_{it} +\beta_{14} SQ\_SUB_{it} + \beta_{15} SEG_{it}+\beta_{16} CA\_TA_{it}+\beta_{17} ROA_{it}+ \beta_{18}\sum INDUSTRY_{it}+\beta_{19}\sum YEAR_{it}+\varepsilon_{it} \quad [8]$$

Using the estimated coefficients of the variables included in Equation [8] above, the fitted values of the audit fees are computed and used as the predicted (normal) audit fees. The abnormal audit fees (AB_AF_{it}) is then measured by taking the difference between the actual audit fees paid by client and predicted (normal) audit fees.

In Table 3.6, column 1 details the results of the multiple regressions wherein the independent variable (AVE_MUL_{it}) is regressed against abnormal audit fees (AB_AF_{it}).

Table 3.6
Multivariate Regression Results – Impact of Multiple Directorships on Abnormal Audit Fees – Unsigned, High and Low

VARIABLES	(Unsigned) AB_R	(High) AB_R	(Low) AB_R
AVE_MUL_{it}	0.938***	0.826***	0.243
	(11.34)	(7.772)	(0.972)
EDU_PER_{it}	-0.167	-0.351	0.121**
	(-0.937)	(-1.343)	(2.101)
GEN_PER_{it}	-0.319	-0.625	-0.329
	(-0.478)	(-0.656)	(-1.007)
$LogTA_{it}$	-0.179**	-0.239**	-0.0455*
	(-2.424)	(-2.288)	(-1.867)
$SHARE\_BOD_{it}$	-0.578	0.394	-0.0542
	(-1.137)	(0.669)	(-0.308)
CEO_DUAL_{it}	-0.0424	-0.0760	-0.247***
	(-0.222)	(-0.235)	(-2.710)
AUD_BOD_{it}	0.219	-0.195	0.106
	(0.671)	(-0.417)	(1.076)
$SPECIALIST_{it}$	-0.155	0.148	-0.153**
	(-1.323)	(0.861)	(-2.431)
PRO_INDBD_{it}	-0.0877	-0.162	0.0682
	(-0.293)	(-0.435)	(0.530)
$ACMEET_{it}$	0.0410	0.0805	-0.00356
	(0.635)	(0.767)	(-0.155)
$FINEXPAC_{it}$	-0.320**	-0.326	-0.00166
	(-2.070)	(-1.220)	(-0.0258)
LEV_{it}	1.124***	1.178***	-0.0190
	(10.26)	(15.87)	(-0.322)
LN_NAF_{it}	0.0326***	0.0238	0.0111*
	(2.674)	(1.409)	(1.726)
SQ_SUB_{it}	-0.0730***	-0.000981	-0.0821***
	(-2.823)	(-0.0301)	(-3.530)
SEG_{it}	-0.0145	-0.0469	0.0243
	(-0.374)	(-0.678)	(1.093)
CA_TA_{it}	0.265	0.646	0.0261
	(1.276)	(1.324)	(0.339)
ROA_{it}	1.177***	1.231**	0.324***
	(3.689)	(2.426)	(7.345)
Constant	0.916	2.718*	-0.338
	(0.793)	(1.732)	(-0.848)
Observations	2,070	899	1,171
Adjusted R-squared	0.856	0.917	0.601
F test	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix B for variable definitions.

To further corroborate the main findings, additional analysis is carried out for the dependent variable. In addition to average number of multiple directorships, a different dependent variable is utilised (AB_AF_{it}) to test the robustness of the results. Column 1 displays the results of OLS regression of all independent and control variables are regressed against AB_AF_{it}. The alternative dependent variable (AB_AF_{it}) is positive significantly associated with the average number of directors with multiple board memberships *(AVE_MUL_{it})*. This finding is consistent with the main results displayed in Table 3.4 and confirms the robustness of the earlier test undertaken. However, some of the other variables used are no longer significant or their significance is negatively associated with the abnormal audit fees.

Table 3.6 column 2 details the results of the multiple regressions wherein the independent variable (AVE_MUL_{it}) is regressed against the abnormal audit fees which are deemed to be high *(AB_AF_{it})*. The alternative dependent variable (AB_AF_{it}) is again positive and significantly associated with the average number of directors with multiple board memberships *(AVE_MUL_{it})* whereas some of the other variables used are no longer significant or their significance is negatively associated with the abnormal audit fees, similar to the results in column 1.

Finally, in table 3.6 column 3 details the results of the multiple regressions wherein the independent variable (AVE_MUL_{it}) is regressed against the abnormal audit fees which are deemed to be low *(AB_AF_{it})*. The alternative dependent variable (AB_AF_{it}) is no longer significantly associated with the average number of directors with multiple board memberships *(AVE_MUL_{it}).* In addition some of the other variables used are no longer significant or their significance is negatively associated with the level of abnormally low audit fees.

3.5.10 Additional Measures of Multiple Directorships

The following section will discuss the sensitivity of the main results in the previous section. For the purposes of the sensitivity tests, four different types of multiple directorship measurements are included, namely MUL_BOD1_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than one board; otherwise scored zero (0)], MUL_BOD2_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than two boards; otherwise scored zero (0)], MUL_BOD3_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than three boards; otherwise scored

zero (0)] and MUL_BOD4_{it} [An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than four boards; otherwise scored zero (0)].

Section 3.5.11 discusses the results of the association between the various independent variables identified above and the dependent variable, audit fees.

3.5.11 Additional analyses - Different Measures of Multiple Directorships

To further corroborate the main results, alternative measures of multiple directorships are used. Four different types of multiple directorship measurements are included in the sensitivity tests in Table 3.7. Column 1 displays the results of OLS regression of the alternative independent and control variables are regressed against the natural logarithm of audit fees ($LogAF_{it}$).

The alternative independent variable (MUL_BOD1_{it}) is not significantly associated with the level of audit fees. This suggests that firms with low level of average number of multiple directorships are indifferent to the performance of the external auditors and as such the knowledge spill-over effect is not evident.

In Column 2, the alternative independent variable (MUL_BOD2_{it}) is significantly associated with the level of audit fees. This suggests that firms with average number of multiple directorships between two and three encourages greater assurance from external auditors leading to higher fees and reinforces the reputation hypothesis (Carpenter & Westphal, 2001; Fama & Jensen, 1983). The remaining variables (i.e.; educated members, female board members, size of firm, audit specialists, board independence, firm's leverage, non-audit services, complexity of the firm, inherent risk and profitability) that were significantly related to the main independent variable in Table 4 remain significant, confirming the robustness of the results. In Column 3 and 4, the results were similar to that of Column 2 where there is significant relationship between the multiple directorships and audit fees. These results indicate that the "Reputation" hypothesis prevails where firms with multiple directorships are keen to have ensure that the financial reporting quality of the firms are not compromised by demanding superior assurance from external auditors to verify the financial statements and thus enhancing the credibility of the audited reports (Sarkar & Sarkar, 2009).

Table 3.7
Multivariate Regression Results – Impact of Multiple Directorships on Audit Fees - Using Alternative Independent Variables

VARIABLES	(1) $LogAF_{it}$	(2) $LogAF_{it}$	(3) $LogAF_{it}$	(4) $LogAF_{it}$
MUL_BOD1_{it}	0.0500			
	(0.786)			
MUL_BOD2_{it}		0.0862**		
		(2.248)		
MUL_BOD3_{it}			0.146***	
			(2.758)	
MUL_BOD4_{it}				0.235**
				(2.379)
EDU_PER_{it}	0.106***	0.106***	0.109***	0.112***
	(2.765)	(2.726)	(2.805)	(2.844)
GEN_PER_{it}	0.558***	0.543**	0.535**	0.551***
	(2.626)	(2.562)	(2.553)	(2.596)
$LogTA_{it}$	0.295***	0.292***	0.291***	0.293***
	(10.30)	(10.16)	(10.18)	(10.28)
$SHARE\_BOD_{it}$	0.275**	0.285**	0.285**	0.285**
	(2.163)	(2.281)	(2.290)	(2.278)
CEO_DUAL_{it}	-0.162***	-0.160***	-0.168***	-0.164***
	(-2.732)	(-2.739)	(-2.851)	(-2.796)
AUD_BOD_{it}	-0.00334	0.00936	0.00662	0.00409
	(-0.0526)	(0.146)	(0.104)	(0.0645)
$SPECIALIST_{it}$	0.344***	0.341***	0.340***	0.339***
	(6.937)	(6.892)	(6.839)	(6.818)
PRO_INDBD_{it}	0.325***	0.321***	0.322***	0.323***
	(3.579)	(3.499)	(3.479)	(3.486)
$ACMEET_{it}$	0.0698***	0.0680***	0.0689***	0.0709***
	(4.515)	(4.452)	(4.521)	(4.617)
$FINEXPAC_{it}$	0.0294	0.0252	0.0333	0.0305
	(0.632)	(0.541)	(0.713)	(0.656)
LEV_{it}	0.00414**	0.00385**	0.00381**	0.00414**
	(2.485)	(2.347)	(2.513)	(2.496)
LN_NAF_{it}	0.0260***	0.0257***	0.0255***	0.0256***
	(4.185)	(4.142)	(4.141)	(4.127)
SQ_SUB_{it}	0.0556***	0.0556***	0.0555***	0.0561***
	(5.218)	(5.314)	(5.315)	(5.296)
SEG_{it}	0.0987***	0.0986***	0.0958***	0.0956***
	(6.508)	(6.539)	(6.423)	(6.427)
CA_TA_{it}	0.202**	0.202**	0.205**	0.204**
	(2.357)	(2.360)	(2.417)	(2.395)
ROA_{it}	-0.0239***	-0.0238***	-0.0238***	-0.0235***
	(-2.621)	(-2.690)	(-2.663)	(-2.592)
Constant	5.255***	5.317***	5.353***	5.327***
	(11.09)	(11.39)	(11.47)	(11.44)
Industry Fixed Effects	Included	Included	Included	Included
Year Fixed Effects	Included	Included	Included	Included
Observations	2,070	2,070	2,070	2,070
Adjusted R-squared	0.704	0.704	0.705	0.705
F test	0	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level. See Appendix B for variable definitions.

In Table 3.8, as an additional robustness test, similar tests were undertaken using an alternative control variable (BIG_FOUR_{it}), as a sensitivity analysis. Column 1 uses the average number of multiple directorships (AVE_MUL_{it}) as the main independent variable, column 2 uses the proportion of multiple directorships (PRO_MUL_{it}) while column 3 (NUM_MUL_{it}) utilises the number of multiple directorships in a firm.

The results produced were similar to that of the earlier additional test using industry audit specialist ($SPECIALIST_{it}$) as the main control variable for audit quality

in which the independent variable (AVE_MUL_{it}) and both alternative independent variables (PRO_MUL_{it}) and (NUM_MUL_{it}) are significant and positively associated with the level of audit fees indicating that directors with multiple directorships are in favour of engaging reputable and highly regarded external auditors to increase the quality of the financial reports. Likewise, majority of all the remaining variables like educated members, female board members, size of firm, audit specialists, board independence, firm's leverage, non- audit services, complexity of the firm, inherent risk and profitability that were significantly correlated with audit fees have similar results, affirming the robustness of the main results in table 3.4.

Table 3.8
Multivariate Regression Results – Impact of Multiple Directorships on Audit Fees – Using Big Four as Alternative Control Variable

VARIABLES	(1) $LogAF_{it}$	(2) $LogAF_{it}$	(3) $LogAF_{it}$
AVE_MUL_{it}	0.0861***		
	(3.564)		
PRO_MUL_{it}		0.192***	
		(2.720)	
NUM_MUL_{it}			0.0843***
			(6.362)
EDU_PER_{it}	0.111***	0.106***	0.0742*
	(2.878)	(2.747)	(1.932)
GEN_PER_{it}	0.421*	0.420*	0.264
	(1.931)	(1.919)	(1.207)
$LogTA_{it}$	0.281***	0.283***	0.256***
	(9.728)	(9.746)	(8.907)
$SHARE\_BOD_{it}$	0.291**	0.260**	0.307**
	(2.294)	(2.062)	(2.456)
CEO_DUAL_{it}	-0.145**	-0.142**	-0.105*
	(-2.462)	(-2.399)	(-1.778)
AUD_BOD_{it}	-0.0445	-0.0455	-0.00828
	(-0.679)	(-0.676)	(-0.127)
BIG_FOUR_{it}	0.291***	0.296***	0.290***
	(5.460)	(5.529)	(5.588)
PRO_INDBD_{it}	0.303***	0.322***	0.308***
	(3.229)	(3.373)	(3.284)
$ACMEET_{it}$	0.0782***	0.0767***	0.0671***
	(5.216)	(5.049)	(4.886)
$FINEXPAC_{it}$	0.0512	0.0478	0.0240
	(1.099)	(1.023)	(0.518)
LEV_{it}	0.00393**	0.00422**	0.00254*
	(2.390)	(2.458)	(1.723)
LN_NAF_{it}	0.0257***	0.0262***	0.0260***
	(4.257)	(4.291)	(4.327)
SQ_SUB_{it}	0.0567***	0.0574***	0.0535***
	(5.441)	(5.458)	(5.469)
SEG_{it}	0.102***	0.102***	0.0891***
	(6.758)	(6.692)	(6.309)
CA_TA_{it}	0.193**	0.189**	0.185**
	(2.237)	(2.185)	(2.257)
ROA_{it}	-0.0229***	-0.0230***	-0.0204***
	(-2.672)	(-2.687)	(-2.862)
Constant	5.335***	5.380***	5.846***
	(11.46)	(11.40)	(12.69)
Industry Fixed Effects	Included	Included	Included
Year Fixed Effects	Included	Included	Included
Observations	2,070	2,070	2,070
Adjusted R-squared	0.705	0.703	0.710
F test	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level. See Appendix B for variable definitions.

Further analyses were undertaken to test the independence of the external auditors by employing an alternative control variable, external auditors' tenure (*AUD_TEN$_{it}$)* in place of natural logarithm of other audit fees (*Log_NAF$_{it}$).*

The findings in Table 3.9 under column 1, 2 and 3 (*AVE_MUL$_{it}$*, *PRO_MUL$_{it}$* and *NUM_MUL$_{it}$* respectively) provides evidence that auditors' tenure (*AUD_TEN$_{it}$)* is positive and significantly associated to audit fees, confirming that audit independence may be jeopardised the longer the tenure of the external auditors. The results produced were similar to that of the earlier additional test using natural logarithm of other audit fees (*Log_NAF$_{it}$)* as the main control variable for audit independence in which the independent variable (*AVE_MUL$_{it}$*) and both alternative independent variables (*PRO_MUL$_{it}$*) and (*NUM_MUL$_{it}$*) are significantly associated with the level of audit fees. For the remaining variables used in this study majority of them that were significant using *Log_NAF$_{it}$* have similar results, supporting the robustness of the main results tabulated in table 3.4.

Table 3.9
Multivariate Regression Results – Analysis on Audit Fees Using Auditors' Tenure as an Alternative Control Variable

VARIABLES	(1) $LogAF_{it}$	(2) $LogAF_{it}$	(3) $LogAF_{it}$
AVE_MUL_{it}	0.0861***		
	(3.541)		
PRO_MUL_{it}		0.189***	
		(2.675)	
NUM_MUL_{it}			0.0790***
			(5.856)
EDU_PER_{it}	0.126***	0.121***	0.0912**
	(3.151)	(3.030)	(2.305)
GEN_PER_{it}	0.491**	0.493**	0.349
	(2.303)	(2.298)	(1.631)
$LogTA_{it}$[1]	0.316***	0.319***	0.293***
	(10.64)	(10.66)	(9.721)
$SHARE\_BOD_{it}$	0.352***	0.322**	0.361***
	(2.695)	(2.486)	(2.801)
CEO_DUAL_{it}	-0.169***	-0.167***	-0.131**
	(-2.810)	(-2.756)	(-2.166)
AUD_BOD_{it}	0.00319	0.00373	0.0350
	(0.0492)	(0.0558)	(0.537)
$SPECIALIST_{it}$	0.374***	0.382***	0.357***
	(7.577)	(7.722)	(7.420)
PRO_INDBD_{it}	0.352***	0.371***	0.359***
	(3.842)	(3.979)	(3.919)
$ACMEET_{it}$	0.0688***	0.0672***	0.0593***
	(4.283)	(4.140)	(4.003)
$FINEXPAC_{it}$	0.0560	0.0520	0.0318
	(1.203)	(1.115)	(0.684)
LEV_{it}	0.00435***	0.00464***	0.00310**
	(2.875)	(2.966)	(2.254)
AUD_TEN_{it}	0.107**	0.103**	0.101**
	(2.265)	(2.174)	(2.150)
SQ_SUB_{it}	0.0568***	0.0575***	0.0540***
	(5.292)	(5.303)	(5.334)
SEG_{it}	0.106***	0.107***	0.0950***
	(6.725)	(6.668)	(6.381)
CA_TA_{it}	0.259***	0.256***	0.253***
	(2.943)	(2.895)	(2.997)
ROA_{it}	-0.0221**	-0.0221**	-0.0198**
	(-2.445)	(-2.471)	(-2.570)
Constant	4.826***	4.871***	5.302***
	(9.713)	(9.683)	(10.57)
Industry Fixed Effects	Included	Included	Included
Year Fixed Effects	Included	Included	Included
Observations	2,070	2,070	2,070
Adjusted R-squared	0.702	0.700	0.706
F test	0	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix B for variable definitions.

[1] Additional analysis using natural logarithm of market capitalisation as a substitute for natural logarithm of total assets was undertaken. The key findings are essentially similar with the main results in Table 6.1.

The findings in Table 3.10 under column 1 and respectively provides evidence that the main variable AVE_MUL_{it} remains positive significantly associated with the level of audit fees regardless of whether the firm has reciprocal or non-reciprocal interlock. The key findings from this table are essentially similar with that of the main results in table 3.4 where the logarithm of total assets ($LogTA_{it}$), existence of audit specialists ($SPECIALIST_{it}$), current assets (CA_TA_{it}) and return of assets (ROA_{it}) are significantly related with audit fees.

Table 3.10
Multivariate Regression Results – Analysis on Audit Fees Using Firms with Reciprocal and Non-Reciprocal Interlock

VARIABLES	(Reciprocal) $LogAF_{it}$	(Non-Reciprocal) $LogAF_{it}$
AVE_MUL_{it}	0.105***	0.089***
	(2.910)	(2.967)
EDU_PER_{it}	-0.0524	0.142***
	(-0.764)	(3.206)
GEN_PER_{it}	1.876**	0.285
	(2.383)	(1.468)
$LogTA_{it}$	0.425***	0.276***
	(17.51)	(8.496)
$SHARE\_BOD_{it}$	-0.177	0.469***
	(-1.201)	(3.003)
CEO_DUAL_{it}	0.131	-0.194***
	(0.887)	(-2.940)
AUD_BOD_{it}	0.0193	0.00199
	(0.144)	(0.0276)
$SPECIALIST_{it}$	0.380***	0.329***
	(4.544)	(5.958)
PRO_INDBD_{it}	0.166	0.304***
	(1.084)	(2.830)
$ACMEET_{it}$	0.00269	0.0740***
	(0.109)	(4.105)
$FINEXPAC_{it}$	-0.00329	0.0342
	(-0.0377)	(0.649)
LEV_{it}	0.00536***	0.00318
	(3.755)	(0.339)
LN_NAF_{it}	0.0111	0.0278***
	(1.055)	(3.983)
SQ_SUB_{it}	0.0342**	0.0601***
	(2.488)	(4.720)
SEG_{it}	0.0255	0.107***
	(0.901)	(6.373)
CA_TA_{it}	0.374**	0.189**
	(2.441)	(2.011)
ROA_{it}	-0.0778***	-0.0227**
	(-3.717)	(-2.331)
Constant	3.308***	5.393***
	(8.699)	(10.24)
Industry Fixed Effects	Included	Included
Year Fixed Effects	Included	Included
Observations	379	1,691
Adjusted R-squared	0.816	0.686
F test	0	0

Above results are based on OLS with Huber-White robust t-statistics in parentheses.
***Significant at 10% level, **Significant at 5% level, *Significant at 1% level. See Appendix B for variable definitions.

3.5.12 Key Findings from Sensitivity Tests

The key findings from the sensitivity tests in Table 3.7 to 3.10 can be summarised as follows:

First, consistent with the main results, firms with average multiple directorships of two and higher board memberships demand higher assurance from external auditors to achieve higher audit quality with the positive relationship with audit fees.

Second, the positive association of firm size with audit fees imply that external auditors seek to minimise their exposure from loss of reputation and monetary compensation in larger clients by spending additional effort and time to ensure no material misstatements exist in the financial statements, consistent with the literature on audit fees.

Third, from the results industry specialised auditors are positively related to audit fees across all the different measures of multiple directorships suggesting that firms favour the use industry specialist auditors to enhance the credibility of the financial reports. These results again lend support to the main tests that were undertaken.

Fourth, firms with more independent board members have positive significant positive association across the different measures of multiple directorships with audit fees, impressing upon the notion that independence of the board is an important element of good corporate governance.

Fifth, the diligence of the audit members lends credence to the belief that their work is complementary with the external auditors to improve financial reporting quality with the positive significant association with audit fees.

Finally, firms with high inherent risk i.e. the positive significant correlation of current assets with audit fees, tend to exercise more caution by ensuring a high quality audit work is undertaken to safeguard better financial reporting quality. The above results are in line with the main results, confirming the robustness of these tests undertaken.

3.6 IMPLICATIONS AND CONTRIBUTIONS

3.6.1 Implications of the Study

The findings provide valuable insights into understanding the determinants of audit fees, and the influence of multiple directorships on audit fees. The results provide important inferences for key stakeholders including regulators, investors, scholars and

corporate management. Implications for key stakeholders are discussed in the following subsections.

In connection with directors with multiple board seats, many past scholars have attempted to determine whether busy directors do play a part in improving the corporate governance structure of a firm by sharing and transferring their relevant knowledge, experience and skills from one firm to another. Regulatory policies such as CLERP 9 in Australia to improve corporate governance were introduced in the mid 2000's after the financial and accounting scandals to improve the financial reporting quality, however no cap on the maximum number of directorships in a public listed firm was recommended. Although efforts by publicly listed firms in the US to limit the number of boards that a director can hold are ongoing, the evidence and results on the impact on the firm in regards to busyness factor have been mixed so far (Falato et al., 2014). As pointed out earlier, no recommendation is placed on the number of multiple directorships a director can hold for public listed firms in Australia as far as the latest ASX guidelines are concerned.

