Corporate Governance and Earnings Management: Moderating Role of Audit Committee

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Project Director

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About NFCG

In 2003, the Ministry of Corporate Affairs (MCA) led a unique PPP model to set up the National Foundation for Corporate Governance in partnership with the Confederation of Indian Industry, the Institute of Company Secretaries of India, and the Institute of Chartered Accountants of India. Subsequently, the Institute of Cost Accountants of India, National Stock Exchange and the Indian Institute of Corporate Affairs also joined with an objective to promote good Corporate Governance practices both at the level of individual corporates and Industry as a whole.

NFCG endeavours to create a business environment that promotes voluntary adoption of good corporate governance practices.

Vision

Be the Key Facilitator and Reference Point for highest standards of Corporate Governance in India

Mission

- To foster a culture of good Corporate Governance
- To create a framework of best practices, structure, processes and
  Ethics
- To reduce the existing gap between Corporate Governance framework & actual compliance by corporates
- To facilitate effective participation of different stakeholders
- To catalyse capacity building in emerging areas of Corporate Governance

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LIST OF ABBREVIATIONS

ABCFO	Abnormal cash flow from operations
ABDISEX	Abnormal discretionary expenditures
ABPROD	Abnormal production costs
AEM	Accruals based earnings management
AUDIT_INDP	Audit committee independence
AUDIT_SIZE	Audit committee size
BI	Board independence
BIG4	Firms audited by BIG4 auditors
BS	Board size
CEO	Chief executive officer
CEO_D	CEO duality
CFO	Cash flow from operations
CFO_TA	Cash flow from operations divided by total assets
CG	Corporate governance
CII	Confederation of Indian Industries
CMIE	Centre for Monitoring the Indian Economy
EM	Earnings management
FE	Fixed effects
FEMA	Foreign exchange management act
FERA	Foreign exchange regulation act
FOREIGN_INSTI_SHARES	Foreign institutional investors
FIRM_S	Firm size
GDP	Gross Domestic Product
GROWTH	Annual growth rate of sales

INTA	Intangible assets
INTANGIBLE_TA	Net value of intangible assets divided by total assets
INSTI_SHARES	Institutional shareholders
BOARD_SIZE	Logarithm of board size
LEV	Leverage
MCA	Ministry of corporate affairs
MTB	Market to book ratio
NFCG	National foundation for corporate governance
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary least squares
RE	Random effects
REM	Real activities based earnings management
ROA	Return on assets
SALES	Annual sales
SEBI	Securities exchange board of India
TA	Total assets

Executive Summary

Fair accounting practices and transparency in reporting systems can be enhanced by establishing adequate governance norms. Investor confidence is enhanced and capital market participation is increased through good corporate governance. It is imperative that a good corporate governance structure is in place so that management can properly utilize the enterprise's resources in the best interests of absentee owners, and to accurately report the company's financial position and operating performance at all times (Lin and Hwang 2010).Anothersignificant role played by corporate governance mechanisms is with regard to the monitoring activity, especially with regard to earnings management. A wide range of stakeholders have recently been paying attention to earnings management, including policymakers, regulators, academicians, investors, and managers (Achilles et al., 2013). There has been a significant increase in the use of earnings management worldwide due to the pressure on companies to meet their earnings estimates and analyst expectations. In the modern economy, the share price of a company is highly dependent on earnings, and any significant deviation from the expected trend is penalized by a drop in the stock price and a decrease in valuation. The financial statements of a company provide essential information that is utilized by a variety of stakeholders, including shareholders, creditors, employees, clients, suppliers, government agencies, and regulatory agencies. When the information provided in the financial statements is true and fair, stakeholders will be able to make informed decisions based on the accounting information. For accounting information to be useful in decision-making processes, managers are responsible for preparing and reporting accurate and relevant information. Accounting standards allow managers to exercise discretion in preparing their company's financial statements. The discretions are mainly for improving the financial statements' quality. The discretion may, however, also be used to increase/decrease the level of transparency in reporting financial information. Earnings

management are broadly classified into two categories according to previous literature namely, accruals-based earnings management and real activities-based earning management.

Given the widespread prevalence of earnings management, the present study attempts to explore the dynamic relationship between corporate governance, audit committee and earnings management of publicly listed firms in India for a period of eight years from 2014 to 2021. The findings of the study reveal that corporate governance mechanisms when coupled with the audit committee characteristics are efficient in monitoring and mitigating the earnings management practices. The individual impact of audit committee in restraining earnings management is not statistically significant but pronounced when clubbed together with the corporate governance mechanisms. The findings of the present study have made significant contributions to the earnings management literature. The regulators can use the findings of the study in framing and changing the regulatory frameworks and guidelines.

Chapter I

Introduction and Design of the study

1.1 Introduction

A wide range of stakeholders have recently been paying attention to earnings management, including policymakers, regulators, academicians, investors, and managers (Achilles et al., 2013). There has been a significant growth in the use of earnings management worldwide due to the pressure on management/executives/companies to meet their earnings estimates and expectations of analysts. In the modern economy, the share price of a company is highly dependent on incomes, and any substantial deviation from the usual trend is penalized by a drop in the stock price and a decrease in valuation. The financial report of a company provides essential information that is used by a various stakeholder, which includes shareholders, creditors, employees, clients, suppliers, government agencies, and regulatory agencies. When the information given in the financial statements is true and fair, stakeholders will be in a position to make informed decisions based on the accounting information. For accounting information to be useful in decision-making processes, managers are responsible for preparing and reporting accurate and relevant information. Accounting standards allow managers to exercise discretion in preparing their company's financial statements. The discretions are mainly for improving the financial statements' quality. The discretion may, however, also be used to increase/decrease the level of transparency in reporting financial information.

The asymmetry in information between managers and other stakeholders, however, allows the former to present earnings in ways most suitable to their objectives and use their discretion over accounting information. It can be argued that managers may have different objectives from those of shareholders, such as incentives, control, reputation, status, and the consumption of more perks (Ames, 2002). As a consequence, they may be motivated to

maximize their own benefit at the cost of shareholders by manipulating accounting earnings in order to maximize their own utility. It is a global phenomenon that financial statements are being manipulated and subsequent corporate collapses are occurring. Literature has shown that there are two main options available to managers for managing reported earnings. To begin with, their judgment can be used in financial reporting in order to alter the amount of accruals so as to reach the level of earnings they desire. This method is known as Accruals Earnings Management (AEM) (Healy and Wahlen, 1999). They may also adjust the timing or structuring of specific transactions, investments, and resource allocations to improve/decrease the earnings reported during the current period (Roychowdhury, 2006). As a result of a deviation from optimal business practices, Real Earnings Management (REM) is used to manipulate reported earnings.

Fair accounting practices and transparency in reporting systems can be enhanced by establishing adequate governance norms. Investor confidence is enhanced and capital market participation is increased through good corporate governance. It is imperative that a good corporate governance structure is in place so that management can properly utilize the enterprise's resources in the best interests of absentee owners, and to accurately report the company's financial position and operating performance at all times (Lin and Hwang 2010). As noted by Dabor and Ibadin (2013), corporate governance is a factor that influences management's decision to engage in earnings management. There has been a dramatic change in the way companies are being governed due to the alarming rise in corporate failures and accounting scandals. Financial reporting malpractices and corporate scams are not limited to a particular country. There have also been instances of corporate fraud in India. Hence, it is evident that corporate governance mechanisms play a significant role in detecting and deterring the earnings management thereby protecting the interests of the stakeholders. In this context, the present study aims to holistically investigate the relationship between corporate

governance mechanisms and earnings management in listed companies of India. In addition, the study also explores the moderating role played by the audit committee in above mentioned relationship between corporate governance and earnings management.

1.2 Corporate governance in India – A conceptual overview

The Securities and Exchange Board of India (SEBI) and the Ministry of Corporate Affairs (MCA) are accountable for corporate governance initiatives in India. By virtue of Clause 49 of the SEBI Act, SEBI monitors and regulates the corporate governance practices of listed companies in India. Companies listed on stock exchanges are required to comply with this clause in their listing agreements. MCA facilitates the exchange of experiences and ideas among corporate leaders, policy makers, regulators, law enforcement agencies, and non-government groups through its appointed committees and forums, like NFCG, a not-for-profit trust. India's first corporate governance code (CG code) was issued by the Confederation of Indian Industry (CII) in 1998. The Securities and Exchange Board of India (SEBI) established a committee in 1999 under the leadership of Shri Kumar Mangalam Birla, member of SEBI's Board, to raise the standards of good corporate governance in the country. The committee was formed with the principal objective of examining corporate governance from the perspective of investors and shareholders and preparing a 'Code' appropriate to Indian corporate environments. It was identified by the committee that the board of directors, shareholders, and management constitute the three key components of corporate governance, and attempted to identify the roles, responsibilities, and rights of each of these constituents within the context of corporate governance. Two categories of recommendations were categorized by the committee, namely, mandatory and non-mandatory.

On 29th August, 2013, the President of India assented to the Companies Act, 2013, which was enacted on 12th September, 2013 to replace the old Companies Act, 1956. By providing enhanced disclosures, reporting and transparency, the Companies Act, 2013

provides a formal framework for corporate governance. In addition to this, there are various legislations that affect corporate governance principles, including the Monopolies and Restrictive Trade Practices Act of 1969 (recently replaced by the Competition Act 2002), the Foreign Exchange Regulation Act, 1973 (now the Foreign Exchange Management Act, 1999), the Industries (Development and Regulation) Act, 1951, and others. Furthermore, non-regulatory bodies have also published codes and guidelines on Corporate Governance from time to time in addition to various acts and guidelines issued by regulators. Examples include the Desirable Corporate Governance Code issued by the Confederation of Indian Industries (CII) in 2009. Several of these recommendations were incorporated into the Revised Clause 49, which is considered to be an imperative requirement under the law. Further, after enactment of the Companies Act, 2013, SEBI has amended Clause 49 in 2013 to bring it in line with the new Act.

1.3 Earnings management – An overview

Earnings management is perhaps the most provocative of all accounting and finance research topics. There has not been a definition of earnings management that is universally accepted in the previous literature which encompasses all the different activities of earnings manipulation. Defining earnings management is difficult due to the fact that it depends on the unobservable intent of managers, which further complicates its definition (Dechow and Skinner, 2000). The earliest description of earnings management was given by Schipper (1989) as an "active intervention in the external financial reporting process with the intent to obtain a private benefit". Additionally, Healy and Wahlen (1999) opines that 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 numbers”. It is also defined as the “active manipulation of

earnings towards a pre-determined target" (Mulford & Comiskey, 2002).There is a negative connotation to earnings management, since these definitions emphasize the private gain of managers and misleading stakeholders to influence contractual outcomes. It should be noted, however, that earnings management does not always pose a negative consequence for stakeholders. Holthausen& Leftwich (1983) describe the use of earnings management to disclose the private information concerning the future performance of the company by managers of the firm. A study by DeFond& Park (1997) documents how managers manage earnings based on the performance of the company in the future. Therefore, earnings management is not always practiced with a view to maximizing personal gain. But most of the previous findings indicate that earnings management could be regarded as a precursor to more serious illegal and fraudulent reporting activities (Treadway, 1987).

Previous literature has identified that it is possible to manage earnings in two ways. The first is through the management of accruals (AEM) and the second is through the management of real activity (REM). Throughout the world, both accrual and real activity-based earnings management are widely utilized and are practiced with various objectives, including improving executive compensation, enhancing the value of shares in the public offering, fulfilling debt covenants, reducing tax liabilities, among others (Graham, et al., 2005). Although earnings management appears to benefit investors in terms of valuation and performance of the firm in the short term, in the long run, earnings management severely damages the value of the firm, as EM is merely a self-interested management practice (Graham et al., 2005; García-Meca& Sánchez-Ballesta, 2009;Karpoff et al., 2008a, 2008b; Hennes et al., 2008) and is a long-term moral hazard to the firms (Martin et al., 2016). As a result, both categories of EM have the same objective, which is to manipulate earnings information and mislead the stakeholders, despite the fact that they differ in several ways (El Diri et al., 2020).

1.4 Audit committee – Contextual background

A renewed interest in audit committees has developed recently as a result of new regulations enacted in the wake of major corporate scandals (Bhasin, 2012). The Organisation for Economic Co-operation and Development (OECD, 2004) defines an audit committee as "an independent subsidiary committee of the board whose role is to oversee internal audit activities and monitor the relationship between a company and its external auditors". An audit committee's monitoring role over management (OECD, 2004) is expected to increase the quality of a firm's financial reporting practices and performance. It is important to note that the role of the audit committee is directly related to the oversight function of the board and the delegation to various committees. In addition to performing an oversight function, it ensures that transparent, effective anti-fraud and risk management mechanisms are in place, as well as that Internal Audit and External Audit functions are efficient in their financial reporting. In accordance with section 177 of the Companies Act, 2013 and Rule 6 of Companies (Meetings of Board and its powers) Rules, 2014, every listed company and all other public companies that have paid-up capital of Rs. 10 crore or more; or a turnover greater than 100 crore or has outstanding loans, borrowings, debentures, or deposits greater than Rs.50 crore is required to have an Audit Committee consisting of not less than three directors, as well as any number of additional directors determined by the Board, of which two thirds are directors. This includes managing directors or whole-time directors. A number of committees, including the Kumar Mangalam Birla Committee, the Naresh Chandra Committee, and the Narayana Murthy Committee, recommended a constitution and composition for the Audit Committee, including independent directors and defined its responsibilities, powers, and functions. In addition to overseeing the integrity and compliance mechanisms of an organization, the Audit Committee and its Chairman are also responsible for reviewing the functioning of the whistle-blower mechanism. As a result of the revision to

Clause 49, the Audit Committee is given greaterresponsibility for providing accurate and transparent financial reporting and disclosures, ensuring that internal audit and internal control systems are robust, monitoring the risk management policies and programs of the company, ensuring that anti-fraud and vigilante mechanisms are effective, and reviewing and administering related party transactions. The audit committee and external auditors have become increasingly popular among capital market regulators and scholars in recent years. In order to ensure accurate reporting of company performance, these two organizations are responsible for overseeing financial reporting methods (Almaqtari et al., 2021; Safari Gerayli et al., 2021). Earnings management may be prevented by an active, well-functioning, and well-structured audit committee. Further, it is expected that audit committees with a large percentage of independent directors to be more effective in monitoring. Audit committee members with corporate and financial backgrounds should have the experience and training to understand earnings management. Therefore, it is expected that if a large proportion of the committee is made up of independent outside members with corporate and financial backgrounds, earnings management will be less likely. Researchers have studied the impact of audit committee characteristics on earnings quality, but their studies have primarily focused on developed economies. Despite the lack of evidence from emerging markets (Claessens& Fan, 2002; Black et al., 2006; Mohanty, 2003), the majority of research has focused on the effects of corporate governance reforms on firm performance and market value in developing countries.

1.5 Motivation of the study

The World Development Indicator of the World Bank indicates that India is the third largest emerging economy in the world only after China and Brazil. Since 2005, India has experienced an average annual growth rate of 7% in its Gross Domestic Product at factor cost. In India, corporate governance reforms have evolved along with the country's economic

transformation since 1991. In response to India's rapidly expanding economy (both in terms of capital and skilled labour), the increasing presence of foreign and institutional investors (both domestic and foreign), and Indian companies' desire to access global capital, corporate governance reforms have been prompted (Khanna & Palepu, 2000b, 2000a). As a result of the inclusion of clause 49 in the listing agreements of companies listed on Indian stock exchanges, the Securities Exchange Board of India (SEBI) implemented the corporate governance reforms in India. In the context of corporate regulation, the enforcement of Clause 49 is of utmost importance. Hence the present study aims to explore the dynamic relationship between corporate governance and earnings management practices in the context of the third largest emerging economy, namely India. In addition to this, the study also investigates the moderating role of audit committee in determining the strength of the relationship between corporate governance and earnings management.

1.6 Scope of the study

The present study aims to comprehensively explore the relationship between corporate governance and earnings management and also the moderating role of audit committee. The scope of the study is limited to the top one thousand companies in terms of market capitalization as on 31st March 2014. The logical reason for choosing the sample firms as mentioned above is that the top thousand market capitalization companies accounts for around ninety per cent trading volume and value in the Bombay Stock Exchange (BSE) and National Stock Exchange (NSE).

However, companies with any of the following criteria are excluded:

- Firms in Banking, insurance,financial industries and government owned firms were excluded as these firms are subject to different regulatory bodies and that their accounts and governance mechanisms are differently structured thus making difficult for comparison.

- Companies that are merged / taken over / bankrupt during the period of our study
- Foreign firms as they more or less have the similar board room practices and structure as that of their parent firms. The foreign subsidiaries were identified by manually examining the annual reports.

1.7 Objectives

The **primary objective** of the study is stated as below:

- To study the corporate governance characteristics and its impact on earnings management.

Secondary objectives:

- To study the impact of audit committee on earnings management.
- To investigate the moderating role played by audit committee

1.8 Research design

1.8.1 Source of data: The data related to corporate governance mechanism, audit committee were manually collected from the annual reports of the companies. Data related to calculation of earnings management were collected from the CMIE database, prowessiq.

1.8.2 Period of study: The studyconsidered top 1000 companies in terms of market capitalization as on 31st March 2014. Hence the period of study was for 8 years from 2014 to 2021.

1.8.3 Analytical framework: To estimate the relationship between corporate governance and earnings management and the moderating role of audit committee, we employed different econometric techniques namely the fixed effects panel regression and random effects panel regression. Also, an innovative econometric technique namely, the panel quantile regression was employed to identify the asymmetric relationship

between the dependant and the independent variables. A detailed description about the empirical models and specification is given in chapter 3.

1.9 Limitations of the study

The present study has included only the top 1000 firms in terms of market capitalization. The other listed firms were not included in the sample. The generalization of results must be exercised with caution. Other factors influencing earnings management such as the analysts' forecasts, board diversity has not been accounted and future research can be extended by accounting for these variables.

1.10 Scheme of the study

The rest of the reports is organized as follows; Chapter two deals with the review of recent and relevant empirical and conceptual studies related to corporate governance, audit committee and earnings management. Research gap from the previous studies is identified in chapter two. Chapter three gives a detailed description related to research design, empirical methodology and empirical specification. Chapter four presents the empirical analysis and results. Chapter five provides the summary of major findings, suggestions to policymakers, regulators, and other market participants and concluding remarks and documents the direction for further research.

Chapter II

Review of Literature

2.1 Introduction

The intention of this chapter is to summarize literature reviewed on the subject matter of interest after introducing the study topic and its objective. To identify the research gap and to contribute to the existing frame of knowledge, a review of previous research studies from various articles, working papers, books and reports of the regulatory authorities was conducted related to corporate governance, earnings management, audit committee, and their inter-connectedness in deriving better firm management practices.

2.2 Corporate governance – A review

The concept ‘corporate governance’ refers to a system of directing and controlling firms (Tihanyi et al., 2014). An organization's governance is governed by its board of directors, shareholders, and auditors. There are numerous views on corporate governance. Shleifer and Vishny (1997) define corporate governance as "the process by which financial institutions ensure that their investments will yield an adequate return on investment." Corporate governance is an indispensable tool for resolving potential conflicts among company stakeholders. Conflicts of this nature, known as agency problems, arise because company stakeholders have different goals and preferences, as well as limited understanding of each other's actions, knowledge, and preferences. There is a conflict of interest between shareholders and corporate managers due to the separation of ownership and control (Gillan and Starks, 2003; Dey, 2008). Corporate governance refers to the processes involved in resolving these potential conflicts both internally and externally (Gonzalez and Garcia-Meca, 2008). A distinction between internal and external corporate governance mechanisms is made by Denis and McConnell (2003). An organization's internal governance mechanisms are determined by its internal factors, including the composition and characteristics of its board of directors, its board committees, and its ownership structure. The phrase "external

governance mechanisms" refers to external influences that ensure that firms are governed in a way that supports the interests of shareholders and other stakeholders. This includes mechanisms such as country laws and takeover laws. Both individual and multi-country studies can benefit from internal governance mechanisms, which are composed of individual governance variables. The impact of different legal systems on corporate governance effectiveness, among other external governance mechanisms, is applicable only to studies comparing corporate governance systems across countries (Denis and McConnell, 2003) and can only be applied to studies conducted in multiple countries.

As a result of several high-profile corporate failures in different countries around the globe, the subject of corporate governance has recently received a great deal of academic attention (Okpala, 2012). Corporate governance mechanisms have been classified by the World Bank into two categories, that is, external and internal corporate governance. The purpose of internal corporate governance is to protect the interests of shareholders while monitoring the highest level of management. Secondly, external corporate governance entails the assessment of credit risk for customers, the development of investment policies and practices, the control of nonexecutive directors' behaviour, and the monitoring of regulatory environments (The World Bank, 2013). Kim et. al. (2006) uses corporate governance elements such as the board of directors' roles, the external auditor's factors, and the audit committee's characteristics to explain the relationship between shareholders and management. In recent years, corporate governance has become one of the most significant topics in the global economy. The implementation of these regulations has thus become a priority for firms of both private and public companies, leading to new corporate governance rules, such as instruments that provide increased assurance. Alhaddad et. al. (2011) has emphasized the importance of increasing transparency in creditor protection policies, as well as reducing corruption and increasing foreign investment.).

Agency problem in firms impelled towards most of the corporate governance related theories and literatures. Adam Smith presented the pioneering work on the management of firms in 1776 in his book 'Wealth of Nations', in which a detailed description is made of the agency problem in firms. Additionally, he noted that if an organization is managed by someone or a group of people who are not the real owners, then there is the possibility that the organization will not work for the benefit of the owners. In his remarks, he expressed concern about the control mechanism in public companies. According to him, public firms cannot survive in a competitive environment. Operational efficiency is adversely affected by the separation of ownership and management. Therefore, it should contribute to the enhancement of the performance of the firm. Several authors have been motivated to study agency theory since this time (Eliot, 1924; Fleischacker, 2002; Hollander, 1927; Iannaccone, 1991; Smith, 1902; Vargo, 2007; Werhane, 2007). As another interesting concept, Berleand Means (1932) emphasized the agency concern in their thesis is that they examined the ownership structure of large companies listed in the United States and claimed that dispersed ownership might result in control issues. Furthermore, they argued that it paves the way for expropriation, where managers seek personal benefit at shareholders' expense. Jensen and Meckling (1976) discuss the agency problem issues discussed above, which can arise when cooperating parties hold contrasting attitudes towards risk. An agency relationship is a contractual arrangement in which one party (the principal) delegated work to another party (the agent), who performed it on behalf of the principal. According to agency theory, public companies survive on the backs of their managers. A manager is viewed as an agent who should act in the best interests of shareholders, while the owner is viewed as a principal who controls the manager. Based on this theory, boards of directors should monitor self-interested managers in order to prevent them from committing financial or other misconduct. An agency theory of organization considers the board of directors to be one of the most significant

mechanisms impacting the performance of a company. Eisenhardt (1989) contends that agency theory primarily addresses two issues. Whenever (a) the desires or goals of the principal and agent conflict, and (b) it is difficult or expensive for the principal to monitor what the agent does and whether the agent behaves appropriately, there is an agency problem. Secondly, when there is a difference in risk preferences or aversions between the principal and the agent, an agency problem may arise. If the agents' interests are not always aligned with those of the principals, their behaviour may harm the interests of the principals. To ensure agents perform their duties properly on behalf of the principal, the principal must pay agency costs. Agency costs are primarily determined by the ownership structure. A positive correlation was found between director shareholding and shareholder return when the relationship between director shareholding and firm performance was examined. According to Farrer and Ramsay (1998), directors of small companies should increase their personal shareholdings. It has been noted that when it comes to examining the relationship between the number of directors serving on the board and the value of the firm, there are interesting insights wherein mixed results have been found, for example Dalton et al. (1999) have shown that a large board of directors enhances firm performance by connecting external resources and providing exceptional qualified advisory services, contrary to Jensen's (1993) finding that even a small group can improve firm value as well. According to the study, large groups of people may lead to difficulties in communication, coordination, and decision-making.

Another stream of literature has investigated the appointment, roles, and responsibilities of independent directors (Bhagat and Black, 2005; Gordon, 2007; Mohammadi andLotfi, 2013; Prasanna, 2011; Zhu et al., 2016). As an example, Bhagat and Black (2005) conducted a study on US large firms stated thatcompanies with a higher percentage of outside directors performed significantly worse than those having lower percentages. The study also found that firms that are low performing were more likely to add

independent directors. In contrast to other independent directors, independent directors holding significant stock positions may be able to add value to the company.On the other hand, according to a study by J Gordon, (2007) independent directors are of greater value than insiders since they attend less meetings with the company's management. The number of independent directors on boards has increased in recent decades. Prasanna (2011) examined the role and functions of independent directors and concluded that independent directors contributed to effective board functioning by improving governance. Furthermore, the study suggests that there is a need for a regulatory framework pertaining to the appointment of directors. A study conducted by Zhu et al., (2016) indicated that independent directors are positively correlated with firm value and that independent directors with higher rankings are more likely to oppose management, particularly in the area of financial reporting and earnings management. The independent director ranking is associated with a lower management of earnings when it comes to independent directors, particularly when it comes to financial reporting issues. There have been few studies that have examined the role of other non-executive and government-appointed directors. An analysis by Staikouras et al. (2007), the value of financial firms is positively impacted by the presence of non-executive directors. These results indicate that independent directors should act as stewards for the benefit of the company and other minority shareholders, in accordance with agency theory and stewardship theory. Once firm-specific variables have been considered, the results are robust. A study conducted by Coles et al., (2008) indicates that the board is beneficial to the firm when the director has sufficient knowledge of the project being monitored. As a result, the board can accurately evaluate management's project proposals. According to Luo et al., (2011), government directors can contribute to the success of firms by providing information about the public policy process. Government directors can facilitate sales to the government

through their connections with the government. By utilizing these connections, directors can enhance the firm's value.

There are a number of studies examines the relationship between thefirm value andcharacteristics of the board of directors, and they have yielded mixed results, yet some of them have been astonishing in nature (Masum and Khan, 2019; Ahmad, et al., 2018; Atty et al., 2018; Berezinets et al., 2017; Almaniaand Imam Muhammad, 2017; Borlea et al., 2017; Garner et al., 2017; Rakesh and Kapil, 2017; PavicandPervan, 2016; Plummer et al., 2016; Purag et al., 2016; Field et al., 2016; Alves and Leal, 2016; Arora and Sharma, 2016; Chen et al., 2015; Ferreira, 2015; FratiniandTettamanzi, 2015; VintilăandGherghina, 2013; KoerniadiandTourani-Rad, 2012; Nakano and Nguyen, 2011; Brickleyand James, 1987). Nakano and Nguyen (2012) studied the relationship between the value andthe characteristics of the board of directorsof the company, and they found that young directors are more willing to take risks, leading to a higher firm value. Using a sample of all companies listed on the Saudi stock exchange in 2011, Ahmad et al. (2018) investigated the relationship between board characteristics and company value. Using the results of this study, it has been determined that independent directors and audit committees do not affect firm value. The composition of the board, however, has a positive impact on the value of the firm. As a result of this study, we hope to gain a deeper understanding of the corporate governance practices in the Gulf region. Based on the influence and causal relationship between board independence and firm value, there is a positive correlation between board independence and firm value (VintilăandGherghina, 2013). A study was conducted by Berezinets et al., (2017) using a sample of closed funds to examine the relationship between board independence and firm value. Funds that have been closed are not subject to accounting or estimation biases. Considering the results of the study, there is strong evidence that board independence and firm value are positively correlated.8 Moreover, this study finds that having more

independent directors on the board results in better decision-making and that these decisions may be aligned with the interests of shareholders. In this study, board independence is closely associated with shareholder interests, which adds to the closed fund literature.

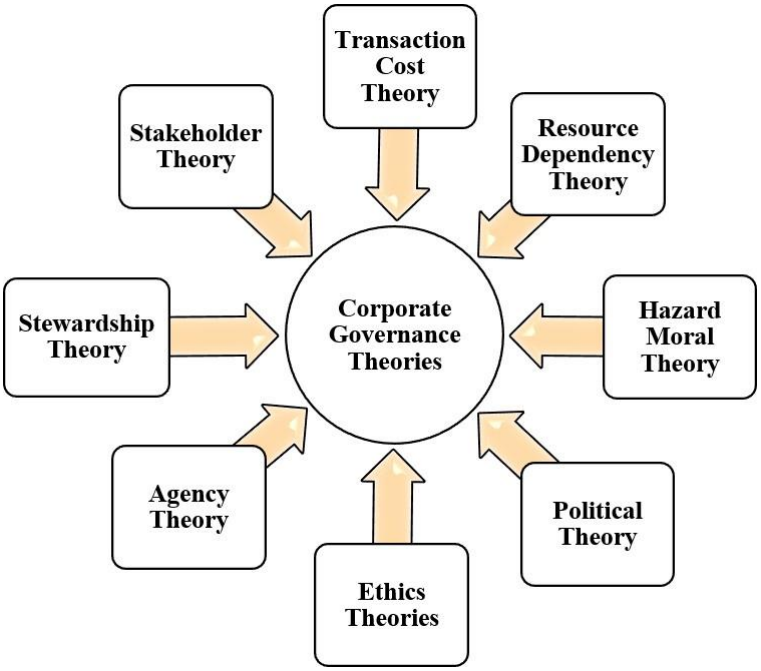
Using two different measures of board independence from agency theory and stewardship theory, Altuwaijriand Kalyanaraman, (2016) examined the relationship between board independence and firm value. The agency theory suggests that external directors are effective monitors who can align their interests with those of shareholders. As a result of their study, they found that board independence and firm value were positively correlated. Based on the ratio of independent directors to the total number of directors on the board, this was determined. Stewardship theory states that independent directors are responsible for obtaining resources in order to enhance the value of the firm. A positive correlation has been found between board independence and a firm's value. Almania (2017) examines how the independence of the board of directors affects the financial leverage of Saudi Arabian listed companies. And it was found that there is a negative relationship between the proportion of independent directors and leverage, which holds true for both internal and external directors. A higher number of external directors is associated with a lower level of leverage, according to the results. Having independent directors monitor the company's finances encourages managers to avoid high levels of debt in order to achieve better performance. Using both market-based and accounting measures, Mishra and Kapil (2017) examined the relationship between board characteristics and firm value in India. Several board characteristics were measured, including board independence, board meetings, CEO duality, and the size of the board. Considering the results of this study, board independence appears to be positively correlated with firm size as measured by ROA or Tobin's Q, but not by Tobin's Q alone. Promoters appear to have a great deal of influence over the independence of the board. The relationship between CEO duality and the value of a company is negative. Therefore, if a

CEO plays two roles, his or her interest may be tainted by a conflict of interest, resulting in a reduction in the value of the business. According to resource dependence theory, the size of the board of directors is positively correlated with the firm's value. Meetings of the board of directors have a positive impact on the value of the firm. With the development of organization combinations and management mechanism theories and concepts related to corporate governance also improved and changed in order to compete with the changing scenarios. From theories that focused on principal and agent aspects they have developed to incorporate the concepts like board diversity, CEO duality, audit committee, etc. as the evidence of strong associations among were established through empirical evidence.