The outcomes from this study also support the Australian Securities Exchange (2014) guidelines under *Recommendation 2.4* in which the majority of the board of a listed firm should be independent directors with the significant positive relationship of the independent board members with audit fees. Further, the significant negative relationship between CEO duality and audit fees reinforces the guidelines describing *Recommendation 2.5* suggesting that the chairperson of the board should be an independent director and shall not be the CEO of the firm, implying that there may be too much authority and power vested in a single individual and this individual may not act in the best interest of the firm.

Additionally, this study also concludes that provision of superior and effective audit work form industry audit specialists enhances the quality of external audit and consequently the earnings reported. The use of an alternate control variable i.e. whether a Big-Four audit firm positively improves financial reporting quality draws the same conclusion, propositioning to investors to contemplate to place their funds only in public listed firms that engages industry audit specialists or a Big-Four audit firm. Besides the above control variables, the frequency of audit committee meeting is also significantly linked with higher audit fees, giving the impression that it will bring about improved earnings quality.

Reputation of the members of the board of directors whose responsibilities include ensuring the quality of the earnings reported is another alternative accessible to investors to form an opinion on the quality of the financial report. Apart from directors with multiple board seats, due consideration should also be given to directors having the necessary education background and the gender of the directors. Both of these variables were significantly associated with the level of audit fees alluding to the belief that educated directors and female directors contributes to the improved financial reporting quality of a firm.

The relationship between corporate governance in particular multiple directorships and the level of audit quality is unavoidably a complex one. Field et al. (2013) suggest that directors holding multiple directorships do not necessarily are ineffective monitors but present other advantages over directors who hold less directorships. Conflicting standpoints are observed as a specific group of scholars believe that busy directors are not able discharge their duties that meet threshold standard and expectations (Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009; V. D. Sharma & Iselin, 2012). Conversely, other researchers opined that in order to preserve one's reputation, directors will devotedly fulfil their task in an accountable, responsible and conscientious manner (Carpenter & Westphal, 2001; J. J. Choi, Park, & Yoo, 2007; J.L. Coles & Hoi, 2003; Fama & Jensen, 1983).Studies on multiple directorships and audit fees have principally been carried out in the United States (Cashman, Gillan, & Jun, 2012; J. H. Choi et al., 2010; J.L. Coles & Hoi, 2003; Craswell & Francis, 1999; Fich & Shivdasani, 2006; Francis & Yu, 2009; Pornsit Jiraporn, Kim, & Davidson Iii, 2008; P. Jiraporn, Singh, et al., 2009; Richardson, 1987; V. D. Sharma & Iselin, 2012).

From a governance-specific perspective, the level of audit fees may be influenced by shareholdings of board members, gender, education level of the directors and multiple board seats that directors hold. Important findings from this study suggest scholars should focus on governance related specific determinants described above as they are significantly associated with the level of audit fees. Benefits in nominating directors with broad experience, skills and knowledge, female directors, independent directors and directors with vested interest in the firm potentially improves the quality of financial reports. The outcomes of this study imply that experienced and knowledgeable directors who have accumulated abundant

knowledge are likely to enhance audit quality within a firm in view of the positive significant multiple directorships/audit fees association. These findings suggest that the firm, under the stewardship of skilled, experienced and knowledgeable directors limit the opportunistic behaviour of the corporate management and hence corroborates the resource dependency theory.

In conclusion, the findings in this study suggest that multiple directorships and certain board and governance characteristics that positively impact the earnings quality (with the external auditors spending more time and effort and thus increasing magnitude of audit fees) along with monitoring tools like the engagement of Big Four auditors or industry audit specialists and more frequent audit committee meetings are advantageous to main stakeholders of a firm.

3.6.2 Major Contributions of the Study

Past empirical literatures have shown that there are two opposing perspectives on multiple directorships. The standpoint that "busy" directors have too much on their plate and as a result are lax and neglectful in their duties is widespread in the studies of some scholars (Falato et al., 2014; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009). The other perspective reasoned that directors are keen protect their "reputation" and enhance their board appointment possibilities underscores the view that board members strive to impart and transfer "quality" know-how, skills and experiences to the advantage of the firm that they are serving on (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Sarkar & Sarkar, 2009).

This study assists in extending the understanding of multiple directorships, particularly within the context of the Australian capital market. For example, this study concludes that multiple directorships have a positive relationship with audit fees in publicly listed firms in Australia.

Second, it assists in addressing some of the unanswered empirical questions related to multiple directorships and concurrently increasing the understanding of the influence of different characteristics of a director who has multiple board seats. Specifically, analysis develops insights into, and identifies, key determinants of multiple directorships. Although extensive researches have taken place to identify the determinants of audit fees from a governance-specific standpoint however very few studies were connected to multiple directorships.

Third, it is expected that the findings can contributes towards enhancing the role of multiple directorships and its impact on improving audit quality in the Australian setting. More importantly, this study provides further evidence that board members with multiple seats impart their skill-sets, knowledge and expertise to the firm by enhancing audit quality within a firm. Concurrently it validates the resource dependency theory in which the sharing of knowledge and expertise is evident with the positive association with audit fees. These findings therefore assist in identifying specific characteristics of the board members which may have an impact in improving the underlying corporate governance mechanism of the firm.

Finally, it provides contributions to the understanding of the Australian capital market that is beneficial to major stakeholders of the listed firm. For instance, findings will help regulators determine which characteristics of board members are most likely to lead to higher audit quality and in turn financial reporting quality. This information can then enable regulators assess whether ASX guidelines and recommendations are likely to benefit the firms and society if new recommendations pertaining to the characteristics of director are imposed. Findings may also assist regulators in improving existing policies to ensure the desired outcome is attained, or to help in development of new policies to strengthen the current standards governing financial reporting quality.

Overall, this study offers valuable insights and underlines potential opportunities for future research. However, this research is not without limitations as with any positivist empirical study.

3.6.3 Limitations of the Study

While this study has numerous of strengths, it is not without its limitations. First, although an extensive range of control variables in this study to assess the influence on audit fees have been employed, it is likely that other factors which are not controlled for in the analysis may have an impact on financial reporting quality. Nevertheless, the effect of the exclusion of such variables may have only a negligible consequence given the fact that the purpose of the study is to examine the relationship between multiple directorships and audit fees and not investigating its causality.

Second, the data collected for the variables meant for this study to test the hypotheses are collected from annual reports of the publicly listed firms, limiting the

amount and type of data that could be collected. For example, some proprietary information that can be utilised for this study may not be publicly available.

Third, this study confined only to Australia and its institutional settings may differ from that of another country and as such limit the potential to generalize the outcome of this study to another nation.

While it is acknowledged that there are limitations within this study, the strength of the study and important implications of the findings cannot be ignored as indicated earlier on the significance of this research.

3.6.4 Summary of the Study

Academics and regulators have attempted to establish an association between boards with multiple directorships and audit fees in the past. While there were some studies that have confirmed the relationship, there were also other studies that have not been able to establish a link between busy boards and audit fees. This study which was based on the Australian capital market focussing on the public listed firms has concluded that there is a relationship between board with multiple directorships and audit fees.

The empirical tests undertaken for this study on audit fees have generated results that are perceptive. Particularly, the general findings suggest that directors with multiple board seats are likely to improve the level of audit quality within a firm. Conflicting with the "busyness" hypothesis, directors holding multiple board seats are likely to enhance and enrich audit quality within a firm. In addition, the results also imply that other board characteristics like gender of the board, education level of the board members shareholdings of the board members and CEO duality also influences the level of audit fees.

Overall, findings from this study beneficial insights and understanding to the association between multiple directorships and level of audit fees in Australia. Concurrently, the personal characteristics of board member who holds multiple directorships researched highlighted some helpful insights which may have meaningful implications for different major stakeholders of the firms (e.g., scholars, practitioners, corporate management, investors and regulators). To augment the grasp and awareness of multiple directorships and audit fees, and the relationship between the two concepts, this study makes an effort to emphasize some different routes for prospective useful empirical research.

Chapter 4 MULTIPLE DIRECTORSHIPS AND ENVIRONMENTAL DISCLOSURE

4.1 INTRODUCTION

The accounting and ethical scandals in early 2000s involving Enron, WorldCom, HIH and Parmalat and recent global financial crisis in 2008 have brought about the need to focus on corporate transparency and voluntary disclosure reporting for investors and other stakeholders. To address the globalisation of capital markets, mitigate future corporate failures and to restore and strengthen investor confidence, corporate social responsibility (CSR) disclosure has been drawing a great deal of attention by regulators, researchers, investors and other key stakeholders (Dunn & Sainty, 2009; Hashim & Rahman, 2011; Roy, 2009). Past studies found consensus that CSR covers at least voluntary focus to ethical, social and environmental implications of business (Caroll, 1999; McWilliams & Siegel, 2001). Public listed firms (especially large firms and firms with multinational operations) generally face higher demands to be transparent and disclose information about major strategic decisions eventually leading to demands for other types of information other than financial accounting data to be disclosed (Luo, 2005a, 2005b). Academics find that compliance to corporate sustainability policies would enable a firm to increase productivity, effectiveness and efficiency that encourages innovation and concurrently enhances profitability and consequently the lifespan of a firm (Sahut, Boulerne, Mili, & Teulon, 2011). CSR is defined by Naylor (1999) as "the obligation of managers to choose an act in ways that benefit both the interests of the organisation and those of society as a whole." (pp.55). The Commission of the European Communities defines CSR as a concept by which "companies decide voluntarily to contribute to a better society and a cleaner environment". It states that behaving in a socially responsible manner equals "going beyond compliance and investing more into human capital, the environment and the relations with stakeholders". CSR is described as a sustainable development that is to be carried out by all the public listed firms (Fraser, 2005). These firms are not only responsible to their shareholders but to the entire group of stakeholders. In addition, CSR motivates the management to embrace a long-term view in respect to business and society. However, a number of firms tend to engage in socially responsible activities in order to advance their short-term financial performance. Researchers find that firms that engage in corporate charitable works are more inclined to do so to expand a firm's social status and reputation (Haley, 1991). On the same token,

McGuire, Dow and Argheyd (2003) find that a short term emphasis, substantiated by short-term executive compensation contracts, however is not associated to robust corporate social performance. The reason behind this phenomenon is because many socially responsible expenses are incurred in one period but the benefits will only crystallised in the subsequent periods. Without a long term perspective the effects of CSR cannot be readily observed (Marom, 2006). Tsang (1998) undertake a longitudinal study on corporate social reporting in Singapore focussing on the banking, food and beverages and hotel industries over a ten-year period from 1986 to 1995 suggests that there is a gradual but steady increase in CSR disclosures. On the same note, R. H. Gray, Kouhy, and Lavers (1995) find that CSR disclosures in the United Kingdom proliferate by more than four-fold from 1979 to 1991. A number of past studies seek to identify the disclosure level, determinants and consequences of CSR disclosures. In relation to the determinants of CSR, researchers have identified both firm-specific (i.e.; size, industry, international influence) and governance specific (i.e.; board independence, size of board) factors that influence CSR disclosures and corporate social performance (Haniffa & Cooke, 2002, 2005; Mallin & Michelon, 2010). One key mechanism that is widely recognised as the key driver of CSR activities is the board of directors (BoD). When investigating the BoD, researchers focussed mainly on board independence, board size and existence of board sub-committee to determine whether the board is effective in discharging its responsibilities. For instance, Cheng and Courtenay (2006) arrive at a conclusion that the relationships is both significant and positive in a study of public listed firms in Singapore, between the proportion of independent non-executives directors and a quantum of voluntary corporate disclosure. Similarly, Ho and Wong (2001) find the impact of internal governing mechanisms (i.e.; board of directors) on voluntary disclosures may be complementary or substitutive. A higher number of disclosures is to be expected if it is complementary as "more governance mechanisms will strengthen internal control of firms and provide close monitoring for a firm to reduce opportunistic behaviour and information asymmetry" (Ho & Wong, 2001).

Despite the number of growing literature in both corporate governance and voluntary disclosure studies, so far there is no study that investigates the relationship between board effectiveness in terms of both board level and personal level attributes in a comprehensive manner. Given the escalating pressure from investors and the global financial crisis, it is both timely and important to investigate the relationship

between board effectiveness and environmental disclosures within the Australian context. Therefore this study aims to investigate the association between board effectiveness and environmental disclosures for Australian public listed firms.

4.1.1 Research Questions and Objectives

The overarching objective of this study is to examine the association between multiple directorships and the extent of environmental disclosures of Australian publicly listed firms. For the purposes of this study, multiple directorships are measured in the following manner: 1) Multiple directorships (i.e.; a director is sitting on more than one board); 2) Independent directors who are sitting on multiple boards. 3) Interlocked directors who are female 4) Interlocked directors who have higher qualifications 5) Interlocked directors who are sitting on sustainability committee. As indicated earlier, there was no past extensive study that investigates the relationship between environmental disclosure and multiple directorships. Therefore this study will bridge this gap by addressing the following research question:

RQ: Is there is an association between multiple directorships and the extent of environmental disclosures in publicly listed companies in Australia?

4.1.2 Significance of Research

Findings from this study will contribute towards the regulators, board of directors, investors and therefore have several intended outcomes.

First, the study is able to assist the regulators to focus on the characteristics or attributes of the board of directors i.e. board level attributes (board size, % shareholdings of board members, board independence, existence of director interlock, number of board meetings) or personal level attributes (age of director, tenure of director, gender, industry expertise, corporate governance experience, educational background) to regulate in order to enhance transparency within a publicly listed firm. Second it contributes to CSR disclosure literature by examining the relationship between board characteristics and environmental disclosures. Investors are able to make an informed decision as to their allocation of funds where firms with higher transparency are expected to yield them better and more secure returns. Third, this study will assist the board of directors to determine which characteristics or board features will result in higher environmental disclosure. Firms may be encouraged to actively seek board members with diverse backgrounds, international experience and

pertinent skill-sets to increase the overall visibility and access to resources of the firm (i.e.; by voluntarily disclosing environmental information).

4.1.3 Essay Outline

This essay is comprised of six major sections which are described below. An overview of this study is provided for under Section 4.1. Under this section, the identification of major research objectives and the study's significance takes place. The organisation of the remaining sections in this essay is as follows. Literature review on Corporate Social Responsibility (CSR) and key determinants of CSR are detailed under section 4.2. Subsequently, this study reviews theoretical frameworks applicable in this study and the development of hypothesis takes place under section 4.3. Section 4.4 outlines the research method of the study that includes the measurement for Corporate Social Responsibility Disclosure (CSRD) models (dependent variable) and multiple directorships (independent variable) used in this study in addition to regression models and related statistical tests. The descriptive analysis of the data point, multivariate and sensitivity analysis are explained in section 4.5. Multivariate analysis undertaken and examinations of all findings on the hypotheses that have been developed are listed in this section. Correspondingly robustness and sensitivity tests are detailed out in section 4.5 together with the summary of the key findings. Lastly, the implications, contributions, limitations and summary of this study are featured in section 4.6.

4.2 LITERATURE REVIEW

4.2.1 Corporate Social Responsibility (CSR) and CSR Reporting Defined

CSR is defined by Naylor (1999) as "the obligation of managers to choose an act in ways that benefit both the interests of the organisation and those of society as a whole."(Page 55). The Commission of the European Communities defines CSR as a concept by which "companies decide voluntarily to contribute to a better society and a cleaner environment". It states that behaving in a socially responsible manner equals "going beyond compliance and investing more into human capital, the environment and the relations with stakeholders". CSR is described as a sustainable development that is to be carried out by all the public listed firms (Fraser, 2005). These firms are not only responsible to their shareholders but to the entire group of stakeholders. In addition, CSR motivates the management to embrace a long-term view in respect to business and society. Nevertheless, a number of firms tend to engage in socially responsible activities in order to advance their short-term financial performance. Researchers find that firms that engage in corporate philanthropy are more prone to adopt such short term objectives to expand a firm's social status and reputation (Haley, 1991). On a similar note, McGuire, Dow and Argheyd (2003) discover that a short term emphasis, substantiated by short-term executive compensation contracts, is not correlated to sound corporate social performance. The reason behind this phenomenon is because many socially responsible expenses are incurred in one period but the benefits will only crystallised in the subsequent periods. Without a long term perspective the effects of CSR cannot be readily observed (Marom, 2006). Tsang (1998) undertake a longitudinal study on corporate social reporting in Singapore focussing on the banking, food and beverages and hotel industries over a ten-year period from 1986 to 1995 suggests that there is a gradual but steady increase in CSR disclosures. Similarly, R. H. Gray et al. (1995) find that CSR disclosures in the United Kingdom increased more than four times from 1979 to 1991.

4.2.2 Prior Research on CSR Reporting

A number of past studies seek to identify the disclosure level, determinants and consequences of CSR disclosures. In relation to the determinants of CSR, researchers have identified both firm-specific (i.e.; size, industry, international influence) and governance specific (i.e.; board independence, size of board) factors that influence

CSR disclosures and corporate social performance (Haniffa & Cooke, 2002, 2005; Mallin & Michelon, 2010). One key mechanism that is widely recognised as the key driver of CSR activities is the board of directors (BoD). When investigating the BoD, researchers focussed mainly on board independence, board size and existence of board sub-committee to determine whether the board is effective in discharging its responsibilities. For example, Cheng and Courtenay (2006) find that there is positive association between the level of voluntary disclosure and the percentage of independent directors in a research on Singaporean public listed firms. Similarly, Ho and Wong (2001) find the impact of internal governing mechanisms (i.e.; board of directors) on voluntary disclosures may be complementary or substitutive. A higher number of disclosures is to be expected if it is complementary as "more governance mechanisms will strengthen internal control of firms and provide close monitoring for a firm to reduce opportunistic behaviour and information asymmetry" (Ho & Wong, 2001).

As indicated above, previous studies focussed predominantly on specific attributes of the board while investigating the association with CSR disclosures (i.e.; board independence, existence of board subcommittees). To date, there are only a couple of studies that examine the relationship between CSR disclosure and director interlocking (Haniffa & Cooke, 2002, 2005). These studies were based on data of Malaysian publicly listed firms and no such study has been undertaken so far in Australia. Given the escalating pressure from investors and the global financial crisis, it is both timely and important to investigate the relationship between director interlocking and CSR disclosures within Australian context. Therefore this study aims to investigate the association between director interlocking and CSR disclosures for Australian public listed firms.

4.2.3 CSR and Firm Level Determinants

CSR studies in the past have investigated specific firm characteristics that may influence the level of CSR disclosures. These past empirical research have determined that firm size, age, financial performance, gearing level, industry type and international influence shape the extent of CSR disclosures.

Previous empirical studies have confirmed that a positive relationship of size with the level of voluntary disclosure exists, specifically voluntary environmental and social reporting (Belkaoui & Karpik, 1989; Cowen, Ferreri, & Parker, 1987; Patten,

1991). Large firms tend to engage in environmental related activities resulting in higher CSR disclosures in this area (Dierkes & Preston, 1977; Liu & Anbumozhi, 2009; Zeng, Xu, Dong, & Tam, 2010). With the expected higher level of CSR disclosures in bigger firms, the agency costs and political costs are anticipated to be lower (Cormier & Gordon, 2001; Karim et al., 2006). Cho, Roberts, and Patten (2010) find that a firm's age is used as a measure to determine a firm's reputation which appears to be significantly correlated with environmental disclosure.

Numerous viewpoints were generated in respect to a firm's social responsibility activities and its financial performance. Some researchers view firms which are socially responsible being commercially disadvantaged compared to firms which do not invest or invest very little in CSR activities (Aupperle, Caroll, & Hatfield, 1985; Ullman, 1985). In one of the earlier studies from Akerlof (1970), it was observed commercially successfully firms have an added incentive to differentiate themselves from less successful firms to obtain the best financial terms to reduce their cost of capital. Hence, one avenue to stand out from the rest is to divulge more voluntary information to the public and as a result it is expected that profitable firms will engage in such practices. Many prior studies on financial and economic performance carried out however there no conclusive evidence associating CSR disclosures with profitability is found (R. Gray, Javad, Power, & Sinclair, 2001; Ullman, 1985). Another justification comes in the context where is it increasingly more evident that environmental disclosures differs under diverse institutional and cultural settings (Darnall, Henriques, & Sadorsky, 2010; Fallan & Fallan, 2009).

Goss and Roberts (2011) find that a firm with high debts have a tendency to produce an distinct sustainability report illustrating various CSR initiatives and activities that has occurred. It's evident that firms that are categorised under the extractive industry or in an "environmental sensitive" are more likely to offer voluntary disclosures to legitimises its existence and to represent itself as a responsible corporate citizen (Boesso & Kumar, 2007; Deegan, 2002). Although there is a standard code of disclosure index designed and updated by Global Reporting Initiative (GRI), the relevance and significance of disclosure items vary across different industries. Cooke (1989, 1992) in his study on voluntary corporate disclosures in Sweden and Japan only find very slight evidence in which the type of industry has an impact on the degree of voluntary disclosures. Haniffa & Cooke (2005) in their study of the study between multiple listings of public listed firms in Malaysia and CSR

disclosures find that multiple stock listings have a tendency to disclose information on their social and environmental practices and activities. This may be due to the reasoning that firms with multiple stock listings tend to recruit directors with diverse background, international exposure, wide-ranging skills and expertise to deal with the additional challenges of multiple operations in diverse geographical locations.

4.2.4 CSR and Corporate Governance Determinants

Board Size

Past empirical studies on corporate governance relating to the size of the board of directors as it may have an impact on the level of a firm's performance and disclosures. The evidence to date however seemed to be inconclusive as researchers on both side of the divides have differing opinions on the size of board of directors. For example, Dalton, Daily et al. (1999) in his studies find that there is a significant correlation between board size and financial performance of firms. On the other hand, Yermack (1996), Conyon and Peck (1998) and Eisenberg, Sundgren et al. (1998) find that there is significant negative relationship between board size and firm's profitability. Consistent with the above studies, Mak and Kusnadi (2005) find that there is an inverse correlation between board size and value of a firm. The above findings perhaps justify the explanation where smaller boards may have reduced bureaucratic issues to deal with and as such can function more effectively as a result where it tends to be able to provide enhanced financial supervision. Alternatively, a larger board may benefit from a diverse range of experience and may have a higher number of independent directors with relevant financial or corporate exposure hence may in the mid to longer term increases the profitability of firms under their care (Jeffrey L. Coles et al., 2008; Dalton et al., 1999).

Board Independence

Past researchers have contended that the board of directors is perhaps the most effectual internal control structure in monitoring behaviours of management and senior executives running a firm (Fama & Jensen, 1983). Nevertheless, the extant literature investigating the role of the board of directors on firm's performance have given rise to varied findings. Conyon and Peck (1998) state that if outside directors either hold

an insignificant number of shares or has no shareholdings, their incentive to monitor management, and hence protect shareholder interests, maybe reduced. On the other hand, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by (Chau & Gray, 2010) who concluded that the level of overall voluntary disclosures for HK public listed firms is higher when the percentage of the independent board of directors are higher.

CEO Duality

CEO duality occurs when a single individual assumes the position of board chairmanship and chief executive officer running a particular organisation (Rechner & Dalton, 1991). Empirical evidence to date has produce inconclusive results when it comes to CEO duality and firm performance. On the one hand, researchers argue that CEO duality may reduce the independence and vigilance of the board and as such may have an adverse effect on the firm's financial performance (Rechner & Dalton, 1991). On the other hand, advocates of CEO duality find that there is weak or no positive association of CEO duality with firm's performance (Cannella Jr & Lubatkin, 1993; L. Donaldson & Davis, 1991a; Mallette & Fowler, 1992). Additionally it is also found that segregating the duty of the chairman and CEO will not on its own, gives rise to better financial performance of a firm (Krause et al., 2014).

Auditor Reputation

Auditors play a part in enhancing the quality of disclosures made by a firm. The existing research literature implies that Big 4 auditors are more reliable in delivering the desired quality of assurance compared to non-Big 4 auditors (Al-Ajmi, 2009; Teoh & Wong, 1993; Watkins, Hilison, & Morecroft, 2004). The reputation of the Big 4 auditors enhances the quality and the dependability of the information provided by a firm (Menon & Williams, 1991) and these reputable audit firms are more inclined to demand firms to disclose additional information to prevent any detrimental lawsuits to maintain its standing in the auditing profession. Financial analysts are predisposed to offer increased acknowledgement to the quality of a firm's disclosures when it is audited by a renowned or reputable auditing firm (Ahmed & Courtis, 1999).

4.2.5 CSR Reporting In Australia

Over the last 20 years, numerous prominent researchers have been studying CSR disclosures of Australian public listed firms, in particular environmental reporting practices (Deegan, 2002; Deegan & Gordon, 1996; Deegan & Rankin, 1996; R. H. Gray et al., 1995; Guthrie & Parker, 1989; Rao, Tilt, & Lester, 2012).

The number of firms reporting CSR disclosures under the Global Reporting Initiative (GRI) has increased by multiple folds from 2000 to 2014 in Australia. From a single Australian firm that has reported in 2001, there are now close to 130 firms disclosing their CSR reports using the GRI framework in 2014 in Australia. This noteworthy upwards trend exemplifies the continual importance and significance of CSR activities in the land Down Under. In a recent CSR study conducted by CPA Australia in association with GRI, it was found that Australian sub-samples obtained the highest disclosure score compared to Hong Kong and United Kingdom (CPA Australia, 2012). In another study conducted by Haque and Deegan (2010), evidence collected on five major Australian energy-intensive firms relating to climate-change related corporate governance disclosure practices has shown an increase of such disclosures over a 16-year period.

In line with the introduction of the new legislation on environmental disclosure for publicly listed firms in Australia commencing 2014 (Australian Securities Exchange, 2014) listed firms recommending listed firms to disclose "material exposure" to economic, environmental and social sustainability risks, it is expected that the level CSR disclosures to increase over time in Australia.

4.2.6 CSR and Investors

Customarily, investors rely on earnings and related accounting information that is publicly available to arrive at decisions to either continue to invest further, divest their shareholdings or maintain their investment in a particular listed firm (Hillman & Dalziel, 2003; Klein, 1998; Vafeas, 1999). After the sensational collapses of massive public listed firms in the early 2000s in USA, Australia and around the world, questions and doubts about the quality of the financial accounting information of public listed firms have emerged.

Prior literature suggests that investors no longer rely on completely financial data to determine their next course of action on their current shareholdings. Investors are pursuing, analysing and studying additional voluntary information that are

disclosed by the firms in addition to the financial data that are available e.g. CSR related information regarding corporate social obligations undertaken to maintain and sustain the long term financial performance of the firm (Fraser, 2005; Luo, 2005a, 2005b; Sahut et al., 2011). It is contended that provision of additional voluntary non-financial information is anticipated to have an impact on the decision of investors on their investments and failure to be conscious about CSR can eventually lead to detrimental consequences on a firm's reputation and value (Fraser, 2005).

It is expected that findings from this study imply that investors may potentially make use of the additional voluntary information provided by a firm for future investment decisions. Concurrently, from a corporate governance perspective, investors may also scrutinize the characteristics of the board members and determine whether to invest in firms where directors with multiple board seats are expected to disclose higher level of voluntary disclosures which are deemed to be exhibiting a higher level of transparency.

4.3 THEORETICAL PERSPECTIVE AND HYPOTHESIS DEVELOPMENT

4.3.1 Theoretical Perspective – CSR Reporting

CSR disclosures have been explained by a number of key theoretical context namely, resource dependency theory; legitimacy theory, stakeholder theory institutional theory; (Aragon-Correa & Sharma, 2003; Deegan & Rankin, 1996; Haniffa & Cooke, 2002, 2005; Jamali, 2008; Russo & Fouts, 1997). The following passages will outline each theory applicable briefly so as to provide a theoretical foundation to this study.

Resource Dependency Theory

From a governance perspective, firms put mechanisms in place to ensure material information (i.e., CSR information) is disclosed to be accountable and transparent to stakeholders. Board of directors is one such mechanism that has a lengthy history of improving transparency of information disclosed by the firm (Ho & Wong, 2001; Mallin & Michelon, 2010; Peng, Au, & Wang, 2001). Utilising resource dependency theory, past studies argue that board of directors with diverse background, expertise and skills will seek to improve the visibility and transparency

of their firms by voluntarily disclosing CSR activities (Haniffa & Cooke, 2002, 2005; Mallin & Michelon, 2010). Pfeffer and Salancik (1978) for example suggest that interlocked directors linkages may serve to cushion the impact of environmental uncertainty, a standpoint that is supported by findings of Mizruchi and Stearns (1988). In a similar vein, the emphasis on resource dependency theory which suggests that the ability of an organisation to operate under an environment of uncertainty and complexity associated with its interdependencies is directly related to the quality and effectiveness of the directors that form the board (Boyd, 1990; Daily et al., 2003; Hillman et al., 2000; Pfeffer & Salancik, 1978). In a resource dependence role, directors do not only reduce uncertainty but at the same time they also contribute resources to a firm in terms of information, skills, access to key stakeholders for example suppliers, buyers, public policy decision makers and social groups (Hillman et al., 2000). Dalton et al. (1999) assert that resource dependency is regarded as a key theory in corporate governance in view of the extensive research undertaken on the association between the board capital and financial performance of a firm.

Legitimacy Theory

The origin of corporate social responsibility (CSR) disclosure stems from an increasing number of public perceptions and awareness of the role of the corporate and business community in society. In the mid-1970s, it has been contended there was a steady transformation in corporate external reporting from a predominantly a profit-based context to a more extensive perspective, embracing the CSR landscape. (Ramanathan, 1976). Triple bottom line reporting and the global reporting initiative (GRI) bring about additional evidence of international interest and concern for CSR. Although there were escalating concerns to the complications of using profit as a measure of corporate performance together with surging expectations of investors relating to business growth and social responsibility, the development of CSR is lacking a coherent theoretical framework and has been particularly sluggish (R. H. Gray, Owen, & Maunders, 1987). The notion of corporate citizenship is fundamental to the concept of CSR as suggested in prior research in this area. Henceforth, the prime theoretical frameworks used to define the stimulus of CSR disclosures may be grouped into two key categories. One category revolves around systems oriented theories explaining the socio-political context within which the firm operates for example, political legitimacy. Another dimension of the framework explores stakeholder

theories that are derived from the broader political economy theory (Campbell, Craven, & Shrives, 2002; Deegan, 2002; Wilmhurst & Frost, 2000).

Socio-political contexts are understood to be the main factors of the decision to disclose CSR information within the domain of political economy theory (Roberts, 1992; Williams, 1999). Societal acceptance in ensuring a firm's survival is the underlying basis of legitimacy theory. The public may react by boycotting a product or pressure the government to step in if a firm's activities are perceived or seen to have harmful effects on the community. Previous researchers argue that both legitimacy and stakeholders theories were used to explain the motivation for CSR disclosures are presented in two different forms (voluntary and solicited) and that voluntary CSR disclosures are better explained by legitimacy theory whereas stakeholder theory are more suited in explaining solicited CSR disclosures (Van Der Laan, 2009). Consistent with legitimacy theory, CSR disclosures are developed in a manner similar with this theory (Deegan, 2002; R. H. Gray et al., 1995; Tsang, 1998). Consequently, firms place internal control mechanisms to ensure that firms disclose all material information (i.e., CSR information) to uphold an appropriate level of transparency and accountability. Evidence from past studies suggests that board of directors is one avenue that has an extensive history of cultivating transparency of information disclosed by the firm (Ho & Wong, 2001; Mallin & Michelon, 2010; Peng et al., 2001).

Stakeholder Theory

Stakeholder theory is considered as one of the more prominent theories emerging from corporate governance studies. In a nutshell, stakeholder theorists do not solely focusses on the shareholders being the main stakeholder of a firm but considers a wide-ranging viewpoint that takes into account other interest groups like creditors, government establishments, employees, suppliers, customers and the community at large (Blair, 1995; T. Donaldson & Preston, 1995; Freeman, 1984; Jensen, 2010).

Freeman (1984, p.2), one of the pioneering stakeholder theorist that arrived at the description of stakeholder theory posits that stakeholder means " any group or individual who can affect or be affected by the achievements of firms' objectives". A firm objectives and goals can only be achieved with a thorough understanding of the relationship with numerous stakeholders group that the firm is engaging with, giving

rise to the formulation and subsequent development of the stakeholder theory (Freeman, 1984).

Thereafter, Clarkson (1995) offered another vigorous version of the stakeholder theory by expounding on the significance of the theory on the attainment of goals and objectives of a firm and the interdependent primary stakeholders relationship without which a firm may not survive as a going concern.

Stakeholder theory has been considered by numerous researchers to be suitable and ethically acceptable structure for corporate governance studies (Blair, 1995; M. Clarkson, 1995; T. Donaldson & Preston, 1995; Freeman, 1984). Ultimately and probably most importantly, the stakeholder viewpoint alters the firm's governance responsibility from solely maximising shareholder benefits to engaging in long range pursuit of enhancing a firm value and worth (Jensen, 2001).

Applying the stakeholder theory from the CSR perspective, Roberts (1992) finds that significant relationship between a stakeholder theory approach and corporate social decisions which are consistent with the framework devised by Ullman (1985) for examining social responsibilities disclosures.

Institutional Theory

Observing from the corporate governance perspective, Meyer and Rowan(1977), initiators of the institutional theory from stresses that a firm is reliant on institutional influences and social pressures that shape its rules, norms and beliefs (Hoffman, 1999; Zucker, 1987). In brief, this influence will eventually dictate the means and channels for the firm to pursue legitimacy and strive for social compliance (Hoffman, 1999).

For a firm to ensure its continual existence and survival, it must conform to rules and regulations that are set out to achieve legitimacy (Deegan, 2010; DiMaggio & Powell, 1983). Isomorphism, a method that compels one element in a population to resemble other elements that encounter the same set of environmental conditions is instigated when firms strive for legitimacy in their respective industries or settings (Deegan, 2010; DiMaggio & Powell, 1983).

Two prominent categories of isomorphism that have been recognised by institutional researchers comprises of (1) competitive; and (2) institutional (DiMaggio & Powell, 1983, 1991). By definition, competitive isomorphism works under the assumption of competitive markets and is frequently used to describe how firms

respond to new ideas and novelty in the market place especially in those industries where free and open competition tend to be present (DiMaggio & Powell, 1983). In addition, institutional isomorphic changes consist of three different mechanisms namely: (1) coercive; (2) mimetic; and (3) normative. In short, coercive isomorphism originates from both informal and formal pressures exerted by other firms upon which that firm is relying or dependent upon and cultural beliefs in which the firm operates. On the other hand, mimetic isomorphism emphasizes on modelling as a response to uncertainty in the environment by imitating or modelling themselves on other firms. Finally, normative isomorphism pressures are derived predominantly from professionalization. Although professionals in a particular firm may have mixed backgrounds and differ from one another, these professionals exhibit somewhat similar attributes with their counterpart in another firm (Deegan, 2010; DiMaggio & Powell, 1983). Study from Meyer and Rowan (1977) suggest that firms that adopts institutionalized myths tend to be more successful, legitimate and have the survival instinct.

4.3.2 Theory Selection

As underscored in the preceding passages, there are four key theories underpinning corporate governance approaches in terms of CSR related studies.

Utilising resource dependency theory it can be argued that firms will seek out environmental linkages to reduce its uncertainties resulting from external pressures such as competition, regulation and social forces by utilising the skills, information and other resources from its interlocked board members (Boyd, 1990; Pfeffer & Salancik, 1978). Specifically for this study, it is expected that interlocked directors (with their knowledge, expertise, diverse background and wide-ranging skills,) are more effective in improving the transparency of their firms by encouraging them to embrace CSR activities and in turn voluntarily disclose them. Therefore, it provides a suitable platform for the adoption of resource dependency theory as the underlying theory for this study.

4.3.3 Hypothesis Development

Multiple directorships as part of the board of directors characteristic have been an area of active research over the last decades. The evidence substantiating multiple directorships in a firm i.e. busy or “overboard” directors are mixed with two schools of thoughts representing the “Busyness” Hypothesis and “Reputation” Hypothesis.

Consistent with the reputation busyness "hypothesis, with the numbers of board seats of a director increases, the director have a tendency to be "overloaded" and overstretched. Consequently, firms with "busy" directors are less effective due to the expanded time commitment related to having multiple board appointments and likely to negatively affect the firm's performance (Fich & Shivdasani, 2006).On the other hand, the "Reputation" hypothesis suggests that as the number of boards that a director is sitting on increases, firms are expected to benefit from the experience, skills and knowledge of such director. Henceforth, in agreement with the "reputation" hypothesis, multiple board appointments is able to enhance value to an organisation by sharing their expertise, knowledge and experience gained as these directors tend to maintain or bolster their reputation by offering sound and effective advice (Fama & Jensen, 1983).

The view in support of the "reputation" hypothesis is that busy directors are associated with a broader network of connection and are likely to deal with a range of challenges that large public firms would confront imply that their abilities are valued with the rising literature on benefits of multiple directorships (Carpenter & Westphal, 2001; L. Cohen et al., 2010; Jeffrey L. Coles et al., 2008; Ishii & Xuan, 2014; Stuart & Yim, 2010). Ferris et al. (2003) discover that a director that serves in better performing firms are more likely to result in up with increased board memberships in the future as Fama and Jensen (1983) reason that talented directors are compensated with a higher number of board positions. However directors are prone to overcommit and overstretched themselves as they take on multiple directorships in different boards which may render them ineffective as monitors and as such could weaken corporate governance within a firm (Fich & Shivdasani, 2006). Mizruchi (1996) states that an interlocking directorate occurs when a person (usually a senior officer/director) affiliated with one organisation sits on the board of directors of another organisation. Pombo and Gutierrez (2011) find that busy non-executive directors turned out to be main drivers of improved firm performance. This view was reinforced by a study by Ong, Ong and Wan (2003) in public listed firms in Singapore. The empirical study finds that board size, market capitalisation, total asset and nature of the firm (both financial and non-financial) significantly associated with interlocks within a board. Another study by Hashim and Rahman (2011) on firms listed on the Kuala Lumpur Stock Exchange (KLSE) in Malaysia has a similar outcome in which the reported earnings quality the greater the presence of interlocked directors. Further, Peng, Au

and Wang (2001) find that internationalization of local firms in Thailand are significantly linked with directors' interlocks. Chua and Petty (1999) in their study of ISO accreditation in Australia and New Zealand, discover that a positive correlation between the directors interlock and the quantity of ISO accreditation. Finally, it was found empirically that multiple directorship is positively associated with the level of social performance (Mallin & Michelon, 2010).

In terms of voluntary disclosure, a study on Malaysian public listed companies undertaken by Haniffa and Cooke (2002, 2005) concluded that there is a positive association between chairperson with multiple directorships and the extent of voluntary disclosure of information. It is argued that directors sitting on multiple boards will endeavour to use their reputation, expertise and experience to influence other board members by participating in corporate social responsible activities as one avenue to enhance board's effectiveness.

On the other hand, Santos, da Silveira, and de C. Barros (2008) in his study of Brazilian public listed firms, conclude that busy board in which half or more external directors served in 2 or more firms negatively influence the firm's value. They also find that the benefits of interlocking did not compensate for the deterioration of quality of the board's monitoring. This view was supported by Fich and Shivdasani (2006) who find that weak corporate governance are associated with boards where majority of the non-executive directors hold three or more directorships. In a similar vein, it was found that pervasive multiple directorships in the banking industry in Japan in the 1920s has a negative impact on bank performance (Okazaki, Sawada, & Yokoyama, 2005).

Based on the mixed results from past researches indicated above, a non-directional hypothesis is therefore postulated:

H_1: Australian publicly listed companies with multiple directorships have an association with the level of environmental disclosures.

4.4 RESEARCH METHOD

4.4.1 Sample Selection

Although there were previous Australian CSR studies focussing on corporate governance, however no single study that specifically examines multiple directorships and environmental disclosures in a comprehensive manner. Public listed firms have also paid more importance to environmental disclosures in view of the enactment of the National Greenhouse and Energy Reporting (NGER) Act 2007 for the financial year ending 2009 and implementation of a carbon price on emissions (CPM) with effect from July 2012 in Australia.

The initial sample comprises 150 publicly listed firms on the ASX as at January 1, 2012 which are randomly chosen from the top 300 firms based on market capitalisation on Australian Securities Exchange (ASX). ASX listed firms are chosen because information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports and/or sustainability reports. The largest firms were chosen because based on previous studies the larger firms tend to have more CSR /environmental disclosures (Belkaoui & Karpik, 1989; Cowen et al., 1987; Patten, 1991). Consistent with Clifford and Evans (1997) unit trusts and foreign firms domiciled outside Australia will also be excluded because the financial statements of unit trusts and foreign firms domiciled outside Australia are not always prepared in accordance with the normal disclosure requirements for other firms listed on the ASX Firms that have an indication of missing data for the observation period are also excluded (Klein, 2002a, 2002b). ASX listed firms are chosen because information on such firms are publicly available they provide readily available information in an appropriate useable form from annual reports and/or sustainability reports.

4.4.2 Source Documentation

The data for this essay are obtained from a number of sources. Data for the dependent variable are hand-collected from the firm's website (which includes annual report, sustainability report and other reports that may contain information relating to environmental disclosures).

The major item of focus in this essay is directors sitting on multiple boards.

Data for multiple directorships and other corporate governance attributes are collected from the Aspect Huntleys Financial Database, specifically, from *FinAnalysis* and *DatAnalysis*. Accounting data are collected from *FinAnalysis* and *DatAnalysis*. *DatAnalysis* provides comprehensive coverage of financial data for all ASX listed firms where *DatAnalysis* reports are updated daily from ASX announcements. *FinAnalysis* provides a comprehensive history of detailed financial information for all firms listed on ASX and more than 400 data items are provided in addition to annual reports and prospectuses. The main independent variable of this study is multiple directorships which are analysed in different ways (i.e., directors on multiple boards that are independent, gender of directors on multiple boards and directors on multiple boards that are higher educated). Data used in the measurement of these independent variables is collected from *FinAnalysis* and *DatAnalysis* database.Whilst the main focus of this study is to examine the relationship between multiple directorships with environmental disclosure, robustness and various sensitivity tests will also be conducted. Data for the sensitivity analysis is obtained from either the *Annual Reports Collection* (Connect 4 Pty Ltd) or *DatAnalysis*.

4.4.3 Measurement of Dependent Variable[2] – Extent of CSRD

The extent of corporate social responsibility disclosure *(ENV_Disc_j)* in the annual reports and/or sustainability reports of sample firms is the dependent variable. The measurement instrument is adopting the Global Reporting Initiative (GRI) G3 disclosure index based on the environmental category. Please refer to Appendix B attached for further details on GRI G3 disclosure index. An unweighted scoring approach is used for the purpose of this research to minimise the researcher subjectivity that may result in biasing the empirical findings of this study if a weighted approach is taken (Chang, S.M., & Carlos, 1983). In order to work out the level of CSR disclosures for each firm, the score for each disclosure item on GRI G3 is added together and thereafter divided by the total number of applicable disclosure items on GRI G3. The level of corporate social responsibility disclosure *(ENV_Disc_j)* of the firm *j* is the total of all GRI G3 disclosure items scores divided by the total applicable number of GRI G3 disclosure items.

[2] Please refer to Appendix D for the details of the measurement of dependent variable.

4.4.4 Measurement of Independent Variable[3] – Multiple Directorships

Based on past literatures, a continuous variable is used to measure the independent variables of multiple directorships in this study tabulated in Appendix A (Haniffa & Cooke, 2002, 2005). Multiple directorships are examined using the following measure:

1) Number of directors with multiple directorships (MUL_BOD_j).

4.4.5 Measurement of the Control Variables[4]

A number of past literatures have found that firm-specific and governance variables have influence on CSR disclosures (Haniffa & Cooke, 2005; Mallin & Michelon, 2010). Therefore the following of firm-specific and governance variables i.e. natural log of market capitalisation ($SIZE_j$), number of board meetings ($MEET\_BOD_j$), age of firms (AGE_j), industry category (IND_M_j), international influence (INT_INF_j), shareholdings of the board of directors ($SHARE\_BOD_j$), profitability of the firm ($LOSS_j$) and CEO duality (CEO_DUAL_j), gender of the board members (GEN_PER_j), board's independence (IND_BOD_j), education level of board members (EDU_PER_j), busy directors sitting on sustainability committee (MUL_SUS_j) are analysed in this study.

Firm Size

A positive relationship of size with the level of voluntary disclosure, and in particular voluntary environmental and social reporting has been confirmed in a number of past empirical studies (Belkaoui & Karpik, 1989; Cowen et al., 1987; Patten, 1991). Sizeable firms in general tend to be under greater burden from the stakeholders to deliver the necessary results and as such compel them to increase their environmental disclosures (Darnall et al., 2010; Deegan & Gordon, 1996). As larger firms have more financial resources available at their disposal, these large firms will seek out and adopt environmental related activities and hence resulting in higher CSR disclosures in this area (Dierkes & Preston, 1977; Liu & Anbumozhi, 2009; Zeng et al., 2010).

[3] Please refer to Table of Variables in Appendix C for further details
[4] Please refer to Table of Variables in Appendix C for further details

Consistent with resource dependency theory, director interlocking is expected to result in higher CSR disclosures because of the long term positive implications of adopting CSR practices. The effect on CSR disclosures is expected to be higher in larger firms with interlocking directorates because in larger firms, the background and experience (e.g. international exposure, diverse skill-sets) of directors sitting on multiple boards tend to be different from smaller firms with interlocked directors.