2.2.1 Theoretical foundation of Corporate Governance

In this section, we review major theoretical perspectives relevant to this study regarding corporate governance mechanisms. Researchers interested in exploring corporate governance issues can choose from a variety of theoretical perspectives. Among these theories are: agency theory, stewardship theory, stakeholder theory, sociology theory, resource dependency theory, transaction cost theory, organization theory, hazard moral theory, political theory, and ethics related theories such as business ethics theory, virtue ethics theory, feminist ethics theory, discourse theory, and postmodernism ethics theory. Several relevant theories are discussed here in relation to corporate governance and earnings management, including agency theory, stewardship theory, resource dependency theory and stakeholder theory.The diagrammatic representation of existing theories related to corporate governance is given below:

Fig. 1 Theories Related to Corporate Governance



Source: Corporate governance: Principles, polices and practice (A.C.Fernando et al., 2018)

2.2.1 (a) Agency theory

A key component of agency theory is the economic theory described by Alchian and Demsetz (1972), and further developed by Jensen and Meckling (1976). As part of agency theory, Alchian and Demsetz (1972) developed the economic theory described by Jensen and Meckling (1976). The separation of ownership and control is an important aspect of the theory (Bhimani, 2008). These relationships demonstrate the relationship between principals (such as shareholders), agents (such as company executives), and managers. It follows from this theory that shareholders (the owners or principals of the company) hire agents to perform work; however, the owners and principals delegate the company's management to directors and managers (the shareholders' agents). An agency problem may arise when one party (the 'principals') contracts with another party (the 'agents') in order to make decisions on their behalf. Agents can conceal information and manage firms in their own interests, as was the case with Adelphia, Enron, WorldCom, and Parmalat. Meckling and Jensen (1976) define the

agency problem as the consumption of perks by managers and other forms of empire building. According to Daily et al. (2003), agency theory has gained prominence as a result of two major factors. The first feature of this theory is that it is conceptually based, simple, and reduces firms to two participants: managers and shareholders; and the second feature is that it implies employees or managers are capable of self-interest. To align the interests of executives and shareholders, Roberts (2004) suggests accepting certain agency costs as either incentives or sanctions. According to agency theory, corporate governance plays a key role in facilitating compliance by curbing the self-serving tendency of executives to compensate for risk in an opportunistic manner.

2.2.1 (b) Stewardship Theory

Based on stewardship theory, managers are motivated by their desire to achieve and gain intrinsic satisfaction through challenging tasks, so their motivation extends beyond financial considerations. Stewardship theory suggests that executives must act autonomously in order to maximize shareholder returns. Managers, therefore, require authority and recognition from their peers and superiors in order to perform their duties effectively. Therefore, shareholders must approve appropriate governance structures, mechanisms, authorities, and information for managers to exercise autonomy based on trust in order to minimize their liability while achieving the company's objectives (Donaldson and Davis, 1991). According to stewardship theory, top management plays a pivotal role in integrating the organization's goals. Executives and directors, according to Daily et al. (2003), are compelled to maximize the financial performance of their organizations in order to maintain their reputations. In order to remain in his or her position, a manager is responsible for maximising investor profits and establishing a positive reputation. Stewardship theory advocates unifying the CEO and chairman's responsibilities in order to reduce agency costs (Abdullah and Valentine, 2009). The management philosophy of stewardship also consists of

five components: trust, open communication, empowerment, long-term orientation, and performance enhancement.

2.2.1 (c) Resource Dependency Theory

According to the resource dependency theory, developed by Pfeffer and Salancik (1978), the board of directors (BOD) plays a key role in providing access to the resources that are necessary to improve the performance of the firm. In addition to facilitating access to resources, a board also creates buffers against adverse changes in the external environment (Hilman et al., 2000); creating links with the external environment to access appropriate resources; and facilitating communication between the organization and the external environment. According to Abdullah and Valentine (2009), directors are classified as insiders, business experts, support specialists, and community leaders. Former and current executives who provide expertise in the organization's specific fields constitute the two types of 'insiders'. Business experts fall into two categories: current and former executives and directors of large for-profit organizations who provide expertise on business strategy and decision making. A 'support specialist' is also a professional in their field, such as a lawyer, a banker, or an insurance company representative. In conclusion, a member of the 'community influential' should be a political leader, a member of a university faculty, a member of the clergy, or a representative of an organization within the community. In terms of monitoring and controlling the board's activities, outside directors are shown to play a significant role. It is a well-known fact that the value of a company increases as the number of external directors increases (Coles et al., 2006; Abdullah and Valentine,2009; Boubakri, 2011). There is a great deal of relevance to resource dependency theory in the context of firms as diverse backgrounds of directors enhance the quality of their advice (Zahra and Pearce, 1989). In accordance with the theory, larger boards are more likely to achieve collective agreement and coordination (Booth and Deli, 1996; Dalton et al., 1999). Cheng (2008) found no correlation

between a large Board of Directors (BOD) and a higher stock price for a company. It has been found that outsiders on the board (i.e., more outsiders on the board) are negatively correlated with firm performance risk as measured by the volatility of stock returns by Brick and Chidambaran (2008).

2.2.1 (d) Stakeholder Theory

Based on stakeholder theory, managers must communicate with a variety of stakeholders, including their employees, shareholders, suppliers, business partners, and contractors. In contrast to the agency theory, which asserts that managers have the sole objective of maximising shareholder wealth, this theory was developed by Freeman (1984). As a result of stakeholder theory, this perspective is inadequate because managers' actions may also affect non-shareholders as well. It is important for managers to be accountable to stakeholders in accordance with stakeholder theory. Stakeholders are groups or individuals who can affect or are affected by a corporation's achievement of its objectives. According to stakeholder theory, organizations should comprise a board of directors composed of representatives of various stakeholder groups to promote consensus building, avoid conflicts, and harmonize efforts to meet organizational objectives (Donaldson and Preston, 1995). The purpose of this strategy is to ensure that the interests of stakeholders are adequately protected. Stakeholder theory is criticized for burdening managers with the responsibility of resolving conflicts of interest among several stakeholders without setting out specific guidelines. Stakeholder theory examines the nature of these relationships in relation to processes and outcomes for both the firm and its stakeholders. According to Freeman (1984), the network of relationships among many groups may have a significant impact on decision-making processes. Additionally, Donaldson and Preston (1995) believe that stakeholder theory emphasizes managerial decision-making and that stakeholder interests are intrinsically valuable, and that none of the stakeholder interests is assumed to be dominant over the other.

Accordingly, managers should take into consideration the interests and influences of those individuals who will either be affected by or may be affected by their organization's policies and operations (Frederick et al., 1992). By protecting all stakeholders' interests, Jensen (1993) holds that managers should pursue objectives that enhance the long-term value of their organizations.

2.3 Earnings management – A review

Earnings management havenumerous forms and include various deceptive practices. As far as the literature is concerned, the most important definition of the term "earnings management". Common definition is, “Earnings management occurs when managers use judgment in financial reporting and structuring transactions, thereby altering financial reports either to mislead stakeholders about the company's underlying economic performance or to influence contractual outcomes based on reported accounting numbers” (Healy and Wahlen, 1999). The earnings management concept was proposed by Schipper (1989) as a means of obtaining private gain for shareholders and managers through a purposeful intervention in the external financial reporting process. Earnings management is the practice of managers exercising discretion over accounting numbers, as stated by Field et al. (2016). This discretion can be exercised either in order to maximize the value of the organization or in order to exploit opportunities. Earnings management can be categorized into two types: opportunistic and informative. In order to pursue their own interests, managers engage in opportunistic earnings management in order to mislead investors. The use of accruals by managers to strategically manipulate bonuses is mainly documented in Kaplan (1985). It is the stockholders who lose out whenever earnings management results in abnormal profits for managers. A compensation increase may be implemented (Kaplan, 1985). Managerial compensation is associated with higher levels of earnings management. According to Burns and Kedia (2006), Cohen et al. (2006), as well as several other studies, discretionary accruals are more common in companies with top management compensation closely tied to stock

value. This is particularly true when stock options are involved, as mentioned in Bergstresser and Philippon (2006), Cheng et. al. (2010), and others. The concept of informative earnings management was developed by Holthausen and Leftwich (1983). A manager may use managerial discretion to disclose to investors their private expectations regarding the cash flow of the firm in the future. Using earnings management may benefit shareholders if it provides managers with private information (Healy and Palepu, 1993) or reduces political costs (Watts and Zimmerman, 1986). There are other manipulations that are included in earnings management besides accounting decisions. The above definitions of earnings management are criticized by Dechow and Skinner (2000) since they do not clearly distinguish between "earnings management" and "fraud.". Fraud can be defined as "an intentional, deliberate, misstatement or omission of material facts, or accounting data, which is misleading and, when combined with all other available information, would cause the reader to change or alter their judgment or decision" (The National Association of Certified Fraud Examiners, 1993). It has been suggested by Dechow and Skinner (2000) that there is only a thin line between earnings management and fraud. Therefore, earnings management activities can be classified in a variety of ways, and they cannot always be easily categorized. The spectrum of accounting standards ranges from very conservative to complete legitimacy at one extreme to fraud at the other. Dechow and Skinner (2000), however, suggest that it is hard to distinguish between opportunistic earnings management as well as legitimate accounting discretion when it comes to aggressive accounting choices. The identification of managerial incentives to manage earnings will lead to additional research on manager incentives, which will be conducted in the future. The Schipper (1989) definition appears to be the most comprehensive among those discussed above since it emphasizes that earnings management is a deliberate process that involves any manipulation that affects financial reporting, whether it be through earnings numbers or other accounting items. There are two

types of fraud: legitimate (according to general accepted accounting principles) and illegitimate (under accounting fraud principles). This manipulation can serve a managerial or shareholder purpose (opportunistic earnings management) or both. The use of earnings management is considered unethical by financial statement users, according to Kaplan (1985). As a result, managers' and companies' reputations may suffer, and the credibility of their companies may be undermined in the financial markets. Kaplan examines whether shareholders and non-shareholders of a company view earnings management as unethical depending on the intention and technique of earnings management. His experiment demonstrates that non-shareholders do not always view earnings management as unethical, while shareholder opinions are influenced by the intention of earnings management (individual managerial benefit versus company benefit). In all three definitions, managers' intent is required to manage earnings, but whether this intent is opportunistic is in dispute. A study by Becker et. al. (1998) investigates the possibility of opportunistic earnings management smoothing. As far as earnings management is concerned, he refers to it as only a form of opportunistic behaviour, not as a means of improving earnings persistence and predictability. Moreover, the above definitions illustrate that earnings management involves more than just reported earnings, as it impacts other accounting metrics as well. It is therefore possible to implement earnings management through supplementary disclosures, targeting, for example, financial ratios instead of earnings. Are there any activities that can be considered earnings management? There is a great deal of importance to this question. As a result of the nature of accrual accounting, managers are afforded considerable flexibility when it comes to determining the actual earnings that a company reports at any point in time. Advertising expenses and research and development expenses are frequently timed to maximize profits. In addition, companies can adjust the timing of revenue and expense recognition by, for example, delaying recognition of losses until after loss reserves are

established or advancing revenue recognition through credit sales. As part of earnings management, judgments can be made regarding, for example, the economic lifetime of assets and the impairment of such assets. As in most earnings management studies, this study relies on Healy and Wahlen's definition of earnings management, which assumes that earnings management serves as a means of concealing deteriorating financial performance. According to Healy and Wahlen's definition, earnings management may be informative for shareholders, but the word 'mislead' does not exclude this possibility. As a result, in this study, the term "earnings management" is used as an expression of management opportunism.Pornupatham (2006) has identified three major motivations for earnings management in her analysis. Firstly, capital market expectations, which states that better firm vitals, that is, consistent pattern of earnings increase may dominate higher price-to-earnings multiples (Barth et al., 1999). Secondly, contracting motivations, that incorporates the incentive-oriented motivation of managers as they are aligned to firm’s performance and accounting numbers as per the pre-determined contracts (Watts and Zimmerman, 1986). Firms with highly remunerative management contract may motivate managers to maximise firm value, which sometimes can lead into earnings management. Thirdly, regulatory motivation and political costs that describes about the accounting discretion for regulatory purposes. Managers of companies that are at risk of being investigated for antitrust violations or other adverse events have an incentive to manage earnings downward (Watts and Zimmerman, 1986). Pornupatham (2006)in his study has summarized various earnings management techniques used, which include; Income smoothing, Big Bath Accounting, Accounting choices and other accounting manipulations, and off-Balance sheet liabilities. The income smoothing technique is used when firms wish to postpone excess incomes in profitable years in order to increase incomes in loss years, or vice versa. The managers of a company may attempt to control earnings downward by establishing a high level of provision for judgemental areas during profitable

years and reversing it during loss years or delaying revenue recognition until the following year (Beidleman, 1973; Copeland, 1968; Dascher and Malcolm, 1970; Lev and Kunitzky, 1974; Ronen and Sadan, 1975; White, 1970). If a company suffers material losses and is unable to recover to profitability, the Big Bath Accounting technique is used. Managers of firms can recognize future losses (e.g., provision, special items) in the year in which they have substantial losses, and this will improve their earnings in the following year. This technique may be driven by management compensation plans, such as bonus schemes, that are linked to the company's financial performance. According to Healy (1985), managers tend to reduce earnings when annual earnings have already reached the bonus cap or cannot reach the bonus threshold. It is important to note that such treatment will not affect the current bonus but will increase the chances of managers receiving bonuses in the future. A firm's managers may have a variety of accounting choices for one accounting practice, such as the method for calculating inventory costs, depreciation, and leasing. Accounting practices such as these may introduce discretionary accounting accruals used by managers to manage earnings (Cushing, 1969). Managers may prefer the first-in, first-out method (FIFO) when earning potential is high and inventory prices are rising. This method results in the cost of goods sold being presented at a historical cost, which is lower than the current cost, and the ending inventory being presented at the current cost. Managers may choose the last-in, first-out (LIFO) method if they wish to reduce earnings at a time of rising inventory prices since it allows them to present both the current and historical cost of goods sold. According to Sweeney (1994), firms manipulate their earnings when they are at risk of defaulting on their loans. As an alternative, managers can apply the weighted average method of calculating the cost of inventory in order to smooth their incomes during periods of rising inventory prices. Managers are likely to conceal their liabilities using off-balance sheet liabilities when business contracts are tied to liabilities listed on balance sheets (Revsine et al., 2002). In such

a case, the company would have to maintain a debt-to-equity ratio that does not exceed the maximum level required by the debt covenant; otherwise, it would be in breach of the contract and would be required to repay the outstanding loan.

The topic of earnings management has attracted the attention of financial regulators in recent years. By improving the functioning of capital markets, reducing information asymmetry, reducing capital costs, and protecting the interests of minority shareholders, regulators can improve the functioning of earnings management practices. The Sarbanes-Oxley Act of 2002 and the Regulation of Fair Disclosure have been implemented to mitigate earnings management practices in the United States. By implementing these interventions, auditors can evaluate financial statements in a more consistent and accurate manner. A more accurate and consistent financial reporting across firms and industries benefits both financial analysts and shareholders, allowing the most accurate conclusions to be drawn.

Several corporate governance mechanisms have been demonstrated to have a significant impact on earnings management measures, including CEO duality, directors' shareholdings, board size, board composition, quality audit committee, executive compensation, and board independence. (Bedard et. al., 2004;Tehranian et. al., 2006; Xie et. al., 2001; Zhou and Chen, 2004). Most research has found a positive association between corporate governance and earnings management (Love, 2011). In this regard, it is possible to argue that sub-optimal or outright failing governance systems contributed significantly to the collapse of many well-known companies. It is common for organizations to fail to meet the expectations of their various stakeholders as a result of weaknesses in their internal control infrastructures and operating environments. A lack of commitment to high ethical standards contributes to this situation as well. These weaknesses may be deliberately or intentionally created by organizational designers and controllers, or they might result from naive assumptions implying or encouraging enlightened self-interest on the part of managers, which

should ultimately lead to a mutually beneficial outcome. (Donaldson and Preston, 1995). Lin and Hwang (2010) describe good corporate governance as a means of ensuring that management effectively utilizes enterprise resources and reports financial conditions and operating results fairly. A company's corporate governance determines whether management will engage in earnings management, according to Dabor and Ibadin (2013). Study findings on earnings management indicate that companies with weak corporate governance are more likely to manipulate earnings (Beasley, 1996; Klein, 2002, cited in Dabor and Ibadin 2013). In financial reporting, corporate governance is established to ensure compliance with generally accepted accounting principles (GAAP) and maintain credibility. It is also expected that they will reduce earnings management in addition to providing effective management monitoring.

2.4 Corporate governance and earnings management

Observed breaches of restrictive covenants by external auditors are reported to users of financial reports by external auditors (DeAngelo, 1981). In addition, they audit management's compensation plan's accounting numbers (Watts and Zimmerman, 1986). Consequently, auditors are likely to restrict discretionary accruals and opportunistic earnings management. The quality of an auditor is determined by the ability of the auditor to detect and reduce earnings management within a company. The definition of audit quality, however, does not have a consensus (Palmrose, 1988), and it cannot be directly measured. Detecting earnings management within a company may be made easier using corporate governance mechanisms. Several studies have demonstrated that independent non-executive directors can reduce earnings manipulation by monitoring and withstand management discretion effectively (Klein, 2002; Xie et al., 2003). Besides being independent, audit committees are responsible for preparing the financial statements of the company, monitoring, and communicating with the external auditors, and possessing knowledge of financial and accounting matters. As a result, effective corporate governance mechanisms may result in a

reduction in earnings management. Therefore, firms with good corporate governance are likely to have lower discretionary accruals than their counterparts with weak corporate governance.

Financial reports can be improved by external independent audits, reduced agency costs, and investors can obtain relatively reliable information from these audits. By exposing and correcting earnings manipulation, a high-quality audit can serve as a restraining force on management's opportunism behaviour, thereby enhancing the accuracy of the financial report. In principal-agent systems, independent auditing is primarily designed to address information asymmetry. The purpose of certified public accountants' auditing services is to ensure that decisions made based on financial reports are effective. The way listed companies manage their earnings is affected by the interaction between internal corporate governance and external audit supervision. DeAngelo (1981) examines the relationship between the size of an accounting firm and the quality of its audits in terms of external auditing. Audit quality is positively correlated with the size of the accounting firm. Even if both auditors possess a similar level of professional competence, the quality of the audit report may differ between auditors from different accounting firms. When large firms fail to detect abnormal earnings in their clients' annual reports, they will incur a greater loss. The results of the study indicate that larger accounting firms are better equipped to prevent earnings management. In addition to Dopuch and Simunic (1980), Teoh and Wong (1993), Defond and Jiambalvo (1994) and Beckeret al. (1998), several studies have examined the relationship between earnings management and external auditing. In accordance with the study by DeAngelo(1981), firms' earnings management is more likely to be detected by external auditors if the audit report is issued by a larger accounting firm. In accordance with Defond andJiambalvo (1993), auditors are more sensitive to positive earnings management than negative earnings management. A company's industry expertise can also affect the quality of audit reports, and earnings

management differs significantly from industry expertise of auditing firms (Bonner and Lewis 1990). According to some studies, earnings manipulation is negatively correlated with the presence of an audit committee on the board of directors (McMullen and Raghundan, 1996). In other words, companies with audit committees on their boards are less likely to manipulate their earnings. The presence of some professional auditors on the audit committee can prevent earnings manipulation (Beasley, 1996;Dechow et al., 1996; Cheng et. al., 2008). A study conducted by Bedard et. al. (2004) has shown that an audit committee's number of independent directors can have a significant effect on the management of the firm's earnings. The degree of earnings management will increase as the number of independent directors on the audit committee increases. A high-quality external audit can effectively restrain accrual earnings management, while at the same time maintaining its motivation. Companies may turn to real earnings management, even at a high cost, when earnings management of accrued profits is forced to decrease due to external audit. According to Chi et. al. (2009), high-quality auditing would restrict accrual earnings management in companies with strong earnings management requirements. It was found, however, that companies opted for a more hidden method of managing their real earnings. When Alhadab(2018) investigated the impact of audit on the management of real earnings during an IPO, it could effectively reduce the management of real earnings through expenses. However, at the end of the year, the company will still conduct real earnings management through sales. The characteristics of boards have been found to have a significant impact on the management of earnings in previous studies. According to Lipton and Lorsch (1992), there is a negative relationship between board size and the effectiveness of the board's monitoring. A particular problem will arise with the increase in the number of directors on the board. This will result in a decrease in the quality of the monitoring function of the board, which in turn will result in an increase in the amount of earnings management (Xie et. al. 2003). He demonstrates that the likelihood that directors

with a finance backgroundon the board will increases as the number of directors on the board increases. In this way, the quality of the monitoring function may be enhanced, resulting in a decrease in the extent to which firms manipulate their earnings. As stated by Dechowet al. (1996), independent directors can prevent earnings manipulation. Consistent with Klein (2002), firms with a high proportion of independent directors tend to avoid manipulating their earnings. An independent board of directors has a negative relationship with earnings management, according to Beasley (1996). Adding independent directors to a board will increase the independence of a board(Klein 2002). It is therefore possible to prevent earnings management. The proportion of independent directors on a company's board was also found to be negatively related to earnings management by Xieet al. (2003). A firm's ability to manage earnings will be impacted by whether the chairman of the board is also the chief executive officer, according to Dechow et al. (1996). A lack of oversight by the board of directors makes it more likely that the chairman of the board will manipulate earnings becauseCEOs are monitored and supervised by the board. Reichelt and Wang (2010) examines the relationship between board independence and earnings management and concludes that there is a connection between board independence and earnings management. Lin et. al. (2007) explains that if the Chairman of the company is also the CEO, there is a greater likelihood of earnings management.

2.4.1 Theoretical Foundation of Corporate governance and Earnings Management

According to agency theory, ownership and control are distinct. It is common for managers to be motivated by their own self-interest rather than by the interests of shareholders. These conflicts of interest have a cost, and it is difficult to verify that managers are maximizing shareholder value (Jensen and Meckling, 1976; Fama and Jensen, 1983). In order to maximize personal gain, managers manage a firm's earnings in order to maximize self-interest. As a result of managers' discretion over accruals, earnings management can be

considered an agency cost. This can reduce the relevance and reliability of earnings reports. This leads to managers being unable to be trusted, and strict supervision is required. In order to ensure that top management acts in the best interest of shareholders, the board of directors must monitor their activities. According to Peasnell et al., 2005, corporate governance is an important factor in resolving issues associated with agency management. As such, audit committees are considered crucial components of the decision control system for resolving agency problems (Jensen and Meckling, 1976; Fama and Jensen, 1983). As a result of improving corporate governance mechanisms, earnings management practices based on agency assumptions should be reduced. Contrary to this, stewardship theory advocates a different approach. This theory holds that managers' interests are aligned with the interests of shareholders. As good stewards of the firm's resources, the managers should be trusted with the firm's assets since they are trustworthy. It is not necessary to monitor managers since they act in the best interests of shareholders and are not opportunistic. Since they gain satisfaction from performing their work effectively and achieving the objectives of the organization, autonomy should be granted to them. In addition to financial motives, managers also seek recognition, respect, and a strong work ethic (Donaldson and Davis, 1994; Davis et al., 1997; Chen et al., 2007). In stewardship theory, managers are less likely to practice earnings management, and the board of directors is more likely to assist managers rather than monitor them. Based on the stakeholder theory, firms and society are interdependent, and firms have a responsibility not only to their shareholders, but also to society (Kiel and Nicholson, 2003). Agency theory requires that the board not only consider the interests of shareholders, but also those of many other stakeholder groups, including social and environmental concerns (Freeman, 1984). According to the link between earnings management and stakeholder theory, management may engage in earnings management for personal gain, at the expense of both shareholders and other stakeholders. The stakeholder theory suggests that effective

corporate governance mechanisms should protect the interests of all stakeholders (Prior et al., 2008). Stakeholder theory faces the challenge of aligning the interests of different stakeholders and considering their needs equally. Due to the criticism that aligning various conflicting stakeholder interests may adversely affect a firm's welfare, it has little influence on corporate governance policy. Corporate governance can benefit from each of these theories when considering the efficiency and effectiveness of monitoring and control functions. The purpose of this study is to examine the relationship between earnings management and corporate governance based on agency theory. Neither of these theories is intended to replace agency theory, but rather to complement it. Throughout the following sections, we describe prior literature that examines the relationship between earnings management and corporate governance, either through variables relating to audit committees, such as size, independence, diligence, and expertise, or through indices relating to corporate governance. For the purpose of developing research hypotheses that can be tested in the future, this study examines the relationship between corporate governance and earnings management.

2.5 Audit committee and earnings management

An audit committee is an important governance mechanism that ensures a fair presentation of financial statements and monitors management on behalf of shareholders. Weak governance systems observed in emerging markets can be remedied by a strong audit committee. Through the interaction between corporate governance, the audit committee, shareholders, and the board of directors, efficient financial and operating management practices can be developed. According to researchers (Bédard et. al. 2004; Liao and Hsu 2013; Leung et al. 2014), corporate governance and audit committees can improve the value of the company and the efficiency of its marketing activities. In addition to being a fundamental responsibility of a corporation, it is also a fundamental component of the

communal system to report financial information. Using financial reporting, companies communicate with their stakeholders to reduce information asymmetry between directors, who have access to management information, and other stakeholders. As demonstrated by Duchin et. al. (2010), corporate governance can enhance the credibility and transparency of financial statements. As a result of these developments, several empirical studies (Chan and Li, 2008; Bédard et. al., 2004; Yasser et. al., 2011; Erkens and Bonner, 2013) have identified audit committees as critical to the credibility of financial statements (Abbott et. al., 2000). According to Bergstresser and Philippon (2006), earnings management is designed to maximize profits rather than reflect an organization's true performance. Various alternative corporate governance systems exist throughout the world, and there is considerable debate regarding whether they are effective, superior, or beneficial (Vera-Munoz, 2008). According to Lin et. al. (2006), such judgments are based on a lack of evidence regarding the relative performance of different corporate governance systems.

Boards of Directors will have established an Audit Committee, which is responsible for financial reporting. Additionally, previous studies indicate that the frequency, size, composition, and expertise of Audit Committee meetings may affect the effectiveness of monitoring at each tier (DeZoort et al., 2003; Walker, 2004) in addition to the benefits associated with the establishment of the Audit Committee. A company's Audit Committee's size will vary based on its needs and the extent of the responsibilities delegated to it. Bahrain Corporate Governance Code stipulates that the board must appoint an Audit Committee consisting of at least three members, including the chairman, who must be independent. It appears that the size of the Audit Committee is also an important characteristic when it comes to the effectiveness of the Audit Committee. An insufficient number of directors may be unable to perform their duties in the committee, thereby reducing the effectiveness of monitoring (Vafeas, 2000). It is likely that the individual directors will not be able to perform

their duties as effectively as they would like because the functions of the committee are distributed among a small number of directors. In addition, when the committee is too large, the directors' performance may be negatively impacted due to coordination issues and the process, which is also considered to be a contributing factor to weaker monitoring (Jensen, 1993; Vafeas, 2000). Based on empirical evidences, three to four members are the ideal size for an Audit Committee (Vafeas, 2000; Xie et al., 2003; Abbott et al., 2000). Firms with larger audit committees can monitor their management more effectively, according to evidence of the size of the audit committee. In a study conducted by Yang and Krishnan (2005), the relationship between quarterly management of earnings and audit committee size was examined in 896 U.S.A. companies between 1996 and 2000. Quarterly earnings management is lower in companies with a high number of Audit Committees. In the absence of sufficient members on the Audit Committee, it may indicate that the Committee is unable to monitor the integrity of financial reports effectively. According to Chen and Zhou (2004), larger firms tend to select Big 4 audit firms for their audit committee because they are more concerned about their auditors' reputations. Financial reporting is more effectively monitored by an Audit Committee that is larger. The independence of the Audit Committee has been demonstrated empirically to be consistent with the agency theory that independence (director) is a fundamental characteristic of a monitoring committee that contributes to its effectiveness (Fama and Jensen, 1983). According to multiple studies conducted by Abbott et al. (2000; 2004), independent audit committees are associated with avoiding fraudulent financial reporting, as well as lower earnings restatement rates (Agrawal and Chadha, 2005) and EM (Klein, 2002; Xie et al., 2003; Bedard et al., 2004). In addition to providing judgment, making equitable assessments, and effectively monitoring management, independent audit committees are expected to provide unbiased information. In addition, Carcello and Neal (2000) demonstrate that firms in financial distress make disclosure decisions in accordance

with the recommendations of an independent audit committee. An independent audit opinion of audit is less likely to be provided by auditors at firms with a greater number of independent auditors. Furthermore, the independent auditors are more effective at protecting auditors from dismissal following the issuance of an audit report than corporate auditors. In studies by Abbott and Parker (2000) and Chen et al. (2015), it was found that a greater proportion of independent Non-Executive Directors on the Audit Committee resulted in auditors specialising in the industry being assigned to audit the Audit Quality. It appears that independent audit committees are associated with higher financial reporting quality and can serve as effective monitoring tools. In addition to protecting the rights of shareholders, a good audit committee plays a significant role in the development of capital markets by protecting investor interests (Rahamanand Ali, 2006). In order to implement corporate governance principles, an audit committee is essential. Independent or outside directors are shown to improve disclosure quality (DeFond et. al., 1998; Ajinkya et. al., 2005; Bergstresser and Philippon 2006; Duchin et. al., 2010; Liao and Hsu 2013), decreasing the likelihood of financial statement fraud (Yang and Krishnan 2005; Abdullah et. al., 2018), curtailing earnings management (Klein 2002; Xie et. al., 2003; Peasnell et. al., 2005; Jaggi et. al., 2009; Dimitropoulos and Asteriou, 2010), lowers the incidence of related party transactions (Denis &McConnell, 2003), and enhances the firm's performance (Choi et. al., 2009). Malaysian evidence indicates, however, that the independence of the board does not enhance the clarity of reporting (Haniffa and Cooke, 2002) and does not restrain corporate restating (Rahamanand Ali, 2006), which supports the notion that independent non-executive directors serve only a ceremonial, symbolic, and window dressing function. In compliance with the Sarbanes-Oxley Act of 2002, firms are required to have an audit committee comprised of independent directors who are not affiliated with the firm and are not compensated by it other than director's fees. The independent nature of audit committees has been demonstrated in

several studies to enhance the quality of financial reporting. Furthermore, Abbott et. al. (2000) and DeZoort et. al. (2003) demonstrate that the independence of the audit committee reduces earnings management, restatement of financial statements, and fraud in financial statements. Furthermore, the number of independent directors on the audit committee has a significant impact on the likelihood that companies will receive an accurate assessment of their performance (Carcello and Neal, 2000; Vera-Munoz, 2005). According to Yang Krishnan (2005), independent directors on audit committees are significantly less likely to experience problems with financial reporting. According to Pomeroy and Thornton (2008), the independence of the audit committee enhances the quality of audits by preventing going concern reports and auditor resignations more than it does by improving accruals quality and preventing restatements. A meeting of the audit committee is held in which directors discuss and monitor the financial reporting process. Unless the independent audit committee is also active, it is unlikely to be effective (Haniffa and Cooke, 2002). In order to provide reliable information, an audit committee should meet at least four times a year, according to the Blue-Ribbon Committee on Audit Committees. According to the audit committee regulation in Britain, there should be no fewer than three meetings per financial year in order to comply with the requirement for semi-annual interim financial reports. Bédard et. al., (2004) found no significant correlation between audit committee meetings and financial reporting quality in most studies. Research by Xie et. al. (2003) and Jing et. al. (2008) has shown that audit committee meeting frequency is positively correlated with the level of corporate disclosure. Based on previous studies (Abbott et al.,2000;Vafeas, 2000; and Peasnell et al., 2009), a greater level of auditor activity is associated with a lower incidence of financial restatement, reporting a small increase in earnings, or fraudulent financial reporting. It has been suggested by Yang and Krishnan (2005) that one of the most effective ways for the audit committee to remain knowledgeable and informed about accounting issues is to hold regular meetings. In

addition, the audit committee will be able to direct internal and external audit resources to address the issue in a timely manner. When the audit committee meets, problems encountered in the financial reporting process are identified, but if the frequency of the meetings is low, the problems may not be rectified and resolved on time. A previous study examined whether the size of audit committees is an effective mechanism for monitoring and controlling financial reporting. According to Baxter and Cotter (2009), a large board size may also lead to delays and administrative bottlenecks. According to other studies, however, smaller boards may be less burdened by bureaucracy. A large board can devote more time and resources to monitoring the financial reporting process and internal control systems, according to Anderson et. al. (2004). By increasing the membership of the audit committee, members will be able to distribute the workload more evenly and devote more time and resources to monitoring the management and detecting fraudulent activity.

2.6 Research gap

The existing studies have considered the linear relationship between corporate governance and earnings management in the context of developed and developing nations. Also, the asymmetric relationship has not been explored in detail by the previous studies. Moreover, the moderating role of the audit committee in explaining the relationship between corporate governance and earnings management has not been explored till date to the authors' knowledge. Hence the present study tries to explore comprehensively the nature of relationship between corporate governance and earnings management and the moderating role played by the audit committee in the relationship between corporate governance and earnings management. In addition, the present study tried to explore the relationship between corporate governance, audit committee characteristics and earnings management at different quantiles thereby providing unique insights on the relationship.

2.7 Research questions

The extensive literature survey leads to the following questions in determining the relationship between corporate governance, audit committee and earnings management.

1. How does corporate governance mechanisms affect the earnings management practices of the companies?
2. What is the role of audit committee in detecting and deterring the earnings management?
3. Is there any prominent role played by the audit committee as a moderator in determining the relationship between corporate governance and earnings management?

2.8 Research hypotheses

H_1 : Corporate governance mechanisms reduces the earnings management

H_2 : Audit committee characteristics reduces the earnings management

H_3 : Audit committee characteristics moderates the relationship between corporate governance mechanisms and earnings management

2.9 Summary

The concept of earnings management or creative accounting refers to reported earnings that reflect the desires of management rather than the company's underlying economic substance. The reasons for managing earnings may include meeting capital market expectations, meeting management's compensation contract requirements, avoiding financial obligations, and avoiding political costs. If Generally Accepted Accounting Principles (GAAP) permits alternative accounting practices and accounting judgement, firms' managers can use several accounting techniques to manage firms' earnings. A few of these techniques include income smoothing, big bath accounting, off-balance sheet accounting, and accounting choices.

As evidenced by the literature, effective board of directors, effective audit committees, effective auditing, and effective ownership structures are among the corporate governance mechanisms which can limit opportunistic behaviour and protect stakeholders' interests. In order to ensure the effectiveness of a board, independence, size, and duality of the CEO are all important factors. Based on the evidence on board characteristics, it appears that the presence of independent directors can serve as a control mechanism for management of earnings. In addition, some evidence suggests that board activity and size can be helpful in reducing such practices.

It is possible to ensure the effectiveness of an audit committee by ensuring its independence and size. A literature review indicates that when audit committees are independent and composed of experts, the quality of accounting information is improved. It is also possible to use the size of the audit committee and its activity as a means of controlling. The Healy Model, the DeAngelo Model, the Industry Model, the Jones Model, the modified-Jones Model, the KS Model, and the Margin Model have been used in prior research studies to measure earnings management. Based on the ordinary least squares technique, total accruals are divided into discretionary and nondiscretionary accruals. As a result of multiple regression, the residual error represents the discretionary proportion of accruals or earnings management. According to Dechow et al. (1995), modified-Jones models are more powerful than other models and generate fewer type II errors than others. Thus, this research study applies both of this model to describe earnings management in India.

Chapter III

Research Design

3.1 Introduction

TheControlling shareholders and minority shareholders have a more prominent conflict in the Asian context (La Porta et al., 1999). In emerging countries, disagreement between investors, coupled with a lack of regulation, create an environment conducive to the extraction of firm resources. This is supported by the findings of previous literature (Bertrand et al., 2002; Claessens et al., 2002; Lins, 2003). India has a very different corporate structure from other countries. The corporate structure of India differs from that of other developed markets such as the United States and the United Kingdom. In this context, the present study explores the relationship between the corporate governance mechanisms, audit committee characteristics and earnings management. Corporate governance plays a significant role in detecting and deterring earnings management practices of the companies. Earnings management might be seen good in books as it enhances the valuation of the company and presents a better picture about the functioning of the company but in the long run it might be a moral hazard and detrimental to the firm. In this chapter, the variables considered for the study and the methodological rationality behind the selection of variables has been explained in detail.

3.2 Sample selection and source of data

In order to study the objectives stated in chapter 1, the following research framework is proposed. The study investigates the corporate governance characteristics and its impact on earnings management and further the role played by audit committee, in enhancing or weaking the relationship between corporate governance and earnings management. The data related to calculation of earnings management and other financial control variables were extracted mainly from the secondary database namely, Center for monitoring Indian

economy (CMIE) prowess. The data related to corporate governance and audit committee characteristics were manually obtained from the annual reports of the company. The top one thousand companies in terms of market capitalization as on 31st March, 2014 were selected for analysis. The logical reason for choosing the sample firms as mentioned above is that the top thousand market capitalization companies accounts for around ninety per cent trading volume and value in the BSE and NSE. The period of study was for eight years from 2014 till 2021.

However, companies with any of the following criteria were excluded:

a) Banking, Insurance and Financial firms as these firms are subject to different regulatory bodies and that their accounts are differently structured thus making difficult for comparison.
b) Companies that are merged / taken over / bankrupt during the period of our study
c) Foreign firms as they more or less have the similar board room practices and structure as that of their parent firms. The foreign subsidiaries were identified by verifying the annual reports and the other internet sources such as the Bloomberg website.
d) Also, government owned firms were also excluded since the corporate governance mechanisms are different from the other firms.

3.3 Variables

The variables considered for the study are tabulated in the table given below. Rationality for the considerations of the dependent, independent, control and moderating variables are further explained in this chapter.

Table 3.1. Variables definition

Variables	Definition
Panel A: Independent Variables	
BOARD_SIZE	Board size: Logarithm of the number of directors on board
BOARD_INDP	Board Independence: Percentage of Independent Directors on board to the total board size
CEO_D	CEO_duality: Dummy variable, indicating that the CEO is the chairman/ Managing director of the board (=1 if CEO is the chairman/MD of board or zero otherwise)
Panel B: Dependant Variables	
AEM	Modified Jones 1991 model proposed by Dechow et al. (1995)
REM1	$\text{REM1} = (-1) * \text{abdisex} + \text{abprod}$
REM2	$\text{REM2} = -1((-1 * \text{abcfo}) + (-1 * \text{abdisex}))$
Panel C: Moderating Variables	
AUDIT_SIZE	Audit committee size: No. of members on audit committee
AUDIT_INDP	Audit committee independence: No. of independent directors on audit committee
Panel D: Control Variables	
BIG4	Audited by BIG4 Firms: Dummy variable, indicating that the firm is audited by Big 4 auditors (=1 if firm is audited by Big 4 auditor or zero otherwise)
FIRM_S	Firm Size: Logarithm of total assets
LEV	Leverage: Total debt/total assets
MTB	Market to Book ratio: Market value/book value
GROWTH	Growth potential: annual growth rate of sales
ROA	Return on assets
INTANGIBLE_TA	Net value of intangible assets/total assets
CFO_TA	Cash-flow from operations/ total assets.
INSTI_SHARES	Percentage of Institutional investor shareholdings
FOREIGN_INSTI_SHARES	Percentage of Foreign Institutional Investor shareholdings
GDP	GDP growth rate: Control for regional economic conditions

3.3.1 Dependant variables

The main dependant variables are the earnings management proxies. Here we have considered both AEM and REM. First, we calculate the discretionary accruals following modified Jones (1991) model proposed by Dechow et al. (1995). We then calculated the REM following Roychowdhury (2006). The following section gives the details 3.3.1.1 gives

the details related to calculations of AEM and 3.3.1.2 explains about the calculations of REM.

3.3.1.1 Calculations of AEM

First, following Cohen and Zarowin (2010)we calculate total accruals as TACC = $EBXI_t$– CFO_t. Here EBXI = earnings/income before extraordinary items and discontinued operations and CFO = cash flow from continuing operations. Then to calculate AEM, we estimate the following equation following modified Jones (1991) model for each industry and year using

$$\frac{TACC_t}{A_{t-1}} = \alpha_1 \frac{1}{A_{t-1}} + \alpha_2 \frac{(\Delta Rev - \Delta Rec_t)}{A_{t-1}} + \alpha_3 \frac{PPE_t}{A_{t-1}} + \varepsilon_t \quad \text{(a)}$$

Here,

A_{t-1} = Lagged total assets,

ΔRev_t = Change in annual revenues (sales),

ΔRec_t = Annual change in receivables,

PPE_t = Gross property plant equipment (fixed assets),

ε_t = Discretionary accruals (DACC) which is the proxy for AEM.

3.3.1.2 Calculations of REM

In order to derive real activities-based earnings (REM), we follow Roychowdhury (2006), and compute the following three components,

(a) Abnormal production costs (abprod)

We estimate the following equation (b) to calculate the abnormal production costs

$$\frac{Prod_t}{A_{t-1}} = \beta_0 + \beta_1 \frac{1}{A_{t-1}} + \beta_2 \frac{Rev_t}{A_{t-1}} + \beta_3 \frac{\Delta Rev_t}{A_{t-1}} + \beta_4 \frac{\Delta Rev_{t-1}}{A_{t-1}} + \varepsilon_t \quad \text{(b)}$$

Here,

$Prod_t$ = Cost of goods sold + Δ Inventories

A_{t-1} = Lagged total assets,

Rev_t = Total revenues in a year *t*,

ΔRev_t = Change in annual revenues (sales),

ΔRev_{t-1} = $Rev_{t-1} - SRev_{t-2}$, so revenue in period $t-1$minus revenue in period $t-2$,

ε_t = abnormal production costs which is one of the proxies for REM.

(b) Abnormal cash flow from operations (abcfo)

The abnormal cash flow from operations is calculated by estimating the following equation:

$$\frac{CFO_t}{A_{t-1}} = \beta_0 + \beta_1 \frac{1}{A_{t-1}} + \beta_2 \frac{Rev_t}{A_{t-1}} + \beta_3 \frac{\Delta Rev_t}{A_{t-1}} + \varepsilon_t \quad \text{(c)}$$

Here,

CFO_t = Cash flow from operations,

A_{t-1} = Lagged total assets,

Rev_t = Total revenues in a year *t*,

ΔRev_t = Change in annual revenues (sales),

ε_t = abnormal cash flow from operations which is one of the proxies for REM.

(c) Abnormal discretionary expenditures (abdisex)

The abnormal discretionary expenditure is calculated by estimating the following equation:

$$\frac{Disex_t}{A_{t-1}} = \beta_0 + \beta_1 \frac{1}{A_{t-1}} + \beta_2 \frac{Rev_t}{A_{t-1}} + \varepsilon_t \quad \text{(d)}$$

Here,

$Disex_t$ = Discretionary expenses which includes research & development expenses, selling, general & administrative expenses and marketing and advertising expenses (Prowess does not give data related to selling, general and administrative expenses directly and it was calculated by the authors),

A_{t-1} = Lagged total assets,

Rev_t = Total revenues in a year *t*,

ΔRev_t = Change in annual revenues (sales),

ε_t = abnormal discretionary expenditures which is one of the proxies for REM.

Then, following Zang (2012), we estimated two comprehensive measures as proxies for REM[1], as given in equations (1) and (2):

$$\text{REM1} = (-1) * \text{abdisex} + \text{abprod} \quad (1)$$

$$\text{REM2} = -1((-1 * \text{abcfo}) + (-1 * \text{abdisex})) \quad (2)$$

3.3.2 Independent variables

The main independent variables are described in this section.

3.3.2 (a) Board size:

It has been observed that large boards suffer from diffusion of responsibility, aversive attitudes toward monitoring managerial performance, and aversion to taking risks (Hermalin et al., n.d.). On the other hand, a board that is too small may have difficulty staffing and managing various sub-committees. Members of large boards bring a variety of experiences and perspectives to the table (Dwivedi & Jain, 2005). As far as Indian corporations are concerned, the Articles of Association (which are important internal documents that describe the purpose of the company and outline the method by which it will accomplish its objectives through its day-to-day operations) stipulate the maximum number of directors. According to Sections 149, 151 and 152 of the Indian Companies Act, 2013 and the Companies (Appointment and Qualification of Directors) Rules 2014, a listed company should have a minimum of three directors and a maximum of fifteen directors. Depending on the size and needs of a company, board size varies. In the literature, there are no conclusive findings regarding the association between board size and EM. In some studies, it has been demonstrated that a larger board of directors is capable of exercising better supervision over top managers who engage in aggressive accounting practices. As an example, Xie et al.

[1] REM1 was calculated by multiplying abdisex by a negative one; a higher value indicates a much higher possibility that an organization is cutting discretionary expenses; then, it was added to abprod; it will be higher if a firm reduces costs by overproduction. REM2 was calculated using Eq. (2); a higher value indicates that the firm may have manipulated sales or cut discretionary expenditures to manage earnings.

(2003) find a negative relationship between board size and EM for a U.S. sample. Additionally, these findings are line with the findings of Peasnell, Pope, and Young (2005) wherein they reinforce the results of negative relationship between the board size and earnings management in UK companies. Conversely, some results indicate that an opportunistic EM behavior is restricted by a board with few members. Further certain studies show that the board size is positively and significantly associated with EM (Hong Kong, Chin, Firth, and Kim, 2006; Gonza'lez and Garcı'aMeca, 2014; Rahman and Ali, 2006) implying bigger the board better is the monitoring function of the boards. Given the conundrum, the present study uses board size as one of the independent variables related to corporate governance mechanisms.

3.3.2 (b) Board independence:

The presence of independent directors on a board can provide an effective mechanism for monitoring top management, since independent directors are more concerned with maintaining their own reputation than that of their managers (Fama& Jensen, 1983a, 1983b). Boards dominated by outsiders are better positioned to supervise and control managers, according to Dunn (1987). Based on the agency theory of governance, the incorporation of independent directors will enhance the effectiveness of the board's monitoring activities.The outside directors contribute their wealth of experience to the firm and are independent of the firm's management (Firstenberg and Makiel, 1980). According to Beasley (1999), the ability of a board to serve as an effective monitoring mechanism depends on its independence from management. As part of previous research, some studies investigated the relationship between board independence and earnings manipulation (e.g., Klein, 2002; Xie et al., 2003; Cornett et al., 2008; Ghosh et al., 2010), however, these studies indicate inconsistent relationships between board independence and earnings manipulation. As an example, Cornett et al. (2008) and Xie et al. (2003) found a significant and negative relationship

between board independence and EM, revealing that board independence deters the earnings management. Additionally, In their study, Uadiale and Fagbemi (2012) asserted that a board consisting primarily of external directors has a much broader spectrum of knowledge and are in a better position to supervise and govern the managers, thus resulting in less earnings management. While Ghosh et al. (2010) and Klein (2002) found an insignificant association between board independence and EM revealing board independence does not have an impact in mitigating earnings management. Given the dilemma in the existing literature with regard to the impact of board independence on earnings management, the present study includes board independence as one of the main independent variable in mitigating the earnings management.

3.3.2 (c) CEO Duality:

It has been debated by researchers based on two different theories of leadership: agency theory and stewardship theory (Rahman and Haniffa, 2005; Epps and Ismail 2009) whether a leadership structure should be distinguished by the separation or combination of the CEO's and chairman's functions. According to the stewardship theory, the CEO and chairman should be unified to reduce agency costs (Abdullah and Valentine, 2009). Those who advocate the stewardship theory in line with this also believes that when the CEO is also the chairman, the board of directors and the management of the firm will have less conflict of interest (Rechner and Dalton, 1991; Lin, 2005). As opposed to this, proponents of agency theory contend that combining two key positions, such as CEO and chairman, will adversely affect firm performance, monitoring mechanisms and thereby paving way for earnings management (Epps and Ismail, 2009). Further, some studies have argued that CEO duality enhances firm performance and is beneficial to the effectiveness of the board of directors (Boyd, 1995; Bradbury et al., 2006). There's also evidence that CEO duality reduces earnings management practices and improves earnings quality (Liu, 2012). Given the multifaceted

aspects related to CEO duality with regard to the control of earnings management, the present study includes CEO duality as one of the main independent variables as a proxy for corporate governance mechanism in mitigating earnings management.

3.3.3 Moderating variable

The moderating variable considered for the study is two characteristics associated with the audit committee which are audit committee size and audit committee independence.

3.3.3 (a) Audit committee size:

An audit committee's size is directly related to the number of members that make up the committee. A minimum of three members is required for audit committees in India under the Companies Act (2013). Based on a review of the previous literature, inconsistent conclusions were drawn regarding the impact of audit committee size on earnings quality. The extant literature has conflicting evidence regarding whether a larger board size can efficiently supervise top management, and this can also be applied to the size of audit committees. Jensen (1993) argues that the larger the board size, the more effectively it can supervise top management. According to Xie et al. (2003), this negative relationship holds for the association between audit committee size and EM, but it is not statistically significant at any conventional level. On the other hand, Ghosh et al. (2010) demonstrate that audit committee size is negatively associated with EM. Lin & Yang (2006) report that larger audit committees better monitor the financial reporting process, thereby improving earnings quality. It has been shown that the size of audit committees helps to reduce the magnitude of fraud and cheating in financial statements (Huang & Liu, 2005). Also, Hamdan &Mushtaha (2011) and Felo et al. (2003) found a positive relationship between audit committee size and financial report quality. Consequently, EM and audit committee size remain ambiguous due to these conflicting findings. Hence, the present study tries to explore the moderating nature

of audit committee size in enhancing or weakening the relationship between earnings management and corporate governance.

3.3.3 (b) Audit committee independence:

Directors who are outside of the firm are always assumed to be more independent than directors who are inside the company, and therefore there will be stronger supervision related to the firm's EM if there are more outside directors on the audit committee. A study by Braiotta (1999) indicates that outside directors have a greater amount of experience than inside directors. Therefore, audit committee independence is thought to be negatively related to EM, in a similar manner to board independence. There are, however, conflicting findings, which suggest that audit committee independence alone does not suffice to restrain opportunistic behavior in the financial reporting process (Ghosh et al., 2010; Klein, 2002; Xie et al., 2003). Using 300 U.S. companies as examples, Bedard et al. (2004) found that an audit committee composed of a majority of independent directors is insufficient for controlling earnings management to occur. There appears to be a lack of research in India exploring the impact of audit committee independence on the management of earnings. In accordance with Indian corporate law, a majority of the members of an audit committee must be independent directors. As a result of regulatory emphasis and supporting studies, it is generally believed that the independence of audit committees has a negative relationship with earnings management. Given the significance of audit committee independence in mitigating earnings management, the present study explores the moderating role of audit committee independence in the relationship between corporate governance and earnings management.

3.3.4 Control variables

Based on existing studies on corporate governance and earnings management (Du et al., 2017; Luo et al., 2017), we add several variables to account for other factors which can affect earnings management. In addition, to control for potential endogeneity following prior

literature (Bowen et al., 2008; DeFond et al., 1998;Leuz et al., 2003; Reichelt& Wang, 2010; Warfield, Wild, & Wild, 1995; Xie et al., 2003; Myers et al., 2003)we have included certain control variables. The study includes BIG4 variables which indicates whether the firm is audited by big4 or not, since the previous literature suggests that firms that are audited by big4 auditors are less likely to engage in earnings management. Our study also factors in firm-specific financial characteristics, including profitability (ROA), growth potential (GROWTH), firm size (FIRM_S), and financial leverage (LEV). Additionally, we also include certain control variables such as Intangible_TAwhich is the ratio of net intangible assets to total assets, and CFO_TA which is the ratio of cash flow operations to total assets. Finally, we also include certain ownership control variables which are Insti_sharesand Foreign_insti_shareswhich indicates institutional shareholdings and foreign institutional shareholdings, respectively.

3.4 Empirical framework

In order to satisfy the objectives framed and test the hypotheses we employed fixed effects regression models to estimate the relationship between corporate governance and earnings management. The Hausman test also indicates that fixed effects regression model is preferred over the random effects model. The following equations are estimated

$$EM_{i,t} = \beta_0 + \beta_1 CG_{i,t} + \beta_2 Controls_{i,t} + yearFE + industryFE + \varepsilon_{i,t} \quad (3)$$

$$EM_{i,t} = \beta_0 + \beta_1 CG_{i,t} + \beta_2 AC_{i,t} + + \beta_3 CG * AC_{i,t} + + \beta_4 Controls_{i,t} + yearFE + industryFE + \varepsilon_{i,t} \quad (4)$$

Here,

EM indicates either AEM/ or REM1/or REM2

CG indicates the corporate governance variables which will be either board size/ or board independence/ or CEO duality.

AC indicates the audit committee characteristics which can be either audit committee size/ or audit committee independence.

In addition to exploring the symmetric relationship between corporate governance, audit committee characteristics and earnings management, the present study also expands the literature by exploring the asymmetric relationship between the dependant and the independent variables by employing a unique econometric technique namely, the fixed effects quantile regression for panel data. Fixed effects quantile regression techniques explores the relationship between dependant and independent variables at different quantiles, thereby comprehensively providing insights on the research question.

3.4.1 Quantile regression

Probability distribution function of random variable y:

$$f(Y) = \Pr(y \leq Y) \tag{5}$$

Accordingly, r -the quantile of Y can be defined as the inverse function as follows:

$$Q(r) = \inf [f(Y \leq r)] \tag{6}$$

Here $0< r < 1$, median is Q(1/2). Here, the random variable y is defined as a vector space [Y_1, Y_2,…Y_n], hence sample median is the value which minimises the total absolute deviations, and it is defined as follows:

$$\min_{\xi \epsilon R} \sum_{i=1}^{n} |Y_i - \xi| \tag{7}$$

To be put in simple terms, the general $r-$ thsample quantile similar to the Q(r) could be formulated to solve the optimization problem.

$$\min_{\xi \epsilon R} \sum_{i=1}^{n} \rho_c (Y_i - \xi) \tag{8}$$

Here, $\rho_\tau(z) = z(\tau - I(z < 0))$, and $0 < \tau < 1$. I(.) stands for the indicator function. The linear conditional quantile is estimated using the following equation:

$$\beta(r) = arg \min_{\xi \epsilon R^P} \sum_{i=1}^{n} \rho_c (Y_i - x'\beta) \tag{9}$$

$\tau \in (0, 1)$, for any quantile. The quantity $\beta(\tau)$ is the τ − th regression quantile and τ =1/2, minimises the sum of absolute residuals and relates to the median regression. The conditional quantile regression model, by assuming the ρth quantile of the conditional distribution of the dependent variables can be estimated as follows:

$$Y_{it} = x_{it}.\beta_\rho + u_{\rho it}$$
$$Quant_\rho(Y_{it}|x_{it}) = \inf[y: f_{it}(Y|\mathrm{x})\rho] = x'_{it}.\beta_\rho \quad (10)$$
$$Quant_\rho(u_{\rho it}|x_{it}) = 0$$

Here,

$Quant_\rho(Y_{it}|x_{it})$ = ρ -th conditional quantile of Y_{it} on the repressor vector which is x_{it},

β_ρ = Vector parameters estimated for various ρ -values i.e. (0,1),

$u_{\rho it}$ = Error term (with a cumulative density function $f_{u\rho}$ (.|x) and $F_{u\rho}$ (.|x),

As a means of defending the $f_{u\rho}$ (.|x), the conditional distribution of the explained variable on *x* is used. Switching the ρ value from 0 to 1 shows the conditional distribution of y when x is changed.

The estimator of β_ρ can be calculated using the following equation:

$$\min \sum_{it:u_{\rho it}>0} \rho x|u_{\rho it}| + \sum_{it:u_{\rho it}<0} (1-\rho)x|u_{\rho it}|$$
$$= \min \sum_{it:Y_{it}-x^F_{it}.\beta_\rho>0} \rho x|Y_{it} - x'_{it}.\beta_\rho| \quad (11)$$
$$+ \sum_{it:Y_{it}-x^F_{it}.\beta_\rho<0} (1-\rho)x|Y_{it} - x'_{it}.\beta_\rho|$$

Although the estimated values of $\beta_\rho$from the above equation don't have an explicit form, linear programming can solve this minimization problem. The present study utilizes STATA 15 to run the fixed effects quantile regression for panel data to obtain the β_ρ

estimators. The asymmetric relationship between different levels of EM practices (both AEM and REM) and the corporate governance and moderating role of audit committee are explored employing this QR technique.

Chapter IV

Corporate governance, audit committee characteristics and earnings management – An Empirical Analysis

4.1 Introduction

In this chapter, the empirical results from the appropriate econometric and statistical tools are presented. First, the relationship between the corporate governance mechanisms and earnings management are identified. This is followed by the impact of audit committee characteristics on earnings management. Then the moderating role of audit committee characteristics in impacting the relationship between corporate governance and earnings management. In addition to exploring the symmetric relationship between the dependent, independent and the moderating variable, the present study also comprehensively explores the asymmetric relationship between the variables considered by employed a unique econometric technique which is the fixed effects quantile regression for panel data. This technique gives the relationship between the dependant and the independent variables at various quantiles.

Table 1 presented below gives the descriptive statistics of the sample considered. After following the data cleansing process (Refer table 4.1 (a)), the final sample consisted of 5750 firm year observations. Initially, the study included top 1000 companies in terms of market capitalization from the year 2014 to 2021 amounting 8 years. So, the initial sample consisted of 800 firm year observations. We followed certain criteria in cleaning the data in order to avoid heterogeneity in the sample so that the captured relationship between the dependant and independent variables can be generalized. The sample companies were distributed across 19 industries and the details related to the sample distribution based on the industry is given in table 4.1(b). From summary statistics (table 4.1) it is evident that firms considered for the study do engage in earnings management practices. The mean values of

AEM, REM1 and REM2 are 0.053, -0.009 and 0.003 respectively. This indicates that companies/executives do engage in earnings management. The value of REM1 is in negative which indicates that companies can engage in either positive or negative earnings management according to the situational demands. The mean value of board size is 12.33 which indicates on an average around 12 directors are present in the board. Regarding board independence the mean value is recorded at 0.438 which indicates that 43.8 percent directors on board are independent directors. The mean value of CEO duality at 0.144 indicates that 14.4 percent of the sample firms has CEO duality wherein the CEO is the chairman/MD of the board. The mean value of audit committee size and independence are 5.43 and 0.695 which indicates on an average around 6 members are present in the audit committee with more than 60 percent of them being independent directors which is in line with the companies act, 2013. The mean value of BIG4 indicates that around 30 percent of the sample firms are audited by the big4 auditors. The mean values of other control variables such as firm size, leverage, market to book ratio, growth rate of sales, intangible to total assets, cash flow from operations scaled by total assets are 10.69, 0.156, 2.86, 0.097, 0.015, 0.10 respectively. Table 4.2 presents the results of the pairwise Pearson correlations which indicates that the EM proxies are significantly correlated with the independent and the control variables which calls for further exploration using advanced econometric techniques. To be specific, the certain components of EM especially AEM is negatively correlated with certain corporate governance mechanisms. The results of correlation matrix reveal that there is no statistically significant relationship between AEM and audit committee characteristics. Coming to REM, certain components have significant negative and positive relationships. The results of the correlation matrix provide preliminary evidence with regard to the asymmetric relationship between corporate governance, audit committee characteristics and earnings management. Additionally, the correlation coefficients are minimal less than twenty percent implying that

multicollinearity cannot be a problem in the regression models. With the preliminary analysis, the study proceeds to document the results of the advanced econometric techniques to test the hypotheses framed for the study.

Table 4.1 Summary statistics

Variables	N	Mean	Std. Dev.	Median	Range
AEM	5740	.053	.068	0.038	1.887
REM1	5740	-.009	.14	-0.003	1.559
REM2	5740	.003	.099	-0.003	1.177
Board_size	5740	2.526	.233	2.565	1.825
Board_ind	5740	.438	.101	0.444	.8
CEO_D	5740	.144	.351	0.000	1
Audit_size	5740	5.436	1.728	5.000	5
Audit_indp	5740	.695	.059	0.670	.31
BIG4	5740	.293	.455	0.000	1
FIRM_S	5740	10.696	1.343	10.560	8.181
LEV	5740	.156	.156	0.116	1.739
MTB	5740	2.868	2.966	2.039	27.868
GROWTH	5740	.097	.351	0.079	12.193
Intangible_TA	5740	.015	.05	0.002	.657
CFO_TA	5740	.1	.076	0.096	.914
Foreign_inst_shares	5740	.464	1.491	0.000	25.12
Insti_shares	5740	11.293	9.104	9.355	49.4
GDP	5740	5.408	4.388	6.795	15.544

Table 4.1 (a) Details of data cleansing exercise & arrival of final sample

Particulars	Sample
Initial number of firm-years observation for the study period	8000
Loss due to delisting/merger/demerger/acquisitions etc.	212
Loss due to excluding Government owned firms and firms in financial services and banking industries	1008
Loss due to excluding foreign firms with similar board practices and structure as that of the parent firms	340
Loss due to calculation of AEM and REM proxies*and missing dependant and independent variables	700
Final firm-year observations	5740

**Note: We stipulated a condition of 10 observations for each industry and year for calculations of EM proxies, since EM proxies are calculated for each industry and each year (Roychowdhury, 2006)*

Table 4.1 (b) Sample distribution across industries

NIC Code*	Industry	Firm-year observations
10	Manufacturing of food products	126
11	Manufacturing of beverages	158
13	Manufacturing of textiles	486
14	Manufacturing of wearing apparels	782
15	Manufacturing of leather products	222
16	Manufacturing of wooden products	356
17	Manufacturing of paper	234
19	Manufacturing of petroleum products	188
20	Manufacturing of chemicals and chemical products	226
21	Manufacture of pharmaceuticals, medicinal chemical, and botanical products	982
22	Manufacture of rubber and plastics products	94
23	Manufacture of other non-metallic mineral products	556
24	Manufacture of basic metals	212
27	Manufacture of electrical equipment	188
28	Manufacturing of machinery and equipment	132
29	Manufacturing of motor vehicles, trailers and semi-trailers	138
42	Civil engineering activities	198
46	Wholesale trade, except of motor vehicles and motorcycles	202
52	Warehousing and support activities for transportation	260
	Total firm-year observations	5740

**Note: NIC code indicates the first two digit of the national industry classification code which classifies into various categories asstipulated by the Ministry of Statistics and Programme Implementation (MOSPI).*

Table 4.2 Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1) AEM	1.000																	
(2) REM1	-0.048*	1.000																
(3) REM2	0.001	-0.816*	1.000															
(4) Board_size	-0.083*	0.052*	-0.038	1.000														
(5) Board_indp	0.002	-0.026	0.044	-0.057*	1.000													
(6) CEO_D	-0.017	-0.055*	0.047*	0.100*	-0.014	1.000												
(7) Audit_size	-0.017	0.005	0.001	-0.001	-0.039	-0.031	1.000											
(8) Audit_indp	-0.008	-0.022	0.019	-0.025	-0.073*	0.007	-0.025	1.000										
(9) BIG4	0.041	-0.035	0.014	0.022	0.012	0.034	0.013	-0.027	1.000									
(10) FIRM_S	-0.047*	-0.018	0.040	0.423*	-0.068*	0.106*	-0.001	-0.002	0.100*	1.000								
(11) LEV	-0.015	0.240*	-0.190*	0.064*	0.023	-0.144*	-0.016	0.001	-0.100*	0.257*	1.000							
(12) MTB	0.049*	-0.359*	0.312*	-0.015	-0.079*	0.051*	0.011	0.030	-0.020	-0.209*	-0.304*	1.000						
(13) GROWTH	0.024	-0.011	-0.001	-0.019	0.046	-0.020	-0.015	0.042	0.022	-0.004	0.033	0.015	1.000					
(14) Intangible_TA	0.006	-0.127*	0.157*	0.007	0.015	0.021	0.025	-0.020	-0.017	0.037	-0.069*	0.122*	0.020	1.000				
(15) CFO_TA	-0.023	-0.257*	0.531*	-0.031	0.015	-0.006	0.019	0.035	-0.053*	-0.153*	-0.248*	0.374*	0.025	0.060*	1.000			
(16) Insti_shares	-0.028	0.046	-0.021	0.039	0.015	0.020	-0.024	0.000	-0.036	0.000	-0.027	0.016	-0.025	0.029	0.046	1.000		
(17) Foreign_insti_shares	0.038	-0.200*	0.217*	0.129*	0.211*	0.089*	-0.014	-0.009	0.066*	0.334*	-0.055*	0.145*	0.046	0.143*	0.070*	0.025	1.000	
(18) GDP	0.016	-0.025	0.016	-0.106*	0.010	-0.032	0.009	0.030	0.016	-0.056*	0.018	0.054*	0.092*	-0.028	0.020	-0.080*	0.027	1.000

**** p<0.01, ** p<0.05, * p<0.1*

4.2 Corporate governance and earnings management – An empirical overview

In this sub section, the relationship between the individual proxies of corporate governance mechanisms and the proxies of earnings management are explored. The study employs fixed effects regression model to capture the relationship between the dependent and the independent variables. Hausman test also indicates that fixed effects models can be preferred over the random effects model. Additionally, fixed effects model will account for the time variant characteristics associated with the firms thereby giving robust results.