Firm Age

Age of firm is used as a proxy to determine a firm's reputation and any past CSR performance and appears to be significantly correlated with environmental disclosure (Cho et al., 2010; Dhaliwal, Radhakrishnan, & Tsang, 2012). With the maturity of an organisation, the reputation and any previous involvement in CSR activities may eventually be rooted and embedded within that organisation (Roberts, 1992). As a result, firm's age is included as a control variable as it is expected to be directly associated with the level of environmental disclosures.

Profitability

Determinants of CSR disclosures from a firm level perspective have been widely researched in the past. Although many studies have taken place whether economic performance is indeed associated with the level of environmental disclosures, this linkage has not been ascertained conclusively (Bewley & Li, 2000; R. Gray et al., 2001; Karim et al., 2006; Laidroo, 2009; Prencipe, 2004; S. D. Stanwick & Stanwick, 2000; Ullman, 1985). Nevertheless, there were studies that have found a positive significant relationship between the level of environmental disclosures and profitability of a firm (Cormier, Magnan, & Velthoven, 2005; P. A. Stanwick & Stanwick, 1998). Conversely, other scholars have found no relationship between the level of environmental disclosures and profitability (Brammer & Pavelin, 2008; P. M. Clarkson, Li, Richardson, & Vasvari, 2008; Cormier & Gordon, 2001; Laidroo, 2009). On the other extreme, (C. J. P. Chen & Jaggi, 2000) in their studies have find a negative correlation between firm's financial performance and the level of comprehensive disclosures. One of the explanations for the above phenomena is the failure to distinguish between voluntary and mandatory environmental disclosures (R. Gray et al., 2001; Guthrie & Parker, 1989).

Industry Type

Based on the extant literary on environmental disclosure, the category of industry that a firm falls under does have a significant impact on the degree of environmental disclosures (Bewley & Li, 2000; Boesso & Kumar, 2007; Cormier & Gordon, 2001; Li, Richardson, & Thornton, 1997; H. Wang et al., 2004).

Firms that are classified under "environmental sensitive" or in the extractive industry tend to offer more voluntary disclosures to portray an image as a responsible corporate citizen and legitimises its existence (Boesso & Kumar, 2007; Deegan, 2002). Firms categorised as "heavy polluters" facing stringent government regulation and surveillance are compel to disclose greater degree of environmental related information, divulging their actions and activities to preserve, conserve the environment and lessen the environmental impact revolving their core work activities (Cormier & Gordon, 2001). On the other hand, firms are concerned about the level of disclosures made as a result of proprietary costs (competitive vulnerability) which can differ from one industry to another (Verrecchia, 1983).

International Influence

Cooke (1992) find that firms with multiple stock listings are more likely to disclose information on their social and environmental practices. Consistent with resource dependency theory, interlocking directorate is expected to result in higher CSR disclosures because of the long term positive implications of adopting CSR practices. The effect on CSR disclosures is expected to be higher in a firm with interlocking directorates and international influence because in these firms, the background and experience of directors sitting on multiple boards tend to be different from interlocked firms with less or no international influence. Firms with multiple stock listings tend to recruit directors with diverse background, international exposure, wide-ranging skills and expertise because of the need to address the additional challenges of operating in multiple geographical locations.

Firms with Independent Board Members

Fama and Jensen (1983) argue that the board of directors is the most effective internal control mechanism for monitoring the behaviour of senior management within a firm. However, existing literature examining the role of board structure on firm's performance yielded mixed findings. Conyon and Peck (1998) state that if outside

directors either hold an insignificant number of shares or has no shareholdings, their incentive to monitor management, and hence protect shareholder interests, maybe reduced. On the other hand, Mashayekhi and Bazaz (2008) suggest that a high proportion of independent directors strengthen the firm's performance. This positive correlation is confirmed by (Chau & Gray, 2010) who concluded that the level of overall voluntary disclosures for HK public listed firms is higher when the percentage of the independent board of directors are higher.

Firms with Women on Board

Past studies have indicated that gender composition on the board is expected to have an impact on CSR and social capital. According to Hillman, Canella et al.(2002), female directors are more likely than male directors to have expert backgrounds outside of business and to bring different perspectives to the board. Many research suggest that firms with a higher percentage of female board members are associated with an increased level of philanthropic deeds (J. Wang & Coffey, 1992), favourable work environment (Johnson & Greening, 1999), and higher concern for environmental CSR (Post, Rahman, & Rubow, 2011). Daily, Dalton et al. (2003) suggest that increasing board gender diversity will lead to enhanced decision making, with a broader coverage of issues and wider range of outcomes are assessed as a result. Increased heterogeneity among the board together with the inherent qualities and characteristics that women may contribute to the board may provide better oversight of management activities. Lastly, the presence and the number of women on board of directors may indicate to shareholders and other stakeholders that the firm is socially responsible, by allowing and increasing the participation of women on the board.

Education Levels of Board Members

Studies from Elm, Kennedy et al. (2001) implied that educational achievement is positively correlated with degree of environmental concern. This relationship showed that the more educated exhibit higher level of concern relating to the environment partly because highly educated persons develop a broader scope of understanding and views.

As such, it is anticipated that boards with a higher percentage of directors with advanced degree (those with Masters' degree or higher) will provide more attention to environmental disclosures.

Firms with Busy Directors Sitting on Sustainability Committee

In the past studies on board committees, results suggest that busy directors sitting on audit committee have a significant positive association with financial misstatements in the post SOX environment. On the other hand, in a different study Hoque, Islam and Azam (2013) find that the frequencies of audit committee and remuneration meetings in Australian listed firms are significantly related to firm's financial performance (V. D. Sharma & Iselin, 2012). Based on the above contradictory outcomes, it is expected that firms in which busy directors are members on the sustainability committee will have an association with environmental disclosures.

4.4.6 Regression Model

This study uses regression analyses to test whether firms with the independent variable indicated earlier will have higher environmental disclosures. The defined *Equation [9]* is as follows:

$$ENV\_Disc_j = \beta_0 + \beta_1 MUL\_BOD_j + \beta_2 IND\_BOD_j + \beta_3 GEN\_PER_j + \beta_4 EDU\_PER_j + \beta_5 SIZE_j + \beta_6 EXP\_PER_j + \beta_7 MEET\_BOD_j + \beta_8 AGE_j + \beta_9 INT\_INF_j + \beta_{10} CEO\_DUAL_j + \beta_{11} SHARE\_BOD_j + \beta_{12} LOSS_j + \beta_{13} IND\_M_j + \varepsilon_j \quad [9]$$

The variable of interest is MUL_BOD_j. The coefficient on MUL_BOD_j is predicted to be significant in the above EQ model.

4.5 ANALYSIS

4.5.1 Cleaning of the Data

Prior to data analysis, data screening checks are undertaken for each of the variables used in the study. Such checks include accuracy of the data entry, missing values and normality assessments. In regards to the accuracy of data entry and missing values, a data authentication check is undertaken on a sample basis, by revisiting data already entered. In total approximately fifteen (15) percent of the data set is examined in this manner. There were no errors noted.

Consistent with previous CSR studies (Arouri & Pijourlet, 2015; Cheung, Tan, Ahn, & Zhang, 2010) this study winsorises all continuous variables at the 1 and 99

percent levels to remove the effect of influential eccentric observations. These studies generally find the results obtained to be robust to the process of winsorisation.

4.5.2 Sample Selection Process and Industry Breakdown

This section provides a detailed description of how the final sample is chosen for this study. The discussion concentrates on two key aspects; sample selection and industry breakdown. As outlined in section 4.4, analysis for this study involves an examination of a sample of 150 randomly selected public listed firms from the top 300 firms listed on the Australian Stock Exchange (ASX) as at January 1, 2012. Firms with overseas headquarter, investment trust and had their IPO in the preceding year and the same year (i.e. 2011 and 2012) and have missing data are replaced with another firm on the list. Table 4.1 presents a summary of the breakdown by industry.

Table 4.1
Sample Selection and Industry Breakdown (Essay 3)

Panel A: Sample Selection

Initial sample size of largest firms listed on ASX as at January 1, 2012		300
Exclusions:		
Firms with overseas headquarters	(24)	
Investment trusts	(14)	
Firms with IPO in the preceding / same year	(10)	
Total number excluded:		(48)
Sample pool for random selection		252
Number randomly selected		150
Excluded due to missing data		-
Final usable sample		**150**

Panel B: Sample firm breakdown by industry

ASX Industry	No of Firms	% of Sample
Consumer Discretionary	24	16.0%
Consumer Staples	5	3.3%
Energy	17	11.3%
Financial	27	18.0%
Health Care	9	6.0%
Industrials	25	16.7%
Information Technology	2	1.3%
Materials	35	23.3%
Telecommunication Services	3	2.0%
Utilities	3	2.0%
Total	150	100%

4.5.3 Descriptive Statistics

Table 4.2 below provides the descriptive statistics of voluntary environmental disclosure index and independent and control variables that are used in this study. The mean aggregate voluntary environmental disclosure index is 15.5 per cent and the range varies from 0 per cent to 93.3 per cent, suggesting that not every firm undertake and voluntarily discloses its' environmental activities and programmes. On the other extreme, there are a handful of Australian publicly listed firms that observe and adhere to the GRI G3 disclosure index as far as the environmental category is concerned, reaching a high of 93.3 per cent compliance. The mean of MUL_BOD_j indicates that approximately 3.26 directors are sitting on multiple boards in each of the firm sampled. This result implies directors with multiple board seats are common in public listed firms in Australia. On average about 78.3 per cent of the directors are independent

directors with approximately 3 of these independent directors sitting on multiple boards. This outcome suggests that in general the public listed firms in Australia comply with the requirements that are spelt out by ASX Corporate Governance Council recommendations on the proportion of independent board members. While on average less than 0.58 director sitting on multiple boards are female (MUL_GEN_j), approximately one director who are sitting on multiple boards have a masters' degree and above. *Recommendation 1.5* in Australian Securities Exchange (2014) reinforces the belief that increased gender diversity is the way forward in improving financial performance of the firm and there is a some catching up to be done in this aspect with the low ratio of female : male proportion in this study.

Table 4.2
Descriptive Statistics

Variable	Mean	Standard Deviation	Median	Minimum	Maximum
ENV_Disc_j	0.155	0.180	0.100	0.000	0.933
MUL_BOD_j	3.260	2.074	3.000	0.000	10.000
IND_BOD_j	0.784	0.142	0.833	0.111	1.000
MUL_GEN_j	0.593	0.493	1.000	0.000	1.000
MUL_EDU_j	0.820	0.385	1.000	0.000	1.000
$SIZE_j$	20.934	1.127	20.677	19.551	24.932
EXP_PER_j	14.220	6.000	13.833	2.286	35.600
$MEET\_BOD_j$	11.083	3.985	10.500	3.510	25.980
AGE_j	18.705	14.278	14.792	2.709	85.040
INT_INF_j	0.133	-	0.000	0.000	1.000
CEO_DUAL_j	0.020	-	0.000	0.000	1.000
$SHARE\_BOD_j$	0.093	0.154	0.018	0.000	0.699
$LOSS_j$	0.127	-	0.000	0.000	1.000

All continuous variables (except log transformed variables) are winsorised at 1% and 99%. See Appendix C for details of variable descriptions

4.5.4 Correlation Analysis

Table 4.3 reports the Pearson correlation coefficients among the variables. The table includes the dependent variable, namely the level of environmental disclosure (ENV_Disc_j). An analysis of correlation coefficients in Table 4.3 highlights a number of observations. First, the dependent variable of environmental disclosure (ENV_Disc_j) is significantly correlated with number of multiple directors *MUL_BOD* (0.377), size of the firm $SIZE_j$ (0.436) and firms in the "material" industry *IND_M* (0.273). Second, there is also a significant correlation between the main independent variable, namely the number of multiple directors (MUL_BOD_j) and size of the firm $SIZE_j$ (0.534) and

women on board GEN_PER_j (0.268) and directors with masters' degree and above EDU_PER_j (0.218). Finally, from the review of Table 4.3 it is found that size is significantly correlated with the women on board GEN_PER_j (0.344) suggesting that only larger firms have the inclination to employ female directors in comparison the smaller publicly listed firms. However in all instances none of the correlations exceed multi-collinearity limits of 0.80 (Hair et al., 1995). There is no unusual correlations among the variables in the regressions that justify any concern.

Table 4.3
Pearson Correlation

Variable	*ENV_DISC$_j$*	*MUL_BOD$_j$*	*IND_BOD$_j$*	*GEN_PER$_j$*	*EDU_PER$_j$*	*SIZE$_j$*	*EXP_PER$_j$*	*MEET_BOD$_j$*	*AGE$_j$*	*INT_INF$_j$*	*CEO_DUAL$_j$*	*SHARE_BOD$_j$*	*LOSS$_j$*	*IND_M$_j$*
ENV_DISC$_j$		0.377**	0.092	0.080	0.102	0.436**	-0.028	0.003	0.178*	0.127	-0.035	-0.159	0.130	0.273**
MUL_BOD$_j$			0.103	0.268**	0.218**	0.534**	-0.152	0.129	0.233*	0.140	-0.041	-0.118	-0.116	0.037
IND_BOD$_j$				0.164*	0.110	0.131	-0.232**	-0.072	0.170*	-0.012	0.047	-0.214**	-0.100	-0.101
GEN_PER$_j$					0.248*	0.344**	-0.277**	0.086	-0.077	0.005	0.022	-0.238**	-0.134	-0.217**
EDU_PER$_j$						0.132	-0.190*	-0.016	0.038	0.082	-0.057	-0.136	0.022	0.094
SIZE$_j$							-0.052	0.051	0.286**	0.105	0.012	-0.063	-0.211**	-0.158
EXP_PER$_j$				`				-0.056	-0.072	0.017	0.025	0.129	0.021	0.179*
MEET_BOD$_j$									-0.004	0.125	0.051	-0.135	-0.038	-0.010
AGE$_j$										0.047	-0.048	0.019	-0.052	0.093
INT_INF$_j$											-0.055	-0.144	0.204*	0.294**
CEO_DUAL$_j$												0.159	0.088	0.033
SHARE_BOD$_j$													-0.071	-0.151
LOSS$_j$														0.264**
IND_M$_j$														

Tests are two tailed. *, and ** denote two-tailed significance levels at 5% and 1% levels, respectively. See Appendix C for details of variable definitions.

4.5.5 Multivariate Regression Results

Table 4.4 summarised the linear regression results using normal scores for these variables. The regression produced an adjusted R^2 of 0.281. The adjusted R^2 level is in line with some of the prior studies on CSR disclosures associating with corporate governance mechanisms (Chau & Gray, 2010; P. A. Stanwick & Stanwick, 1998).

The number of directors sitting on multiple boards (*MUL_BOD$_j$)* is found to be positively associated with the disclosure level at 10 per cent level using the percentage of voluntary disclosures as the dependent variable. The linear regression results also indicated that larger firms (*SIZE$_j$*) and firms within a specific industry (*IND_M$_j$)* i.e. material industry are significantly correlated with environmental disclosures. These outcomes are similar to past CSR studies confirming again that one of the key determinants of CSR disclosures is size (Cowen et al., 1987; Patten, 1991) and "sensitive" industry, in this case the material industry (Bewley & Li, 2000; Cormier & Gordon, 2001).

Table 4.4
Multivariate Regression Results – Impact of Multiple Directorships on Environmental Disclosure

VARIABLES	Coefficient Value	t-Statistics	Sig *t*
MUL_BOD$_j$	0.013	1.717	0.088*
IND_BOD$_j$	0.054	0.560	0.575
GEN_PER$_j$	-0.021	-0.701	0.485
EDU_PER$_j$	-0.014	-.0396	0.692
SIZE$_j$	0.071	4.897	0.000***
EXP_PER$_j$	-0.001	-0.511	0.610
MEET_BOD$_j$	-0.002	-0.599	0.550
AGE$_j$	0.000	-0.107	0.915
INT_INF$_j$	-0.033	-0.805	0.422
CEO_DUAL$_j$	-0.053	-0.568	0.571
SHARE_BOD$_j$	-0.080	-0.874	0.383
LOSS$_j$	0.024	0.579	0.563
IND_M$_j$	0.144	4.125	0.000***
Constant	-1.371	-4.540	0.000***
No of observations = 150			
Adjusted R^2 = 0.281			
F-statistic = 5.449			
p value = 0.000			

***Significant at 1% level, **Significant at 5% level, *Significant at 10% level.
See Appendix C for variable definitions.

4.5.6 Sensitivity Analysis

The following regression models are employed to examine whether environmental disclosures are affected by the personal characteristics of directors with multiple board membership using the defined *Equation [10]* as follows:

$$ENV\_Disc_j = \beta_0 + \beta_1 MUL\_GEN_j + \beta_2 MUL\_IND_j + \beta_3 MUL\_EDU_j + \beta_4 MUL\_SUS_j + \beta_5 SIZE_j + \beta_6 EXP\_PER_j + \beta_7 MEET\_BOD_j + \beta_8 AGE_j + \beta_9 INT\_INF_j + \beta_{10} CEO\_DUAL_j + \beta_{11} SHARE\_BOD_j + \beta_{12} LOSS_j + \beta_{13} IND\_M_j + \varepsilon_j \quad [10]$$

To test the personal attributes of multiple directorships, multiple regression tests on board members sitting on different boards that are female, independent, those that has a masters' degree or above are performed.

4.5.7 Additional Analyses - Alternative Measures of Disclosure

To further corroborate the main findings perform additional analyses for the dependent variable are performed. A dichotomous variable is used to measure the dependent variable where 1 is given is the firm discloses any environmental data and 0 if there are no disclosures made to ensure that the results are robust. The results from the binary logistic regression in Table 4.5 indicated that board members sitting on multiple boards are significantly associated with the environmental disclosures at the 1% per cent level, confirming the robustness indicated main results in Table 4.4 on board members with multiple directorships.

Table 4.5
Logistic Regression - Impact of Multiple Directorships on Environmental Disclosure

VARIABLES	Coefficient Value	S.E.	Wald	Sig
MUL_BOD_j	0.504	0.195	6.686	0.010***
IND_BOD_j	-1.136	2.257	0.253	0.615
GEN_PER_j	-0.608	0.614	0.982	0.322
EDU_PER_j	-0.337	0.691	0.238	0.626
$SIZE_j$	0.035	0.372	0.009	0.925
EXP_PER_j	0.014	0.049	0.080	0.777
$MEET\_BOD_j$	-0.022	0.084	0.067	0.796
AGE_j	0.041	0.030	1.871	0.796
INT_INF_j	18.381	7539.880	0.000	0.998
CEO_DUAL_j	-0.014	1.599	0.000	0.993
$SHARE\_BOD_j$	-2.455	1.741	1.990	0.158
$LOSS_j$	-0.210	0.944	0.049	0.824
IND_M_j	18.710	6067.860	0.000	0.998
Constant	0.570	7.920	0.000	0.943

Number of Observations: 150
Chi Square:17.98
Pseudo R^2: 0.1622

***Significant at 10% level, **Significant at 5% level, *Significant at 1% level.
See Appendix C for variable definitions.

4.5.8 Personal Attributes of Multiple Directorships

A number of past literatures have found that personal attributes of directors have an influence on the level of CSR and voluntary disclosures (Chau & Gray, 2010; Daily et al., 2003; Hillman et al., 2002; Mashayekhi & Bazaz, 2008). Previous researches suggest that firms with a higher proportion of female board members are linked higher concern for environmental related CSR (Post et al., 2011). On a separate note, it was found a high proportion of independent directors strengthen the firm's performance (Mashayekhi & Bazaz, 2008). On the same token, Chau & Gray (2010) conclude that the level of overall voluntary disclosures for HK public listed firms is higher when the percentage of the independent board of directors are higher.

In a different study, Elm, Kennedy et al. (2001) imply that educational achievement is positively associated with extent of environmental concern. The rationale behind this relationship stems from the fact that highly educated individuals develop a broader scope of understanding and views and as such will exhibit higher level of concern to the environment.

The following regression model is employed to examine whether environmental disclosures are affected by the personal characteristics of directors with multiple board memberships using the regression equation *[11]:*

$$ENV\_Disc_j = \beta_0 + \beta_1 MUL\_GEN_j + \beta_2 MUL\_IND_j + \beta_3 MUL\_EDU_j + \beta_4 MUL\_SUS_j + \beta_5 SIZE_j + \beta_6 EXP\_PER_j + \beta_7 MEET\_BOD_j + \beta_8 AGE_j + \beta_9 INT\_INF_j + \beta_{10} CEO\_DUAL_j + \beta_{11} SHARE\_BOD_j + \beta_{12} LOSS_j + \beta_{13} IND\_M_j + \varepsilon_j \quad [11]$$

To test the personal attributes of multiple directorships, multiple regression tests on board members sitting on different boards that are female, independent, those that has a masters' degree or above are carried out. Based on the additional tests that were taken, the results available in Table 4.6 showed no significant relationship from the point of view of multiple directors that are female, those that has a masters' degree and above nor those who has served the board for a prolonged period of time.

The regression produced an adjusted R^2 of 0.319. However, multiple directors who are independent board members contribute towards the environmental disclosure at a significant level measured both with the linear regression and binary logistic regression. It is significant at 5% level the using linear regression method measurement. This result suggests that independent board members who are on

multiple boards improves the transparency of firms, underpinning the *Recommendation 4.1* put forth by Australian Securities Exchange (2014) in safeguarding integrity in corporate reporting.

In addition, there is also a positive association between directors with multiple board seats that are sitting on sustainability committee at 10% level. This gives rise to a perspective that a separate and distinct sub-committee focussing on sustainability may encourage firms to proactively volunteer additional disclosures on its CSR activities.

Table 4.6
Multivariate Regression Results – Impact of Personal Attributes of Multiple Directorship on Environmental Disclosure

VARIABLES	Coefficient Value	t-Statistics	Sig *t*
MUL_GEN_j	0.005	0.279	0.811
MUL_IND_j	0.026	2.458	0.015**
MUL_EDU_j	-0.015	-1.042	0.299
MUL_SUS_j	-0.015	1.719	0.088*
$SIZE_j$	0.061	4.445	0.000***
EXP_PER_j	-0.000	-0.020	0.171
$MEET\_BOD_j$	-0.002	-0.746	0.457
AGE_j	0.000	-0.368	0.714
INT_INF_j	-0.034	-0.838	0.403
CEO_DUAL_j	-0.041	-0.458	0.648
$SHARE\_BOD_j$	-0.034	-0.373	0.710
$LOSS_j$	0.023	0.569	0.570
IND_M_j	0.138	4.107	0.000***
Constant	-1.204	-4.32	0.000***

No of observations = 150
Adjusted R^2 = 0.319
F-statistic = 6.334
p value = 0.000

***Significant at 1% level, **Significant at 5% level, *Significant at 10% level.
See Appendix C for variable definitions.