4.2 (a) Board size and earnings management

Here, the relationship between the board size as one of the proxy for corporate governance and different proxies of earnings management are explored in detail. From table **4.3** it is evident that larger the board the more efficient it is in mitigating the AEM practices in line with the findings of the previous studies.

Table 4.3 Board size and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size	-.0206709	.0118185	-1.75	0.080	-.0438526	.0025107
BIG4	.0071972	.0053099	1.36	0.175	-.003218	.0176125
FIRM_S	-.0020064	.0051943	-0.39	0.699	-.012195	.0081821
LEV	-.0278455	.0223018	-1.25	0.212	-.0715899	.0158988
MTB	.0002923	.0010536	0.28	0.782	-.0017744	.0023589
GROWTH	.0029908	.0046531	0.64	0.520	-.006136	.0121177
Intangible_TA	.0054733	.0472104	0.12	0.908	-.0871285	.0980751
CFO_TA	-.0172759	.0277657	-0.62	0.534	-.0717376	.0371857
Insti_shares	.0004552	.0012521	0.36	0.716	-.0020008	.0029112
Foreign_insti_shares	.0007371	.0004717	1.56	0.118	-.0001881	.0016622
GDP	.0000204	.0003771	0.05	0.957	-.0007192	.00076
_cons	.1205181	.0571066	2.11	0.035	.0085053	.2325309

Table 4.4 Board size and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size	-.044471	.0130079	3.42	0.001	.0189565	.0699855
BIG4	-.0036866	.0058443	-0.63	0.528	-.01515	.0077768
FIRM_S	.0215523	.0057171	3.77	0.000	.0103384	.0327661
LEV	.0879206	.0245462	3.58	0.000	.039774	.1360671
MTB	-.002727	.0011596	-2.35	0.019	-.0050016	-.0004524
GROWTH	-.0072686	.0051213	-1.42	0.156	-.0173139	.0027767
Intangible_TA	.1256455	.0519614	2.42	0.016	.0237248	.2275661
CFO_TA	-.1853363	.0305599	-6.06	0.000	-.2452787	-.125394
Insti_shares	.0004417	.0013781	0.32	0.749	-.0022615	.0031449
Foreign_insti_shares	-.0028244	.0005191	-5.44	0.000	-.0038426	-.0018061
GDP	.0004551	.000415	1.10	0.273	-.000359	.0012691
_cons	-.3101072	.0628534	-4.93	0.000	-.4333922	-.1868221

Table 4.5 Board size and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size	-.0228102	.0088593	-2.57	0.010	-.0401874	-.0054329
BIG4	.0017504	.0039804	0.44	0.660	-.006057	.0095578
FIRM_S	-.0027885	.0038937	-0.72	0.474	-.010426	.0048489
LEV	.0238576	.0167177	1.43	0.154	-.0089337	.056649
MTB	-.0034478	.0007898	-4.37	0.000	-.004997	-.0018986
GROWTH	.0000765	.003488	0.02	0.983	-.0067652	.0069181
Intangible_TA	-.0138959	.0353895	-0.39	0.695	-.0833113	.0555195
CFO_TA	.7021771	.0208135	33.74	0.000	.661352	.7430022
Insti_shares	-.0010594	.0009386	-1.13	0.259	-.0029005	.0007816
Foreign_insti_shares	.0012487	.0003536	3.53	0.000	.0005552	.0019422
GDP	-.0001853	.0002827	-0.66	0.512	-.0007397	.0003692
_cons	.0134989	.0428078	0.32	0.753	-.0704672	.0974651

From table 4.3, it is evident that the board size has a significant negative impact in mitigating the AEM. This is evident since the coefficient is negative and significant at 10 percent level. Table 4.4 indicates that board size has a greater significant negative relationship in mitigating the REM1 since the coefficient is negative at 1 percent confidence level. The same is the case with regard to REM2 wherein the board size is statistically significant in mitigating the REM practices. Overall, the results suggests that board size is significant in reducing the earnings management practices.

4.2 (b) Board independence and earnings management

In this sub section, the relationship between one of the proxies of corporate governance, board independence and the earnings management are explored using the fixed effects regression technique.

Table 4.6 Board independence and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp	.0123137	.022987	0.54	0.592	-.0327745	.0574019
BIG4	.0065676	.0053038	1.24	0.216	-.0038356	.0169709
FIRM_S	-.0035117	.005178	-0.68	0.498	-.0136683	.0066448
LEV	-.0255337	.0222787	-1.15	0.252	-.0692326	.0181652
MTB	.0000486	.0010444	0.05	0.963	-.0019999	.0020972
GROWTH	.0028042	.0046637	0.60	0.548	-.0063435	.011952
Intangible_TA	.004827	.0472878	0.10	0.919	-.0879266	.0975806
CFO_TA	-.0158694	.0277828	-0.57	0.568	-.0703645	.0386258
Insti_shares	.0003485	.0012518	0.28	0.781	-.002107	.0028039
Foreign_insti_shares	.0007576	.000472	1.61	0.109	-.0001682	.0016833
GDP	.0001106	.0003751	0.29	0.768	-.0006252	.0008465
_cons	.0787404	.0587773	1.34	0.181	-.0365494	.1940302

Table 4.7 Board independence and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp	.008416	.0253706	0.33	0.740	-.0413477	.0581798
BIG4	-.0024181	.0058538	-0.41	0.680	-.0139001	.0090639
FIRM_S	.0264716	.005715	4.63	0.000	.0152618	.0376813
LEV	.0825175	.0245889	3.36	0.001	.0342871	.1307479
MTB	-.0021134	.0011527	-1.83	0.067	-.0043744	.0001475
GROWTH	-.0072451	.0051473	-1.41	0.159	-.0173414	.0028513
Intangible_TA	.1242209	.0521914	2.38	0.017	.021849	.2265928
CFO_TA	-.1878886	.0306638	-6.13	0.000	-.2480348	-.1277425
Insti_shares	.0006624	.0013817	0.48	0.632	-.0020477	.0033724
Foreign_insti_shares	-.0028862	.0005209	-5.54	0.000	-.0039079	-.0018644
GDP	.0002905	.000414	0.70	0.483	-.0005216	.0011027
_cons	-.2535931	.0648723	-3.91	0.000	-.3808381	-.126348

Table 4.8 Board independence and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp	-.0000486	.0172523	-0.00	0.998	-.0338885	.0337913
BIG4	.0010892	.0039806	0.27	0.784	-.0067187	.0088971
FIRM_S	-.0051062	.0038863	-1.31	0.189	-.012729	.0025166
LEV	.0265765	.0167207	1.59	0.112	-.0062207	.0593737
MTB	-.0037516	.0007838	-4.79	0.000	-.005289	-.0022141
GROWTH	.0000182	.0035002	0.01	0.996	-.0068474	.0068838
Intangible_TA	-.0135094	.0354908	-0.38	0.704	-.0831235	.0561047
CFO_TA	.7035441	.0208518	33.74	0.000	.662644	.7444442
Insti_shares	-.0011737	.0009395	-1.25	0.212	-.0030166	.0006692
Foreign_insti_shares	.0012782	.0003542	3.61	0.000	.0005834	.001973
GDP	-.0000973	.0002816	-0.35	0.730	-.0006495	.000455
_cons	-.0195681	.0441139	-0.44	0.657	-.1060962	.06696

From tables 4.6, 4.7 and 4.8, it is evident that board independence has no statistically significant relationship in mitigating the earnings management. Even though coefficient is negative for REM2, there is no statistical significance. On the whole, the results suggests that board independence have no role in mitigating earnings management.

4.2 (c) CEO duality and earnings management

Table 4.9CEO duality and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D	-.006734	.0080786	-0.83	0.405	-.02258	.0091119
BIG4	.0063518	.005311	1.20	0.232	-.0040656	.0167693
FIRM_S	-.0035654	.0050989	-0.70	0.484	-.0135667	.0064359
LEV	-.026278	.0222999	-1.18	0.239	-.0700185	.0174626
MTB	.0000414	.001043	0.04	0.968	-.0020044	.0020872
GROWTH	.0029604	.0046565	0.64	0.525	-.0061732	.0120941
Intangible_TA	.0045124	.0472714	0.10	0.924	-.088209	.0972338
CFO_TA	-.0163688	.0277803	-0.59	0.556	-.0708591	.0381215
Insti_shares	.0003415	.0012517	0.27	0.785	-.0021137	.0027967
Foreign_insti_shares	.0007352	.000473	1.55	0.120	-.0001926	.001663
GDP	.0000927	.0003747	0.25	0.805	-.0006423	.0008277
_cons	.0862743	.0547455	1.58	0.115	-.0211073	.193656

Table 4.10CEO duality and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D	.0103172	.008914	1.16	0.247	-.0071674	.0278018
BIG4	-.0020203	.0058602	-0.34	0.730	-.013515	.0094744
FIRM_S	.0252402	.0056262	4.49	0.000	.0142046	.0362757
LEV	.0839934	.0246059	3.41	0.001	.0357296	.1322572
MTB	-.0021722	.0011509	-1.89	0.059	-.0044296	.0000851
GROWTH	-.007189	.0051381	-1.40	0.162	-.0172672	.0028892
Intangible_TA	.1269028	.0521597	2.43	0.015	.0245931	.2292125
CFO_TA	-.1874937	.0306531	-6.12	0.000	-.2476188	-.1273686
Insti_shares	.00068	.0013812	0.49	0.623	-.0020291	.0033891
Foreign_insti_shares	-.0028381	.0005219	-5.44	0.000	-.0038619	-.0018144
GDP	.0002949	.0004134	0.71	0.476	-.0005161	.0011058
_cons	-.239059	.0604067	-3.96	0.000	-.357545	-.1205731

Table 4.11CEO duality and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D	-.0050133	.0060627	-0.83	0.408	-.016905	.0068785
BIG4	.0009059	.0039857	0.23	0.820	-.006912	.0087237
FIRM_S	-.0047024	.0038265	-1.23	0.219	-.0122081	.0028032
LEV	.025909	.0167352	1.55	0.122	-.0069166	.0587346
MTB	-.0037333	.0007827	-4.77	0.000	-.0052686	-.0021981
GROWTH	.0000347	.0034946	0.01	0.992	-.0068198	.0068892
Intangible_TA	-.0144867	.0354754	-0.41	0.683	-.0840705	.0550971
CFO_TA	.7032974	.0208481	33.73	0.000	.6624045	.7441902
Insti_shares	-.0011812	.0009394	-1.26	0.209	-.0030238	.0006613
Foreign_insti_shares	.0012569	.000355	3.54	0.000	.0005606	.0019532
GDP	-.0001028	.0002812	-0.37	0.715	-.0006544	.0004488
_cons	-.022768	.0410844	-0.55	0.580	-.1033537	.0578178

From tables 4.9, 4.10 and 4.11, it is evident that CEO duality has no statistically significant relationship in mitigating the earnings management. Even though coefficient is negative for AEM and REM2, there is no statistical significance. On the whole, the results suggest that board independence have no role in mitigating earnings management.

4.3 Empirical insights on audit committee characteristics and earnings management

In this sub section, the role played by the audit committee characteristics which are the size and independence in mitigating the different earnings management are explored

using the fixed effects regression models. First the role of audit committee size is explored followed by the role played by audit committee independence in mitigating earnings management is explored.

4.3 (a) Audit committee size and earnings management

Table 4.12Audit committee size and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_size	-.0004645	.0009522	-0.49	0.626	-.0023322	.0014032
BIG4	.0066155	.0053037	1.25	0.212	-.0037876	.0170185
FIRM_S	-.0041203	.0050585	-0.81	0.415	-.0140424	.0058019
LEV	-.025168	.0222816	-1.13	0.259	-.0688726	.0185365
MTB	.000024	.0010428	0.02	0.982	-.0020215	.0020695
GROWTH	.0028925	.0046581	0.62	0.535	-.0062441	.0120291
Intangible_TA	.0057683	.0472523	0.12	0.903	-.0869157	.0984523
CFO_TA	-.0153601	.0278161	-0.55	0.581	-.0699205	.0392003
Insti_shares	.0003411	.001252	0.27	0.785	-.0021147	.0027969
Foreign_insti_shares	.0007642	.0004718	1.62	0.106	-.0001613	.0016897
GDP	.0001016	.0003747	0.27	0.786	-.0006333	.0008365
_cons	.0930743	.0547699	1.70	0.089	-.0143552	.2005037

Table 4.13Audit committee size and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_size	.0006293	.0010508	0.60	0.549	-.0014318	.0026905
BIG4	-.0024211	.0058531	-0.41	0.679	-.0139018	.0090597
FIRM_S	.0260875	.0055826	4.67	0.000	.0151375	.0370375
LEV	.0823308	.0245898	3.35	0.001	.0340988	.1305629
MTB	-.0021444	.0011509	-1.86	0.063	-.0044018	.000113
GROWTH	-.0070929	.0051406	-1.38	0.168	-.0171761	.0029902
Intangible_TA	.1249696	.0521473	2.40	0.017	.0226842	.227255
CFO_TA	-.1889194	.0306976	-6.15	0.000	-.2491319	-.1287069
Insti_shares	.0006787	.0013817	0.49	0.623	-.0020315	.0033889
Foreign_insti_shares	-.0028824	.0005207	-5.54	0.000	-.0039038	-.001861
GDP	.0002815	.0004135	0.68	0.496	-.0005295	.0010925
_cons	-.249023	.0604437	-4.12	0.000	-.3675814	-.1304646

Table 4.14Audit committee size and REM2

REM2	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_size	-.0005892	.0007145	-0.82	0.410	-.0019907	.0008122
BIG4	.0011113	.0039797	0.28	0.780	-.0066947	.0089172
FIRM_S	-.0051237	.0037957	-1.35	0.177	-.0125689	.0023214
LEV	.0268476	.016719	1.61	0.109	-.0059463	.0596415
MTB	-.0037426	.0007825	-4.78	0.000	-.0052775	-.0022078
GROWTH	-.0000395	.0034952	-0.01	0.991	-.0068952	.0068162
Intangible_TA	-.0135789	.0354559	-0.38	0.702	-.0831247	.0559668
CFO_TA	.7044029	.0208719	33.75	0.000	.6634633	.7453425
Insti_shares	-.001187	.0009395	-1.26	0.207	-.0030297	.0006557
Foreign_insti_shares	.0012786	.000354	3.61	0.000	.0005842	.0019731
GDP	-.0000954	.0002811	-0.34	0.734	-.0006469	.000456
_cons	-.0163616	.0410968	-0.40	0.691	-.0969717	.0642484

The results of the above table indicate that there is no significant influence of the audit committee size in reducing the earnings management. Even though the coefficients are negative for AEM and REM1, the values are not statistically significant. Now, overall results indicatethere is no significant role played by the audit committee size in mitigating the earnings management.

4.3 (b) Audit committee independence and earnings management

Table 4.15Audit committee independence and AEM

AEM	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_indp	-.0144996	.028754	-0.50	0.614	-.0708997	.0419005
BIG4	.0065591	.0053041	1.24	0.216	-.0038447	.016963
FIRM_S	-.0041736	.0050603	-0.82	0.410	-.0140991	.005752
LEV	-.0251832	.0222806	-1.13	0.259	-.068886	.0185195
MTB	.0000332	.0010432	0.03	0.975	-.0020131	.0020794
GROWTH	.0030418	.0046617	0.65	0.514	-.006102	.0121856
Intangible_TA	.0053711	.0472603	0.11	0.910	-.0873286	.0980709
CFO_TA	-.0157354	.0277878	-0.57	0.571	-.0702403	.0387695
Insti_shares	.0003605	.001252	0.29	0.773	-.0020952	.0028162
Foreign_insti_shares	.0007716	.0004721	1.63	0.102	-.0001544	.0016976
GDP	.0001028	.0003747	0.27	0.784	-.0006321	.0008377
_cons	.1011139	.0584316	1.73	0.084	-.013498	.2157257

Table 4.16Audit committee independence and REM1

REM1	Coef.	Std. Err.	T	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_indp	.0096757	.0317355	0.30	0.760	-.0525726	.071924
BIG4	-.0023715	.0058541	-0.41	0.685	-.0138541	.0091112
FIRM_S	.0261123	.005585	4.68	0.000	.0151576	.037067
LEV	.0824883	.0245909	3.35	0.001	.0342539	.1307226
MTB	-.0021457	.0011514	-1.86	0.063	-.0044041	.0001127
GROWTH	-.0072235	.0051451	-1.40	0.161	-.0173154	.0028684
Intangible_TA	.1251991	.0521609	2.40	0.016	.0228872	.227511
CFO_TA	-.1882038	.0306691	-6.14	0.000	-.2483604	-.1280472
Insti_shares	.0006586	.0013818	0.48	0.634	-.0020518	.0033689
Foreign_insti_shares	-.0028871	.000521	-5.54	0.000	-.0039091	-.0018651
GDP	.0002816	.0004135	0.68	0.496	-.0005295	.0010928
_cons	-.2526247	.0644905	-3.92	0.000	-.3791208	-.1261286

Table 4.17 Audit committee independence and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Audit_indp	-.0121977	.0215782	-0.57	0.572	-.0545227	.0301274
BIG4	.0010564	.0039804	0.27	0.791	-.0067511	.0088639
FIRM_S	-.0051619	.0037974	-1.36	0.174	-.0126104	.0022867
LEV	.0267433	.0167203	1.60	0.110	-.0060531	.0595397
MTB	-.0037379	.0007829	-4.77	0.000	-.0052735	-.0022023
GROWTH	.0001053	.0034983	0.03	0.976	-.0067565	.0069672
Intangible_TA	-.0138909	.0354662	-0.39	0.695	-.0834568	.055675
CFO_TA	.7037981	.0208531	33.75	0.000	.6628953	.7447009
Insti_shares	-.0011662	.0009395	-1.24	0.215	-.0030091	.0006766
Foreign_insti_shares	.0012847	.0003543	3.63	0.000	.0005898	.0019796
GDP	-.000095	.0002812	-0.34	0.735	-.0006465	.0004565
_cons	-.0106943	.0438496	-0.24	0.807	-.0967039	.0753154

The results of the above table indicate that there is no significant influence of the audit committee independence in reducing the earnings management. Even though the coefficients are negative for AEM and REM1, the values are not statistically significant. Now, overall results indicate there is no significant role played by the audit committee independence in mitigating the earnings management.

4.4 Moderating role of audit committee characteristics

After a detailed exploration of the role played by the corporate governance mechanisms and audit committee characteristics in mitigating the earnings management, this

sub section deals with exploring the moderating role played by the audit committee characteristics in either weaking or enhancing the relationship between corporate governance mechanisms and earnings management. First the moderating role of audit committee size in relation to different corporate governance mechanisms are explored followed by moderating role of audit committee independence.

4.4 (a) Moderating role of audit committee size in influencing the impact of board size on earnings management

In this sub section moderating role of audit committee size with respect to the different corporate governance mechanisms and the earnings management are explored by employed fixed effects regression model.

Table 4.18Moderating role of Audit committee size, Board Size and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size*Audit_size	-.0003064	.0003697	-2.83	0.007	-.0010316	.0004187
BIG4	.0066623	.0053034	1.26	0.209	-.0037401	.0170648
FIRM_S	-.0039436	.0050614	-0.78	0.436	-.0138714	.0059843
LEV	-.0251583	.0222757	-1.13	0.259	-.0688514	.0185348
MTB	.0000492	.0010433	0.05	0.962	-.0019972	.0020956
GROWTH	.0028536	.0046576	0.61	0.540	-.0062821	.0119893
Intangible_TA	.0056786	.0472458	0.12	0.904	-.0869926	.0983498
CFO_TA	-.0149254	.0278099	-0.54	0.592	-.0694737	.0396228
Insti_shares	.0003394	.0012518	0.27	0.786	-.0021159	.0027947
Foreign_insti_shares	.0007631	.0004718	1.62	0.106	-.0001623	.0016885
GDP	.0000959	.0003746	0.26	0.798	-.000639	.0008307
_cons	.0927856	.0545784	1.70	0.089	-.0142682	.1998394

Table 4.19Moderating role of Audit committee size, Board Size and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size* Audit_size	-.0004294	.000408	2.05	0.093	-.0003708	.0012296
BIG4	-.0024875	.0058522	-0.43	0.671	-.0139665	.0089914
FIRM_S	.0258406	.0055852	4.63	0.000	.0148853	.0367959
LEV	.0823073	.024581	3.35	0.001	.0340925	.1305221
MTB	-.00218	.0011513	-1.89	0.058	-.0044382	.0000782
GROWTH	-.0070364	.0051396	-1.37	0.171	-.0171175	.0030448
Intangible_TA	.1250977	.0521352	2.40	0.017	.0228361	.2273592
CFO_TA	-.1895598	.0306879	-6.18	0.000	-.2497531	-.1293664
Insti_shares	.0006816	.0013813	0.49	0.622	-.0020277	.003391
Foreign_insti_shares	-.0028809	.0005206	-5.53	0.000	-.003902	-.0018598
GDP	.0002894	.0004134	0.70	0.484	-.0005214	.0011003
_cons	-.2487372	.0602266	-4.13	0.000	-.3668698	-.1306046

Table 4.20Moderating role of Audit committee Size, Board Size and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size* Audit_size	-.0003059	.0002774	-1.99	0.070	-.00085	.0002382
BIG4	.0011533	.0039793	0.29	0.772	-.006652	.0089586
FIRM_S	-.0049431	.0037978	-1.30	0.193	-.0123923	.0025061
LEV	.0267994	.0167142	1.60	0.109	-.0059849	.0595838
MTB	-.0037194	.0007828	-4.75	0.000	-.0052549	-.0021839
GROWTH	-.0000661	.0034947	-0.02	0.985	-.0069209	.0067887
Intangible_TA	-.0136544	.0354501	-0.39	0.700	-.0831887	.0558798
CFO_TA	.7046539	.0208667	33.77	0.000	.6637246	.7455832
Insti_shares	-.0011859	.0009392	-1.26	0.207	-.0030282	.0006564
Foreign_insti_shares	.0012774	.000354	3.61	0.000	.0005831	.0019718
GDP	-.0001015	.0002811	-0.36	0.718	-.0006529	.0004498
_cons	-.0173432	.0409519	-0.42	0.672	-.0976692	.0629828

The results displayed above indicates that the moderating role of the audit committee size in determining the relationship between board size and earnings management is strong and statistically significant. This is mainly because all the coefficients of the different measures of earnings management i.e., AEM, REM1 and REM2 are negative and significant at different confidence intervals. To conclude, the moderating role of audit committee size between the board size and earnings management is statistically significant and negative indicating that if the increase in board size is also accompanied by greater audit committee size, the earnings management practices in the companies are significantly deterred.

4.4 (b) Moderating role of audit committee size in influencing the impact of board independence on earnings management

In this sub section, the moderating role of the audit committee size in impacting the relationship between board independence and earnings management is explored analytically. The empirical results relating to the same is reported below.

Table 4.21Moderating role of Audit committee Size, Board Independence and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_size	-.0006367	.0019099	-4.33	0.039	-.004383	.0031096
BIG4	.0066301	.0053047	1.25	0.212	-.0037748	.0170351
FIRM_S	-.004281	.0050862	-0.84	0.400	-.0142574	.0056955
LEV	-.0252305	.0222828	-1.13	0.258	-.0689375	.0184764
MTB	.0000142	.0010428	0.01	0.989	-.0020313	.0020596
GROWTH	.0029511	.0046575	0.63	0.526	-.0061845	.0120866
Intangible_TA	.0059852	.0472567	0.13	0.899	-.0867074	.0986778
CFO_TA	-.0157486	.027796	-0.57	0.571	-.0702697	.0387724
Insti_shares	.000347	.001252	0.28	0.782	-.0021087	.0028027
Foreign_insti_shares	.000766	.0004719	1.62	0.105	-.0001596	.0016916
GDP	.0000968	.0003748	0.26	0.796	-.0006384	.0008319
_cons	.0938468	.0554303	1.69	0.091	-.014878	.2025716

Table 4.22Moderating role of Audit committee Size, Board independence and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_size	-.0007455	.0021079	2.35	0.024	-.003389	.0048801
BIG4	-.002435	.0058544	-0.42	0.678	-.0139182	.0090482
FIRM_S	.0262727	.0056133	4.68	0.000	.0152625	.037283
LEV	.0824435	.0245919	3.35	0.001	.0342071	.1306798
MTB	-.0021316	.0011509	-1.85	0.064	-.004389	.0001259
GROWTH	-.0071698	.0051402	-1.39	0.163	-.0172521	.0029125
Intangible_TA	.1247061	.0521539	2.39	0.017	.0224078	.2270045
CFO_TA	-.1883399	.0306766	-6.14	0.000	-.248511	-.1281688
Insti_shares	.0006699	.0013817	0.48	0.628	-.0020403	.0033801
Foreign_insti_shares	-.0028845	.0005208	-5.54	0.000	-.003906	-.001863
GDP	.0002874	.0004136	0.69	0.487	-.0005239	.0010988
_cons	-.2494555	.0611745	-4.08	0.000	-.3694474	-.1294636

Table 4.23Moderating role of Audit committee Size, Board independence and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_size	-.0011689	.0014331	-2.82	0.015	-.0039798	.001642
BIG4	.0011481	.0039802	0.29	0.773	-.006659	.0089552
FIRM_S	-.0054275	.0038163	-1.42	0.155	-.0129131	.002058
LEV	.0268543	.0167194	1.61	0.108	-.0059402	.0596488
MTB	-.0037568	.0007825	-4.80	0.000	-.0052916	-.002222
GROWTH	.0000425	.0034946	0.01	0.990	-.0068122	.0068971
Intangible_TA	-.01321	.035458	-0.37	0.710	-.0827597	.0563397
CFO_TA	.7040732	.0208561	33.76	0.000	.6631646	.7449818
Insti_shares	-.0011821	.0009394	-1.26	0.208	-.0030247	.0006605
Foreign_insti_shares	.0012822	.0003541	3.62	0.000	.0005877	.0019767
GDP	-.0001035	.0002812	-0.37	0.713	-.0006551	.0004481
_cons	-.0134894	.0415908	-0.32	0.746	-.0950685	.0680897

The results displayed above indicates that the moderating role of the audit committee size in determining the relationship between board independence and earnings management is strong and statistically significant. This is mainly because all the coefficients of the different measures of earnings management i.e., AEM, REM1 and REM2 are negative and significant at different confidence intervals. To conclude, the moderating role of audit committee size between the board independence and earnings management is statistically significant and negative indicating that if the increase in board independence is also accompanied by greater audit committee size, the earnings management practices in the companies are significantly deterred.

4.4 (c) Moderating role of audit committee size in influencing the impact of CEO duality on earnings management

In this sub section, the moderating role of the audit committee size in impacting the relationship between CEO duality and earnings management is explored.

Table 4.24 Moderating role of Audit committee Size, CEO duality and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D*Audit_size	-.0013467	.0013219	-1.02	0.308	-.0039396	.0012462
BIG4	.0062992	.0053103	1.19	0.236	-.0041168	.0167153
FIRM_S	-.0034875	.0050933	-0.68	0.494	-.0134779	.0065029
LEV	-.0260823	.0222822	-1.17	0.242	-.0697881	.0176235
MTB	.0000409	.0010427	0.04	0.969	-.0020044	.0020862
GROWTH	.003023	.0046567	0.65	0.516	-.006111	.012157
Intangible_TA	.0038539	.0472796	0.08	0.935	-.0888836	.0965915
CFO_TA	-.0153918	.0277817	-0.55	0.580	-.0698847	.0391011
Insti_shares	.000332	.0012517	0.27	0.791	-.0021231	.0027871
Foreign_insti_shares	.0007368	.0004725	1.56	0.119	-.00019	.0016635
GDP	.000097	.0003746	0.26	0.796	-.0006376	.0008317
_cons	.0853561	.0547376	1.56	0.119	-.02201	.1927221

Table 4.25 Moderating role of Audit committee Size, CEO duality and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D*Audit_size	.0023111	.0014582	1.58	0.113	-.0005492	.0051714
BIG4	-.0018847	.0058579	-0.32	0.748	-.0133749	.0096055
FIRM_S	.0250072	.0056185	4.45	0.000	.0139866	.0360277
LEV	.0838225	.0245799	3.41	0.001	.0356097	.1320353
MTB	-.0021759	.0011503	-1.89	0.059	-.0044321	.0000803
GROWTH	-.0073006	.0051369	-1.42	0.155	-.0173765	.0027753
Intangible_TA	.1282736	.0521551	2.46	0.014	.0259729	.2305743
CFO_TA	-.1891093	.0306465	-6.17	0.000	-.2492215	-.128997
Insti_shares	.0006981	.0013807	0.51	0.613	-.0020102	.0034064
Foreign_insti_shares	-.0028355	.0005212	-5.44	0.000	-.0038578	-.0018132
GDP	.0002888	.0004132	0.70	0.485	-.0005217	.0010992
_cons	-.2367035	.0603821	-3.92	0.000	-.3551412	-.1182659

Table 4.26 Moderating role of Audit committee Size, CEO duality and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D*Audit_size	-.0009374	.0009921	-0.94	0.345	-.0028833	.0010086
BIG4	.0008812	.0039854	0.22	0.825	-.006936	.0086983
FIRM_S	-.0046743	.0038225	-1.22	0.222	-.012172	.0028234
LEV	.0260886	.0167226	1.56	0.119	-.0067123	.0588895
MTB	-.0037348	.0007826	-4.77	0.000	-.0052698	-.0021999
GROWTH	.0000771	.0034948	0.02	0.982	-.0067779	.0069321
Intangible_TA	-.0148818	.035483	-0.42	0.675	-.0844807	.0547171
CFO_TA	.7039936	.02085	33.76	0.000	.663097	.7448901
Insti_shares	-.0011873	.0009394	-1.26	0.206	-.0030299	.0006552
Foreign_insti_shares	.0012593	.0003546	3.55	0.000	.0005638	.0019548
GDP	-.0000994	.0002811	-0.35	0.724	-.0006508	.000452
_cons	-.0232022	.0410802	-0.56	0.572	-.1037796	.0573753

The results from the above tables indicate that there is no significant role played by the audit committee size in moderating the relationship between CEO duality and earnings management. Some coefficients for instance the coefficient of AEM and REM2 are negative while for REM1 it is positive but has no statistical significance. This implies that the moderating role played by the audit committee size in mitigating earnings management by CEO duality is not statistically pronounced.

4.4 (d) Moderating role of audit committee independence in influencing the impact of board size on earnings management

In this sub section, moderating role played by the audit committee independence between the relationship between corporate governance and earnings management is explored.

Table 4.27 Moderating role of Audit committee independence, Board size and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size*Audit_indp	-.0137485	.0094891	-2.45	0.048	-.032361	.004864
BIG4	.0067934	.0053022	1.28	0.200	-.0036066	.0171935
FIRM_S	-.0033014	.0050858	-0.65	0.516	-.0132769	.0066742
LEV	-.0259814	.0222679	-1.17	0.243	-.0696592	.0176965
MTB	.0001816	.0010483	0.17	0.863	-.0018746	.0022378
GROWTH	.0032126	.0046583	0.69	0.491	-.0059244	.0123497
Intangible_TA	.0044919	.0472332	0.10	0.924	-.0881547	.0971385
CFO_TA	-.0158809	.0277653	-0.57	0.567	-.0703418	.0385799
Insti_shares	.000422	.0012521	0.34	0.736	-.0020338	.0028779
Foreign_insti_shares	.0007707	.0004716	1.63	0.102	-.0001543	.0016956
GDP	.0000697	.000375	0.19	0.852	-.0006658	.0008053
_cons	.1056372	.0554762	1.90	0.057	-.0031777	.2144521

Table 4.28 Moderating role of Audit committee independence, Board size and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size*Audit_indp	-.0227348	.0104638	2.17	0.030	.0022104	.0432592
BIG4	-.0027206	.0058468	-0.47	0.642	-.0141889	.0087478
FIRM_S	.024738	.0056082	4.41	0.000	.0137377	.0357382
LEV	.0836118	.0245553	3.41	0.001	.0354474	.1317763
MTB	-.002407	.001156	-2.08	0.037	-.0046744	-.0001396
GROWTH	-.0076088	.0051368	-1.48	0.139	-.0176844	.0024668
Intangible_TA	.1270957	.0520851	2.44	0.015	.0249324	.2292589
CFO_TA	-.1882601	.0306174	-6.15	0.000	-.2483152	-.128205
Insti_shares	.000548	.0013807	0.40	0.691	-.0021601	.0032561
Foreign_insti_shares	-.0028932	.00052	-5.56	0.000	-.0039132	-.0018732
GDP	.0003337	.0004135	0.81	0.420	-.0004774	.0011449
_cons	-.2705632	.0611747	-4.42	0.000	-.3905555	-.1505708

Table 4.29 Moderating role of Audit committee independence, Board size and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_size*Audit_indp	-.0134782	.0071178	-1.89	0.058	-.0274395	.0004832
BIG4	.0012807	.0039772	0.32	0.747	-.0065204	.0090818
FIRM_S	-.0043164	.0038149	-1.13	0.258	-.0117991	.0031663
LEV	.0259885	.0167033	1.56	0.120	-.0067745	.0587515
MTB	-.0035902	.0007863	-4.57	0.000	-.0051325	-.0020478
GROWTH	.0002873	.0034942	0.08	0.934	-.0065664	.0071411
Intangible_TA	-.0148153	.0354299	-0.42	0.676	-.08431	.0546794
CFO_TA	.7036973	.0208269	33.79	0.000	.6628459	.7445487
Insti_shares	-.0011046	.0009392	-1.18	0.240	-.0029468	.0007375
Foreign_insti_shares	.0012849	.0003537	3.63	0.000	.000591	.0019787
GDP	-.0001271	.0002813	-0.45	0.652	-.0006788	.0004247
_cons	-.0047849	.041613	-0.11	0.908	-.0864075	.0768378

The results from the above tables indicate that the moderating role of audit committee independence in the relationship between board size and earnings management is statistically significant. This is evident from the negative coefficients of the interacting variables which indicates the mitigation of earnings management is more when accounting for audit committee independence and board size together. This implies that the earnings management is mitigated strongly when there is more members on board which is accompanied by more audit committee independence.

4.4 (e) Moderating role of audit committee independence in influencing the impact of board independence on earnings management

Herein the moderating role of the audit committee independence in influencing the impact of board independence on earnings management is explored in detail.

Table 4.30 Moderating role of Audit committee independence, Board independence and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_indp	-.0105005	.0297483	2.35	0.024	-.0478499	.0688509
BIG4	.0065845	.0053039	1.24	0.215	-.0038189	.016988
FIRM_S	-.0037357	.0051655	-0.72	0.470	-.0138676	.0063963
LEV	-.0255064	.0222808	-1.14	0.252	-.0692095	.0181967
MTB	.0000314	.0010436	0.03	0.976	-.0020155	.0020783
GROWTH	.0028233	.0046685	0.60	0.545	-.0063339	.0119805
Intangible_TA	.0053552	.0472722	0.11	0.910	-.0873679	.0980783
CFO_TA	-.0160447	.0277825	-0.58	0.564	-.0705393	.0384498
Insti_shares	.0003477	.0012519	0.28	0.781	-.002108	.0028033
Foreign_insti_shares	.0007577	.0004722	1.60	0.109	-.0001684	.0016839
GDP	.0001052	.0003749	0.28	0.779	-.0006302	.0008406
_cons	.0834161	.0581054	1.44	0.151	-.0305559	.1973882

Table 4.31 Moderating role of Audit committee independence, Board independence and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_indp	-.0201065	.0328287	1.97	0.040	-.0442859	.0844989
BIG4	-.002423	.0058531	-0.41	0.679	-.0139038	.0090577
FIRM_S	.0267729	.0057004	4.70	0.000	.0155918	.037954
LEV	.0823833	.0245879	3.35	0.001	.0341548	.1306117
MTB	-.0021076	.0011516	-1.83	0.067	-.0043665	.0001513
GROWTH	-.0073727	.005152	-1.43	0.153	-.0174781	.0027327
Intangible_TA	.1240097	.0521672	2.38	0.018	.0216853	.226334
CFO_TA	-.1880186	.0306593	-6.13	0.000	-.2481559	-.1278813
Insti_shares	.000657	.0013816	0.48	0.634	-.002053	.0033669
Foreign_insti_shares	-.0028936	.0005211	-5.55	0.000	-.0039156	-.0018715
GDP	.000293	.0004137	0.71	0.479	-.0005186	.0011045
_cons	-.2591326	.0641221	-4.04	0.000	-.3849061	-.133359

Table 4.32 Moderating role of Audit committee independence, Board independence and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
Board_indp*Audit_indp	-.0057179	.0223253	-2.26	0.008	-.0495083	.0380724
BIG4	.0010964	.0039804	0.28	0.783	-.0067111	.0089039
FIRM_S	-.0053048	.0038766	-1.37	0.171	-.0129086	.0022989
LEV	.0266435	.0167211	1.59	0.111	-.0061545	.0594415
MTB	-.0037592	.0007832	-4.80	0.000	-.0052954	-.0022231
GROWTH	.0000799	.0035036	0.02	0.982	-.0067924	.0069521
Intangible_TA	-.0132603	.0354765	-0.37	0.709	-.0828464	.0563259
CFO_TA	.7035493	.02085	33.74	0.000	.6626526	.7444459
Insti_shares	-.0011715	.0009395	-1.25	0.213	-.0030144	.0006713
Foreign_insti_shares	.0012815	.0003543	3.62	0.000	.0005864	.0019765
GDP	-.0001	.0002814	-0.36	0.722	-.0006519	.0004519
_cons	-.0157515	.0436065	-0.36	0.718	-.1012844	.0697814

The coefficients of the interacting variables are statistically significant and negative. This indicates that the moderating role of the audit committee independence is statistically pronounced in determining the relationship between board independence and earnings management. This implies that board independence coupled with audit committee independence is significantly mitigating the earnings management.

4.4 (f) Moderating role of audit committee independence in influencing the impact of CEO duality on earnings management

Table 4.33 Moderating role of Audit committee independence, CEO duality and AEM

AEM	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_Da*Audit_indp	-.0095251	.0115257	-0.83	0.409	-.0321324	.0130823
BIG4	.0063868	.005309	1.20	0.229	-.0040266	.0168002
FIRM_S	-.0035801	.0050974	-0.70	0.483	-.0135785	.0064183
LEV	-.0262337	.0222979	-1.18	0.240	-.0699704	.0175029
MTB	.0000411	.001043	0.04	0.969	-.0020048	.0020869
GROWTH	.0029738	.0046567	0.64	0.523	-.0061602	.0121077
Intangible_TA	.0043361	.0472796	0.09	0.927	-.0884014	.0970737
CFO_TA	-.0162897	.0277793	-0.59	0.558	-.0707779	.0381985
Insti_shares	.0003434	.0012517	0.27	0.784	-.0021118	.0027986
Foreign_insti_shares	.0007359	.000473	1.56	0.120	-.0001919	.0016636
GDP	.0000928	.0003747	0.25	0.804	-.0006421	.0008278
_cons	.0863843	.0547375	1.58	0.115	-.0209816	.1937503

Table 4.34 Moderating role of Audit committee independence, CEO duality and REM1

REM1	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D*Audit_indp	.0172827	.0127155	1.36	0.174	-.0076583	.0422238
BIG4	-.0020142	.005857	-0.34	0.731	-.0135026	.0094742
FIRM_S	.0251145	.0056236	4.47	0.000	.014084	.036145
LEV	.084166	.0245997	3.42	0.001	.0359145	.1324175
MTB	-.0021785	.0011507	-1.89	0.059	-.0044354	.0000785
GROWTH	-.0072197	.0051374	-1.41	0.160	-.0172965	.0028571
Intangible_TA	.1275919	.0521602	2.45	0.015	.0252811	.2299026
CFO_TA	-.1875434	.0306469	-6.12	0.000	-.2476564	-.1274305
Insti_shares	.0006795	.0013809	0.49	0.623	-.0020292	.0033881
Foreign_insti_shares	-.0028312	.0005218	-5.43	0.000	-.0038547	-.0018077
GDP	.0002968	.0004134	0.72	0.473	-.0005141	.0011076
_cons	-.2380626	.060388	-3.94	0.000	-.3565118	-.1196135

Table 4.35 Moderating role of Audit committee independence, CEO duality and REM2

REM2	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
					Lower	Upper
CEO_D*Audit_indp	-.0102481	.0086476	-1.19	0.236	-.0272101	.0067138
BIG4	.0008619	.0039833	0.22	0.829	-.0069512	.0086749
FIRM_S	-.0045395	.0038245	-1.19	0.235	-.0120411	.0029622
LEV	.0256597	.0167298	1.53	0.125	-.0071553	.0584748
MTB	-.0037257	.0007825	-4.76	0.000	-.0052606	-.0021907
GROWTH	.0000566	.0034939	0.02	0.987	-.0067964	.0069097
Intangible_TA	-.0151098	.0354733	-0.43	0.670	-.0846896	.05447
CFO_TA	.7032724	.0208424	33.74	0.000	.6623906	.7441542
Insti_shares	-.0011826	.0009391	-1.26	0.208	-.0030247	.0006595
Foreign_insti_shares	.0012481	.0003549	3.52	0.000	.000552	.0019442
GDP	-.0001052	.0002811	-0.37	0.708	-.0006566	.0004463
_cons	-.0240536	.0410688	-0.59	0.558	-.1046089	.0565017

The coefficients of the interacting variables are not statistically significant even though they are negative. This indicates that the moderating role of the audit committee independence is not statistically pronounced. This finding is in line with the findings of the previous sections which indicates CEO duality is not significant in reducing the earnings management practices.

4.5 Unique insights on the relationship between corporate governance, earnings management and the moderating role of audit committee characteristics from fixed effects quantile regression

In this section, the asymmetric relationship between corporate governance, audit committee characteristics and the earnings management are explored by employing fixed effects quantile regression (FE-QR) for panel data. This section has been divided into subsections, dealing with corporate governance, audit committee characteristics and finally the moderating role of the audit committee characteristics in mitigating earnings management.

4.5 (a) Board size and earnings management

In this sub section one of the proxies of corporate governance mechanisms i.e., board size and its relationship with different proxies of earnings management are estimated by FE-

QR.From table 4.36, it is evident that board size does play a significant role in reducing the AEM at moderate levels. This is evident from the significant and negative coefficients of board size at 0.25,0.35 and 0.50 quantiles. The fixed effects and the random effects models also reveal that they are significant.

Table 4.37 reveals that board size does play a significant role in reducing the REM1 at moderate quantiles. This is evident from the significant and negative coefficients of board size at 0.35,0.50 and 0.60 quantiles. The fixed effects and the random effects models also reveal that they are significant.

Table 4.38 reveals the same relationship between board size and REM2 as that with REM1 that board size does play a significant role in reducing the REM2 at moderate quantiles. This is evident from the significant and negative coefficients of board size at 0.35,0.50 and 0.60 quantiles. The fixed effects and the random effects models also reveal that they are significant.

Table 4.36 Board size and AEM – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size	-0.00427	-0.00667	-0.00806*	-0.00925*	-0.0114*	-0.0134	-0.0172	-0.0206	-0.0270	-0.0192*	-0.0126*
	(0.152)	(0.125)	(0.110)	(0.0980)	(0.0775)	(0.0612)	(0.0517)	(0.0712)	(0.136)	(0.00764)	(0.0107)
BIG4	-0.000944	0.00211	0.00389	0.00541	0.00812	0.0107	0.0156	0.0198	0.0280	0.00596	0.00970*
	(0.0735)	(0.0607)	(0.0535)	(0.0475)	(0.0375)	(0.0296)	(0.0251)	(0.0345)	(0.0660)	(0.00351)	(0.00470)
FIRM_S	-0.00553	-0.00125	0.00123	0.00335	0.00715	0.0108	0.0176	0.0235	0.0350	0.00387*	0.00935
	(0.115)	(0.0947)	(0.0835)	(0.0742)	(0.0586)	(0.0463)	(0.0391)	(0.0539)	(0.103)	(0.00182)	(0.00656)
LEV	-0.0497	-0.0143	0.00625	0.0238	0.0553	0.0856	0.142	0.191	0.286	0.0702***	0.0736***
	(0.518)	(0.428)	(0.377)	(0.335)	(0.265)	(0.209)	(0.177)	(0.244)	(0.466)	(0.0127)	(0.0210)
GROWTH	-0.00758	-0.00948	-0.0106	-0.0115	-0.0132	-0.0149	-0.0179	-0.0205	-0.0256	-0.0115**	-0.0142***
	(0.0856)	(0.0707)	(0.0623)	(0.0553)	(0.0437)	(0.0345)	(0.0292)	(0.0402)	(0.0768)	(0.00415)	(0.00424)
MTB	0.00120	-0.0000782	-0.000816	-0.00145	-0.00258	-0.00367	-0.00569	-0.00745	-0.0109	-0.00267***	-0.00323**
	(0.0211)	(0.0174)	(0.0154)	(0.0136)	(0.0108)	(0.00852)	(0.00722)	(0.00993)	(0.0190)	(0.000666)	(0.00100)
ROA	0.124	0.234	0.297	0.352	0.449	0.542	0.716	0.868	1.162	0.448***	0.505***
	(1.813)	(1.496)	(1.318)	(1.171)	(0.926)	(0.731)	(0.620)	(0.852)	(1.630)	(0.0219)	(0.0242)
Intangible_TA	0.0344	0.0480	0.0560	0.0628	0.0749	0.0866	0.108	0.127	0.164	0.0403	0.0819
	(0.540)	(0.446)	(0.393)	(0.349)	(0.276)	(0.218)	(0.184)	(0.253)	(0.485)	(0.0314)	(0.0419)
CFO_TA	-0.218	-0.196	-0.184	-0.173	-0.155	-0.136	-0.103	-0.0734	-0.0164	-0.206***	-0.144***
	(0.802)	(0.662)	(0.584)	(0.518)	(0.410)	(0.323)	(0.273)	(0.376)	(0.720)	(0.0237)	(0.0258)
Insti_shares	0.00156	0.00134	0.00122	0.00111	0.000918	0.000733	0.000389	0.0000901	-0.000491	-0.000686	0.000806
	(0.0117)	(0.00968)	(0.00853)	(0.00758)	(0.00599)	(0.00473)	(0.00400)	(0.00550)	(0.0105)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000120	-0.000121	-0.000121	-0.000121	-0.000121	-0.000121	-0.000122	-0.000122	-0.000123	-0.00000545	-0.000121
	(0.00696)	(0.00575)	(0.00506)	(0.00450)	(0.00356)	(0.00281)	(0.00237)	(0.00327)	(0.00625)	(0.000212)	(0.000430)
GDP	-0.00285	-0.00163	-0.000929	-0.000325	0.000754	0.00179	0.00373	0.00540	0.00867	0.00340	0.00138
	(0.0109)	(0.00903)	(0.00796)	(0.00707)	(0.00559)	(0.00441)	(0.00372)	(0.00512)	(0.00980)	(0.00198)	(0.00260)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.37 Board size and REM1 – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size	0.0554	0.0497	-0.0468	-0.0443*	-0.0404*	-0.0378*	-0.0344	-0.0312	-0.0263	-0.0438***	-0.0405**
	(0.0970)	(0.0711)	(0.0586)	(0.0479)	(0.0321)	(0.0235)	(0.0188)	(0.0246)	(0.0428)	(0.0129)	(0.0132)
BIG4	-0.0149	-0.0108	-0.00884	-0.00709	-0.00436	-0.00255	-0.000125	0.00207	0.00549	-0.00547	-0.00440
	(0.0436)	(0.0319)	(0.0263)	(0.0215)	(0.0144)	(0.0106)	(0.00845)	(0.0111)	(0.0192)	(0.00572)	(0.00582)
FIRM_S	0.0288	0.0218	0.0184	0.0154	0.0106	0.00753	0.00336	-0.000413	-0.00631	-0.00207	0.0107
	(0.0666)	(0.0488)	(0.0402)	(0.0329)	(0.0221)	(0.0162)	(0.0129)	(0.0169)	(0.0294)	(0.00549)	(0.00813)
LEV	0.0745	0.0736	0.0732	0.0728	0.0721	0.0717	0.0712	0.0707	0.0699	0.101***	0.0722**
	(0.221)	(0.162)	(0.133)	(0.109)	(0.0732)	(0.0536)	(0.0428)	(0.0561)	(0.0975)	(0.0246)	(0.0261)
GROWTH	0.00513	0.00257	0.00131	0.000195	-0.00154	-0.00268	-0.00422	-0.00561	-0.00778	-0.000309	-0.00151
	(0.0289)	(0.0212)	(0.0175)	(0.0143)	(0.00958)	(0.00701)	(0.00560)	(0.00734)	(0.0127)	(0.00534)	(0.00525)
MTB	-0.00473	-0.00375	-0.00326	-0.00284	-0.00217	-0.00173	-0.00114	-0.000605	0.000230	-0.00464***	-0.00218
	(0.0106)	(0.00775)	(0.00639)	(0.00522)	(0.00351)	(0.00257)	(0.00205)	(0.00269)	(0.00467)	(0.00119)	(0.00124)
ROA	-0.131	-0.128	-0.127	-0.126	-0.125	-0.124*	-0.123*	-0.121	-0.119	-0.109***	-0.125***
	(0.251)	(0.184)	(0.152)	(0.124)	(0.0833)	(0.0609)	(0.0487)	(0.0638)	(0.111)	(0.0302)	(0.0300)
Intangible_TA	0.0627	0.0787	0.0866	0.0935	0.104	0.111	0.121	0.130	0.143	0.0529	0.104*
	(0.410)	(0.300)	(0.247)	(0.202)	(0.136)	(0.0993)	(0.0793)	(0.104)	(0.181)	(0.0508)	(0.0519)
CFO_TA	-0.164	-0.163	-0.162	-0.162	-0.162	-0.161*	-0.161**	-0.160*	-0.160	-0.172***	-0.162***
	(0.271)	(0.199)	(0.164)	(0.134)	(0.0900)	(0.0658)	(0.0526)	(0.0689)	(0.120)	(0.0321)	(0.0320)
Insti_shares	-0.00155	-0.000763	-0.000376	-0.0000349	0.000497	0.000849	0.00132	0.00175	0.00241	0.00105	0.000488
	(0.0122)	(0.00894)	(0.00737)	(0.00602)	(0.00404)	(0.00296)	(0.00236)	(0.00310)	(0.00538)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00227	-0.00237	-0.00241	-0.00246	-0.00252	-0.00256**	-0.00262***	-0.00267**	-0.00276	-0.00234***	-0.00252***
	(0.00395)	(0.00290)	(0.00239)	(0.00195)	(0.00131)	(0.000959)	(0.000766)	(0.00100)	(0.00174)	(0.000482)	(0.000533)
GDP	0.00498	0.00429	0.00395	0.00365	0.00318	0.00287	0.00245	0.00208	0.00149	0.00868**	0.00319
	(0.00651)	(0.00477)	(0.00393)	(0.00321)	(0.00216)	(0.00158)	(0.00126)	(0.00165)	(0.00287)	(0.00287)	(0.00322)

Standard errors in parentheses
† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.38 Board size and REM2 – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size	-0.0244	-0.0228	-0.0219	-0.0209*	-0.0196*	-0.0186**	-0.0170	-0.0158	-0.0138	-0.0240**	-0.0194*
	(0.0297)	(0.0230)	(0.0196)	(0.0163)	(0.0127)	(0.0115)	(0.0130)	(0.0162)	(0.0236)	(0.00864)	(0.00889)
BIG4	-0.00337	-0.00163	-0.000703	0.000285	0.00169	0.00270	0.00440	0.00560	0.00773	0.00197	0.00191
	(0.0127)	(0.00985)	(0.00841)	(0.00700)	(0.00546)	(0.00494)	(0.00559)	(0.00694)	(0.0101)	(0.00382)	(0.00392)
FIRM_S	0.0253	0.0227	0.0213	0.0198	0.0177*	0.0163*	0.0137	0.0119	0.00876	0.0123***	0.0174**
	(0.0198)	(0.0153)	(0.0130)	(0.0109)	(0.00847)	(0.00767)	(0.00868)	(0.0108)	(0.0157)	(0.00350)	(0.00547)
LEV	-0.0314	-0.0221	-0.0172	-0.0119	-0.00430	0.00108	0.0102	0.0167	0.0281	-0.0246	-0.00315
	(0.0754)	(0.0583)	(0.0497)	(0.0414)	(0.0323)	(0.0293)	(0.0331)	(0.0411)	(0.0599)	(0.0163)	(0.0175)
GROWTH	-0.0125	-0.00909	-0.00725	-0.00530	-0.00251	-0.000525	0.00285	0.00523	0.00945	-0.00218	-0.00209
	(0.0238)	(0.0184)	(0.0157)	(0.0131)	(0.0102)	(0.00923)	(0.0104)	(0.0130)	(0.0189)	(0.00359)	(0.00353)
MTB	-0.00157	-0.00179	-0.00190	-0.00203	-0.00220	-0.00233	-0.00254	-0.00269	-0.00295	-0.000185	-0.00223**
	(0.00379)	(0.00293)	(0.00250)	(0.00208)	(0.00162)	(0.00147)	(0.00166)	(0.00206)	(0.00301)	(0.000792)	(0.000835)
ROA	-0.155	-0.120	-0.102	-0.0824	-0.0545	-0.0346	-0.000692	0.0231	0.0654	-0.0681***	-0.0502*
	(0.118)	(0.0908)	(0.0775)	(0.0646)	(0.0504)	(0.0457)	(0.0517)	(0.0641)	(0.0935)	(0.0203)	(0.0202)
Intangible_TA	-0.0430	-0.0352	-0.0310	-0.0265	-0.0202	-0.0157	-0.00795	-0.00254	0.00707	0.0282	-0.0192
	(0.124)	(0.0961)	(0.0819)	(0.0682)	(0.0532)	(0.0482)	(0.0545)	(0.0676)	(0.0987)	(0.0339)	(0.0349)
CFO_TA	0.747***	0.746***	0.746***	0.746***	0.745***	0.745***	0.745***	0.744***	0.744***	0.741***	0.745***
	(0.0946)	(0.0731)	(0.0624)	(0.0519)	(0.0405)	(0.0367)	(0.0415)	(0.0515)	(0.0752)	(0.0216)	(0.0215)
Insti_shares	-0.00182	-0.00155	-0.00141	-0.00126	-0.00104	-0.000885	-0.000623	-0.000439	-0.000111	-0.000951	-0.00101
	(0.00342)	(0.00265)	(0.00226)	(0.00188)	(0.00147)	(0.00133)	(0.00150)	(0.00186)	(0.00272)	(0.000926)	(0.000927)
Foreign_insti_shares	0.00124	0.00120	0.00117	0.00114	0.00111*	0.00108*	0.00103*	0.00100	0.000944	0.00117***	0.00110**
	(0.00117)	(0.000905)	(0.000772)	(0.000643)	(0.000501)	(0.000454)	(0.000513)	(0.000637)	(0.000930)	(0.000317)	(0.000359)
	-	-	-	-	-	-	-	-	-		
GDP	0.0122***	0.0120***	0.0119***	0.0118***	0.0116***	0.0114***	0.0112***	0.0111***	0.0108***	-0.0121***	-0.0115***
	(0.00203)	(0.00157)	(0.00134)	(0.00111)	(0.000867)	(0.000785)	(0.000888)	(0.00110)	(0.00161)	(0.00191)	(0.00216)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (b) Board independence and earnings management

In this sub section, board independence as one of the proxy for earnings management is used to estimate the relationship with the proxies of earnings management.From the table 4.39 it is clear that board independence has no significant impact in reducing the AEM. This is evident from insignificant coefficients at all the quantiles. The results of the FE and RE regression estimates also conforms with it.

From the table 4.40 it is clear that board independence has no significant impact in reducing the REM1. This is evident from insignificant coefficients at all the quantiles. The results of the FE and RE regression estimates also conforms with it.

From the table 4.41 it is clear that board independence has no significant impact in reducing the REM1 even though the coefficients are negative. This is evident from insignificant coefficients at all the quantiles. The results of the FE and RE regression estimates also conforms with it.

Table 4.39 Board independence and AEM – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp	0.0229	0.0203	0.0189	0.0177	0.0155	0.0134	0.00949	0.00627	-0.000378	-0.00912	0.0142
	(0.391)	(0.321)	(0.283)	(0.252)	(0.197)	(0.147)	(0.0946)	(0.129)	(0.290)	(0.0165)	(0.0213)
BIG4	-0.00182	0.00146	0.00330	0.00482	0.00759	0.0104	0.0154	0.0195	0.0280	0.00611	0.00929*
	(0.0943)	(0.0775)	(0.0683)	(0.0608)	(0.0475)	(0.0354)	(0.0228)	(0.0311)	(0.0701)	(0.00354)	(0.00469)
FIRM_S	-0.00667	-0.00212	0.000435	0.00253	0.00638	0.0102	0.0171	0.0229	0.0347	0.00265	0.00873
	(0.148)	(0.121)	(0.107)	(0.0952)	(0.0744)	(0.0554)	(0.0358)	(0.0488)	(0.110)	(0.00177)	(0.00656)
LEV	-0.0506	-0.0134	0.00744	0.0246	0.0560	0.0873	0.144	0.190	0.287	0.0715***	0.0751***
	(0.663)	(0.545)	(0.480)	(0.428)	(0.334)	(0.249)	(0.161)	(0.220)	(0.494)	(0.0128)	(0.0211)
GROWTH	-0.00741	-0.00948	-0.0106	-0.0116	-0.0133	-0.0151	-0.0182	-0.0208	-0.0262	-0.0116**	-0.0144***
	(0.110)	(0.0903)	(0.0796)	(0.0708)	(0.0554)	(0.0412)	(0.0266)	(0.0363)	(0.0817)	(0.00415)	(0.00424)
MTB	0.00129	-0.0000920	-0.000863	-0.00150	-0.00266	-0.00382	-0.00591	-0.00764	-0.0112	-0.00276***	-0.00337***
	(0.0268)	(0.0220)	(0.0194)	(0.0173)	(0.0135)	(0.0101)	(0.00651)	(0.00887)	(0.0199)	(0.000673)	(0.001000)
ROA	0.118	0.233	0.297	0.350	0.447	0.544	0.718	0.863	1.161	0.449***	0.506***
	(2.324)	(1.910)	(1.683)	(1.498)	(1.171)	(0.872)	(0.565)	(0.770)	(1.730)	(0.0220)	(0.0242)
Intangible_TA	0.0327	0.0470	0.0550	0.0616	0.0737	0.0858	0.107	0.125	0.163	0.0431	0.0811
	(0.696)	(0.572)	(0.504)	(0.449)	(0.351)	(0.261)	(0.169)	(0.230)	(0.517)	(0.0316)	(0.0420)
CFO_TA	-0.221	-0.198	-0.185	-0.174	-0.155	-0.136	-0.101	-0.0725	-0.0132	-0.205***	-0.143***
	(1.031)	(0.848)	(0.747)	(0.665)	(0.519)	(0.387)	(0.249)	(0.340)	(0.766)	(0.0238)	(0.0258)
Insti_shares	0.00161	0.00136	0.00121	0.00110	0.000880	0.000664	0.000275	-0.0000468	-0.000712	-0.000666	0.000748
	(0.0149)	(0.0123)	(0.0108)	(0.00961)	(0.00751)	(0.00559)	(0.00361)	(0.00492)	(0.0111)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.0000906	-0.0000962	-0.0000993	-0.000102	-0.000107	-0.000111	-0.000120	-0.000127	-0.000141	0.0000158	-0.000109
	(0.00894)	(0.00735)	(0.00648)	(0.00577)	(0.00451)	(0.00335)	(0.00216)	(0.00295)	(0.00665)	(0.000217)	(0.000430)
GDP	-0.00231	-0.00120	-0.000577	-0.0000666	0.000869	0.00180	0.00349	0.00488	0.00775	0.00275	0.00144
	(0.0141)	(0.0116)	(0.0102)	(0.00911)	(0.00712)	(0.00530)	(0.00342)	(0.00466)	(0.0105)	(0.00201)	(0.00265)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.40 Board independence and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp	0.0241	0.0243	0.0245	0.0246	0.0248	0.0249	0.0251	0.0252	0.0255	0.0262	0.0248
	(0.0624)	(0.0442)	(0.0360)	(0.0309)	(0.0281)	(0.0307)	(0.0392)	(0.0474)	(0.0646)	(0.0261)	(0.0264)
BIG4	-0.0120	-0.00876	-0.00703	-0.00558	-0.00324	-0.00174	0.000468	0.00209	0.00507	-0.00443	-0.00328
	(0.0142)	(0.0101)	(0.00821)	(0.00704)	(0.00641)	(0.00701)	(0.00893)	(0.0108)	(0.0147)	(0.00573)	(0.00583)
FIRM_S	0.0309	0.0238	0.0200	0.0168	0.0117	0.00841	0.00356	0.00000693	-0.00655	0.0000847	0.0118
	(0.0217)	(0.0153)	(0.0125)	(0.0107)	(0.00977)	(0.0107)	(0.0136)	(0.0165)	(0.0224)	(0.00547)	(0.00815)
LEV	0.0734	0.0728	0.0725	0.0723*	0.0719*	0.0716*	0.0712	0.0710	0.0704	0.0998***	0.0719**
	(0.0718)	(0.0508)	(0.0414)	(0.0355)	(0.0323)	(0.0353)	(0.0451)	(0.0545)	(0.0743)	(0.0247)	(0.0262)
GROWTH	0.00680	0.00385	0.00227	0.000946	-0.00119	-0.00256	-0.00458	-0.00606	-0.00879	0.0000259	-0.00116
	(0.00899)	(0.00637)	(0.00519)	(0.00445)	(0.00406)	(0.00443)	(0.00565)	(0.00683)	(0.00930)	(0.00535)	(0.00527)
MTB	-0.00443	-0.00350	-0.00300	-0.00258	-0.00190	-0.00147	-0.000825	-0.000356	0.000509	-0.00436***	-0.00191
	(0.00347)	(0.00245)	(0.00200)	(0.00172)	(0.00156)	(0.00171)	(0.00218)	(0.00263)	(0.00359)	(0.00119)	(0.00124)
ROA	-0.134	-0.131*	-0.129**	-0.128**	-0.125***	-0.124**	-0.121*	-0.120	-0.117	-0.110***	-0.125***
	(0.0811)	(0.0574)	(0.0468)	(0.0401)	(0.0365)	(0.0399)	(0.0509)	(0.0616)	(0.0839)	(0.0303)	(0.0301)
Intangible_TA	0.0567	0.0733	0.0821	0.0896	0.102	0.109	0.121	0.129	0.144	0.0486	0.101
	(0.132)	(0.0931)	(0.0759)	(0.0651)	(0.0593)	(0.0648)	(0.0826)	(0.0999)	(0.136)	(0.0509)	(0.0521)
CFO_TA	-0.164	-0.164**	-0.164**	-0.164***	-0.165***	-0.165***	-0.165**	-0.165*	-0.165	-0.175***	-0.165***
	(0.0874)	(0.0619)	(0.0505)	(0.0432)	(0.0394)	(0.0431)	(0.0549)	(0.0664)	(0.0905)	(0.0322)	(0.0321)
Insti_shares	-0.00103	-0.000409	-0.0000802	0.000197	0.000643	0.000929	0.00135	0.00166	0.00223	0.00117	0.000636
	(0.00386)	(0.00273)	(0.00223)	(0.00191)	(0.00174)	(0.00190)	(0.00242)	(0.00293)	(0.00399)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00225	-0.00236**	-0.00241**	-0.00246***	-0.00254***	-0.00259***	-0.00266**	-0.00271**	-0.00281*	-0.00238***	-0.00254***
	(0.00129)	(0.000911)	(0.000742)	(0.000636)	(0.000580)	(0.000634)	(0.000808)	(0.000977)	(0.00133)	(0.000483)	(0.000535)
GDP	0.00701**	0.00628***	0.00590***	0.00557***	0.00505***	0.00471***	0.00422**	0.00386*	0.00319	0.0105***	0.00506
	(0.00214)	(0.00151)	(0.00123)	(0.00106)	(0.000963)	(0.00105)	(0.00134)	(0.00162)	(0.00221)	(0.00295)	(0.00330)