Similarly, in addition to the percentage of disclosures that are measured, this paper has also taken into account a dichotomous variable to measure the dependent variable where 1 is given is the firm discloses any environmental data and 0 if there are no disclosures made to ensure that the results are robust for personal attributes of director that have multiple directorships. The results from the binary logistic regression in Table 4.7 indicated that board members sitting on multiple boards are significantly associated with the environmental disclosures at the 5% per cent level.

Table 4.7
Logistic Regression – Impact of Personal Attributes of Directors with Multiple Directorships Analysis

VARIABLES	Coefficient Value	S.E.	Wald	Sig
MUL_GEN_j	0.549	0.544	0.771	0.320
MUL_IND_j	0.549	0.263	4.351	0.037**
MUL_EDU_j	-0.549	0.357	2.548	0.110
MUL_SUS_j	18.021	7568.162	2.424	0.998
$SIZE_j$	0.108	0.370	0.085	0.771
EXP_PER_j	0.047	0.045	1.075	0.300
$MEET\_BOD_j$	-0.007	0.084	0.006	0.938
AGE_j	0.029	0.029	1.032	0.310
INT_INF_j	18.541	7219.631	0.000	0.998
CEO_DUAL_j	-0.694	1.561	0.198	0.657
$SHARE\_BOD_j$	-1.214	1.641	0.547	0.460
$LOSS_j$	-0.262	0.958	0.075	0.784
IND_M_j	18.871	5873.745	0.157	0.997
Constant	-2.911	7.349	0.000	0.692

Number of Observations:150
Chi Square: 16.46
Pseudo R^2: 0.1549

***Significant at 1% level, **Significant at 5% level, *Significant at 10% level.
See Appendix C for variable definitions.

4.6 IMPLICATIONS AND CONTRIBUTIONS

4.6.1 Implications of the Study

Findings provide valuable insights into understanding the determinants of environmental disclosures, and the influence of multiple directorships on environmental disclosures. Results provide important inferences for key stakeholders including regulators, investors, scholars and corporate management. Implications for key stakeholders are discussed in the following subsections.

Throughout the last twenty years, CSR disclosures have been a focal point for firms to improve their visibility and their commitment to the environment with the heightened fears of global warming, pollution and destruction of the natural habitat by firms in the industrialised nations. Numerous studies have been undertaken in respect to environmental protection and contribution that a firm can make to lessen the impact of global warming. In Australia, rules and guidelines have been put in place for firms in the extractive industry and to ensure that firms in these industries comply with the environmental policies that are being laid out. In the latest updated release of the ASX

Corporate Governance Principles and Recommendations 2014, it is spelt out under *Recommendation 7.4* that a public listed firm discloses any material exposure[5] to economic, environmental and social responsibility risks and how the firm intends to manage those risks.

Although there were attempts by publicly listed firms in the US to limit the number of boards that a director can hold, the evidence and results on the impact on the firm in regards to busyness factor have been mixed so far (Falato et al., 2014). As far as Australia is concerned, there is no restriction placed on the number of multiple directorships a director can hold for public listed firms although it is suggested that the under *Recommendation 2.4* that the majority of the board of a listed firm should be independent directors with *Recommendation 2.5* suggesting that the chairperson of the board should be an independent director and not the CEO of the firm (Australian Securities Exchange, 2014). Regulators in Australia may pursue additional recommendation in the future to limit the numbers of appointments of directors who may have a high number of board seats in order to them to be more effective in their respective roles.

Past literature suggests that investors no longer rely solely on financial data to determine their next course of action on their current shareholdings. Investors are seeking beyond the financial data that are available by analysing and studying additional voluntary information that are disclosed by the firms e.g. CSR related information regarding corporate social obligations undertaken to maintain and sustain the long term financial performance of the firm (Fraser, 2005; Luo, 2005a, 2005b; Sahut et al., 2011). It is argued that provision of additional voluntary non-financial information is likely to have an impact on the decision of investors on their investments and failure to be mindful on CSR can eventually lead to severe consequences on a firm's reputation and value (Fraser, 2005).

Findings from this study nevertheless do imply that investors may potentially make use of the additional voluntary information provided by a firm for future investment decisions. Simultaneously, from a corporate governance perspective, investors may also study the characteristics of the board members and determine whether to invest in firms where directors with multiple board seats are seen to

[5] "Material exposure" in the context means that the risk in question could substantially impact the listed entity's ability to create or preserve value for security holders over the short, medium and long term.

enhance and encourage voluntary disclosures within a firm and henceforth increases its transparency. Although the findings from this study seems to imply that both gender and education level of the directors does not directly lead to higher level of environmental disclosures, the evidence from this study seemed to suggest that independent directors that are holding multiple board seats do encourage higher level of voluntary disclosures within a firm (Armstrong, Core, & Guay, 2014). This finding is consistent with the Australian Stock Exchange Principle 2 on structuring the board to add value where the majority of the board members should comprise of independent directors (Australian Securities Exchange, 2014).

Given the study's overall results indicate a significant multiple directorships/environmental disclosure association, results suggests that independent, experienced and knowledgeable directors who have accumulated are likely to encourage corporate management to enhance their visibility and environmental accountability by disclosing more environmental related activities. These findings suggest that the firm, under the guidance of experienced and knowledgeable directors limit the opportunistic behaviour of the corporate management rather than encouraging them to pursue opportunities to maximise their own self-interests.

CSR disclosures differs from one country to another due to contrasts in culture, economy, existence of stakeholder groups, accounting conventions and gravity of the social and environmental issues ((Harte & Owen, 1991; J.V., Adhikari, Tondkar, & Andrews, 2010; Meek, Roberts, & Gray, 1995; Williams & Pei, 1999)

Research on director interlock and multiple directorships have largely been carried out in the United States (Cashman et al., 2012; J.L. Coles & Hoi, 2003; Fich & Shivdasani, 2006; Pornsit Jiraporn et al., 2008; P. Jiraporn, Singh, et al., 2009; Richardson, 1987; V. D. Sharma & Iselin, 2012). In comparison, this study is carried out within the domicile of Australia. Researchers under diverse domestic setting shall therefore control for any fundamental institutional or social factors that are relevant rather than heedlessly presume factors used under the United States context can be applied universally.

As the findings from this study indicated that firms exhibiting a higher level of concern for environmental implications are not reliant on firm specific determinants like size, industry type and international influence, scholars may shift their focus on governance related specific determinants like director's independence and directors with multiple board memberships instead. The findings suggest that there is a benefit

in nominating directors with broad experience, skills and knowledge which can be transferred and applied in a different firm. In addition there is also an advantage for firms to hire independent directors on their board to increase the visibility and transparency of a firm by committing to voluntarily share more non-financial information like environmental disclosures to stakeholders of the firm.

For scholars planning to commence on future research on similar topic, perhaps it is beneficial to concentrate on governance related determinants of voluntary disclosures rather than just focussing on the just the firm specific determinants as a means of studying the causes and factors of CSR related activities and disclosures. Past studies have shown that there are two divergent perspectives on multiple directorships. The view and belief that "busy" directors have too much on their plate and as a result neglect the duties accorded to them is prevalent in the studies of some scholars (Falato et al., 2014; Fich & Shivdasani, 2006; P. Jiraporn, Singh, et al., 2009).

The belief that directors seek to protect their "reputation" and enhance their board appointment possibilities underlines the concept where board members strive to impart and transfer "quality" know-how, skills and experiences to the advantage of the firm that they are serving on (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Sarkar & Sarkar, 2009).

This study assists in extending the understanding of multiple directorships, particularly within the context of the Australian capital market. For example, this study concludes that multiple directorships do have a positive impact on the environmental disclosure of large publicly listed firm in Australia. Furthermore, independent directors that hold multiple board seats are likely to encourage more environmental disclosures than their non-independent counterparts. Also, findings from this study provide an update on the existence and extent of environmental disclosures amongst large Australian publicly listed firms for the year 2012.

This study also helps in addressing some of the unanswered empirical questions related to multiple directorships and concurrently increasing the understanding of the influence of different characteristics of a director who has multiple board seats. Specifically, analysis develops insights into, and identifies, key determinants of multiple directorships. Numerous empirical researches to date has pursued diverse range of techniques to ascertain the level of voluntary corporate social responsibilities disclosures of a firm (Barth, 1997; Chiu & Sharfman, 2011; Cormier

& Gordon, 2001; Jenkins & Yakovleva, 2006; Meek et al., 1995; Tilt, 2001). Limited researches however have taken place to identify the determinants of voluntary disclosures from a governance-specific standpoint and applying the theoretical concept of resource dependence model as the platform for disclosure studies as the past focus were mainly on utilizing the legitimacy and stakeholder theories to form the base of such studies.

To the researcher's best knowledge, this is probably a pioneer study that examines the relationship between multiple directorships and the directors' personal attributes and the environmental disclosures in Australia capital market setting. By focussing on the number of board seats that a director hold and the personal attributes of these directors, this study provides a more profound understanding of the characteristics of the board members who hold multiple directorships and the extent to which this corporate governance mechanism aid in improving the transparency of a firm by voluntary disclosing more environmentally related information. In addition, by examining the multiple directorship/environmental disclosures in an Australian setting, this study provides vital global evidence of the impact of corporate governance mechanisms on voluntary disclosures.

Findings from this study are expected to increase the role of multiple directorships and its impact on environmental disclosure in the Australian setting. More importantly, this study provides further evidence that board members with numerous seats do impart their skill-sets, knowledge and expertise to the firm by encouraging higher level of voluntary environmental disclosures. The results have also imply that independent directors with multiple board seats play an important role in enhancing the transparency of a firm by influencing the board and ultimately the management of the firms to voluntarily improve and increase on their level of non-financial related disclosures. These findings therefore assist in identifying specific characteristics of the board members which may have an impact in improving the underlying corporate governance mechanism of the firm.

This study also provides contributions to the understanding of the Australian capital market that is beneficial to major stakeholders of the listed firm. For instance, findings will help regulators determine which characteristics of board members are most likely to lead to higher level of environmental disclosures. This information can then enable regulators assess whether ASX guidelines and recommendations are likely to benefit the firms and society if new recommendations pertaining to the

characteristics of director are imposed. Findings may also assist regulators in improving existing policies to ensure the desired outcome is attained, or to help in development of new policies to strengthen the current standards governing voluntary disclosures specially environmental related disclosures.

Overall, this study provides valuable insights and underlines potential opportunities for future research. However, this research is not without limitations as with any positivist empirical study.

4.6.2 Contributions of the Study

This study facilitates the understanding of multiple directorships, particularly in terms of voluntary environmental disclosures in the context of the Australian capital market. As an illustration, this study concludes that multiple directorships have a positive relationship with level of environmental disclosures in publicly listed firms in Australia.

The belief that directors strive to protect their "reputation" and enhance their board appointment possibilities highlight the impression where board members attempt to impart and transfer "quality" know-how, skills and experiences to the advantage of the firm that they are acting on behalf (Carpenter & Westphal, 2001; Fama & Jensen, 1983; Sarkar & Sarkar, 2009). This study also assists in addressing some of the unanswered empirical questions related to multiple directorships and the understanding of the influence of different characteristics of directors who have multiple board seats. Specifically, analysis develops insights into, and identifies, key determinants of multiple directorships.

By focussing on the number of board seats that a director hold and personal attributes of these directors, this study provides a deep understanding of the characteristics of the board members who hold multiple directorships and determinants of CSR disclosures.

Findings from this study are expected to accentuate the role of multiple directorships and its impact on improving the transparency level of public listed firms in the Australian setting by influencing its level of voluntary CSR disclosures. Essentially, this study provides evidence that board members with multiple seats impart their skill-sets, knowledge and expertise to the firm and contributes to the theoretical perspective in which resource dependency theory is validated. These findings as a result helps in recognising specific characteristics of the board members

which may have an impact in improving the underlying corporate governance mechanism of the firm.

This study also provides contributions to the understanding of the Australian capital market that is constructive to stakeholders of publicly listed firm. For instance, findings will help regulators determine which characteristics of board members are most likely to lead to higher of level of voluntary CSR disclosures. This information may enable regulators to assess whether ASX guidelines and recommendations are likely to benefit the firms and society if new recommendations pertaining to the characteristics of director are imposed. Findings may also assist regulators in improving existing policies to ensure the desired outcome is attained, or to help in development of new policies to strengthen the current standards governing financial reporting quality. For example, the ASX may introduce a new recommendation to publicly listed firms to source directors who have the necessary skills, knowledge and accreditation before approving their directorship in a firm.

In summary, this study presents beneficial insights and underlines potential opportunities for future research. Nonetheless, when it comes to any positivist empirical study, this research is not without limitations.

4.6.3 Limitations of the Study

While this study has a number of strengths, it is not without its limitations. Because of the extensive number of variables that have been researched and the laborious and time consuming exercise to hand-collect CSR related data over a longer period, this essay is limited to a cross-sectional study. As such, it may not be generalizable across other periods. There are other avenues and angles that a multiple directorships can be measured which was not undertaken in this study. This study confines only to Australia and its institutional settings may differ from that of another country. With the introduction of the new legislation on environmental disclosure for publicly listed firms in Australia commencing 2014(Australian Securities Exchange, 2014), further analysis could be undertaken on the impact of the initiation of this regulation. There are other alternative ways of measuring director interlocking and external networking that were not taken into account in this study which can be considered in future research.

While it is acknowledged that there are limitations within this study, the strength of the study and important implications of the findings cannot be ignored as indicated earlier on the significance of this research.

4.6.4 Summary of the Study

Regulators and researchers in the past have attempted to establish a link between boards with multiple directorships and voluntary CSR disclosures. While there were some studies that have confirmed the positive association, there were also other studies that disputed the linkage between busy boards and voluntary disclosures. This study which was based on the Australian capital market concentrating on the sizeable firms has concluded that there is a relationship between board with multiple directorships and environmental disclosure. Furthermore, this study also looked into the personal characteristics of the directors that hold multiple board seats in terms of their independence, gender, and educational level.

The empirical tests have yielded insightful results. Particularly, the general findings suggest that independent directors with multiple seats are likely to encourage firms to voluntarily disclose higher environmental related activities and information. Contrary to the "busyness" hypothesis, directors that hold multiple board seats are likely to encourage a higher level of transparency within the firm by disclosing environmental related information. Furthermore, independent directors with multiple directorships tend to promote a greater level of environmental disclosures within the firm that they are responsible for. The results from this study suggests that there is no evidence to link gender diversity with the level of environmental disclosures made despite past literature indicating gender composition on the board is expected to have an impact on CSR disclosure and social capital. In addition, neither does the education level of the board members have any association with the level of environmental disclosures based on the results from this study conducted.

However, the size and industry factors continue to play a significant part in the level of voluntary disclosures made in this study. The larger the firm, the greater the level of disclosures are evident in past studies on CSR activities (Cowen et al., 1987; Hackston & Milne, 1996; Patten, 1991).

These researches have indicated that sizeable firms are more inclined to be subjected to intense public scrutiny and as a result are compelled to voluntary disclose more CSR related information. As a result, to prevent any form of regulation and

escalating political costs, larger firms tend to offer more voluntary information in terms of CSR disclosures (Adams, Hill, & Roberts, 1998).

On a similar note, firms in the extractive industry in which their economic activities have an impact on the environment, are prone to disclose information relating to the environment effect than firms in a different industry as evident in the results from this study (Dierkes & Preston, 1977). Firms in upholding its competitive advantage and to present a responsible social impression tend to voluntarily disclose more CSR information (R. Hall, 1993).

Overall, findings from this study beneficial insights and understanding to the association between multiple directorships and level of environmental disclosures in Australia. Concurrently, the personal characteristics of board member who holds multiple directorships researched highlighted some helpful insights which may have meaningful implications for different major stakeholders of the firms (e.g., scholars, practitioners, corporate management, investors and regulators). Going forward, in expanding the understanding and awareness of multiple directorships and environmental disclosures, and the relationship between the two concepts, this study makes an attempt to emphasize a variety of different routes for prospective useful empirical research.

Chapter 5 CONCLUSIONS & FUTURE RESEARCH

5.1 Introduction

The three essays revolving around this thesis examines the relationship between multiple directorships and financial and non-financial reporting of public listed firms in Australia. The board of directors as a corporate governance mechanism is an important instrument to overcome the challenges that were besetting the financial and accounting profession in the early 2000s. This thesis investigates whether directors sitting on multiple boards can assist in constraining earnings management, improves audit quality and enhances the transparency of a firm by disclosing voluntary CSR information. Chapter two dwells into the relationship between multiple directorship and earnings management and how it influences the magnitude of earnings management of publicly listed firms in Australia. Chapter three studies the correlation between multiple directorships and the audit fees and whether boards with multiple directorships can contributes towards enhancing the audit quality within publicly listed firms in Australia. Lastly, chapter four explores the association between multiple directorships and environmental disclosures, delving into the aspect of voluntary disclosures of public listed firms in Australia.

5.2 Summary of Major Conclusions in this Study

Essay 1 – Multiple Directorships and Earnings Management

This study has examined whether the presence of multiple directorships in ASX listed firms is associated with the degree of earnings management. Results based on the full regression model with 14 variables comprising of both independent and control variables indicated that there is a negative significant relationship between multiple directorships and the level of earnings management of publicly listed firms in Australia. Alternative robustness test using the performance adjusted Kothari model with multiple directorships produced results that multiple directorships have an influence the level of earnings management. The negative relationship suggests that firms with multiple directorships have an impact on the level of earnings management. The main results suggest that firms with multiple directorships restrict earnings management. The main results were corroborated with findings from the additional tests undertaken using the performance adjusted Kothari (2005) model and alternative

measurement of multiple directorships. The results validate the reputation hypothesis inferring that experience, knowledge derived from having multiple board memberships pays and reinforces the resource dependency theory.

In addition, findings have shown that firms with industry specialist auditor have an inclination towards lower earnings management while high growth firms engage in earnings management consistent with prior literature (Dechow et al., 1998; Firth et al., 2007; McNichols, 2000).

This study has also found that the firm size played a part in the level of earnings management from the findings in this study. It is noted that larger firms tend to engage in earnings management compare to smaller firms. This finding is consistent with the prior literature in which larger firms are compelled to conform to the expectations of the analysts and investors to report a predictable degree of earnings consistently (Dechow et al., 2010; Watts & Zimmerman, 1978).

Finally, it was found that firms with higher net income engage in earnings management as evident with the positive significant relationship with both the models. This finding is in line with some of the earlier studies suggesting profitable firms are expected to meet or surpass earnings objectives in comparison to less profitable firms or firms that are incurring losses (Chan et al., 2015; Degeorge et al., 1999; Roychowdhury, 2006)

Essay 2 – Multiple Directorships and Audit Fees

This study has examined whether the presence of multiple directorships in ASX listed firms is associated with the quantum of audit fees. Results based on the full regression model with 17 variables comprising of both independent and control variables indicated that there is a positive significant relationship between multiple directorships and the level of audit fees of publicly listed firms in Australia. Alternative robustness test using different measurement of independent variables with multiple directorships produced results that multiple directorships have an influence the level of audit fees. The positive significant relationship suggests that firms with multiple directorships have an impact on the level of audit fees. The main results suggest that firms with multiple directorships encourage the use of external auditors that have the necessary skills and knowledge thus enhancing the audit quality and consequently result in higher audit fees. The main results were corroborated with findings from the additional tests undertaken using the different measurement of the dependent variables

and alternative measurement of multiple directorships. The results validate the reputation hypothesis inferring that experience, knowledge derived from having multiple board memberships pays and reasserting the resource dependency theory.

In addition, findings have shown that firms with industry specialist auditor have an inclination towards higher audit fees suggesting that firms that engaged industry specialist auditor tend to have higher audit quality, resulting in enhanced earnings quality for the firm.

This study has also found that the firm size played a dominant role in the level of audit fees from the findings in this study. This finding is consistent with the prior literature in which external auditors in larger firms are more inclined to spend additional time and effort to ensure that the audit opinion rendered reflects the true and fair view of the financial statements verified. Similarly, the results also imply that firm with educated board members and a higher proportion of female directors encourage higher audit/earnings quality with the positive significant results for both of these variables.

On the other hand, some noteworthy results are observed for firms with CEO duality. Firms with the same executive having the role of chairmanship and chief executive position are more likely to experience a lower level of audit fees as they are concerned with overall expense and eventually profitability of the firm and therefore not in favour of seeking additional assurance from the work of external auditors.

Additionally, firms with a higher proportion of shareholdings and higher proportion independent board members demand and encourage greater level of audit quality given the positive and statistically significant results obtained. Further, firms with diligent audit committee members, high level of gearing and with high non-audit services are also positive significantly associated with audit fees, supporting the view of greater audit efforts culminating into higher audit quality. Moreover, the positive significant association with audit fees for the number of subsidiaries the number of business segments and current assets also confirm that the more complex risky of the firm, the more attention is paid to the audit quality of that particular firm. These results also concurred with most of the previous empirical studies on these variables (Carcello et al., 2002; A. Ferguson & Stokes, 2002; Goodwin-Stewart & Kent, 2006). Finally, the results on the return of assets (where the profitability of a firm is negatively significant correlated with audit fees) infer that external auditors exercise more effort

and attention to firms that are less profitable to alleviate their exposure to any litigation and financial damages in the event the client becomes insolvent.

Essay 3 – Multiple Directorships and Environmental Disclosure

This study has examined whether the extent of voluntary environmental disclosures both in annual reports and websites of the 150 Australian listed firms is associated with multiple directorships. Results based on the full regression model with 13 variables comprising of both independent and control variables indicated that there is a positive relationship between multiple directorships and the level of environmental disclosures in publicly listed firms in Australia. Alternative robustness tests measuring the disclosures using logistic regression produced results that multiple directorships do influence the level of disclosures significantly.

With the positive association between multiple directorships and environmental disclosure, it can be concluded that the resource dependency theory is relevant as directors share their experience and expertise when it comes to sitting on different boards and encouraging voluntary disclosures to be made on these firms.

This study has also found that the firm size played a part in environmental disclosures (Deegan & Gordon, 1996). A positive relationship of size with the level of voluntary disclosure, and in particular voluntary environmental and social reporting has been confirmed in a number of past empirical studies (Belkaoui & Karpik, 1989; Cowen et al., 1987; Patten, 1991). Consistent with resource dependency theory, multiple directorships is expected to result in higher CSR disclosures because of the long term positive implications of adopting CSR practices. The effect on CSR disclosures is expected to be higher in larger firms with multiple directorships because in larger firms, the background and experience (e.g. international exposure, diverse skill-sets) of directors sitting on multiple boards tend to be different from smaller firms with interlocked directors. The study also found industry type has a significant influence on environmental disclosure as concluded in this paper. The results indicated that firms in "material" industry are more likely to voluntarily disclose environmental related information than firms in another industry as far as this essay is concerned. In addition to the above findings, the results suggest that independent directors that are sitting on multiple boards appear to contribute to higher environmental disclosures based on the results from both the linear and the logistic regressions indicated above.