Standard errors in parentheses
† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.41 Board independence and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp	-0.0376	-0.0353	-0.0339	-0.0326	-0.0308	-0.0294	-0.0273	-0.0257	-0.0230	-0.0288	-0.0306
	(0.0413)	(0.0310)	(0.0259)	(0.0219)	(0.0190)	(0.0195)	(0.0248)	(0.0307)	(0.0426)	(0.0174)	(0.0177)
BIG4	-0.00389	-0.00212	-0.00110	-0.000136	0.00121	0.00226	0.00386	0.00507	0.00711	0.00144	0.00142
	(0.00923)	(0.00694)	(0.00578)	(0.00490)	(0.00424)	(0.00437)	(0.00553)	(0.00686)	(0.00951)	(0.00382)	(0.00391)
FIRM_S	0.0252	0.0225*	0.0210*	0.0195*	0.0175**	0.0159*	0.0135	0.0117	0.00857	0.0112**	0.0172**
	(0.0143)	(0.0108)	(0.00899)	(0.00761)	(0.00659)	(0.00678)	(0.00860)	(0.0107)	(0.0148)	(0.00348)	(0.00547)
LEV	-0.0363	-0.0256	-0.0195	-0.0136	-0.00556	0.000760	0.0104	0.0177	0.0300	-0.0246	-0.00429
	(0.0547)	(0.0411)	(0.0343)	(0.0290)	(0.0251)	(0.0259)	(0.0328)	(0.0407)	(0.0564)	(0.0164)	(0.0176)
GROWTH	-0.0120	-0.00869	-0.00682	-0.00504	-0.00256	-0.000627	0.00233	0.00456	0.00833	-0.00230	-0.00217
	(0.0164)	(0.0124)	(0.0103)	(0.00872)	(0.00755)	(0.00778)	(0.00986)	(0.0122)	(0.0169)	(0.00359)	(0.00353)
MTB	-0.00160	-0.00184	-0.00197	-0.00210	-0.00228	-0.00242	-0.00264	-0.00280	-0.00308	-0.000328	-0.00231**
	(0.00275)	(0.00206)	(0.00172)	(0.00146)	(0.00126)	(0.00130)	(0.00165)	(0.00204)	(0.00283)	(0.000791)	(0.000833)
ROA	-0.160	-0.124	-0.103	-0.0830	-0.0553	-0.0337	-0.000635	0.0242	0.0663	-0.0685***	-0.0510*
	(0.0850)	(0.0639)	(0.0533)	(0.0452)	(0.0392)	(0.0404)	(0.0511)	(0.0633)	(0.0878)	(0.0203)	(0.0202)
Intangible_TA	-0.0390	-0.0315	-0.0272	-0.0231	-0.0174	-0.0130	-0.00617	-0.00107	0.00759	0.0314	-0.0165
	(0.0887)	(0.0666)	(0.0556)	(0.0470)	(0.0407)	(0.0419)	(0.0532)	(0.0660)	(0.0914)	(0.0340)	(0.0350)
CFO_TA	0.746***	0.747***	0.747***	0.747***	0.747***	0.747***	0.748***	0.748***	0.748***	0.743***	0.747***
	(0.0680)	(0.0511)	(0.0426)	(0.0361)	(0.0312)	(0.0322)	(0.0408)	(0.0506)	(0.0701)	(0.0216)	(0.0215)
Insti_shares	-0.00184	-0.00158	-0.00143	-0.00129	-0.00110	-0.000946	-0.000714	-0.000540	-0.000244	-0.00100	-0.00107
	(0.00242)	(0.00182)	(0.00152)	(0.00128)	(0.00111)	(0.00114)	(0.00145)	(0.00180)	(0.00249)	(0.000927)	(0.000926)
Foreign_insti_shares	0.00119	0.00116	0.00114*	0.00113*	0.00111**	0.00109**	0.00106*	0.00104	0.00101	0.00119***	0.00110**
	(0.000845)	(0.000635)	(0.000530)	(0.000448)	(0.000388)	(0.000400)	(0.000507)	(0.000629)	(0.000872)	(0.000318)	(0.000359)
GDP	-0.0141***	-0.0137***	-0.0135***	-0.0133***	-0.0130***	-0.0128***	-0.0125***	-0.0122***	-0.0118***	-0.0134***	-0.0130***
	(0.00148)	(0.00111)	(0.000925)	(0.000783)	(0.000677)	(0.000698)	(0.000884)	(0.00110)	(0.00152)	(0.00196)	(0.00221)

Standard errors in parentheses
† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (c) CEO duality and earnings management

In this sub section, one of proxies of corporate governance, CEO duality is estimated for its relationship with the different proxies of earnings management. Table 4.42 reveals that CEO duality has no significant role in mitigating AEM. Even though certain coefficients are negative at higher quantiles they are not statistically significant. The coefficients are not significant in FE and RE models, therefore this leads to the conclusion that CEO duality has no role in reducing AEM.

Table 4.43 reveals that CEO duality has no significant role in mitigating REM1. Here the coefficients are positive and are not statistically significant. The coefficients are not significant in FE and RE models, therefore this leads to the conclusion that CEO duality has no role in reducing REM1.

Table 4.44 reveals that CEO duality has no significant role in mitigating REM2. Even though certain coefficients are negative at lower quantiles they are not statistically significant. The coefficients are not significant in FE and RE models, therefore this leads to the conclusion that CEO duality has no role in reducing REM2.

Table 4.42 CEO duality and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D	0.00380	0.00213	0.00116	0.000359	-0.00110	-0.00253	-0.00515	-0.00742	-0.0120	-0.00258	-0.00196
	(0.223)	(0.185)	(0.163)	(0.145)	(0.113)	(0.0827)	(0.0433)	(0.0607)	(0.157)	(0.00477)	(0.00723)
BIG4	-0.00126	0.00178	0.00355	0.00501	0.00768	0.0103	0.0151	0.0192	0.0276	0.00605	0.00925*
	(0.140)	(0.116)	(0.102)	(0.0910)	(0.0707)	(0.0519)	(0.0272)	(0.0381)	(0.0985)	(0.00354)	(0.00470)
FIRM_S	-0.00593	-0.00165	0.000845	0.00291	0.00666	0.0103	0.0171	0.0229	0.0347	0.00277	0.00888
	(0.220)	(0.183)	(0.161)	(0.143)	(0.111)	(0.0816)	(0.0428)	(0.0599)	(0.155)	(0.00178)	(0.00656)
LEV	-0.0509	-0.0148	0.00626	0.0237	0.0554	0.0863	0.143	0.192	0.292	0.0707***	0.0741***
	(0.996)	(0.826)	(0.728)	(0.647)	(0.503)	(0.369)	(0.194)	(0.271)	(0.701)	(0.0128)	(0.0210)
GROWTH	-0.00728	-0.00931	-0.0105	-0.0115	-0.0133	-0.0150	-0.0182	-0.0210	-0.0266	-0.0116**	-0.0143***
	(0.163)	(0.135)	(0.119)	(0.106)	(0.0825)	(0.0605)	(0.0317)	(0.0444)	(0.115)	(0.00415)	(0.00424)
MTB	0.00128	-0.0000523	-0.000831	-0.00148	-0.00265	-0.00379	-0.00590	-0.00772	-0.0114	-0.00273***	-0.00334***
	(0.0404)	(0.0335)	(0.0295)	(0.0263)	(0.0204)	(0.0150)	(0.00786)	(0.0110)	(0.0285)	(0.000671)	(0.000999)
ROA	0.123	0.234	0.298	0.351	0.448	0.543	0.717	0.868	1.173	0.449***	0.506***
	(3.486)	(2.890)	(2.546)	(2.264)	(1.760)	(1.291)	(0.678)	(0.949)	(2.453)	(0.0220)	(0.0242)
Intangible_TA	0.0360	0.0493	0.0570	0.0633	0.0749	0.0862	0.107	0.125	0.162	0.0428	0.0818
	(1.032)	(0.856)	(0.754)	(0.670)	(0.521)	(0.382)	(0.200)	(0.281)	(0.726)	(0.0316)	(0.0419)
CFO_TA	-0.219	-0.197	-0.184	-0.174	-0.154	-0.136	-0.101	-0.0717	-0.0116	-0.205***	-0.143***
	(1.553)	(1.288)	(1.134)	(1.009)	(0.784)	(0.575)	(0.301)	(0.422)	(1.092)	(0.0238)	(0.0258)
Insti_shares	0.00162	0.00137	0.00123	0.00110	0.000883	0.000667	0.000270	-0.0000729	-0.000768	-0.000688	0.000753
	(0.0224)	(0.0185)	(0.0163)	(0.0145)	(0.0113)	(0.00828)	(0.00434)	(0.00608)	(0.0157)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000107	-0.000111	-0.000113	-0.000115	-0.000118	-0.000121	-0.000127	-0.000132	-0.000142	-0.00000202	-0.000120
	(0.0134)	(0.0111)	(0.00981)	(0.00872)	(0.00678)	(0.00497)	(0.00260)	(0.00365)	(0.00944)	(0.000214)	(0.000431)
GDP	-0.00310	-0.00188	-0.00117	-0.000587	0.000479	0.00152	0.00343	0.00509	0.00844	0.00302	0.00111
	(0.0215)	(0.0178)	(0.0157)	(0.0139)	(0.0108)	(0.00795)	(0.00416)	(0.00582)	(0.0151)	(0.00198)	(0.00260)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.43 CEO duality and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D	0.00165	0.00338	0.00433	0.00509	0.00635	0.00720	0.00835	0.00925	0.0108	0.00225	0.00636
	(0.0204)	(0.0146)	(0.0119)	(0.0101)	(0.00885)	(0.00945)	(0.0118)	(0.0144)	(0.0197)	(0.00863)	(0.00898)
BIG4	-0.0122	-0.00881	-0.00694	-0.00546	-0.00300	-0.00133	0.000919	0.00270	0.00579	-0.00432	-0.00298
	(0.0147)	(0.0105)	(0.00852)	(0.00728)	(0.00635)	(0.00678)	(0.00847)	(0.0103)	(0.0141)	(0.00574)	(0.00584)
FIRM_S	0.0314	0.0243	0.0204	0.0174	0.0123	0.00881	0.00415	0.000452	-0.00596	0.000280	0.0122
	(0.0223)	(0.0160)	(0.0130)	(0.0111)	(0.00967)	(0.0103)	(0.0129)	(0.0157)	(0.0215)	(0.00547)	(0.00814)
LEV	0.0719	0.0713	0.0711	0.0708	0.0704*	0.0702*	0.0698	0.0696	0.0691	0.0987***	0.0704**
	(0.0740)	(0.0530)	(0.0430)	(0.0367)	(0.0320)	(0.0342)	(0.0427)	(0.0522)	(0.0712)	(0.0247)	(0.0261)
GROWTH	0.00703	0.00402	0.00236	0.00104	-0.00115	-0.00263	-0.00463	-0.00621	-0.00896	0.000101	-0.00117
	(0.00926)	(0.00662)	(0.00537)	(0.00459)	(0.00401)	(0.00428)	(0.00534)	(0.00652)	(0.00890)	(0.00535)	(0.00527)
MTB	-0.00444	-0.00348	-0.00295	-0.00254	-0.00184	-0.00137	-0.000737	-0.000234	0.000639	-0.00431***	-0.00184
	(0.00358)	(0.00256)	(0.00208)	(0.00177)	(0.00155)	(0.00165)	(0.00206)	(0.00252)	(0.00344)	(0.00119)	(0.00124)
ROA	-0.136	-0.132*	-0.130**	-0.129**	-0.126***	-0.124**	-0.122*	-0.120*	-0.117	-0.111***	-0.126***
	(0.0828)	(0.0593)	(0.0481)	(0.0411)	(0.0359)	(0.0383)	(0.0478)	(0.0584)	(0.0797)	(0.0303)	(0.0301)
Intangible_TA	0.0578	0.0750	0.0845	0.0920	0.104	0.113	0.124	0.133	0.149	0.0510	0.105*
	(0.135)	(0.0964)	(0.0782)	(0.0668)	(0.0583)	(0.0622)	(0.0778)	(0.0949)	(0.130)	(0.0509)	(0.0521)
CFO_TA	-0.162	-0.162*	-0.163**	-0.163***	-0.163***	-0.163***	-0.164**	-0.164**	-0.165	-0.174***	-0.163***
	(0.0903)	(0.0646)	(0.0524)	(0.0448)	(0.0391)	(0.0417)	(0.0521)	(0.0636)	(0.0868)	(0.0322)	(0.0321)
Insti_shares	-0.00110	-0.000451	-0.0000941	0.000188	0.000656	0.000974	0.00140	0.00174	0.00233	0.00120	0.000660
	(0.00398)	(0.00285)	(0.00231)	(0.00197)	(0.00172)	(0.00184)	(0.00230)	(0.00280)	(0.00383)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00227	-0.00236*	-0.00241**	-0.00246***	-0.00252***	-0.00257***	-0.00263***	-0.00268**	-0.00277*	-0.00236***	-0.00252***
	(0.00132)	(0.000948)	(0.000769)	(0.000657)	(0.000573)	(0.000612)	(0.000765)	(0.000934)	(0.00127)	(0.000483)	(0.000535)
GDP	0.00645**	0.00557***	0.00508***	0.00470***	0.00406***	0.00363***	0.00304*	0.00258	0.00178	0.00964***	0.00405
	(0.00218)	(0.00156)	(0.00126)	(0.00108)	(0.000941)	(0.00100)	(0.00126)	(0.00153)	(0.00209)	(0.00287)	(0.00323)

Standard errors in parentheses
† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.44 CEO duality and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D	-0.0132	-0.00869	-0.00618	-0.00355	-0.0000542	0.00257	0.00701	0.0102	0.0158	0.00247	0.000558
	(0.0150)	(0.0115)	(0.00969)	(0.00809)	(0.00669)	(0.00648)	(0.00790)	(0.00983)	(0.0140)	(0.00574)	(0.00603)
BIG4	-0.00454	-0.00261	-0.00153	-0.000401	0.00110	0.00222	0.00412	0.00550	0.00788	0.00149	0.00136
	(0.0106)	(0.00814)	(0.00688)	(0.00574)	(0.00475)	(0.00460)	(0.00561)	(0.00698)	(0.00991)	(0.00383)	(0.00392)
FIRM_S	0.0246	0.0220	0.0206	0.0191*	0.0171*	0.0156*	0.0131	0.0113	0.00816	0.0110**	0.0168**
	(0.0165)	(0.0126)	(0.0107)	(0.00891)	(0.00736)	(0.00714)	(0.00870)	(0.0108)	(0.0154)	(0.00349)	(0.00547)
LEV	-0.0325	-0.0226	-0.0170	-0.0112	-0.00354	0.00224	0.0120	0.0191	0.0313	-0.0230	-0.00220
	(0.0630)	(0.0482)	(0.0408)	(0.0340)	(0.0281)	(0.0273)	(0.0332)	(0.0414)	(0.0587)	(0.0164)	(0.0175)
GROWTH	-0.0120	-0.00884	-0.00707	-0.00521	-0.00275	-0.000894	0.00223	0.00449	0.00841	-0.00246	-0.00231
	(0.0191)	(0.0146)	(0.0124)	(0.0103)	(0.00855)	(0.00828)	(0.0101)	(0.0126)	(0.0178)	(0.00360)	(0.00354)
MTB	-0.00179	-0.00199	-0.00210	-0.00221	-0.00236	-0.00247	-0.00266	-0.00280	-0.00303	-0.000361	-0.00238**
	(0.00316)	(0.00242)	(0.00204)	(0.00170)	(0.00141)	(0.00137)	(0.00166)	(0.00207)	(0.00294)	(0.000792)	(0.000833)
ROA	-0.157	-0.122	-0.102	-0.0816	-0.0543	-0.0338	0.000959	0.0260	0.0695	-0.0670***	-0.0495*
	(0.0969)	(0.0741)	(0.0627)	(0.0524)	(0.0434)	(0.0420)	(0.0512)	(0.0637)	(0.0904)	(0.0203)	(0.0202)
Intangible_TA	-0.0452	-0.0365	-0.0317	-0.0266	-0.0199	-0.0149	-0.00634	-0.000185	0.0105	0.0298	-0.0187
	(0.102)	(0.0784)	(0.0663)	(0.0553)	(0.0458)	(0.0443)	(0.0540)	(0.0673)	(0.0955)	(0.0340)	(0.0350)
CFO_TA	0.747***	0.747***	0.747***	0.747***	0.746***	0.746***	0.746***	0.746***	0.746***	0.742***	0.746***
	(0.0783)	(0.0599)	(0.0507)	(0.0423)	(0.0349)	(0.0339)	(0.0413)	(0.0514)	(0.0730)	(0.0216)	(0.0216)
Insti_shares	-0.00185	-0.00160	-0.00146	-0.00131	-0.00112	-0.000971	-0.000725	-0.000546	-0.000237	-0.00103	-0.00108
	(0.00280)	(0.00214)	(0.00181)	(0.00151)	(0.00125)	(0.00121)	(0.00148)	(0.00184)	(0.00261)	(0.000927)	(0.000927)
Foreign_insti_shares	0.00119	0.00117	0.00115	0.00114*	0.00112*	0.00110**	0.00108*	0.00106	0.00102	0.00118***	0.00111**
	(0.000972)	(0.000744)	(0.000629)	(0.000525)	(0.000434)	(0.000421)	(0.000513)	(0.000638)	(0.000907)	(0.000318)	(0.000359)
GDP	-0.0124***	-0.0123***	-0.0123***	-0.0122***	-0.0121***	-0.0121***	-0.0120***	-0.0119***	-0.0118***	-0.0127***	-0.0121***
	(0.00168)	(0.00129)	(0.00109)	(0.000909)	(0.000752)	(0.000728)	(0.000888)	(0.00111)	(0.00157)	(0.00191)	(0.00217)

Standard errors in parentheses
† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (d) Audit committee size and earnings management

In this sub section, the role of audit committee characteristics especially the audit committee size and it role in reducing different earnings management are calculated.Table 4.45 reveals that audit committee size has no significant role in reducing AEM. The coefficients even though negative at certain quantiles they are statistically significant. The results of the FE and RE models also indicate the same i.e., no role of audit committee size in reducing AEM.

Table 4.46 reveals that audit committee size has no significant role in reducing REM1. The coefficients even though negative at certain quantiles they are statistically significant. The results of the FE and RE models also indicate the same i.e., no role of audit committee size in reducing REM1.

Table 4.47 reveals that coefficients of audit committee size at almost all quantiles except 0.05 are negative but not statistically significant, thereby revealing that audit committee size do not mitigate REM2. The results of the FE and RE models also indicate the same i.e., no role of audit committee size in reducing REM2.

Table 4.45 Audit committee size and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_size	-0.000826	-0.000619	-0.000506	-0.000413	-0.000233	-0.0000625	0.000251	0.000510	0.00105	-0.0000921	-0.000129
	(0.00385)	(0.00292)	(0.00252)	(0.00230)	(0.00223)	(0.00262)	(0.00398)	(0.00534)	(0.00842)	(0.000823)	(0.000845)
BIG4	-0.00151	0.00170	0.00346	0.00491	0.00772	0.0104	0.0153	0.0193	0.0277	0.00611	0.00933*
	(0.0256)	(0.0194)	(0.0167)	(0.0153)	(0.0148)	(0.0174)	(0.0264)	(0.0355)	(0.0559)	(0.00353)	(0.00469)
FIRM_S	-0.00650	-0.00194	0.000546	0.00260	0.00657	0.0103	0.0172	0.0230	0.0349	0.00266	0.00886
	(0.0400)	(0.0303)	(0.0262)	(0.0239)	(0.0232)	(0.0272)	(0.0413)	(0.0555)	(0.0875)	(0.00176)	(0.00657)
LEV	-0.0517	-0.0143	0.00609	0.0229	0.0555	0.0864	0.143	0.190	0.288	0.0714***	0.0743***
	(0.181)	(0.137)	(0.118)	(0.108)	(0.105)	(0.123)	(0.186)	(0.251)	(0.395)	(0.0127)	(0.0210)
GROWTH	-0.00720	-0.00932	-0.0105	-0.0114	-0.0133	-0.0150	-0.0183	-0.0209	-0.0265	-0.0116**	-0.0144***
	(0.0294)	(0.0223)	(0.0193)	(0.0176)	(0.0171)	(0.0200)	(0.0304)	(0.0408)	(0.0643)	(0.00415)	(0.00424)
MTB	0.00132	-0.0000604	-0.000815	-0.00144	-0.00264	-0.00379	-0.00588	-0.00762	-0.0112	-0.00273***	-0.00334***
	(0.00730)	(0.00552)	(0.00477)	(0.00435)	(0.00423)	(0.00497)	(0.00753)	(0.0101)	(0.0160)	(0.000670)	(0.000998)
ROA	0.119	0.233	0.296	0.348	0.448	0.543	0.717	0.861	1.162	0.449***	0.506***
	(0.631)	(0.477)	(0.413)	(0.377)	(0.366)	(0.430)	(0.652)	(0.876)	(1.381)	(0.0220)	(0.0242)
Intangible_TA	0.0350	0.0490	0.0566	0.0629	0.0751	0.0867	0.108	0.125	0.162	0.0429	0.0822
	(0.187)	(0.142)	(0.123)	(0.112)	(0.109)	(0.128)	(0.193)	(0.260)	(0.410)	(0.0315)	(0.0419)
CFO_TA	-0.218	-0.196	-0.184	-0.174	-0.154	-0.135	-0.101	-0.0733	-0.0143	-0.205***	-0.143***
	(0.279)	(0.211)	(0.183)	(0.167)	(0.162)	(0.190)	(0.288)	(0.387)	(0.610)	(0.0238)	(0.0259)
Insti_shares	0.00160	0.00135	0.00121	0.00110	0.000879	0.000670	0.000287	-0.0000302	-0.000694	-0.000699	0.000752
	(0.00406)	(0.00307)	(0.00266)	(0.00242)	(0.00235)	(0.00276)	(0.00419)	(0.00563)	(0.00888)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000117	-0.000116	-0.000115	-0.000115	-0.000114	-0.000113	-0.000111	-0.000110	-0.000107	-0.00000463	-0.000113
	(0.00242)	(0.00183)	(0.00159)	(0.00145)	(0.00140)	(0.00165)	(0.00250)	(0.00336)	(0.00530)	(0.000214)	(0.000430)
GDP	-0.00279	-0.00165	-0.00103	-0.000512	0.000483	0.00142	0.00315	0.00458	0.00757	0.00298	0.00106
	(0.00381)	(0.00289)	(0.00250)	(0.00228)	(0.00221)	(0.00259)	(0.00393)	(0.00528)	(0.00833)	(0.00198)	(0.00259)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.46 Audit committee size and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_size	0.00244	0.00171	0.00133	0.000991	0.000467	0.000122	-0.000354	-0.000733	-0.00141	0.000368	0.000474
	(0.00243)	(0.00173)	(0.00141)	(0.00120)	(0.00106)	(0.00114)	(0.00142)	(0.00174)	(0.00238)	(0.00107)	(0.00105)
BIG4	-0.0125	-0.00906	-0.00724	-0.00567	-0.00320	-0.00158	0.000659	0.00244	0.00561	-0.00442	-0.00323
	(0.0142)	(0.0101)	(0.00827)	(0.00701)	(0.00620)	(0.00667)	(0.00833)	(0.0102)	(0.0139)	(0.00573)	(0.00583)
FIRM_S	0.0323	0.0249	0.0210	0.0176	0.0123	0.00875	0.00392	0.0000559	-0.00679	0.000387	0.0123
	(0.0216)	(0.0154)	(0.0125)	(0.0106)	(0.00942)	(0.0101)	(0.0126)	(0.0154)	(0.0212)	(0.00547)	(0.00816)
LEV	0.0707	0.0704	0.0702	0.0701*	0.0698*	0.0696*	0.0694	0.0692	0.0689	0.0983***	0.0698**
	(0.0718)	(0.0511)	(0.0417)	(0.0354)	(0.0313)	(0.0336)	(0.0421)	(0.0514)	(0.0704)	(0.0247)	(0.0261)
GROWTH	0.00719	0.00415	0.00253	0.00113	-0.00106	-0.00251	-0.00449	-0.00608	-0.00890	0.000158	-0.00103
	(0.00910)	(0.00648)	(0.00529)	(0.00449)	(0.00397)	(0.00427)	(0.00533)	(0.00651)	(0.00892)	(0.00535)	(0.00527)
MTB	-0.00437	-0.00343	-0.00294	-0.00251	-0.00184	-0.00140	-0.000786	-0.000300	0.000563	-0.00432***	-0.00185
	(0.00347)	(0.00247)	(0.00202)	(0.00171)	(0.00152)	(0.00163)	(0.00204)	(0.00248)	(0.00340)	(0.00119)	(0.00124)
ROA	-0.136	-0.132*	-0.130**	-0.129**	-0.126***	-0.125**	-0.122*	-0.120*	-0.117	-0.111***	-0.126***
	(0.0811)	(0.0578)	(0.0472)	(0.0400)	(0.0354)	(0.0380)	(0.0475)	(0.0580)	(0.0795)	(0.0303)	(0.0301)
Intangible_TA	0.0606	0.0765	0.0848	0.0921	0.103	0.111	0.121	0.130	0.144	0.0504	0.103*
	(0.132)	(0.0939)	(0.0767)	(0.0650)	(0.0575)	(0.0618)	(0.0773)	(0.0944)	(0.129)	(0.0509)	(0.0521)
CFO_TA	-0.165	-0.165**	-0.165**	-0.165***	-0.164***	-0.164***	-0.164**	-0.164**	-0.164	-0.175***	-0.164***
	(0.0874)	(0.0622)	(0.0508)	(0.0431)	(0.0381)	(0.0410)	(0.0512)	(0.0625)	(0.0857)	(0.0323)	(0.0321)
Insti_shares	-0.00108	-0.000436	-0.0000937	0.000203	0.000668	0.000975	0.00140	0.00173	0.00233	0.00121	0.000663
	(0.00386)	(0.00275)	(0.00224)	(0.00190)	(0.00168)	(0.00181)	(0.00226)	(0.00276)	(0.00378)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00229	-0.00238**	-0.00243**	-0.00248***	-0.00255***	-0.00259***	-0.00265***	-0.00270**	-0.00279*	-0.00237***	-0.00255***
	(0.00128)	(0.000915)	(0.000747)	(0.000633)	(0.000560)	(0.000602)	(0.000753)	(0.000919)	(0.00126)	(0.000483)	(0.000535)
GDP	0.00591**	0.00528***	0.00495***	0.00466***	0.00421***	0.00391***	0.00350**	0.00318*	0.00260	0.00966***	0.00422
	(0.00210)	(0.00150)	(0.00122)	(0.00104)	(0.000916)	(0.000984)	(0.00123)	(0.00150)	(0.00206)	(0.00287)	(0.00321)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.47 Audit committee size and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_size	0.000165	-0.00000356	-0.0000906	-0.000187	-0.000314	-0.000408	-0.000566	-0.000686	-0.000881	-0.000365	-0.000336
	(0.00218)	(0.00167)	(0.00142)	(0.00118)	(0.000928)	(0.000841)	(0.000950)	(0.00119)	(0.00173)	(0.000716)	(0.000705)
BIG4	-0.00417	-0.00231	-0.00135	-0.000291	0.00112	0.00215	0.00390	0.00522	0.00737	0.00143	0.00135
	(0.0128)	(0.00980)	(0.00835)	(0.00691)	(0.00544)	(0.00494)	(0.00558)	(0.00701)	(0.0101)	(0.00383)	(0.00391)
FIRM_S	0.0247	0.0220	0.0206	0.0190	0.0170*	0.0154*	0.0129	0.0109	0.00776	0.0109**	0.0166**
	(0.0199)	(0.0152)	(0.0130)	(0.0107)	(0.00845)	(0.00767)	(0.00866)	(0.0109)	(0.0157)	(0.00348)	(0.00548)
LEV	-0.0322	-0.0220	-0.0168	-0.0110	-0.00323	0.00243	0.0120	0.0193	0.0311	-0.0232	-0.00194
	(0.0760)	(0.0583)	(0.0497)	(0.0411)	(0.0324)	(0.0294)	(0.0332)	(0.0417)	(0.0602)	(0.0164)	(0.0176)
GROWTH	-0.0122	-0.00888	-0.00716	-0.00526	-0.00274	-0.000891	0.00224	0.00461	0.00847	-0.00244	-0.00232
	(0.0232)	(0.0178)	(0.0152)	(0.0126)	(0.00989)	(0.00897)	(0.0101)	(0.0127)	(0.0184)	(0.00360)	(0.00354)
MTB	-0.00174	-0.00196	-0.00207	-0.00219	-0.00236	-0.00248	-0.00269	-0.00285	-0.00310	-0.000349	-0.00239**
	(0.00381)	(0.00292)	(0.00249)	(0.00206)	(0.00162)	(0.00147)	(0.00166)	(0.00209)	(0.00302)	(0.000792)	(0.000833)
ROA	-0.157	-0.121	-0.102	-0.0817	-0.0542	-0.0341	0.0000753	0.0258	0.0679	-0.0674***	-0.0496*
	(0.118)	(0.0902)	(0.0769)	(0.0637)	(0.0502)	(0.0456)	(0.0515)	(0.0646)	(0.0933)	(0.0203)	(0.0202)
Intangible_TA	-0.0438	-0.0354	-0.0311	-0.0263	-0.0199	-0.0153	-0.00737	-0.00142	0.00829	0.0297	-0.0189
	(0.125)	(0.0955)	(0.0814)	(0.0673)	(0.0530)	(0.0481)	(0.0543)	(0.0683)	(0.0986)	(0.0340)	(0.0350)
CFO_TA	0.748***	0.748***	0.747***	0.747***	0.747***	0.747***	0.746***	0.746***	0.746***	0.742***	0.747***
	(0.0941)	(0.0722)	(0.0615)	(0.0509)	(0.0401)	(0.0363)	(0.0410)	(0.0516)	(0.0746)	(0.0217)	(0.0216)
Insti_shares	-0.00184	-0.00159	-0.00146	-0.00132	-0.00113	-0.000985	-0.000748	-0.000569	-0.000277	-0.00104	-0.00109
	(0.00337)	(0.00258)	(0.00220)	(0.00182)	(0.00143)	(0.00130)	(0.00147)	(0.00185)	(0.00267)	(0.000928)	(0.000927)
Foreign_insti_shares	0.00122	0.00119	0.00117	0.00115	0.00112*	0.00110*	0.00106*	0.00104	0.000993	0.00118***	0.00111**
	(0.00117)	(0.000898)	(0.000766)	(0.000633)	(0.000499)	(0.000452)	(0.000511)	(0.000642)	(0.000928)	(0.000318)	(0.000359)
GDP	-0.0131***	-0.0127***	-0.0125***	-0.0123***	-0.0121***	-0.0119***	-0.0115***	-0.0113***	-0.0109***	-0.0126***	-0.0120***
	(0.00202)	(0.00155)	(0.00132)	(0.00109)	(0.000861)	(0.000781)	(0.000882)	(0.00111)	(0.00160)	(0.00190)	(0.00216)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (e) Audit committee independence and earnings management

In this sub section, audit committee independence as one of the proxy for audit committee characteristics and it relationship with different earnings management are estimated.Table 4.48 reveals that there is no significant impact of audit committee independence in reducing AEM. Since the coefficients of audit committee independence are not statistically significant even though negative at some quantiles. The results of FE and RE models also reveals the same.