5.3 Overall Conclusions in this Thesis

This thesis attempts to establish whether boards with multiple directorships are effective monitors and able to influence financial reporting quality as a consequence of knowledge spill-over or whether they are too busy to discharge their duties effectively. Using different measures of multiple directorships, results from the first essay suggest that firms with board of directors having higher multiple directorships exhibit lower levels of earnings management. In the second essay, multiple directorships are associated with higher level of audit fees suggesting higher levels of monitoring. Findings from both the first and second essays suggest that earnings/audit quality strengthens with firms having skilled, knowledgeable and experienced board of directors. In the third essay, results indicate that firms with multiple directorships are associated with higher level of environmental disclosures.

5.4 Suggestions for Future Research

The findings from the different studies in this thesis contribute towards the understanding of the influence of multiple directorships on earnings management, audit fees and environmental disclosures of Australian publicly listed firms. In addition, the results provide a useful framework for key stakeholders including regulators, investors, scholars and corporate management when it comes to the study of multiple directorships and its impact on financial and non-financial reporting measures for publicly listed firms in Australia.

First, this study specifically examines solely the influence of multiple directorships on financial and non-financial reporting measures in Australia. More research can be possibly undertaken to understand the interaction between directors with multiple board seats and other board characteristics (for example CEO power, nomination committee, internal audit function) that may have an influence on the earnings quality, audit quality and the level of environmental disclosures of publicly listed firms.

Second, future research can be undertaken by investing the influence of multiple directorships on financial and non-financial reporting aspect of listed firms in Australia by comparing empirical results pre-CLERP 9 and post-CLERP 9 to

obtain evidence whether the introduction of the reforms in 2004 have indeed improve and enrich corporate governance culture in Australia.

Third, future researchers can embark on the path in dealing with some the limitations that have been highlighted individually in each of the essays.

Last, as this study focusses only on a single nation i.e. Australia, researchers may in the future examine a similar topic on multiple directorships and their influence on financial and non-financial reporting by selecting countries/jurisdictions with dissimilar institutional and regulatory settings. By doing so, the external validity of this study can be assessed.

Appendix A - Definition of Variables (Essay 1)

Variable	Definition
MJ_DAC_{it}	Absolute value of discretional accruals of firm *i* for time period *t* calculated using the cross-sectional version of the modified Jones model established by Dechow, Sloan and Sweeney (1995).
KO_DAC_{it}	Absolute value of discretional accruals of firm *i* for time period *t* calculated using the performance adjusted model established by Kothari, Leone and Wesley (2005).
AVE_MUL_{it}	Average number of directors with multiple directorships on the board of firm *i* in year *t.*
MUL_BOD1_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than one board; otherwise scored zero (0).
MUL_BOD2_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than two boards; otherwise scored zero (0).
MUL_BOD3_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than three boards; otherwise scored zero (0).
MUL_BOD4_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than four boards; otherwise scored zero (0).
INT_REC_{it}	An indicator variable where firm *i* is scored one (1) if the director has reciprocal interlock; otherwise scored zero.
SUB_DIR_{it}	An indicator variable where firm *i* in year t is scored one (1) if the director sits on more than one sub-committee; otherwise scored zero (0).
EDU_PER_{it}	An indicator variable where firm *i* is scored one (1) where firm *i* has director(s) with "masters' degree or higher"; otherwise scored zero.
$LogMVE_{it}$	Natural logarithm of market value of equity for firm *i* in year *t*.
$SHARE\_BOD_{it}$	Proportion of share owned by the board of directors of firm *i* in year *t*.
CEO_DUAL_{it}	An indicator variable where firm *i* is scored one (1) if the same individual occupies the roles of chairperson of the board and chief executive officer (CEO) at the end of time period *t*; otherwise scored zero (0).
$SPECIALIST_{it}$	Auditee *i* in time period *t* is scored one (1) if the incumbent auditor *j* in time period *t* is an industry specialist in industry *k*; otherwise auditee *i* in time period *t* is scored zero (0) using Krishnan (2003) model.
AUD_BOD_{it}	An indicator variable where firm *i* is scored one (1) if firm has audit committee; otherwise scored zero.
LEV_{it}	Ratio of total debt of firm *i* at the end of time period t to the total assets of firm *i* at the end of time period *t.*
$MKTCAP\_BK_{it}$	Ratio of total market capitalisation of firm *i* at the end of time period *t* to the total book value of assets of firm *i* at the end of time period *t*.
NET_INCOME_{it}	Income before extraordinary items (IBEI) scaled by lagged total assets of firm *i* in year *t.*
$SHARE\_INST_{it}$	Proportion of share owned by institutional shareholders of firm i at time period t.
$\sum INDUSTRY_{it}$	$ENERGY_{it}$ +$MATERIALS_{it}$ + $INDUSTRIALS_{it}$ + $CONSUMER\ DISCRETIONARY_{it}$ + $CONSUMER\ STAPLES_{it}$ + $HEALTH\ CARE_{it}$ + $INFORMATION\ TECHNOLOGY_{it}$ + $TELECOMMUNICATION\ SERVICES_{it}$ + $UTILITIES_{it}$
$YEAR_{it}$	Series of indicator variables corresponding to the financial year the data firm *i* is obtained.
ε_{it}	The error term.

Appendix B - Definition of Variables (Essay 2)

Variable	Definition
$LogAF_{it}$	Natural logarithm of audit fees for firm *i* in year *t*.
AVE_MUL_{it}	Average number of directors with multiple directorships on the board of firm *i* in year *t.*
MUL_BOD1_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than one d; otherwise scored zero (0).
MUL_BOD2_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than two boards; otherwise scored zero (0).
MUL_BOD3_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than three boards; otherwise scored zero (0).
MUL_BOD4_{it}	An indicator variable where firm *i* in year *t* is scored one (1) if the director sits on more than four boards; otherwise scored zero (0).
PRO_REC_{it}	Proportion of the board of directors with directors having reciprocal interlock in firm *i.*
EDU_PER_{it}	An indicator variable where firm *i* is scored one (1) where firm *i* has director(s) with "masters' degree or higher"; otherwise scored zero.
GEN_PER_{it}	Proportion of the women on the board of firm *i* in year *t*.
$LogTA_{it}$	Natural logarithm of total assets for firm *i* in year *t*.
$LogMVE_{it}$	Natural logarithm of market value of equity for firm *i* in year *t*.
$SHARE\_BOD_{it}$	Proportion of share owned by the board of directors of firm *i* in year *t*.
CEO_DUAL_{it}	An indicator variable where firm *i* is scored one (1) if the same individual occupies the roles of chairperson of the board and chief executive officer (CEO) at the end of time period *t*; otherwise scored zero (0).
$SPECIALIST_{it}$	Auditee *i* in time period *t* is scored one (1) if the incumbent auditor *j* in time period *t* is an industry specialist in industry *k*; otherwise auditee *i* in time period *t* is scored zero (0) using Krishnan (2003) model.
BIG_FOUR_{it}	An indicator variable where firm *i* is scored one (1) if it is audited by a Big Four accounting firm; otherwise scored zero.
PRO_INDAC_{it}	The proportion of independent directors on the audit committee for firm *i* at time period *t*.
$ACMEET_{it}$	The number of audit committee meetings held during the year for firm *i* at time period *t*.
AUD_BOD_{it}	An indicator variable where firm *i* is scored one (1) if firm has audit committee; otherwise scored zero.
$FINEXPAC_{it}$	A dummy variable given the value of 1 if the audit committee consists of at least one financial expert during the year for firm *i* at time period *t*.
SQ_SUB_{it}	Square of number of subsidiaries of firm *i* at the end of time period *t.*
SEG_{it}	Number of business segments of firm *i* at the end of time period *t*.
ROA_{it}	Return on assets for firm *i* in year *t*.
CA_TA_{it}	Total current assets scaled by total assets of firm *i* at the end of time period *t.*
AUD_TEN_{it}	An indicator variable where firm *i* is scored one (1) if firm *i* changed auditors during the sample period; otherwise scored zero.
LEV_{it}	Ratio of total debt of firm *i* at the end of time period t to the total assets of firm *i* at the end of time period *t.*
$\sum INDUSTRY_{it}$	$ENERGY_{it}$ +$MATERIALS_{it}$ + $INDUSTRIALS_{it}$ + $CONSUMER\ DISCRETIONARY_{it}$ + $CONSUMER\ STAPLES_{it}$ + $HEALTH\ CARE_{it}$ + $INFORMATION\ TECHNOLOGY_{it}$ + $TELECOMMUNICATION\ SERVICES_{it}$ + $UTILITIES_{it}$
$YEAR_{it}$	Series of indicator variables corresponding to the financial year the data firm *i* is obtained.
ε_{it}	The error term.

Appendix C - Definition of Variables (Essay 3)

Variable	Definition
ENV_Disc_j	Ratio of the number of corporate social responsibility items *I* disclosed by firm *j* in their annual /sustainability/other reports to the number of corporate social responsibility items *I* applicable to firm *j* expressed as a percentage (%).
ENV_DICH_j	An indicator variable where firm *j* is scored one (1) if the firm has at least one CSR disclosure item; otherwise scored zero.
MUL_BOD_j	The number of directors that has multiple directorships of firm *j*.
IND_BOD_j	Proportion of independent directors on the board of firm *j*.
MUL_IND_j	Number of independent directors with multiple directorships on the board of firm *j*.
GEN_PER_j	An indicator variable where firm *j* is scored one (1) if the firm has woman on board; otherwise scored zero.
MUL_GEN_j	Number of women with multiple directorships on the board of firm *j*.
EDU_PER_j	An indicator variable where firm *j* is scored one (1) where firm *j* has director(s) with "masters' degree or higher"; otherwise scored zero.
MUL_EDU_j	Number of directors with multiple directorships with "masters' degree or higher" on the board of firm *j*.
MUL_SUS_j	An indicator variable where firm *j* is scored one (1) where firm *j* has director(s) with multiple directorships sitting on sustainability committee; otherwise scored zero.
$SIZE_j$	Natural logarithm of market capitalisation of firm *j*.
EXP_PER_j	Average number of years of industry experience of directors on the board of firm *j*.
$MEET\_BOD_j$	The number of board meetings held annually by the board of directors of firm *j*.
AGE_j	Number of days from the time of incorporation of firm *j*.
INT_INF_j	An indicator variable where firm *j* is scored one (1) if firm has multiple listings in different stock exchanges internationally; otherwise scored zero.
CEO_DUAL_j	An indicator variable where firm *j* is scored one (1) if the same individual occupies the roles of chairperson of the board and chief executive officer (CEO) at the end of time period *t*; otherwise scored zero.
$SHARE\_BOD_j$	Proportion of shares owned by the board of directors of firm *j*.
$LOSS_j$	An indicator variable where firm *j* is scored one (1) where firm *j* incur a loss; otherwise scored zero.
IND_M_j	An indicator variable where firm *j* is classified within the "Material" sector.
$\sum INDUSTRY_{it}$	$ENERGY_{it} + MATERIALS_{it} + INDUSTRIALS_{it} + FINANCIALS + CONSUMER\ DISCRETIONARY_{it} + CONSUMER\ STAPLES_{it} + HEALTH\ CARE_{it} + INFORMATION\ TECHNOLOGY_{it} + TELECOMMUNICATION\ SERVICES_{it} + UTILITIES_{it}$
ε_{it}	The error term.

Appendix D - Global Reporting Initiative (GRI) G3 Disclosure Index

Environmental

Materials

EN1 Materials used by weight or volume.

EN2 Percentage of materials used that are recycled input materials.

Energy

EN3 Direct energy consumption by primary energy source.

EN4 Indirect energy consumption by primary source.

EN5 Energy saved due to conservation and efficiency improvements.

EN6 Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.

EN7 Initiatives to reduce indirect energy consumption and reductions achieved.

Water

EN8 Total water withdrawal by source.

EN9 Water sources significantly affected by withdrawal of water.

EN10 Percentage and total volume of water recycled and reused.

Biodiversity

EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.

EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.

EN13 Habitats protected or restored.

EN14 Strategies, current actions, and future plans for managing impacts on biodiversity.

EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.

Emissions, effluents and waste

EN16 Total direct and indirect greenhouse gas emissions by weight.

EN17 Other relevant indirect greenhouse gas emissions by weight.

EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved.

EN19 Emissions of ozone-depleting substances by weight.

EN20 NOx, SOx, and other significant air emissions by type and weight.

EN21 Total water discharge by quality and destination.

EN22 Total weight of waste by type and disposal method.

EN23 Total number and volume of significant spills.

EN24 Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.

EN25 Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organisation's discharges of water and runoff.

Products and services

EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.

EN27 Percentage of products sold and their packaging materials that are reclaimed by category.

Compliance

EN28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.

Transport

EN29 Significant environmental impacts of transporting products and other goods and materials used for the organisation's operations, and transporting members of the workforce.

Overall

EN30 Total environmental protection expenditures and investments by type.

REFERENCES

Abbott, L. J., & Parker, S. (2000). Auditor Selection and Audit Committee Characteristics. *Auditing: A Journal of Practice and Theory*, 47-66.

Abbott, L. J., Parker, S., & Peters, G. (2004). Audit Committee Characteristics and Restatements. *Auditing: A Journal of Practice and Theory*, 69-88.

Abbott, L. J., Parker, S., Peters, G., & Raghunandran, K. (2003). The Association of Audit Committee Characteristics and Audit Fees. *Auditing: A Journal of Practice and Theory*, 17-32.

Abbott, L. J., Parker, S., Peters, G. F., & Raghunandan, K. (2003b). An Empirical Investigation of Audit Fees, Nonaudit Fees and Audit Committees. *Contemporary Accounting Research, 20*(2), 215-234.

Achleitner, A.-K., Guenther, N., Kaserer, C., & Siciliano, G. (2014). Real Earnings Management and Accrual-based Earnings Management in Family Firms. *European Accounting Review, 23*(3), 431-461.

Adams, C. A., Hill, W. Y., & Roberts, C. B. (1998). Corporate Social Reporting Practices in Western Europe: Legitimating Corporate Behaviour? *British Accounting Review, 30*, 1-21.

Aerts, W., Cheng, P., & Tarca, A. (2013). Management's Earnings Justification and Earnings Management under Different Institutional Regimes. *Corporate Governance: An International Review, 21*(1), 93-115.

Agrawal, A., & Knoeber, C. R. (1996). Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders. *Journal of Financial and Quantitative Analysis, 31*(3), 377-397.

Aharony, J., Lin, C., & Loeb, M. P. (1993). Initial Public Offerings, Accounting Choices and Earnings Management. *Contemporary Accounting Research, 10*(1), 61-81.

Ahmed, K., & Courtis, J. K. (1999). Associations Between Corporate Characteristics and Disclosure Levels in Annual Reports: A Meta-Analysis. *The British Accounting Review, 31*(1), 35-61.

Akerlof, G. A. (1970). The Market for "Lemons": Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics, 84*(3), 488-500.

Al-Ajmi, J. (2009). Audit Firm, Corporate Governance and Audit Quality: Evidence from Bahrain. *Advances in Accounting, 25*(1), 64-74.

Ali, A., & Zhang, W. (2015). CEO Tenure and Earnings Management. *Journal of Accounting and Economics, 59*, 60-79.

Aragon-Correa, J. A., & Sharma, S. (2003). A Contingent Resource-Based View of Proactive Corporate Environmental Strategy. *The Academy of Management Review, 28*(1), 71-88.

Armstrong, C. S., Core, J. E., & Guay, W. R. (2014). Do Independent Directors Cause Improvements in Firm Transparency? *Journal of Financial Economics, 113*, 383-403.

Arouri, M., & Pijourlet, G. (2015). CSR Performance and the Value of Cash Holdings. *Journal of Business Ethics*, 1-22.

Ashari, N., Koh, H. C., Tan, S. L., & Wong, W. H. (1994). Factors Affecting Income Smoothing Among Listed Companies in Singapore. *Accounting and Business Research, 24*(96), 291-301.

Athanasakou, V. E., Strong, N. C., & Walker, N. (2007). Classificatory Income Smoothing: The Impact of a Change in Regime of Reporting Financial Performance. *Journal of Accounting and Public Policy, 26*, 387-435.

Aupperle, K. E., Caroll, A. B., & Hatfield, J. D. (1985). An Empirical Examination of the Relationship between Corporate Social Responsibility and Profitability. *Academy of Management Journal, 28* (2), 446-463.

ASX Corporate Governance Principles and Recommendations (1st Edition) (2003).

ASX Corporate Governance Principles and Recommendations (3rd Edition) (2014).

Baccouche, S., & Omri, A. (2014). Multiple Directorships of Board Members and Earnings Management: An Empirical Evidence from French Listed Companies. *Journal of Economic and Financial Modelling, 2*(1), 13-23.

Badolato, P. G., Donelson, D. C., & Ege, M. (2015). Audit Committee Financial Expertise and Earnings Management: The Role of Status. *Journal of Accounting and Economics, 58*, 208-230.

Ball, R., Kothari, S. P., & Robin, A. (2000). The Effect of Institutional Factors on Properties of Accounting Earnings. *Journal of Accounting and Economics*, 1-51.

Barney, J. (1990). The Debate Between Traditional Management Theory and Organizational Economics: Substantive Differences or Intergroup Conflict? *Academy of Management Review, 15*(3), 382-393.

Barth, M. E. (1997). Factors Influencing Firms' Disclosures About Environmental Liabilities. *Review of Accounting Studies, 2*, 35-64.

Barth, M. E., Cram, D. P., & Nelson, K. K. (2001). Accruals and the Prediction of Future Cash Flows. *The Accounting Review, 76*(1), 27-58.

Barton, J., & Simko, P. J. (2002). The Balance Sheet as an Earnings Management Constraint. *The Accounting Review, 77*(s-1), 1-27.

Bartov, E., Givoly, D., & Hayn, C. (2002). The Rewards to Meeting or Beating Earnings Expectations. *Journal of Accounting and Economics, 33*, 173-204.

Barua, A., Davidson, L. F., Rama, D. V., & Thiruvadi, S. (2010). CFO Gender and Accruals Quality. *Accounting Horizons, 24*(1), 25-39.

Bathke, A. W., Lorek, K. S., & Willinger, G. L. (1989). Firm-Size and the Predictive Ability of Quarterly Earnings Data. *The Accounting Review, 64*(4), 49-68.

Baxter, P., & Cotter, J. F. (2009). Audit Committees and Earnings Quality. *Accounting & Finance, 49*, 267-290.

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.

Beck, M. J., & Mauldin, E. G. (2014). Who's Really in Charge? Audit Committee versus CFO Power and Audit Fees. *The Accounting Review, 89*(6), 2057-2085.

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.

Becker, G. (1964). *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education*. New York, USA: Columbia University Press.

Belkaoui, A., & Karpik, P. G. (1989). Determinants of the Corporate Decision to Disclose Social Information. *Accounting, Auditing and Accountability Journal, 2*(1), 36-51.

Bergstresser, D., & Philippon, T. (2006). CEO Incentives and Earnings Management. *Journal of Financial Economics, 80*(3), 511-529.

Berle, A. A., & Means, G. C. (1932). *The Modern Corporation and Private Property*. New York City, New York, USA: Macmillan.

Bewley, K., & Li, Y. (2000). Disclosure of Environmental Information by Canadian Manufacturing Companies: A Voluntary Disclosure Perspective". *Advances in Environmental Accounting & Management, 1*, 201-226.

Black, B. S., & Coffee, J. C. (1994). Hail Britannia? Institutional Investor under Limited Regulation. *Michigan Law Review, 92*(7), 1997-2087.

Blair, M. (1995). *Ownership and Control: Rethinking Corporate Governance for the Twenty-First Century*. Washington DC, Washington, USA: The Brookings Instituition Press.

Boesso, G., & Kumar, K. (2007). Drivers of Corporate Voluntary Disclosure: A Framework and Empirical Evidence from Italy and United States. *Accounting, Auditing and Accountability Journal, 20*(2), 269-296.

Boo, E., & Sharma, D. (2008). Effect of Regulatory Oversight on the Association Between Internal Governance Characteristics and Audit Fees. *Accounting & Finance, 48*, 51-71.

Boyd, B. (1990). Corporate Linkages and Organizational Environment: A Test of Resource Dependence Model. *Strategic Management Journal*, 419-430.

Brammer, S., & Pavelin, S. (2008). Factors Influencing the Quality of Corporate Environmental Disclosure. *Business Strategy and the Environment, 17*, 120-136.

Brynes, J. P., Miller, D. C., & Schafre, W. D. (1999). Gender Differences in Risk Taking: A Meta-Analysis. *Psychological Bulletin, 125*(3), 367-383.

Bushee, B. J. (1998). The Influence of Institutional Investors on Myopic R&D Investment Behavior. *The Accounting Review, 73*(3), 305-333.

Campbell, D., Craven, B., & Shrives, P. (2002). Voluntary Social Reporting in Three FTSE Sectors: A Comment on Perception and Legitimacy. *Accounting, Auditing & Accountability Journal, 16*(4), 558-581.

Cannella Jr , A. A., & Lubatkin, M. (1993). Succession as a Sociopolitical Process: Internal Impediments to Outsider Selection. *The Academy of Management Journal, 36*(4), 763-793.

Carcello, J. V., Hermanson, D. R., Neal, T. L., & Riley Jr., R. A. (2002). Board Characteristics and Audit Fees. *Contemporary Accounting Research, 19*(3), 365-384.

Caroll, A. B. (1999). Corporate Social Responsibility - Evolution of a Definitional Construct. *Business and Society, 38*, 268-295.

Carpenter, M. A., & Westphal, J. D. (2001). The Strategic Context of External Network Ties: Examining the Impact of Director Appointments on Board Involvement in Strategic Decision Making. *Academy of Management Journal, 4*(4), 639-660.

Carter, D. A., D'Souza, F., Simkins, B. J., & Simpson, W. G. (2010). The Gender and Ethnic Diversity of US Boards and Board Committtees and Firm Financial Performance. *Corporate Governance: An International Review, 18*(5), 396-414.

Cashman, G. D., Gillan, S. L., & Jun, C. (2012). Going Overboard? On Busy Directors and Firm Value. *Journal of Banking & Finance, 36*(12), 3248-3259.

Certo, S. T. (2003). Influencing Initial Public Offering Investors with Prestige: Signalling with Board Structures. *Academy of Management Review, 28*(3), 432-446.

Chan, L. H., Chen, K. C. W., & Yu, Y. X. (2015). Substitution between Real and Accruals-Based Earnings Management after Voluntary Adoption of Compensation Clawback Provisions. *The Accounting Review, 90*(1), 147-174.

Chang, L. S., S.M., K., & Carlos, W. B. (1983). The Utility of Annual Reports: An International Study. *Journal of International Business Studies, 14*(1), 63-84.

Chau, G., & Gray, S. J. (2010). Family Ownership, Board independence and Voluntary disclosure: Evidence from Hong Kong. *Journal of International Accounting, Auditing and Taxation, 19*(2), 93-109.

Chen, C. J. P., & Jaggi, B. (2000). Association Between Independent Non-executive Directors, Family Control and Financial Disclosures in Hong Kong. *Journal of Accounting and Public Policy, 19*(4–5), 285-310.

Chen, K. Y., Wu, S. Y., & Zhou, J. (2006). Auditor Brand Name, Industry Specialisation and Earnings Management: Evidence from Taiwanese Companies. *International Journal of Accounting, Auditing and Performance Evaluation*, 1-26.

Cheng, C. M., & Courtenay, S. M. (2006). Board Composition, Regulatory Regime and Voluntary Disclosure. *The International Journal of Accounting*, 262-289.

Cheng, Q., & Warfield, T. D. (2005). Equity Incentives and Earnings Management *The Accounting Review, 80*(2), 441-476.

Cheng, T. W., Chan, Y. K., & Leung, T. Y. (2010). Management Demography and Corporate Performance: Evidence from China. *International Business Review, 19*, 261-275.

Cheung, Y. L., Tan, W. Q., Ahn, H. J., & Zhang, Z. (2010). Does Corporate Social Responsibility Matter in Asian Emerging Markets? *Journal of Business Ethics, 92*, 401-413.

Chi, W., Lisic, L. L., & Pevzner, M. (2011). Is Enhanced Audit Quality Associated with Greater Real Earnings Management? *Accounting Horizons, 25*(2), 315-335.

Chiu, S.-C., & Sharfman, M. (2011). Legitimacy, Visibility, and the Antecedents of Corporate Social Performance: An Investigation of the Instrumental Perspective. *Journal of Management, 37*(6), 1558-1585.

Cho, C. H., Roberts, R. W., & Patten, D. M. (2010). The Language of US Corporate Environmental Disclosure. *Accounting, Organizations and Society, 35*, 431-443.

Choi, J. H., Kim, J. B., & Zang, Y. S. (2010). Do Abnormally High Audit Fees Impair Audit Quality? *Auditing: A Journal of Practice and Theory, 29*(2), 115-140.

Choi, J. J., Park, S. W., & Yoo, S. S. (2007). The Value of Outside Directors: Evidence from Corporate Governance Reform in Korea. *Journal of Financial and Quantitative Analysis, 42*(4), 941-962.

Chua, W. F., & Petty, R. (1999). Mimicry, Director Interlocks, and the Interorganizational Diffusion of a Quality Strategy: A Note. *Journal of Management Accounting Research*, 93-104.

Chung, H., & Kallapur, S. (2003). Client Importance, Nonaudit Servces and Abnormal Accruals. *The Accounting Review, 78*(4), 931-955.

Chung, R., Firth, M., & Kim, J. B. (2002). Institutional Monitoring and Opportunistic Earnings Management. *Journal of Corporate Finance, 8*, 29-48.

Clarkson, M. (1995). A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *Academy of Management Review, 20*(1), 92-116.

Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the Relation Between Environmental Performance and Environmental Disclosure. *Accounting, Organizations and Society, 33*, 303-327.

Clifford, P., & Evans, R. (1997). Non-executive Directors: A Question of Independence. *Corporate Governance: An International Review, 5*(4), 224-231.

Clout, V. J., Chapple, L., & Gandhi, N. (2013). The Impact of Auditor Independence Regulations on Established and Emerging Firms. *Accounting Research Journal, 26*(2), 88-108.

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and Real Earnings Management Activities Around Seasoned Equity Offerings. *Journal of Accounting and Economics, 50*, 2-19.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2002). Corporate Governance and the Audit Process. *Contemporary Accounting Research, 19*(4), 573-594.

Cohen, L., Frazzini, A., & Malloy, C. (2010). Sell-Side School Ties. *The Journal of Finance, 65*(4), 1409-1437.

Coles, J. L., Daniel, N. D., & Naveen, L. (2008). Boards: Does One Size Fit All? *Journal of Financial Economics, 87*(2), 329-356.

Coles, J. L., & Hoi, C. K. (2003). New Evidence on the Market for Directors: Board Membership and Pennsylvania Senate Bill 1310. *The Journal of Finance, 58*(197-230)

Conyon, M. J., & Peck, S. I. (1998). Board Size and Corporate Performance. *The European Journal of Finance, 4*, 291-304.

Conyon, M. J., & Simon, I. P. (1998). Board Control, Remuneration Committees, and Top Management Compensation. *The Academy of Management Journal, 41*(2), 146-157.

Cooke, T. E. (1989). Voluntary Corporate Disclosure by Swedish Companies. *Journal of International Financial Management & Accounting, 89*(1), 171-195.

Cooke, T. E. (1992). The Impact of Size, Stock Market Listing and Industry Type on Disclosure in the Annual Reports of Japanese Listed Companies. *Accounting and Business Research, 22*(87), 229-237.

Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate Governance, Chief Executive Officer Compensation and Firm Performance. *Journal of Financial Economics, 51*(3), 371-406.

Cormier, D., & Gordon, I. M. (2001). An Examination of Social and Environmental Reporting Strategies. *Accounting, Auditing and Accountability Journal, 14*(5), 587-617.

Cormier, D., Magnan, M., & Velthoven, B. V. (2005). Environmental Disclosure Quality in Large German Companies: Economic Incentives, Public Pressures or Institutional Conditions? *European Accounting Review, 14*(1), 3-39.

Coulton, J., Taylor, S., & Taylor, S. (2005). Is "Benchmark Beating" by Australian Firms Evidence of Earnings Management? *Accounting & Finance, 45*, 553-576.

Cowen, S., Ferreri, L., & Parker, L. D. (1987). The Impact of Corporate Characteristic on Social Responsibility Disclosure: A Typology and Frequency-Based Analysis. *Accounting, Organizations and Society*, 111-122.

CPA Australia. (2012). *Sustainability Reporting: Practices, Performance and Potential*. Australia:

Craswell, A. T. (1999). Does the Provision of Non-Audit Services Impair Auditor Independence? *International Journal of Auditing, 3*, 29-40.

Craswell, A. T., & Francis, J. R. (1999). Pricing Initial Audit Engagements: A Test of Competing Theories. *The Accounting Review, 74*(2), 201-216.

Craswell, A. T., Francis, J. R., & Taylor, S. L. (1995). Auditor Brand Name Reputations and Industry Specializations. *Journal of Accounting and Economics, 20*, 297-332.

Craswell, A. T., Stokes, D. J., & Laughton, J. (2002). Auditor Independence and Fee Dependence. *Journal of Accounting and Economics, 33*, 253-275.

Daily, C. M., Dalton, D. R., & Canella, A. A. (2003). Corporate Governance: Decades of Dialogue and Data. *Academy of Management*, 371-382.

Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of Directors and Financial Performance: A Meta-Analysis. *The Academy of Management Journal, 42*(6), 674-686.

Darnall, N., Henriques, I., & Sadorsky, P. (2010). Adopting Proactive Environmental Strategy: The Influence of Stakeholders and Firm Size. *Journal of Management Studies, 47*(6), 1072-1094.

Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal Governance Structures and Earnings Management. *Accounting & Finance, 45*, 241-267.

Davis, J., Schoorman, F., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *Academy of Management Review, 22*(1), 20-47.

DeAngelo, L., & DeAngelo, H. (1994). Accounting Choice in Troubled Companies. *Journal of Accounting and Economics, 17*, 113-143.

DeAngelo, L. E. (1981). Auditor Size and Audit Quality. *Journal of Accounting and Economics, 3*, 183-199.

Dechow, P. M., Ge, W. L., & Schrand, C. (2010). Understanding Earnings Quality: A Review of the Proxies, their Determinants and their Consequences. *Journal of Accounting and Economics, 50*(2–3), 344-401.

Dechow, P. M., Kothari, S. P., & Watts, R. L. (1998). The Relation Between Earnings and Cash Flows. *Journal of Accounting and Economics, 25*, 133-168.

Dechow, P. M., & Skinner, D. J. (2000). Earnings management: Reconciling the views of accounting academics, practitioners, and regulators. *Accounting Horizons, 14*(2), 235-250.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting Earnings Management. *The Accounting Review, 70*(2), 193-225.

Deegan, C. (2002). The Legitimising Effect of Social and Environmental Disclosures - A Theoretical Foundation. *Accounting, Auditing & Accountability Journal, 15*(3), 282-312.

Deegan, C. (2010). *Financial Accounting Theory - 3rd Edition*. Sydney, New South Wales, Australia: McGraw-Hill.

Deegan, C., & Gordon, B. (1996). A Study of the Environmental Disclosure Practices of Australian Corporations. *Accounting and Business Research, 26*(3), 187-199.

Deegan, C., & Rankin, M. (1996). Do Australian Companies Report Environmental News Objectively? *Accounting, Auditing and Accountability Journal, 9*(2), 50-67.

DeFond, M. L., & Jiambalvo, J. (1994). Debt Covenant Violation and Manipulation of Accruals. *Journal of Accounting and Economics, 17*, 145-176.

DeFond, M. L., & Park, C. (2001). The Reversals of Abnormal Accruals and the Market Valuation of Earnings Surprises. *The Accounting Review, 76*(3), 375-404.

Defond, M. L., Raghunandan, K., & Subramanyam, K. R. (2002). Do Non-Audit Service Service Fees Impair Auditor Independence ? Evidence from Going Concern Audit Opinions. *Journal of Accounting Research, 40*(4), 1247-1274.

Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings Management to Exceed Threshold. *Journal of Business, 72*(1), 1-33.

Dhaliwal, D. S., Radhakrishnan, S., & Tsang, A. (2012). Nonfinancial Disclosure and Analyst Forecast Accuracy: International Evidence on Corporate Social Responsibility Disclosure. *The Accounting Review, 87*(3), 723-759.

Dierkes, M., & Preston, L. E. (1977). Corporate Social Accounting Reporting for the Physical Environment: A Critical Review and Implementation Proposal. *Accounting, Organizations and Society, 2*(1), 3-22.

DiMaggio, P., & Powell, W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociology Review, 48*(2), 147-160.

DiMaggio, P., & Powell, W. (1991). *The New Institutionalism in Organizational Analysis*. Chicago, Illinois, USA: University of Chicago Press.

Donaldson, L., & Davis, J. H. (1991a). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management, 16*(49), 49-64.

Donaldson, L., & Davis, J. H. (1991b). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management Review*, 65-91.

Donaldson, T., & Preston, L. (1995). A Stakeholder Theory of the Corporation: Concepts, Evidence and Implications. *Academy of Management Review, 20*(1), 65-91.

Dopuch, N., & Simunic, D. (1980). *The Nature of Competition in the Auditing Profession: A Descriptive and Normative View*. Belmont, San Mateo County, California, USA: Lifetime Learning Publications.

DuCharme, L., Malatesta, P., & Sefeik, S. (2004). Earnings Management, Stock Issues and Shareholders Lawsuit. *Journal of Financial Economics, 71*(1), 27-49.

Dunn, P., & Sainty, B. (2009). The Relationship Among Board of Director Characteristics, Corporate Social Performance and Corporate Financial Performance. *International Journal of Managerial Finance*, 407-423.

Eisenberg, T., Sundgren, S., & Wells, M. T. (1998). Larger Board Size and Decreasing Firm Value in Small Firms. *Journal of Financial Economics, 48*, 35-54.

Eisenhardt, K. (1989). Agency Theory: An Assessment and Review. *Academy of Management Review, 14*(1), 57-74.

Elayan, F. A., Li, J. Y., & Meyer, T. O. (2008). Accounting Irregularities, Management Compensation Structure and Information Assymetry. *Accounting & Finance, 48*(741-760)

Eldenberg, L. G., Gunny, K. A., Hee, K. W., & Soderstrom, N. (2011). Earnings Management Using Real Activities: Evidence from Nonprofit Hospitals. *The Accounting Review, 86*(5), 1605-1630.

Elm, D. R., Kennedy, E. J., & Lawton, L. (2001). Determinants of Moral Reasoning: Sex Role Orientation, Gender and Academic Factors. *Business and Society, 40*, 241-265.

Elyasiani, E., & Zhang, L. (2015). Bank Holding Company Performance, Risk and "Busy" Board of Directors. *Journal of Banking & Finance, 60*, 239-251.

Erickson, M., Hanlon, M., & Maydew, E. L. (2004). How Much Will Firms Pay for Earnings That Do Not Exist? Evidence of Taxes Paid on Allegedly Fraudulent Earnings. *The Accounting Review, 79*(2), 387-408.

Eshleman, J. D., & Gou, P. (2014). Abnormal Audit Fees and Audit Quality: The Importance of Considering Managerial Incentives in Tests of Earnings Management. *Auditing: A Journal of Practice and Theory, 33*(1), 117-138.

Falato, A., Kadyrzhanova, D., & Lei, U. (2014). Distracted Directors: Does Board Busyness Hurt Shareholder Value? *Journal of Financial Economics, 113*(3), 404-426.

Fallan, E., & Fallan, L. (2009). Voluntarism vs Regulation: Lessons from Public Disclosure of Environmental Performance Information in Norwegian Companies. *Journal of Accounting and Organizational Change, 5*(4), 472-489.

Fama, E. (1980). Agency Problems and the Theory of the Firm. *Journal of Political Economy, 88*(2), 288-307.

Fama, E., & Jensen, M. C. (1983). Separation of Ownership and Control. *Journal of Law and Economics,*(26), 301-325.

Fan, J. P. H., & Wong, T. J. (2005). Do External Auditors Perform a Corporate Governance Role in Emerging Markets? Evidence from East Asia. *Jurnal of Accounting Research, 43*(1), 35-72.

Ferguson, A., Francis, J., & Stokes, D. J. (2006). What Matters in Audit Pricing: Industry Specialization or Overall Market Leadership. *Accounting & Finance, 46*, 97-106.

Ferguson, A., Francis, J. R., & Stokes, D. J. (2003). The Effects of Firm-Wide and Office Level Industry Expertise on Audit Pricing. *The Accounting Review, 78*(2), 429-448.

Ferguson, A., & Stokes, D. J. (2002). Brand Name Audit Pricing, Industry Specialization and Leadership Premiums post-Big 8 and Big 6 Mergers. *Contemporary Accounting Research, 19*(1), 77-110.

Ferguson, M. J., Seow, G. S., & Young, D. (2004). Nonaudit Services and Earnings Management: UK Evidence. *Contemporary Accounting Research, 21*(4), 813-841.

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), 1087-1112.

Fich, E. M., & Shivdasani, A. (2006). Are Busy Boards Effective Monitors? *The Journal of Finance*, 689-724.

Field, L., Lowry, M., & Mkrtchyan, A. (2013). Are Busy Boards Detrimental? *Journal of Financial Economics, 109*(1), 63-82.

Firth, M., Fung, P. M. Y., & Rui, O. M. (2007). Ownership, Two-Tier Board Structure and the Informativeness of Earnings - Evidence from China. *Journal of Accounting and Public Policy, 26*, 463-496.

Francis, J. R. (1984). The Effect of Audit Firm Size on Audit Prices. *Journal of Accounting and Economics, 6*, 133-151.

Francis, J. R., Reichelt, K., & Wang, D. (2005). The Pricing of National and City-Specific Reputations for Indsutry Expertise in the U.S. Audit Market. *The Accounting Review, 80*(1), 113-136.

Francis, J. R., & Stokes, D. J. (1986). Audit Prices, Product Differentiation and Scale Economies: Further Evidence from the Australian Market. *Journal of Accounting Research, 24*(2), 383-393.

Francis, J. R., & Yu, M. D. (2009). Big 4 Office Size and Audit Quality. *The Accounting Review, 84*(5), 1521-1552.

Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The Relation between Auditors' Fees for Nonaudit Services and Earnings Management. *The Accounting Review, 77*, 71-105.

Franz, D. R., HassabElnaby, H. R., & Lobo, G. J. (2014). Impact of Proximity to Debt Covenant Violation on Earnings Management. *Review of Accounting Studies, 19*, 473-505.

Fraser, B. W. (2005). Corporate Social Responsibility. *Internal Auditor*, 42-47.

Freeman, E. (1984). *Strategic Management: A Stakeholder Approach*. Boston, Massachusetts, USA: Pitman Press.

Geiger, M. A., & Rama, D. V. (2003). Audit Fees, Nonaudit Fees and Auditor Reporting on Stressed Companies. *Auditing: A Journal of Practice and Theory, 22*(2), 53-69.

Ghosh, S. (2007). Board Diligence, Director Busyness and Corporate Govenance: An Empirical Analysis for India. *Review of Applied Economics, 3*(1-2), 91-104.

Goodwin-Stewart, J., & Kent, P. (2006). Relation between External Audit Fees, Audit Committee Characteristics and Internal Audit. *Accounting & Finance, 46*, 387-404.

Gopalan, R., & Jayaraman, S. (2011). Private Control Benefits and Earnings Management: Evidence from Insider Controlled Firms. *Journal of Accounting Research, 50*(1), 117-157.

Goss, A., & Roberts, G. S. (2011). The Impact of Corporate Social Responsibility on the Cost of Bank Loans. *Journal of Banking & Finance, 35*, 1794-1810.

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The Economic Implications of Corporate Financial Reporting. *Journal of Accounting and Economics, 40*, 3-73.

Gray, R., Javad, M., Power, D. M., & Sinclair, C. D. (2001). Social and Environmental Disclosure and Corporate Characteristics: A Research Note and Extension. *Journal of Business Finance and Accounting, 28*(3), 327-356.

Gray, R. H., Kouhy, R., & Lavers, S. (1995). Corporate Social and Environmental Reporting - A Review of the Literature and a Longitudinal Study of UK Disclosure. *Accounting, Auditing and Accountability Journal, 8*(2), 47-77.

Gray, R. H., Owen, D., & Maunders, K. (1987). *Corporate Social Reporting: Accounting and Accountability*: Prentice-Hall, London.

Gul, F. A., Fung, S. Y. K., & Jaggi, B. (2009). Earnings Quality: Some Evidence on the Role of Auditor Tenure and Auditors' Industry Expertise. *Journal of Accounting and Economics, 47*(3), 265-287.

Gul, F. A., Jaggi, B., & Krishnan, G. V. (2007). Auditor Independence: Evidence on the Joint Effects of Auditor Tenure and Nonaudit Fees. *Auditing: A Journal of Practice and Theory, 26*(2), 117-142.

Guthrie, J., & Parker, L. D. (1989). Corporate Social Reporting: A Rebuttal of Legitimacy Theory. *Accounting and Business Review, 19*(3), 343-352.

Hackston, D., & Milne, M. J. (1996). Some Determinants of Social and Environmental Disclosures in New Zealand Companies. *Accounting, Auditing and Accountability Journal, 9*(1), 77-108.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate Data Analysis 4th Edition*. Eaglewood Cliffs, New Jersey, USA: Prentice Hall.

Haley, U. (1991). Corporate Contributions as Managerial Masques: Reframing Corporate Contributions as Strategies to Influence Society. *The Journal of Management Studies*, 485-510.

Hall, R. (1993). A Framework Linking Intangible Resources and Capabilities to Sustainable Competitive Advantage. *Strategic Management Journal, 14*, 607-618.

Hall, S. C., Agrawal, V., & Agrawal, P. (2013). Earnings Management and the Financial Statement Analyst. *Accounting and Finance Research, 2*(2), 105-111.

Han, J., & Wang, S. (1998). Political Costs and Earnings Management of Oil Companies During the 1990 Persian Gulf Crisis. *The Accounting Review, 73*(1), 103-118.

Haniffa, R. M., & Cooke, T. E. (2002). Culture, Corporate Governance and Disclosure in Malaysian Corporation. *ABACUS, 38*(3), 317-349.

Haniffa, R. M., & Cooke, T. E. (2005). The Impact of Culture and Governance on Corporate Social Reporting. *Journal of Accounting and Public Policy, 24*, 391-430.

Haque, S., & Deegan, C. (2010). Corporate Climate Change-Related Governance Practices and Related Disclosures: Evidence from Australia. *Australian Accounting Review, 4*(4), 317-333.

Harte, G., & Owen, D. (1991). Environmental Disclosure in the Annual Reports of British Companies: A Research Note. *Accounting, Auditing and Accountability Journal, 4*(3), 51-61.

Hashim, H. A., & Rahman, S. (2011). Multiple Board Appointments: Are Directors Effective? A Malaysian Perspective. *International Journal of Business and Social Science, 2*(17), 137-143.

Hay, D. C., Knechel, W. R., & Wong, N. (2006). Audit Fees: A Meta-analysis of the Effect of Supply and Demand Attributes. *Contemporary Accounting Research, 23*(1), 141-191.

Healy, P. M. (1985). The Effect of Bonus Schemes on Accounting Decisions. *Journal of Accounting and Economics, 7*, 85-107.

Healy, P. M., & Wahlen, J. M. (1999). A Review of the Earnings Management Literature and Its Implications for Standard Setting. *Accounting Horizons, 13*(4), 365-383.

Hermann, D., & Inoue, T. (1996). Income Smoothing amd Incentives by Operating Condition: An Empricial Test Using Depreciation Changes in Japan. *Journal of International Accounting, Auditing and Taxation, 5*(2), 161-177.

Hillman, A. J., Canella, A. A., & Harris, I. C. (2002). Women and Racial Minorities in the Boardroom: How Do Directors Differ? *Journal of Management, 28*, 747-763.

Hillman, A. J., Canella, A. A., & Paetzold, R. L. (2000). The Resource Dependence Role of Corporate Directors: Strategic Adaption of Board Composition in Response to Environmental Change. *Journal of Management Studies, 37*(2), 236-255.

Hillman, A. J., & Dalziel, T. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *Academy of Management Review, 28*(3), 383-396.

Ho, S. M., & Wong, K. S. (2001). A Study of the Relationship between Corporate Governance Structures and the Extent of Voluntary Disclosure. *Journal of International Accounting, Auditing and Taxation*, 139-156.

Hoffman, A. (1999). Institutional Evolution and Change: Environmentalism and the U.S. Chemical Industry. *Academy of Management Journal, 42*(4), 351-371.