Table 4.49 reveals that there is no significant impact of audit committee independence in reducing REM1 even though coefficients of audit committee independence are negative at some quantilesbut are not statistically significant. The results of FE and RE models also reveals the same.

Table 4.50 reveals that there is no significant impact of audit committee independence in reducing REM2 even though coefficients of audit committee independence are negative at some quantilesbut are not statistically significant. The results of FE and RE models also reveals the same.

Table 4.48 Audit committee independence and AEM – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_indp	-0.0343	-0.0307	-0.0287	-0.0272	-0.0241	-0.0212	-0.0158	-0.0114	-0.00198	-0.0178	-0.0223
	(0.230)	(0.186)	(0.163)	(0.147)	(0.118)	(0.101)	(0.108)	(0.146)	(0.258)	(0.0243)	(0.0254)
BIG4	-0.00159	0.00166	0.00348	0.00490	0.00767	0.0103	0.0151	0.0192	0.0277	0.00604	0.00927*
	(0.0496)	(0.0401)	(0.0351)	(0.0315)	(0.0254)	(0.0217)	(0.0232)	(0.0314)	(0.0555)	(0.00354)	(0.00469)
FIRM_S	-0.00672	-0.00209	0.000478	0.00249	0.00642	0.0101	0.0170	0.0227	0.0348	0.00267	0.00868
	(0.0773)	(0.0625)	(0.0548)	(0.0491)	(0.0396)	(0.0339)	(0.0363)	(0.0490)	(0.0866)	(0.00177)	(0.00656)
LEV	-0.0517	-0.0137	0.00737	0.0239	0.0562	0.0863	0.143	0.190	0.289	0.0715***	0.0747***
	(0.350)	(0.283)	(0.248)	(0.222)	(0.180)	(0.154)	(0.164)	(0.222)	(0.393)	(0.0128)	(0.0210)
GROWTH	-0.00674	-0.00898	-0.0102	-0.0112	-0.0131	-0.0149	-0.0182	-0.0210	-0.0268	-0.0115**	-0.0142***
	(0.0572)	(0.0463)	(0.0406)	(0.0364)	(0.0293)	(0.0251)	(0.0268)	(0.0363)	(0.0641)	(0.00415)	(0.00424)
MTB	0.00136	-0.0000430	-0.000826	-0.00144	-0.00264	-0.00375	-0.00586	-0.00761	-0.0113	-0.00272***	-0.00332***
	(0.0141)	(0.0114)	(0.0100)	(0.00898)	(0.00725)	(0.00620)	(0.00664)	(0.00897)	(0.0158)	(0.000671)	(0.000998)
ROA	0.116	0.233	0.298	0.349	0.449	0.542	0.717	0.862	1.167	0.450***	0.506***
	(1.223)	(0.989)	(0.866)	(0.777)	(0.627)	(0.537)	(0.575)	(0.777)	(1.372)	(0.0220)	(0.0242)
Intangible_TA	0.0309	0.0461	0.0545	0.0612	0.0741	0.0862	0.109	0.128	0.168	0.0425	0.0816
	(0.365)	(0.296)	(0.259)	(0.232)	(0.187)	(0.160)	(0.171)	(0.232)	(0.409)	(0.0316)	(0.0419)
CFO_TA	-0.221	-0.197	-0.184	-0.174	-0.154	-0.135	-0.100	-0.0713	-0.0101	-0.205***	-0.143***
	(0.542)	(0.438)	(0.384)	(0.345)	(0.278)	(0.238)	(0.254)	(0.343)	(0.607)	(0.0238)	(0.0258)
Insti_shares	0.00168	0.00141	0.00126	0.00114	0.000906	0.000689	0.000280	-0.0000582	-0.000770	-0.000677	0.000772
	(0.00781)	(0.00632)	(0.00554)	(0.00497)	(0.00400)	(0.00342)	(0.00366)	(0.00495)	(0.00875)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000106	-0.000104	0.000103	0.000103	-0.000101	-0.000100	0.0000977	0.0000958	0.0000916	0.00000504	-0.000101
	(0.00472)	(0.00382)	(0.00334)	(0.00300)	(0.00242)	(0.00207)	(0.00221)	(0.00299)	(0.00528)	(0.000214)	(0.000431)
GDP	-0.00278	-0.00162	0.000972	0.000468	0.000520	0.00144	0.00318	0.00462	0.00764	0.00297	0.00109
	(0.00737)	(0.00596)	(0.00522)	(0.00469)	(0.00378)	(0.00323)	(0.00345)	(0.00466)	(0.00824)	(0.00197)	(0.00258)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.49 Audit committee independence and REM1 – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_indp	-0.0303	-0.0152	-0.00717	-0.000388	0.0106	0.0180	0.0279	0.0366	0.0498	0.00721	0.0106
	(0.0931)	(0.0549)	(0.0433)	(0.0440)	(0.0632)	(0.0821)	(0.110)	(0.136)	(0.177)	(0.0321)	(0.0316)
BIG4	-0.0122	-0.00888	-0.00711	-0.00561	-0.00318	-0.00156	0.000637	0.00255	0.00547	-0.00438	-0.00319
	(0.0178)	(0.0105)	(0.00828)	(0.00841)	(0.0121)	(0.0157)	(0.0211)	(0.0260)	(0.0338)	(0.00573)	(0.00583)
FIRM_S	0.0306	0.0238	0.0202	0.0172	0.0122	0.00892	0.00445	0.000565	-0.00537	0.000320	0.0122
	(0.0271)	(0.0160)	(0.0126)	(0.0128)	(0.0184)	(0.0239)	(0.0321)	(0.0397)	(0.0514)	(0.00546)	(0.00815)
LEV	0.0732	0.0720	0.0713	0.0708	0.0699	0.0694	0.0686	0.0679	0.0668	0.0985***	0.0699**
	(0.0900)	(0.0530)	(0.0418)	(0.0425)	(0.0611)	(0.0794)	(0.107)	(0.132)	(0.171)	(0.0247)	(0.0261)
GROWTH	0.00703	0.00402	0.00241	0.00106	-0.00113	-0.00260	-0.00458	-0.00631	-0.00894	0.0000927	-0.00113
	(0.0113)	(0.00666)	(0.00526)	(0.00534)	(0.00768)	(0.00997)	(0.0134)	(0.0165)	(0.0214)	(0.00536)	(0.00527)
MTB	-0.00436	-0.00343	-0.00294	-0.00253	-0.00186	-0.00141	-0.000799	-0.000270	0.000538	-0.00434***	-0.00186
	(0.00435)	(0.00256)	(0.00202)	(0.00206)	(0.00295)	(0.00384)	(0.00516)	(0.00636)	(0.00825)	(0.00119)	(0.00124)
ROA	-0.136	-0.132*	-0.130**	-0.129**	-0.126	-0.125	-0.123	-0.121	-0.118	-0.111***	-0.126***
	(0.102)	(0.0599)	(0.0473)	(0.0480)	(0.0690)	(0.0897)	(0.121)	(0.149)	(0.193)	(0.0303)	(0.0301)
Intangible_TA	0.0601	0.0762	0.0847	0.0919	0.104	0.111	0.122	0.131	0.145	0.0505	0.104*
	(0.165)	(0.0971)	(0.0766)	(0.0779)	(0.112)	(0.145)	(0.195)	(0.241)	(0.313)	(0.0509)	(0.0521)
CFO_TA	-0.161	-0.162*	-0.163**	-0.163**	-0.164*	-0.164	-0.165	-0.166	-0.166	-0.174***	-0.164***
	(0.110)	(0.0645)	(0.0509)	(0.0517)	(0.0744)	(0.0966)	(0.130)	(0.160)	(0.208)	(0.0323)	(0.0321)
Insti_shares	-0.00106	-0.000434	-0.0000979	0.000185	0.000642	0.000950	0.00136	0.00172	0.00228	0.00120	0.000642
	(0.00480)	(0.00283)	(0.00223)	(0.00227)	(0.00326)	(0.00424)	(0.00570)	(0.00703)	(0.00911)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00224	-0.00236*	-0.00242**	-0.00247**	-0.00255*	-0.00260	-0.00268	-0.00274	-0.00284	-0.00237***	-0.00255***
	(0.00161)	(0.000948)	(0.000748)	(0.000760)	(0.00109)	(0.00142)	(0.00191)	(0.00235)	(0.00305)	(0.000483)	(0.000535)
GDP	0.00656*	0.00573***	0.00528***	0.00491***	0.00430*	0.00389	0.00335	0.00287	0.00214	0.00973***	0.00430
	(0.00263)	(0.00155)	(0.00122)	(0.00124)	(0.00178)	(0.00232)	(0.00312)	(0.00384)	(0.00498)	(0.00286)	(0.00321)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.50 Audit committee independence and REM2 – Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Audit_indp	-0.0155	-0.0128	-0.0114	-0.00992	-0.00789	-0.00642	-0.00382	-0.00199	0.00114	-0.00852	-0.00754
	(0.0519)	(0.0391)	(0.0331)	(0.0278)	(0.0236)	(0.0237)	(0.0300)	(0.0372)	(0.0520)	(0.0215)	(0.0212)
BIG4	-0.00411	-0.00228	-0.00132	-0.000295	0.00108	0.00208	0.00385	0.00509	0.00722	0.00139	0.00132
	(0.00962)	(0.00725)	(0.00614)	(0.00515)	(0.00438)	(0.00440)	(0.00556)	(0.00690)	(0.00964)	(0.00383)	(0.00391)
FIRM_S	0.0245	0.0218	0.0205*	0.0190*	0.0170*	0.0156*	0.0131	0.0113	0.00823	0.0110**	0.0167**
	(0.0150)	(0.0113)	(0.00956)	(0.00802)	(0.00682)	(0.00685)	(0.00865)	(0.0107)	(0.0150)	(0.00348)	(0.00547)
LEV	-0.0317	-0.0217	-0.0165	-0.0108	-0.00333	0.00213	0.0118	0.0186	0.0302	-0.0231	-0.00203
	(0.0573)	(0.0432)	(0.0366)	(0.0307)	(0.0261)	(0.0262)	(0.0331)	(0.0411)	(0.0574)	(0.0164)	(0.0176)
GROWTH	-0.0122	-0.00887	-0.00711	-0.00521	-0.00269	-0.000850	0.00240	0.00469	0.00861	-0.00236	-0.00225
	(0.0175)	(0.0132)	(0.0112)	(0.00937)	(0.00798)	(0.00801)	(0.0101)	(0.0126)	(0.0175)	(0.00360)	(0.00354)
MTB	-0.00175	-0.00196	-0.00208	-0.00219	-0.00235	-0.00247	-0.00267	-0.00282	-0.00306	-0.000359	-0.00238**
	(0.00288)	(0.00217)	(0.00184)	(0.00154)	(0.00131)	(0.00131)	(0.00166)	(0.00206)	(0.00288)	(0.000792)	(0.000833)
ROA	-0.158	-0.121	-0.102	-0.0816	-0.0542	-0.0343	0.000913	0.0257	0.0682	-0.0670***	-0.0494*
	(0.0889)	(0.0670)	(0.0568)	(0.0477)	(0.0406)	(0.0408)	(0.0514)	(0.0638)	(0.0891)	(0.0203)	(0.0202)
Intangible_TA	-0.0433	-0.0352	-0.0309	-0.0263	-0.0201	-0.0156	-0.00773	-0.00215	0.00738	0.0291	-0.0190
	(0.0936)	(0.0705)	(0.0597)	(0.0501)	(0.0426)	(0.0428)	(0.0540)	(0.0671)	(0.0937)	(0.0340)	(0.0350)
CFO_TA	0.748***	0.748***	0.747***	0.747***	0.747***	0.746***	0.746***	0.745***	0.745***	0.742***	0.747***
	(0.0711)	(0.0536)	(0.0454)	(0.0381)	(0.0324)	(0.0325)	(0.0411)	(0.0510)	(0.0712)	(0.0216)	(0.0216)
Insti_shares	-0.00180	-0.00156	-0.00143	-0.00129	-0.00111	-0.000977	-0.000742	-0.000576	-0.000292	-0.00103	-0.00108
	(0.00253)	(0.00191)	(0.00161)	(0.00135)	(0.00115)	(0.00116)	(0.00146)	(0.00181)	(0.00253)	(0.000927)	(0.000927)
Foreign_insti_shares	0.00125	0.00120	0.00118*	0.00116*	0.00112**	0.00110**	0.00106*	0.00103	0.000975	0.00118***	0.00112**
	(0.000884)	(0.000666)	(0.000564)	(0.000473)	(0.000402)	(0.000404)	(0.000510)	(0.000634)	(0.000885)	(0.000318)	(0.000359)
GDP	-0.0129***	-0.0126***	-0.0125***	-0.0123***	-0.0121***	-0.0120***	-0.0117***	-0.0115***	-0.0112***	-0.0126***	-0.0121***
	(0.00152)	(0.00114)	(0.000969)	(0.000813)	(0.000691)	(0.000694)	(0.000877)	(0.00109)	(0.00152)	(0.00190)	(0.00215)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (f) Moderating role of audit committee size in influencing the impact of board size on earnings management

In the previous sections and sub sections, the individual proxies for corporate governance and audit committee characteristics and its impact on earnings management has been explored. Herein analysis has been carried out to find out the moderating role of different audit committee characteristics on the relationship between corporate governance and earnings management has been explored in detail.

Table 4.51 reveals the moderating role played by audit committee size in determining the relationship between board size and AEM has been pronounced. This is evident from the significant and negative coefficients at almost all quantiles except 0.05, 0.85 and 0.95. This indicates that the audit committee size enhances the monitoring mechanism of board size in reducing AEM revealing that when increase in board size is coupled with greater audit committee size, they are efficient in monitoring AEM.

Table 4.52 reveals the moderating role played by audit committee size in determining the relationship between board size and REM1 has been pronounced. This is evident from the significant and negative coefficients at higher quantiles of REM1. This indicates that the audit committee size enhances the monitoring mechanism of board size in reducing REM1 revealing that when increase in board size is coupled with greater audit committee size, they are efficient in monitoring REM1.Table 4.53 reveals the moderating role played by audit committee size in determining the relationship between board size and REM2 has been pronounced. This is evident from the significant and negative coefficients at lower quantiles of REM2. This indicates that the audit committee size enhances the monitoring mechanism of board size in reducing REM2 revealing that when increase in board size is coupled with greater audit committee size, they are efficient in monitoring lower levels of REM2.

Table 4.51 Moderating role of Audit committee size, Board size and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_size	-0.000345	-0.00282*	-0.0248*	-0.00220*	-0.0166*	-0.00114*	-0.00193*	-0.0000597	-0.000223	-0.0228**	-0.00134***
	(0.00264)	(0.00205)	(0.00179)	(0.00161)	(0.00146)	(0.00158)	(0.00227)	(0.00306)	(0.00488)	(0.000317)	(0.000329)
BIG4	-0.00154	0.00174	0.00347	0.00494	0.00772	0.0104	0.0153	0.0193	0.0277	0.00612	0.00936*
	(0.0463)	(0.0359)	(0.0314)	(0.0283)	(0.0257)	(0.0278)	(0.0399)	(0.0538)	(0.0857)	(0.00352)	(0.00469)
FIRM_S	-0.00649	-0.00190	0.000541	0.00260	0.00650	0.0103	0.0171	0.0228	0.0346	0.00269	0.00880
	(0.0725)	(0.0562)	(0.0490)	(0.0443)	(0.0402)	(0.0434)	(0.0623)	(0.0840)	(0.134)	(0.00175)	(0.00656)
LEV	-0.0524	-0.0143	0.00594	0.0230	0.0554	0.0866	0.143	0.191	0.289	0.0712***	0.0744***
	(0.327)	(0.253)	(0.221)	(0.200)	(0.181)	(0.196)	(0.281)	(0.379)	(0.605)	(0.0127)	(0.0210)
GROWTH	-0.00717	-0.00933	-0.0105	-0.0114	-0.0133	-0.0150	-0.0183	-0.0209	-0.0265	-0.0116**	-0.0144***
	(0.0534)	(0.0414)	(0.0361)	(0.0327)	(0.0296)	(0.0320)	(0.0460)	(0.0620)	(0.0988)	(0.00415)	(0.00424)
MTB	0.00136	-0.0000494	-0.000798	-0.00143	-0.00263	-0.00379	-0.00588	-0.00764	-0.0113	-0.00271***	-0.00334***
	(0.0132)	(0.0102)	(0.00893)	(0.00807)	(0.00733)	(0.00792)	(0.0114)	(0.0153)	(0.0244)	(0.000667)	(0.000998)
ROA	0.117	0.233	0.295	0.348	0.447	0.543	0.716	0.862	1.162	0.448***	0.506***
	(1.143)	(0.885)	(0.773)	(0.699)	(0.634)	(0.685)	(0.984)	(1.326)	(2.115)	(0.0220)	(0.0242)
Intangible_TA	0.0354	0.0494	0.0569	0.0632	0.0751	0.0866	0.107	0.125	0.161	0.0427	0.0821
	(0.340)	(0.263)	(0.230)	(0.208)	(0.188)	(0.203)	(0.292)	(0.394)	(0.628)	(0.0314)	(0.0419)
CFO_TA	-0.219	-0.196	-0.184	-0.173	-0.154	-0.135	-0.101	-0.0726	-0.0136	-0.206***	-0.142***
	(0.506)	(0.393)	(0.343)	(0.310)	(0.281)	(0.303)	(0.436)	(0.587)	(0.937)	(0.0238)	(0.0259)
Insti_shares	0.00160	0.00135	0.00121	0.00109	0.000877	0.000666	0.000285	-0.0000343	-0.000694	-0.000742	0.000748
	(0.00737)	(0.00572)	(0.00499)	(0.00451)	(0.00409)	(0.00442)	(0.00634)	(0.00855)	(0.0136)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000118	-0.000117	-0.000116	-0.000115	-0.000113	-0.000112	-0.000109	-0.000107	-0.000102	-0.00000335	-0.000113
	(0.00440)	(0.00341)	(0.00297)	(0.00269)	(0.00244)	(0.00263)	(0.00378)	(0.00510)	(0.00813)	(0.000212)	(0.000430)
GDP	-0.00277	-0.00160	-0.000981	-0.000456	0.000540	0.00150	0.00324	0.00470	0.00771	0.00308	0.00113
	(0.00692)	(0.00537)	(0.00469)	(0.00423)	(0.00384)	(0.00415)	(0.00595)	(0.00803)	(0.0128)	(0.00198)	(0.00259)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.52 Moderating role of Audit committee size, Board size and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_size	-0.00115	-0.00846	-0.00691	-0.000552	-0.00343*	-0.00204*	-0.00762*	-0.0147*	-0.0418*	-0.0342*	-0.0344*
	(0.000944)	(0.000669)	(0.000548)	(0.000462)	(0.000408)	(0.000435)	(0.000545)	(0.000666)	(0.000912)	(0.000415)	(0.000408)
BIG4	-0.0128	-0.00925	-0.00741	-0.00576	-0.00328	-0.00163	0.000695	0.00253	0.00574	-0.00448	-0.00329
	(0.0144)	(0.0102)	(0.00834)	(0.00704)	(0.00620)	(0.00663)	(0.00830)	(0.0101)	(0.0139)	(0.00573)	(0.00583)
FIRM_S	0.0323	0.0249	0.0210	0.0176	0.0124	0.00895	0.00410	0.000267	-0.00644	0.000337	0.0124
	(0.0218)	(0.0155)	(0.0127)	(0.0107)	(0.00943)	(0.0101)	(0.0126)	(0.0154)	(0.0211)	(0.00546)	(0.00815)
LEV	0.0711	0.0705	0.0702	0.0699*	0.0695*	0.0692*	0.0688	0.0685	0.0680	0.0983***	0.0695**
	(0.0726)	(0.0515)	(0.0421)	(0.0355)	(0.0313)	(0.0335)	(0.0419)	(0.0512)	(0.0702)	(0.0247)	(0.0261)
GROWTH	0.00731	0.00419	0.00259	0.00114	-0.00104	-0.00248	-0.00451	-0.00612	-0.00893	0.000186	-0.00102
	(0.00914)	(0.00648)	(0.00530)	(0.00448)	(0.00395)	(0.00422)	(0.00528)	(0.00645)	(0.00883)	(0.00535)	(0.00527)
MTB	-0.00440	-0.00345	-0.00296	-0.00252	-0.00185	-0.00141	-0.000793	-0.000303	0.000554	-0.00435***	-0.00186
	(0.00350)	(0.00249)	(0.00203)	(0.00172)	(0.00151)	(0.00162)	(0.00202)	(0.00247)	(0.00339)	(0.00119)	(0.00124)
ROA	-0.135	-0.132*	-0.130**	-0.128**	-0.126***	-0.125***	-0.122**	-0.121*	-0.118	-0.110***	-0.126***
	(0.0818)	(0.0580)	(0.0475)	(0.0401)	(0.0353)	(0.0377)	(0.0473)	(0.0578)	(0.0791)	(0.0303)	(0.0301)
Intangible_TA	0.0608	0.0767	0.0850	0.0923	0.104	0.111	0.121	0.130	0.144	0.0502	0.103*
	(0.134)	(0.0947)	(0.0775)	(0.0654)	(0.0576)	(0.0616)	(0.0771)	(0.0943)	(0.129)	(0.0509)	(0.0521)
CFO_TA	-0.166	-0.166**	-0.166**	-0.165***	-0.165***	-0.165***	-0.164**	-0.164**	-0.164	-0.175***	-0.165***
	(0.0882)	(0.0626)	(0.0512)	(0.0432)	(0.0381)	(0.0407)	(0.0510)	(0.0623)	(0.0853)	(0.0323)	(0.0321)
Insti_shares	-0.00115	-0.000467	-0.000117	0.000197	0.000672	0.000986	0.00143	0.00178	0.00239	0.00123	0.000669
	(0.00391)	(0.00278)	(0.00227)	(0.00192)	(0.00169)	(0.00181)	(0.00226)	(0.00276)	(0.00378)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00230	-0.00240**	-0.00244**	-0.00248***	-0.00255***	-0.00259***	-0.00265***	-0.00270**	-0.00278*	-0.00237***	-0.00255***
	(0.00130)	(0.000921)	(0.000754)	(0.000636)	(0.000561)	(0.000599)	(0.000750)	(0.000917)	(0.00126)	(0.000483)	(0.000535)
GDP	0.00572**	0.00510***	0.00478***	0.00450***	0.00407***	0.00378***	0.00338**	0.00306*	0.00251	0.00955***	0.00407
	(0.00213)	(0.00151)	(0.00123)	(0.00104)	(0.000918)	(0.000981)	(0.00123)	(0.00150)	(0.00206)	(0.00287)	(0.00322)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.53 Moderating role of Audit committee size, Board size and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_size	-0.000457	-0.00934*	-0.00119*	-0.00146*	-0.00182*	-0.000210	-0.000255	-0.000289	-0.000345	-0.00234**	-0.0)189*
	(0.000784)	(0.000600)	(0.000509)	(0.000423)	(0.000339)	(0.000315)	(0.000367)	(0.000460)	(0.000660)	(0.000279)	(0.000274)
BIG4	-0.00419	-0.00233	-0.00134	-0.000280	0.00113	0.00220	0.00396	0.00528	0.00748	0.00146	0.00138
	(0.0121)	(0.00925)	(0.00785)	(0.00653)	(0.00523)	(0.00486)	(0.00566)	(0.00709)	(0.0102)	(0.00383)	(0.00391)
FIRM_S	0.0245	0.0219	0.0204	0.0190	0.0169*	0.0154*	0.0129	0.0111	0.00793	0.0109**	0.0166**
	(0.0188)	(0.0144)	(0.0122)	(0.0101)	(0.00812)	(0.00754)	(0.00879)	(0.0110)	(0.0158)	(0.00346)	(0.00547)
LEV	-0.0319	-0.0218	-0.0165	-0.0108	-0.00317	0.00259	0.0121	0.0192	0.0310	-0.0233	-0.00184
	(0.0719)	(0.0550)	(0.0467)	(0.0388)	(0.0311)	(0.0289)	(0.0337)	(0.0422)	(0.0605)	(0.0164)	(0.0176)
GROWTH	-0.0122	-0.00890	-0.00714	-0.00527	-0.00276	-0.000862	0.00225	0.00460	0.00850	-0.00246	-0.00232
	(0.0219)	(0.0167)	(0.0142)	(0.0118)	(0.00947)	(0.00880)	(0.0102)	(0.0128)	(0.0184)	(0.00360)	(0.00354)
MTB	-0.00173	-0.00195	-0.00206	-0.00219	-0.00235	-0.00248	-0.00268	-0.00284	-0.00310	-0.000322	- 0.00238**
	(0.00360)	(0.00275)	(0.00234)	(0.00194)	(0.00156)	(0.00145)	(0.00168)	(0.00211)	(0.00303)	(0.000791)	(0.000833)
ROA	-0.157	-0.121	-0.102	-0.0818	-0.0545	-0.0338	0.000113	0.0256	0.0682	-0.0678***	-0.0497*
	(0.111)	(0.0851)	(0.0722)	(0.0601)	(0.0482)	(0.0448)	(0.0522)	(0.0653)	(0.0937)	(0.0204)	(0.0202)
Intangible_TA	-0.0440	-0.0356	-0.0311	-0.0264	-0.0200	-0.0152	-0.00731	-0.00136	0.00854	0.0301	-0.0189
	(0.118)	(0.0902)	(0.0766)	(0.0637)	(0.0510)	(0.0474)	(0.0552)	(0.0691)	(0.0992)	(0.0340)	(0.0350)
CFO_TA	0.748***	0.748***	0.748***	0.747***	0.747***	0.747***	0.746***	0.746***	0.746***	0.742***	0.747***
	(0.0889)	(0.0681)	(0.0578)	(0.0480)	(0.0385)	(0.0357)	(0.0416)	(0.0522)	(0.0748)	(0.0217)	(0.0216)
Insti_shares	-0.00186	-0.00160	-0.00147	-0.00132	-0.00113	-0.000982	-0.000741	-0.000559	-0.000257	-0.00105	-0.00109
	(0.00319)	(0.00244)	(0.00207)	(0.00172)	(0.00138)	(0.00128)	(0.00149)	(0.00187)	(0.00268)	(0.000929)	(0.000927)
Foreign_insti_shares	0.00122	0.00119	0.00117	0.00115	0.00112*	0.00110*	0.00106*	0.00104	0.000995	0.00118***	0.00111**
	(0.00111)	(0.000848)	(0.000719)	(0.000598)	(0.000479)	(0.000445)	(0.000518)	(0.000649)	(0.000932)	(0.000317)	(0.000359)
GDP	- 0.0130***	- 0.0126***	- 0.0125***	- 0.0123***	- 0.0120***	- 0.0118***	- 0.0115***	- 0.0112***	- 0.0108***	- -0.0125***	- 0.0120***
	(0.00192)	(0.00147)	(0.00125)	(0.00104)	(0.000829)	(0.000770)	(0.000897)	(0.00112)	(0.00161)	(0.00190)	(0.00216)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (g) Moderating role of audit committee size in influencing the impact of board independence on earnings management

Table 4.54 reveals that the moderating role played by audit committee size in determining the relationship between board independence and AEM has been pronounced. This is evident from the significant and negative coefficients at quantiles except 0.35, 0.50 and 0.60. This indicates that the audit committee size enhances the monitoring mechanism of board independence in reducing AEM revealing that when increase in board independence is coupled with greater audit committee size, they are efficient in monitoring AEM.

Table 4.55 indicates that the moderating role played by audit committee size in determining the relationship between board independence and REM1 has been pronounced. This is evident from the significant and negative coefficients at moderate and higher quantiles of REM1 (0.35, 0.50, 0.60, 0.75 and 0.85). This indicates that the audit committee size enhances the monitoring mechanism of board independence in reducing REM1 revealing that when increase in board independence is coupled with greater audit committee size, they are efficient in monitoring REM1.

Table 4.56 reveals that the moderating role played by audit committee size in determining the relationship between board independence and REM2 has been pronounced. This is evident from the significant and negative coefficients at moderate quantiles of REM2 (0.35, 0.50, and 0.60). This indicates that the audit committee size enhances the monitoring mechanism of board independence in reducing REM2 revealing that when increase in board independence is coupled with greater audit committee size, they are efficient in monitoring REM2.