Hoistash, R., Markelevich, A., & Barragato, C. A. (2007). Auditor Fees and Audit Quality. *Managerial Auditing Journal, 22*(8), 761-786.

Holland, D., & Ramsay, A. (2003). Do Australian Companies Manage Earnings to Meet Simple Earnings Benchmarks? *Accounting & Finance, 43*(1), 41-62.

Holland, K., & Jackson, R. H. G. (2004). Earnings Management and Deferred Tax. *Accounting and Business Research, 34*(2), 101-123.

Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual Bonus Scheme and the Manipulation of Earnings. *Journal of Accounting and Economics, 19*, 29-74.

Hoque, M. Z., Islam, M. R., & Azam, M. N. (2013). Board Committee Meetings and Firm Financial Performance: An Investigation of Australian Companies. *International Review of Finance, 13*(4), 503-528.

Hutcheson, G., & Sofroniou, N. (1999). *The Multivariate Social Scientist: An Introduction to Generalized Linear Models*. London, UK: Sage Publications.

Ishii, J., & Xuan, Y. H. (2014). Acquirer-Target Social Ties and Merger Outcomes. *Journal of Financial Economics, 112*, 344-363.

J.V., S., Adhikari, A., Tondkar, R. H., & Andrews, R. L. (2010). The Impact of Corporate Social Disclosure on Investment Behavoir: A Cross-National Study. *Journal of Accounting and Public Policy, 29*, 177-192.

Jacobs, D. (2004). Book Review Essay: Douglas McGregor: The Human Side of Enterprise in Peril. *Academy of Management Review, 29*(2), 293-311.

Jaggi, B., & Gul, F. A. (2009). Family Control, Board Independence and Earnings Management: Evidence Based on Hong Kong Firms. *Journal of Accounting and Public Policy, 28*, 281-300.

Jaggi, B., Gul, F. A., & Lau, T. S. C. (2012). Auditor Industry Specialization, Political Economy and Earnings Quality: Some Cross-Country Evidence. *Journal of International Financial Management & Accounting, 23*(1), 24-61.

Jamali, D. (2008). A Stakeholder Approach to Corporate Social Responsibility: A Fresh Perspective into Theory and Practice. *Journal of Business Ethics, 82*(1), 213-231.

Jenkins, H., & Yakovleva, N. (2006). Corporate Social Responsibility in the Mining Industry: Exploring Trends in Social and Environmental Disclosure. *Journal of Cleaner Production, 14*(3–4), 271-284.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. *American Economic Review, 76*(2), 323-329.

Jensen, M. C. (2001). Value, Maximization, Stakeholder Theory and the Corporate Objective Function. *Journal of Applied Corporate Finance, 48*(3), 8-21.

Jensen, M. C. (2010). Value Maximization, Stakeholder Theory and the Corporate Objective Function. *Journal of Applied Corporate Finance, 22*(1), 32-42.

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.

Jiraporn, P., Davidson III, W. N., DaDalt, P., & Ning, Y. (2009). Too Busy to Show Up? An Analysis of Directors' Absences. *The Quarterly Review of Economics and Finance, 49*, 1159-1171.

Jiraporn, P., Kim, Y. S., & Davidson Iii, W. N. (2008). Multiple Directorships and Corporate Diversification. *Journal of Empirical Finance, 15*(3), 418-435.

Jiraporn, P., Singh, M., & Lee, C. I. (2009). Ineffective Corporate Governance: Director Busyness and Board Committee Memberships. *Journal of Banking & Finance, 33*(5), 819-828.

Johnson, R. A., & Greening, D. W. (1999). The Effects of Corporate Governance and Institutional Ownership Types on Corporate Social Performance. *The Academy of Management Journal, 42*(5), 564-576.

Judge, T., Cable, D., Boudreau, J., & Bretz, R. (1995). An Empirical Examination of the Predictors of Executive Career Success. *Personnel of Psychology, 48*, 485-519.

Kanter, R. (1977). *Men and Women of the Corporation*. New York City, New York, USA: Basic Books.

Karim, K. E., Lacina, M. J., & Rutledge, R. W. (2006). The Association Between Firm Characteristics and the Level of Environmental Disclosure in Financial Statement Footnotes. *Advances in Environmental Accounting & Management, 3*, 77-109.

Kasznik, R., & McNichols, M. F. (2002). Does Meeting Earnings Expectations Matter? Evidence from Analyst Forecast Revisions and Share Prices. *Journal of Accounting Research, 40*(3), 727-759.

Kiel, G. C., & Nicholson, G. J. (2003). Board Composition and Corporate Performance: How the Australian Experience Informs Contrasting Theories of Corporate Governance. *Corporate Governance: An International Review, 11*(3), 189-205.

Kiel, G. C., & Nicholson, G. J. (2006). Multiple Directorships and Corporate Performance in Australian Listed Companies. *Corporate Governance: An International Review, 14*(6), 530-546.

Klein, A. (1998). Firm Performance and Board Committee Structure. *The Journal of Law and Economics*, 275-303.

Klein, A. (2002a). Audit Committee, Board of Director Characteristics and Earnings Management. *Journal of Accounting and Economics, 33*(3), 375-400.

Klein, A. (2002b). Economic Determinations of Audit Committee Independence. *The Accounting Review*, 435-452.

Koh, P. S. (2003). On the Association Between Institutional Ownership and Aggressive Corporate Earnings Management in Australia. *The British Accounting Review, 35*, 105-128.

Koh, P. S. (2007). Institutional Investor Type, Earnings Management and Benchmark Beaters. *Journal of Accounting and Public Policy, 26*, 267-299.

Kosnik, R. (1987). A Study of Board Performance and Corporate Governance. *Administrative Science Quarterly, 32*, 163-185.

Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance Matched Discretionary Accrual Measures. *Journal of Accounting and Economics, 39*, 163-197.

Krause, R., Semadeni, M., & Cannella Jr, A. A. (2014). CEO Duality: A Review and Research Agenda. *Journal of Management, 40*(1), 256-286.

Krishnan, G. V. (2003). Does Big 6 Auditor Industry Expertise Constrain Earnings Management? *Accounting Horizons*,(Supplement), 1-16.

Krishnan, G. V., Raman, K. K., Yang, K., & Yu, W. (2011). CFO/CEO-Board Social Ties, Sarbanes-Oxley, and Earnings Management. *Accounting Horizons, 25*(3), 537-557.

Laidroo, L. (2009). Association Between Ownership Structure and Public Announcements' Disclosures. *Corporate Governance: An International Review, 17*(1), 13-34.

Lee, H. Y., & Mande, V. (2005). The Relationship of Audit Committee Characteristics with Endogenously Determined Audit and Non-Audt Fees. *Quarterly Journal of Business and Economics, 44*(3), 93-112.

Li, Y., Richardson, G. D., & Thornton, D. B. (1997). Corporate Disclosure of Environmental Liability Information: Theory and Evidence. *Contemporary Accounting Research, 14*(3), 435-474.

Lim, S., & Matolcsy, Z. (1999). Earnings Management of Firms Subject to Product Price Controls. *Accounting & Finance, 39*(2), 131-150.

Liu, X. B., & Anbumozhi, V. (2009). Determinant Factors of Corporate Environmental Information Disclosure: An Empirical Study of Chinese Listed Companies. *Journal of Cleaner Production, 17*, 593-600.

Luo, Y. (2005a). Corporate Governance and Accountability in Multinational Enterprises: Concepts and Agenda. *Journal of International Management, 11*, 1-18.

Luo, Y. (2005b). How Does Globalization Affect Corporate Governance and Accountability? A Perspective from MNEs. *Journal of International Management, 11*, 19-41.

Maher, M. W., Tiessen, P., Colson, R., & Broman, A. J. (1992). Competition and Audit Fees. *The Accounting Review, 67*(1), 199-211.

Mak, Y. T., & Kusnadi, Y. (2005). Size Really Matters: Further Evidence on the Negative Relationship Between Board Size and Firm Value. *Pacific-Basin Finance Journal, 13*(3), 301-318.

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.

Mallin, C. A., & Michelon, G. (2010). *Board Reputation Attributes and Corporate Social Performance: An Empirical Investigation of the US Best Corporate Citizens.* University of Padova, Padova, Italy.

Marom, I. Y. (2006). Towards a Unified Theory of the CSP-CFP Link. *Journal of Business Ethics*, 191-200.

Mashayekhi, B., & Bazaz, M. S. (2008). Corporate Governance and Firm Performance in Iran. *Journal of Contemporary Accounting & Economics, 4*(2), 156-172.

Matsunaga, S., & Park, C. (2001). The Effect of Missing a Quarterly Earnings Benchmark on the CEO's Annual Bonus. *The Accounting Review, 76*(3), 313-332.

Mayhew, B. W., & Willkins, M. S. (2003). Audit Firm Industry Specialization as a Differentiation Strategy: Evidence from Fees Charged to Firms Going Public. *Auditing: A Journal of Practice and Theory, 22*(2), 33-52.

McCabe, A. C., Ingram, R., & Dato-on, M. (2006). The Business of Ethics and Gender. *Journal of Business Ethics, 64*(2), 101-116.

McGregor, D. (1960). *The Human Side of Enterprise*. New York City, New York, USA: McGraw -Hill.

McGuire, J., Dow, S., & Argheyd, K. (2003). CEO Incentives and Corporate Social Performance. *Journal of Business Ethics*, 341-359.

McNichols, M. F. (2000). Research Design Issues in Earnings Management Studies. *Journal of Accounting and Public Policy, 19*, 313-345.

McWilliams, A., & Siegel, D. (2001). Corporate Social Responsibility: A Theory of the Firm Perspective. *Academy of Management Review, 26*(1), 117-127.

Meek, G. K., Roberts, C. B., & Gray, S. J. (1995). Factors Influencing Voluntary Annual Report Disclosures by U.S., U.K. and Continental European Multinational Corporation. *Journal of International Business Studies, 26*(3), 555-572.

Menon, K., & Williams, D. D. (1991). Credibility and Initial Public Offerings. *The Accounting Review, 66*(2), 313-332.

Merchant, K. A. (1989). Rewarding Results: Motivating Profit Center Managers

Meyer, J., & Rowan, B. (1977). Institutionalized Organizations: Formal Structures as Myths And Ceremony. *American Journal of Sociology, 83*(2), 340-363.

Michelon, P., & Parbonetti, A. (2012). The Effect of Corporate Governance on Sustainability Disclosure. *Journal of Management and Governance, 16*(3), 477-509.

Mizruchi, M. S. (1996). What Do Interlocks Do? An Analysis, Critique and Assessment of Research on Interlocking Directorates. *Annual Review of Sociology, 22*, 271-298.

Mizruchi, M. S., & Stearns, L. (1988). A Longitudinal Study of the Formation of Interlocking Directorates. *Administrative Science Quarterly, 33*, 194-210.

Nagar, V., Nanda, D., & Wysocki, P. (2003). Discretionary Disclosure and Stock-Based Incentives. *Journal of Accounting and Economics, 34*, 283-309.

Naylor, S. (1999). *Management*. UK: Pitman, London, UK.

Nelson, M. W. (2002). Evidence from Auditors about Managers' and Auditors' Earnings Management Decisions. *The Accounting Review, 77*(Supplement), 175-202.

Nettle, D. (2007). Empathizing and Systemizing: What are They and What They Contribute to our Understanding of Psychological Sex Differences? *British Journal of Psychology, 98*(2), 237-255.

Niemi, L. (2005). Audit Effort and Fees Under Concentrated Client Ownership: Evidence from Four International Audit Firms. *The International Journal of Accounting, 40*, 303-323.

Okazaki, T., Sawada, M., & Yokoyama, K. (2005). Measuring the Extent and Implications of Director Interlocking in the Prewar Japanese Banking Industry. *The Journal of Economic History, 65*(4), 1082-1115.

Ong, C. H., Ong, K. S., & Wan, D. (2003). An Exploratory Study on Interlocking Directorates in Listed Firms in Singapore. *Corporate Governance: An International Review*, 332-334.

Osma, B. G. (2008). Board Independence and Real Earnings Management: The Case of R&D Expenditure. *Corporate Governance: An International Review, 16*(2), 116-131.

Palmrose, Z. (1986). Audit Fees and Auditor Size: Further Evidence. *Journal of Accounting Research, 24*(1), 97-110.

Palmrose, Z. (1988). Audit Litigation Research: Do the Merits Matter? An Assessment and Directions for Future Research. *Journal of Accounting and Public Policy, 16*, 355-378.

Patten. (1991). Exposure, Legitimacy and Social Disclosure. *Journal of Accounting and Public Policy, 10*, 297-308.

Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board Monitoring and Earnings Management: Do Outside Directors Influence Abnormal Accruals? *Journal of Business Finance & Accounting, 32*(7), 1311-1346.

Peng, M. W., Au, K. Y., & Wang, D. Y. (2001). Interlocking Directorates as Corporate Governance in Third World Multinationals: Theory and Evidence from Thailand. *Asia Pacific Journal of Management*, 161-181.

Pfeffer, J. (1972). Size and Composition of Corporate Board of Directors: The Organization and Its Environment. *Administrative Science Quarterly, 17*(2), 218-228.

Pfeffer, J., & Ross, J. (1982). The Effects of Marriage and a Working Wife on Occupational and Wage Attainment. *Administrative Science Quarterly, 27*(1), 66-80.

Pfeffer, J., & Salancik, G. R. (1978). *The External Control of Organizations : A Resource Dependence Perspective*. New York City, New York, USA: Harper and Row.

Pombo, C., & Gutierrez, L. H. (2011). Outside Directors, Board Interlocks and Firm Performance: Empirical Evidence from Colombian Business Groups. *Journal of Economics and Business, 63*(4), 251-277.

Porter, M. E. (1992). Changing the Way America Invests in Industry. *Journal of Applied Corporate Finance, 5*(2), 4-16.

Post, C., Rahman, N., & Rubow, E. (2011). Green Governance: Boards of Directors' Composition and Environmental Corporate Social Responsibility. *Business & Society, 50*(1), 189-223.

Prencipe, A. (2004). Proprietary Costs and Determinants of Voluntary Segment Disclosure: Evidence from Italian Listed Companies. *European Accounting Review, 13*(2), 319-340.

Ramanathan, K. V. (1976). Toward a Theory of Corporate Social Performance: Methods and Results. *Journal of Contemporary Business*, 516-528.

Rao, K. K., Tilt, C. A., & Lester, L. H. (2012). Corporate Governance and Environmental Reporting: An Australian Study. *Corporate Governance, 12*(2), 143-163.

Rechner, P. L., & Dalton, D. R. (1991). CEO Duality and Organizational Performance: A Longitudinal Analysis. *Strategic Management Journal, 12*, 155-160.

Richardson, R. J. (1987). Directorship Interlocks and Corporate Profitability. *Administrative Science Quarterly, 32*(3), 367-386.

Robbins, W. A., Turpin, R., & Polinski, P. (1993). Economic Incentives and Accounting Choice Strategy By Nonprofit Hosptals. *Financial Accountability and Management, 9*(3), 159-175.

Roberts, R. W. (1992). Determinants of Corporate Social Responsibility Disclosure: An Application of Stakeholder Theory. *Accounting, Organizations and Society, 17*(6), 595-612.

Rosenstein, S., & Wyatt, J. G. (1990). Outside Directors, Board Independence and Shareholder Wealth. *Journal of Financial Economics, 26*(2), 175-191.

Roy, M. (2009). Organising for Corporate Social Performance - The Role of Board-Level Committees. *The Journal of Corporate Citizenship*, 71-86.

Roychowdhury, S. (2006). Earnings Management Through Real Activities Manipulation. *Journal of Accounting and Economics*,(42), 335-370.

Russo, M. V., & Fouts, P. A. (1997). A Resource-Based Perspective on Corporate Environmental Performance. *Academy of Management Journal, 40*(3), 534-559.

Sahut, J. M., Boulerne, S., Mili, M., & Teulon, F. (2011). *What Relation Exists between CSR and Longevity of Firms?* University of Applied Sciences Western Switzerland. Switzerland.

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.

Santos, R. L., da Silveira, A. D. M., & de C. Barros, L. A. B. (2008). *Board Interlocking in Brazil: Directors' Participation in Multiple Companies and Its Effect on Firm Value*. School of Economics, Management and Accounting. University of Sau Paulo. Sau Paulo, Brazil.

Sarkar, J., & Sarkar, S. (2009). Multiple Board Appointments and Firm Performance in Emerging Economies: Evidence from India. *Pacific-Basin Finance Journal, 17*(2), 271-293.

Schipper, K. (1989). Commentary on Earnings Management. *Accounting Horizons*, 91-102.

Sharma, D. (2004). Board of Directors Characteristics, Institutional Ownership and Fraud: Evidence from Australia. *Auditing: A Journal of Practice and Theory, 23*(2), 105-117.

Sharma, V. D., & Iselin, E. R. (2012). The Association between Audit Committee Multiple-Directorships, Tenure, and Financial Misstatements. *Auditing: A Journal of Practice and Theory, 31*(3), 149-175.

Shivakumar, L. (2000). Do Firms Mislead Investors By Overstating Earnings Before Seasoned Equity Offerings? *Journal of Accounting and Economics, 29*(3), 339-371.

Shivdasani, A., & Yermack, D. (1999). CEO Involvement in the Selection of New Board Members: An Empirical Analysis. *The Journal of Finance, 64*(5)

Simon, D. T., & Francis, J. R. (1988). The Effects of Auditor Change on Audit Fees: Tests of Price Cutting and Price Recovery. *The Accounting Review, 63*(2), 255-269.

Simunic, D. A. (1980). The Pricing of Audit Services. *Journal of Accounting Research, 18*(1), 161-190.

Siregar, S. V., & Utama, S. (2008). Type of Earnings Management and the Effect of Ownership Structure, Firm Size and Corporate-Governance Practices: Evidence from Indonesia. *The International Journal of Accounting, 43*(1), 1-27.

Skinner, D. J., & Sloan, R. (2002). Earnings Surprises, Growth Expectations and Stock Returns or Don't Let An Earnings Torpedo Sink Your Portfolio. *Review of Accounting Studies, 7*, 289-312.

Srinidhi, B. N., He, S. H., & Firth, M. (2014). The Effect of Governance on Specialist Auditor Choice and Audit Fees in U.S. Family Firms. *The Accounting Review, 89*(6), 2297-2329.

Stanwick, P. A., & Stanwick, S. D. (1998). The Relationship Between Corporate Social Performance and Organizational Size, Financial Performance and Environmental Performance: An Empirical Examination. *Journal of Business Ethics, 17*, 195-204.

Stanwick, S. D., & Stanwick, P. A. (2000). The Relationship Between Environmental Disclosures and Financial Performance. *Eco-Managment and Auditing, 7*, 155-164.

Stuart, T. E., & Yim, S. J. (2010). Board Interlocks and the Propensity to be Targeted in Private Equity Transactions. *Journal of Financial Economics, 97*(1), 174-189.

Sweeney, A. P. (1994). Debt-covenant Violations and Managers' Accounting Responses. *Journal of Accounting and Economics, 17*, 281-308.

Teoh, S. H., & Wong, T. J. (1993). Perceived Auditor Quality and the Earnings Response Coefficient. *The Accounting Review, 68*(2), 346-366.

Tilt, C. A. (2001). The Content and Disclosure of Australian Corporate Environmental Policies. *Accounting, Auditing and Accountability Journal, 14*(2), 190-212.

Tsang, E. W. K. (1998). A Longitudinal Study of Corporate Social Reporting in Singapore. *Accounting, Auditing and Accountability Journal*, 625-636.

Udayasankar, K., & Das, S. S. (2007). Corporate Governance and Firm Performance: The Effect of Regulation and Competitiveness. *Corporate Governance: An International Review, 15*(2), 262-271.

Ullman, A. A. (1985). Data in Search of a Theory: A Critical Examination of the Relationships Among Social Performance, Social Disclosure and Economic Performance of U.S. Firms. *Academy of Management Journal, 10*(3), 540-557.

Vafeas, N. (1999). Board Meeting Frequency and Firm Performance. *Journal of Financial Economics, 53*(1), 113-142.

Van Der Laan, S. (2009). The Role of Theory in Explaining Motivation for Corporate *Australasian Accounting Business and Finance Journal*, 15-29.

Verrecchia, R. E. (1983). Discretionary Disclosure. *Journal of Accounting and Economics, 5*, 179-194.

Wang, H., Bi, J., Wheeler, D., Wang, J., Cao, D., Lu, G., & Wang, Y. (2004). Environmental Performance Rating and Disclosure: China's GreenWatch Program. *Journal of Environmental Management, 71*(2), 123-133.

Wang, J., & Coffey, B. S. (1992). Board Composition and Corporate Philanthropy. *Journal of Business Ethics, 11*(10), 771-778.

Warfield, T. D., Wild, J. J., & Wild, K. L. (1995). Managerial Ownership, Accounting Choices and Informativeness of Earnings. *Journal of Accounting and Economics, 20*, 61-91.

Watkins, A. L., Hilison, W., & Morecroft, S. E. (2004). Audit Quality: A Synthesis of Theory and Empirical Evideonce. *Journal of Accounting Literature, 23*(1), 153-193.

Watts, R. L., & Zimmerman, J. L. (1978). Towards a Positive Theory of the Determination of Accounting Standards. *The Accounting Review*, 112-143.

White, G. E. (1970). Discetionary Accounting Decisions and Income Normalization. *Journal of Accounting Research, 8*(2), 260-273.

Williams, S. M. (1999). Voluntary Environmental and Social Accounting Disclosure Practices in the Asia-Pacific Region: An International Empirical Test of Political Economy Theory. *The International Journal of Accounting, 34*(2), 209-238.

Williams, S. M., & Pei, C. (1999). Corporate Social Disclosures by Listed Companies on Their Web Sites: An International Comparison. *The International Journal of Accounting, 34*(3), 389-419.

Wilmhurst, T. D., & Frost, G. R. (2000). Corporate Environmental Reporting: A Test of Legitimacy Theory. *Accounting, Auditing & Accountability Journal, 13*(1), 10-25.

Yardley, J. A., Kauffman, N. L., Cairney, T. D., & Albrecht, W. D. (1992). Supplier Behavior in the US Audit Market. *Journal of Accounting Literature, 11*, 1-25.

Yermack, D. (1996). Higher Market Valuation of Companies With a Small Board of Directors. *Journal of Financial Economics, 40*(2), 185-211.

Zeng, S. X., Xu, X. D., Dong, Z. Y., & Tam, V. W. Y. (2010). Towards Corporate Environmental Information Disclosure: An Empirical Study in China. *Journal of Cleaner Production, 18*, 1142-1148.

Zucker, L. (1987). Institutional Theories of Organization. *Annual Review of Sociology, 13*, 443-464.