Table 4.54 Moderating role of Audit committee size, Board independence and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_size	-0.00146	-0.00110	-0.000899	-0.00727*	-0.00406*	-0.000943*	0.000467	0.000936	0.00194	-0.0109*	-0.00221*
	(0.00909)	(0.00647)	(0.00545)	(0.00510)	(0.00588)	(0.00790)	(0.0127)	(0.0171)	(0.0268)	(0.00158)	(0.00169)
BIG4	-0.00131	0.00176	0.00351	0.00498	0.00775	0.0104	0.0153	0.0193	0.0279	0.00615	0.00934*
	(0.0292)	(0.0208)	(0.0175)	(0.0164)	(0.0189)	(0.0254)	(0.0407)	(0.0548)	(0.0860)	(0.00353)	(0.00469)
FIRM_S	-0.00610	-0.00178	0.000685	0.00276	0.00665	0.0104	0.0172	0.0229	0.0351	0.00262	0.00889
	(0.0456)	(0.0324)	(0.0274)	(0.0256)	(0.0295)	(0.0396)	(0.0636)	(0.0856)	(0.134)	(0.00176)	(0.00656)
LEV	-0.0508	-0.0149	0.00573	0.0231	0.0555	0.0870	0.144	0.191	0.293	0.0714***	0.0742***
	(0.206)	(0.147)	(0.124)	(0.116)	(0.133)	(0.179)	(0.288)	(0.387)	(0.607)	(0.0127)	(0.0210)
GROWTH	-0.00722	-0.00927	-0.0104	-0.0114	-0.0133	-0.0151	-0.0183	-0.0210	-0.0268	-0.0116**	-0.0143***
	(0.0335)	(0.0239)	(0.0201)	(0.0188)	(0.0217)	(0.0291)	(0.0468)	(0.0630)	(0.0988)	(0.00415)	(0.00424)
MTB	0.00129	-0.0000428	-0.000804	-0.00144	-0.00264	-0.00381	-0.00590	-0.00766	-0.0114	-0.00274***	-0.00334***
	(0.00832)	(0.00591)	(0.00498)	(0.00466)	(0.00538)	(0.00722)	(0.0116)	(0.0156)	(0.0245)	(0.000670)	(0.000999)
ROA	0.123	0.233	0.296	0.349	0.449	0.545	0.718	0.863	1.174	0.449***	0.506***
	(0.720)	(0.512)	(0.432)	(0.404)	(0.466)	(0.626)	(1.004)	(1.351)	(2.120)	(0.0220)	(0.0242)
Intangible_TA	0.0360	0.0493	0.0569	0.0633	0.0753	0.0870	0.108	0.125	0.163	0.0431	0.0822
	(0.215)	(0.153)	(0.129)	(0.120)	(0.139)	(0.186)	(0.299)	(0.403)	(0.632)	(0.0315)	(0.0419)
CFO_TA	-0.218	-0.196	-0.184	-0.173	-0.154	-0.135	-0.101	-0.0728	-0.0120	-0.205***	-0.143***
	(0.319)	(0.227)	(0.191)	(0.179)	(0.206)	(0.277)	(0.445)	(0.598)	(0.939)	(0.0238)	(0.0259)
Insti_shares	0.00161	0.00136	0.00122	0.00110	0.000881	0.000667	0.000280	-0.0000428	-0.000735	-0.000698	0.000754
	(0.00463)	(0.00330)	(0.00278)	(0.00260)	(0.00299)	(0.00402)	(0.00646)	(0.00870)	(0.0136)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000121	-0.000119	-0.000118	-0.000117	-0.000115	-0.000113	-0.000110	-0.000107	-0.000101	0.00000867	-0.000114
	(0.00277)	(0.00197)	(0.00166)	(0.00155)	(0.00179)	(0.00241)	(0.00387)	(0.00520)	(0.00816)	(0.000214)	(0.000430)
GDP	-0.00302	-0.00186	-0.00119	-0.000636	0.000410	0.00142	0.00325	0.00478	0.00805	0.00288	0.00101
	(0.00434)	(0.00309)	(0.00260)	(0.00243)	(0.00280)	(0.00377)	(0.00605)	(0.00814)	(0.0128)	(0.00198)	(0.00258)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.55 Moderating role of Audit committee size, Board independence and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_size	-0.00526	-0.00369	-0.00288	-0.0214*	-0.0102*	-0.00268*	-0.0770*	-0.0160*	-0.00309	-0.00923*	-0.0103*
	(0.00484)	(0.00345)	(0.00283)	(0.00240)	(0.00214)	(0.00231)	(0.00289)	(0.00353)	(0.00486)	(0.00213)	(0.00210)
BIG4	-0.0125	-0.00906	-0.00729	-0.00568	-0.00325	-0.00161	0.000648	0.00245	0.00570	-0.00444	-0.00327
	(0.0141)	(0.0101)	(0.00827)	(0.00700)	(0.00624)	(0.00673)	(0.00843)	(0.0103)	(0.0142)	(0.00573)	(0.00583)
FIRM_S	0.0317	0.0245	0.0207	0.0173	0.0122	0.00874	0.00397	0.000170	-0.00670	0.000365	0.0122
	(0.0214)	(0.0152)	(0.0125)	(0.0106)	(0.00947)	(0.0102)	(0.0128)	(0.0156)	(0.0215)	(0.00547)	(0.00815)
LEV	0.0730	0.0720	0.0714	0.0710*	0.0702*	0.0697*	0.0690	0.0685	0.0675	0.0985***	0.0702**
	(0.0711)	(0.0507)	(0.0417)	(0.0353)	(0.0315)	(0.0339)	(0.0425)	(0.0519)	(0.0714)	(0.0247)	(0.0261)
GROWTH	0.00695	0.00398	0.00244	0.00104	-0.00108	-0.00251	-0.00447	-0.00604	-0.00887	0.000133	-0.00106
	(0.00907)	(0.00647)	(0.00532)	(0.00450)	(0.00402)	(0.00433)	(0.00542)	(0.00661)	(0.00911)	(0.00535)	(0.00527)
MTB	-0.00442	-0.00347	-0.00298	-0.00253	-0.00186	-0.00140	-0.000773	-0.000272	0.000632	-0.00433***	-0.00186
	(0.00345)	(0.00246)	(0.00202)	(0.00171)	(0.00153)	(0.00164)	(0.00206)	(0.00251)	(0.00346)	(0.00119)	(0.00124)
ROA	-0.134	-0.131*	-0.130**	-0.128**	-0.126***	-0.125**	-0.123*	-0.121*	-0.118	-0.111***	-0.126***
	(0.0806)	(0.0575)	(0.0472)	(0.0400)	(0.0357)	(0.0384)	(0.0481)	(0.0588)	(0.0809)	(0.0303)	(0.0301)
Intangible_TA	0.0590	0.0753	0.0838	0.0915	0.103	0.111	0.122	0.130	0.146	0.0503	0.103*
	(0.131)	(0.0932)	(0.0766)	(0.0649)	(0.0578)	(0.0623)	(0.0781)	(0.0953)	(0.131)	(0.0509)	(0.0521)
CFO_TA	-0.166	-0.165**	-0.165**	-0.165***	-0.164***	-0.164***	-0.164**	-0.164**	-0.163	-0.175***	-0.164***
	(0.0867)	(0.0618)	(0.0508)	(0.0430)	(0.0383)	(0.0413)	(0.0518)	(0.0632)	(0.0870)	(0.0323)	(0.0321)
Insti_shares	-0.00107	-0.000428	-0.0000967	0.000205	0.000661	0.000969	0.00139	0.00173	0.00234	0.00120	0.000658
	(0.00383)	(0.00273)	(0.00225)	(0.00190)	(0.00170)	(0.00183)	(0.00229)	(0.00279)	(0.00385)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00228	-0.00238**	-0.00243**	-0.00247***	-0.00254***	-0.00259***	-0.00266***	-0.00271**	-0.00280*	-0.00237***	-0.00254***
	(0.00127)	(0.000908)	(0.000746)	(0.000632)	(0.000563)	(0.000607)	(0.000760)	(0.000928)	(0.00128)	(0.000483)	(0.000535)
GDP	0.00675**	0.00588***	0.00542***	0.00501***	0.00438***	0.00396***	0.00338**	0.00292	0.00208	0.00978***	0.00439
	(0.00208)	(0.00148)	(0.00122)	(0.00103)	(0.000919)	(0.000990)	(0.00124)	(0.00151)	(0.00209)	(0.00286)	(0.00321)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.56 Moderating role of Audit committee size, Board independence and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_size	-0.00140	-0.00151	-0.00158	-0.00164*	-0.00173*	-0.00180*	-0.00191	-0.00199	-0.00213	-0.00176*	-0.00175*
	(0.00341)	(0.00260)	(0.00219)	(0.00184)	(0.00154)	(0.00152)	(0.00188)	(0.00234)	(0.00328)	(0.00143)	(0.00141)
BIG4	-0.00415	-0.00231	-0.00128	-0.000256	0.00120	0.00229	0.00404	0.00534	0.00753	0.00149	0.00143
	(0.0100)	(0.00764)	(0.00644)	(0.00543)	(0.00453)	(0.00449)	(0.00554)	(0.00690)	(0.00966)	(0.00383)	(0.00391)
FIRM_S	0.0241	0.0216	0.0202*	0.0188*	0.0169*	0.0154*	0.0130	0.0112	0.00828	0.0109**	0.0165**
	(0.0155)	(0.0118)	(0.00998)	(0.00841)	(0.00702)	(0.00695)	(0.00858)	(0.0107)	(0.0150)	(0.00348)	(0.00547)
LEV	-0.0320	-0.0222	-0.0167	-0.0112	-0.00349	0.00233	0.0116	0.0185	0.0302	-0.0232	-0.00226
	(0.0594)	(0.0453)	(0.0382)	(0.0322)	(0.0269)	(0.0266)	(0.0328)	(0.0409)	(0.0572)	(0.0164)	(0.0175)
GROWTH	-0.0119	-0.00873	-0.00696	-0.00520	-0.00269	-0.000808	0.00219	0.00443	0.00819	-0.00241	-0.00229
	(0.0179)	(0.0137)	(0.0115)	(0.00971)	(0.00810)	(0.00803)	(0.00991)	(0.0123)	(0.0173)	(0.00359)	(0.00353)
MTB	-0.00168	-0.00190	-0.00203	-0.00216	-0.00234	-0.00247	-0.00269	-0.00285	-0.00312	-0.000357	-0.00236**
	(0.00298)	(0.00227)	(0.00191)	(0.00161)	(0.00135)	(0.00133)	(0.00165)	(0.00205)	(0.00287)	(0.000791)	(0.000833)
ROA	-0.157	-0.122	-0.102	-0.0824	-0.0545	-0.0335	-0.0000925	0.0249	0.0668	-0.0677***	-0.0500*
	(0.0922)	(0.0702)	(0.0592)	(0.0500)	(0.0418)	(0.0414)	(0.0511)	(0.0635)	(0.0888)	(0.0203)	(0.0202)
Intangible_TA	-0.0434	-0.0352	-0.0306	-0.0260	-0.0194	-0.0145	-0.00668	-0.000822	0.00899	0.0297	-0.0184
	(0.0974)	(0.0742)	(0.0626)	(0.0527)	(0.0440)	(0.0436)	(0.0538)	(0.0670)	(0.0938)	(0.0340)	(0.0350)
CFO_TA	0.748***	0.748***	0.748***	0.748***	0.747***	0.747***	0.747***	0.747***	0.747***	0.743***	0.747***
	(0.0737)	(0.0562)	(0.0474)	(0.0399)	(0.0333)	(0.0330)	(0.0407)	(0.0507)	(0.0710)	(0.0216)	(0.0216)
Insti_shares	-0.00187	-0.00162	-0.00147	-0.00133	-0.00113	-0.000977	-0.000735	-0.000554	-0.000250	-0.00105	-0.00110
	(0.00264)	(0.00201)	(0.00170)	(0.00143)	(0.00119)	(0.00118)	(0.00146)	(0.00182)	(0.00254)	(0.000927)	(0.000927)
Foreign_insti_shares	0.00120	0.00117	0.00116	0.00114*	0.00112**	0.00110**	0.00107*	0.00105	0.00102	0.00118***	0.00111**
	(0.000918)	(0.000699)	(0.000590)	(0.000497)	(0.000415)	(0.000411)	(0.000507)	(0.000631)	(0.000884)	(0.000318)	(0.000359)
GDP	-0.0131***	-0.0128***	-0.0126***	-0.0125***	-0.0122***	-0.0121***	-0.0118***	-0.0116***	-0.0112***	-0.0127***	-0.0122***
	(0.00158)	(0.00120)	(0.00101)	(0.000852)	(0.000711)	(0.000704)	(0.000870)	(0.00108)	(0.00152)	(0.00190)	(0.00215)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (h) Moderating role of audit committee size in influencing the impact of CEO duality on earnings management

Table 4.57 reveals the moderating role played by audit committee size in determining the relationship between CEO duality and AEM has not been statistically pronounced. This is evident from the insignificant yet negative coefficients for all quantiles of AEM. This indicates that moderating role of the audit committee size in determining the relationship between CEO duality and AEM is not statistically significant.

The moderating role played by audit committee size in determining the relationship between CEO duality and REM1 has not been statistically pronounced and this is visible from the results displayed in table 4.58. This is evident from the insignificant coefficients for all quantiles of REM1. This indicates that moderating role of the audit committee size in determining the relationship between CEO duality and REM1 is not statistically significant.

The moderating role played by audit committee size in determining the relationship between CEO duality and REM2 has not been statistically pronounced (Refer table 4.59). This is evident from the insignificant coefficients for all quantiles of REM2. This indicates that moderating role of the audit committee size in determining the relationship between CEO duality and REM2 is not statistically significant.

Table 4.57 Moderating role of Audit committee size, CEO duality and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_size	0.000779	0.000409	0.000210	0.0000436	-0.000254	-0.000548	-0.00108	-0.00154	-0.00249	-0.000430	-0.000432
	(0.0325)	(0.0266)	(0.0234)	(0.0208)	(0.0162)	(0.0119)	(0.00624)	(0.00860)	(0.0225)	(0.000835)	(0.00118)
BIG4	-0.00151	0.00177	0.00354	0.00501	0.00765	0.0103	0.0150	0.0191	0.0275	0.00605	0.00923*
	(0.123)	(0.101)	(0.0886)	(0.0787)	(0.0612)	(0.0449)	(0.0236)	(0.0325)	(0.0851)	(0.00354)	(0.00470)
FIRM_S	-0.00637	-0.00171	0.000802	0.00289	0.00664	0.0103	0.0171	0.0228	0.0348	0.00276	0.00888
	(0.194)	(0.158)	(0.139)	(0.124)	(0.0964)	(0.0706)	(0.0371)	(0.0512)	(0.134)	(0.00178)	(0.00656)
LEV	-0.0545	-0.0152	0.00598	0.0236	0.0553	0.0865	0.143	0.192	0.293	0.0708***	0.0742***
	(0.877)	(0.717)	(0.631)	(0.561)	(0.436)	(0.320)	(0.169)	(0.232)	(0.607)	(0.0128)	(0.0210)
GROWTH	-0.00710	-0.00930	-0.0105	-0.0115	-0.0132	-0.0150	-0.0181	-0.0209	-0.0265	-0.0116**	-0.0143***
	(0.144)	(0.117)	(0.103)	(0.0918)	(0.0715)	(0.0523)	(0.0275)	(0.0379)	(0.0993)	(0.00415)	(0.00424)
MTB	0.00141	-0.0000391	-0.000823	-0.00147	-0.00265	-0.00380	-0.00589	-0.00770	-0.0114	-0.00273***	-0.00334***
	(0.0355)	(0.0291)	(0.0256)	(0.0227)	(0.0177)	(0.0130)	(0.00683)	(0.00941)	(0.0246)	(0.000671)	(0.000999)
ROA	0.113	0.233	0.298	0.351	0.448	0.543	0.716	0.865	1.172	0.449***	0.505***
	(3.062)	(2.503)	(2.204)	(1.958)	(1.524)	(1.116)	(0.589)	(0.811)	(2.119)	(0.0220)	(0.0242)
Intangible_TA	0.0352	0.0493	0.0569	0.0633	0.0747	0.0860	0.106	0.124	0.160	0.0427	0.0815
	(0.908)	(0.742)	(0.653)	(0.580)	(0.452)	(0.331)	(0.174)	(0.240)	(0.627)	(0.0316)	(0.0420)
CFO_TA	-0.221	-0.197	-0.184	-0.174	-0.154	-0.135	-0.101	-0.0709	-0.00933	-0.205***	-0.143***
	(1.357)	(1.109)	(0.977)	(0.868)	(0.675)	(0.495)	(0.260)	(0.358)	(0.938)	(0.0238)	(0.0258)
Insti_shares	0.00166	0.00138	0.00123	0.00111	0.000882	0.000662	0.000264	-0.0000798	-0.000790	-0.000688	0.000749
	(0.0196)	(0.0160)	(0.0141)	(0.0125)	(0.00977)	(0.00715)	(0.00376)	(0.00518)	(0.0136)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000108	-0.000112	-0.000113	-0.000115	-0.000117	-0.000120	-0.000125	-0.000129	-0.000138	-0.00000155	-0.000119
	(0.0118)	(0.00965)	(0.00850)	(0.00755)	(0.00587)	(0.00430)	(0.00226)	(0.00312)	(0.00816)	(0.000214)	(0.000431)
GDP	-0.00321	-0.00189	-0.00117	-0.000578	0.000489	0.00154	0.00345	0.00510	0.00849	0.00302	0.00113
	(0.0188)	(0.0154)	(0.0135)	(0.0120)	(0.00935)	(0.00685)	(0.00359)	(0.00495)	(0.0130)	(0.00198)	(0.00259)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.58 Moderating role of Audit committee size, CEO duality and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_size	0.00149	0.00158	0.00162	0.00166	0.00172	0.00176	0.00182	0.00186	0.00194	0.00104	0.00172
	(0.00330)	(0.00239)	(0.00195)	(0.00165)	(0.00143)	(0.00152)	(0.00189)	(0.00230)	(0.00314)	(0.00143)	(0.00147)
BIG4	-0.0118	-0.00855	-0.00673	-0.00523	-0.00285	-0.00121	0.000993	0.00273	0.00573	-0.00417	-0.00282
	(0.0146)	(0.0106)	(0.00861)	(0.00731)	(0.00634)	(0.00672)	(0.00835)	(0.0102)	(0.0139)	(0.00574)	(0.00583)
FIRM_S	0.0311	0.0244	0.0205	0.0174	0.0123	0.00885	0.00420	0.000531	-0.00580	0.000223	0.0123
	(0.0223)	(0.0161)	(0.0131)	(0.0111)	(0.00967)	(0.0102)	(0.0127)	(0.0155)	(0.0212)	(0.00547)	(0.00814)
LEV	0.0713	0.0709	0.0707	0.0705	0.0702*	0.0700*	0.0697	0.0695	0.0691	0.0988***	0.0702**
	(0.0738)	(0.0535)	(0.0435)	(0.0369)	(0.0320)	(0.0339)	(0.0422)	(0.0515)	(0.0701)	(0.0247)	(0.0261)
GROWTH	0.00689	0.00394	0.00228	0.000908	-0.00128	-0.00278	-0.00479	-0.00639	-0.00914	-0.00000433	-0.00130
	(0.00919)	(0.00666)	(0.00541)	(0.00460)	(0.00399)	(0.00422)	(0.00525)	(0.00641)	(0.00873)	(0.00535)	(0.00527)
MTB	-0.00437	-0.00346	-0.00294	-0.00251	-0.00183	-0.00136	-0.000736	-0.000240	0.000616	-0.00430***	-0.00182
	(0.00357)	(0.00258)	(0.00210)	(0.00178)	(0.00155)	(0.00164)	(0.00204)	(0.00249)	(0.00339)	(0.00119)	(0.00124)
ROA	-0.135	-0.131*	-0.129**	-0.128**	-0.126***	-0.124**	-0.122**	-0.120*	-0.117	-0.110***	-0.125***
	(0.0823)	(0.0596)	(0.0485)	(0.0411)	(0.0357)	(0.0378)	(0.0470)	(0.0573)	(0.0782)	(0.0303)	(0.0301)
Intangible_TA	0.0599	0.0764	0.0858	0.0935	0.106	0.114	0.126	0.135	0.150	0.0522	0.106*
	(0.134)	(0.0971)	(0.0789)	(0.0670)	(0.0581)	(0.0615)	(0.0765)	(0.0934)	(0.127)	(0.0510)	(0.0521)
CFO_TA	-0.164	-0.164*	-0.164**	-0.164***	-0.164***	-0.165***	-0.165**	-0.165**	-0.165	-0.175***	-0.164***
	(0.0900)	(0.0652)	(0.0530)	(0.0450)	(0.0390)	(0.0413)	(0.0514)	(0.0627)	(0.0855)	(0.0322)	(0.0321)
Insti_shares	-0.00108	-0.000447	-0.0000907	0.000203	0.000670	0.000991	0.00142	0.00176	0.00235	0.00121	0.000675
	(0.00397)	(0.00288)	(0.00234)	(0.00199)	(0.00172)	(0.00182)	(0.00227)	(0.00277)	(0.00377)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00226	-0.00236*	-0.00241**	-0.00245***	-0.00252***	-0.00257***	-0.00263***	-0.00268**	-0.00277*	-0.00236***	-0.00252***
	(0.00132)	(0.000957)	(0.000778)	(0.000660)	(0.000572)	(0.000607)	(0.000754)	(0.000920)	(0.00125)	(0.000483)	(0.000535)
GDP	0.00619**	0.00538***	0.00492***	0.00454***	0.00393***	0.00351***	0.00295*	0.00251	0.00175	0.00952***	0.00392
	(0.00217)	(0.00157)	(0.00128)	(0.00108)	(0.000940)	(0.000996)	(0.00124)	(0.00151)	(0.00206)	(0.00287)	(0.00322)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.59 Moderating role of Audit committee size, CEO duality and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_size	-0.00245	-0.00172	-0.00132	-0.000899	-0.000351	0.0000654	0.000779	0.00129	0.00215	0.0000709	-0.000250
	(0.00251)	(0.00192)	(0.00163)	(0.00135)	(0.00111)	(0.00106)	(0.00127)	(0.00158)	(0.00225)	(0.000952)	(0.000984)
BIG4	-0.00465	-0.00269	-0.00161	-0.000471	0.00101	0.00213	0.00406	0.00543	0.00776	0.00142	0.00128
	(0.0111)	(0.00847)	(0.00716)	(0.00596)	(0.00489)	(0.00466)	(0.00561)	(0.00697)	(0.00989)	(0.00383)	(0.00392)
FIRM_S	0.0246	0.0220	0.0206	0.0191*	0.0171*	0.0156*	0.0131	0.0112	0.00815	0.0110**	0.0167**
	(0.0172)	(0.0132)	(0.0111)	(0.00925)	(0.00759)	(0.00724)	(0.00871)	(0.0108)	(0.0154)	(0.00349)	(0.00547)
LEV	-0.0321	-0.0222	-0.0168	-0.0110	-0.00360	0.00206	0.0118	0.0187	0.0304	-0.0232	-0.00222
	(0.0656)	(0.0502)	(0.0424)	(0.0353)	(0.0290)	(0.0276)	(0.0332)	(0.0414)	(0.0586)	(0.0164)	(0.0175)
GROWTH	-0.0120	-0.00877	-0.00699	-0.00513	-0.00272	-0.000878	0.00227	0.00451	0.00833	-0.00243	-0.00227
	(0.0199)	(0.0152)	(0.0129)	(0.0107)	(0.00879)	(0.00838)	(0.0101)	(0.0125)	(0.0178)	(0.00360)	(0.00354)
MTB	-0.00180	-0.00199	-0.00210	-0.00222	-0.00236	-0.00247	-0.00266	-0.00280	-0.00303	-0.000364	-0.00239**
	(0.00329)	(0.00252)	(0.00213)	(0.00177)	(0.00145)	(0.00139)	(0.00167)	(0.00207)	(0.00294)	(0.000792)	(0.000833)
ROA	-0.159	-0.123	-0.103	-0.0818	-0.0547	-0.0341	0.00128	0.0264	0.0693	-0.0671***	-0.0497*
	(0.101)	(0.0772)	(0.0652)	(0.0543)	(0.0446)	(0.0426)	(0.0512)	(0.0636)	(0.0902)	(0.0203)	(0.0202)
Intangible_TA	-0.0478	-0.0384	-0.0331	-0.0277	-0.0205	-0.0151	-0.00585	0.000749	0.0120	0.0294	-0.0192
	(0.107)	(0.0818)	(0.0691)	(0.0575)	(0.0471)	(0.0449)	(0.0541)	(0.0673)	(0.0954)	(0.0340)	(0.0350)
CFO_TA	0.749***	0.748***	0.748***	0.747***	0.747***	0.746***	0.745***	0.745***	0.744***	0.742***	0.746***
	(0.0813)	(0.0623)	(0.0526)	(0.0438)	(0.0359)	(0.0342)	(0.0412)	(0.0512)	(0.0726)	(0.0216)	(0.0216)
Insti_shares	-0.00188	-0.00162	-0.00147	-0.00132	-0.00112	-0.000975	-0.000719	-0.000537	-0.000227	-0.00103	-0.00109
	(0.00292)	(0.00224)	(0.00189)	(0.00157)	(0.00129)	(0.00123)	(0.00148)	(0.00184)	(0.00261)	(0.000928)	(0.000927)
Foreign_insti_shares	0.00120	0.00117	0.00116	0.00114*	0.00111*	0.00110*	0.00106*	0.00104	0.00100	0.00118***	0.00111**
	(0.00101)	(0.000776)	(0.000655)	(0.000545)	(0.000447)	(0.000426)	(0.000513)	(0.000638)	(0.000905)	(0.000318)	(0.000359)
	-	-	-	-	-	-	-				
GDP	0.0125***	0.0123***	0.0123***	0.0122***	0.0121***	0.0120***	0.0118***	-0.0117***	-0.0116***	-0.0126***	-0.0120***
	(0.00175)	(0.00134)	(0.00113)	(0.000944)	(0.000774)	(0.000738)	(0.000888)	(0.00111)	(0.00157)	(0.00191)	(0.00216)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (i) Moderating role of audit committee independence in influencing the impact of board size on earnings management

The moderating role played by audit committee independence in determining the relationship between board size and AEM has been pronounced and this is evident from table 4.60. This is evident from the significant and negative coefficients at moderate quantiles at 0.25, 0.35 and 0.50. This indicates that the audit committee independence enhances the monitoring mechanism of board size in reducing AEM revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring AEM.

The moderating role played by audit committee independence in determining the relationship between board size and REM1 has been pronounced (Refer table 4.61). This is evident from the significant and negative coefficients at higher quantiles of REM1 (0.60, 0.75 and 0.80). This indicates that the audit committee independence enhances the monitoring mechanism of board size in reducing REM1 revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring REM1. The moderating role played by audit committee independence in determining the relationship between board size and REM2 has been pronounced and this is evident from the results displayed in table 4.62. This is evident from the significant and negative coefficients at higher quantiles of REM1 (0.50, 0.60, 0.75 and 0.80). This indicates that the audit committee independence enhances the monitoring mechanism of board size in reducing REM2 revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring REM2.

Table 4.60 Moderating role of Audit committee independence, Board size and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_indp	-0.0111	-0.0114	-0.0116*	-0.0117*	-0.0120*	-0.0123	-0.0128	-0.0132	-0.0140	-0.0165*	-0.0122*
	(0.109)	(0.0683)	(0.0552)	(0.0541)	(0.0755)	(0.111)	(0.183)	(0.244)	(0.376)	(0.00733)	(0.00846)
BIG4	-0.000983	0.00216	0.00388	0.00526	0.00796	0.0106	0.0153	0.0192	0.0272	0.00587	0.00950*
	(0.0688)	(0.0433)	(0.0350)	(0.0343)	(0.0479)	(0.0704)	(0.116)	(0.155)	(0.238)	(0.00352)	(0.00469)
FIRM_S	-0.00617	-0.00166	0.000819	0.00279	0.00668	0.0105	0.0172	0.0228	0.0344	0.00338	0.00889
	(0.107)	(0.0675)	(0.0545)	(0.0535)	(0.0746)	(0.110)	(0.180)	(0.241)	(0.371)	(0.00178)	(0.00655)
LEV	-0.0503	-0.0129	0.00768	0.0240	0.0563	0.0879	0.144	0.190	0.286	0.0709***	0.0746***
	(0.483)	(0.304)	(0.246)	(0.241)	(0.336)	(0.495)	(0.813)	(1.088)	(1.674)	(0.0127)	(0.0210)
GROWTH	-0.00699	-0.00910	-0.0103	-0.0112	-0.0130	-0.0148	-0.0179	-0.0205	-0.0259	-0.0112**	-0.0140***
	(0.0802)	(0.0505)	(0.0408)	(0.0400)	(0.0558)	(0.0820)	(0.135)	(0.181)	(0.278)	(0.00415)	(0.00424)
MTB	0.00131	-0.0000546	-0.000806	-0.00140	-0.00258	-0.00374	-0.00578	-0.00746	-0.0110	-0.00267***	-0.00325**
	(0.0196)	(0.0123)	(0.00998)	(0.00978)	(0.0137)	(0.0201)	(0.0330)	(0.0442)	(0.0679)	(0.000666)	(0.001000)
ROA	0.119	0.235	0.298	0.349	0.449	0.547	0.720	0.862	1.161	0.449***	0.506***
	(1.695)	(1.067)	(0.863)	(0.845)	(1.180)	(1.735)	(2.853)	(3.816)	(5.872)	(0.0219)	(0.0242)
Intangible_TA	0.0293	0.0448	0.0534	0.0601	0.0735	0.0866	0.110	0.129	0.169	0.0400	0.0811
	(0.507)	(0.319)	(0.258)	(0.253)	(0.353)	(0.519)	(0.853)	(1.141)	(1.756)	(0.0314)	(0.0419)
CFO_TA	-0.220	-0.197	-0.184	-0.174	-0.154	-0.135	-0.100	-0.0719	-0.0124	-0.206***	-0.143***
	(0.751)	(0.473)	(0.382)	(0.375)	(0.523)	(0.769)	(1.264)	(1.691)	(2.602)	(0.0238)	(0.0258)
Insti_shares	0.00166	0.00141	0.00127	0.00116	0.000937	0.000723	0.000345	0.0000334	-0.000620	-0.000680	0.000813
	(0.0109)	(0.00687)	(0.00556)	(0.00545)	(0.00760)	(0.0112)	(0.0184)	(0.0246)	(0.0378)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000111	-0.000108	-0.000106	-0.000104	-0.000102	-0.0000988	-0.0000938	-0.0000897	-0.0000812	-0.00000392	-0.0001000
	(0.00654)	(0.00411)	(0.00333)	(0.00326)	(0.00455)	(0.00669)	(0.0110)	(0.0147)	(0.0227)	(0.000212)	(0.000430)
GDP	-0.00253	-0.00137	-0.000731	-0.000223	0.000776	0.00176	0.00349	0.00491	0.00790	0.00324	0.00134
	(0.0102)	(0.00643)	(0.00520)	(0.00510)	(0.00712)	(0.0105)	(0.0172)	(0.0230)	(0.0354)	(0.00197)	(0.00259)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.61 Moderating role of Audit committee independence, Board size and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_indp	-0.0156	-0.0175	-0.0185	-0.0194	-0.0208	-0.0217*	-0.0230*	-0.0240*	-0.0258	-0.0221*	-0.0208*
	(0.0248)	(0.0177)	(0.0144)	(0.0123)	(0.0111)	(0.0121)	(0.0152)	(0.0186)	(0.0254)	(0.0105)	(0.0105)
BIG4	-0.0125	-0.00918	-0.00738	-0.00590	-0.00350	-0.00188	0.000248	0.00205	0.00513	-0.00465	-0.00351
	(0.0142)	(0.0101)	(0.00820)	(0.00701)	(0.00632)	(0.00690)	(0.00865)	(0.0106)	(0.0145)	(0.00573)	(0.00582)
FIRM_S	0.0303	0.0236	0.0200	0.0170	0.0121	0.00885	0.00454	0.000885	-0.00535	-0.000231	0.0122
	(0.0215)	(0.0153)	(0.0124)	(0.0106)	(0.00959)	(0.0105)	(0.0131)	(0.0161)	(0.0220)	(0.00547)	(0.00813)
LEV	0.0737	0.0722	0.0713	0.0706*	0.0695*	0.0688*	0.0678	0.0669	0.0655	0.0980***	0.0695**
	(0.0712)	(0.0507)	(0.0412)	(0.0352)	(0.0317)	(0.0347)	(0.0435)	(0.0535)	(0.0729)	(0.0247)	(0.0261)
GROWTH	0.00606	0.00325	0.00172	0.000443	-0.00161	-0.00299	-0.00481	-0.00636	-0.00899	-0.000412	-0.00159
	(0.00915)	(0.00651)	(0.00530)	(0.00453)	(0.00408)	(0.00446)	(0.00559)	(0.00687)	(0.00938)	(0.00535)	(0.00527)
MTB	-0.00437	-0.00350	-0.00302	-0.00263	-0.00199	-0.00156	-0.000997	-0.000517	0.000300	-0.00445***	-0.00200
	(0.00343)	(0.00245)	(0.00199)	(0.00170)	(0.00153)	(0.00167)	(0.00210)	(0.00258)	(0.00352)	(0.00119)	(0.00124)
ROA	-0.134	-0.132*	-0.130**	-0.129**	-0.127***	-0.125**	-0.123*	-0.122*	-0.119	-0.111***	-0.127***
	(0.0808)	(0.0575)	(0.0468)	(0.0400)	(0.0360)	(0.0394)	(0.0494)	(0.0607)	(0.0828)	(0.0303)	(0.0300)
Intangible_TA	0.0609	0.0771	0.0860	0.0933	0.105	0.113	0.124	0.133	0.148	0.0533	0.105*
	(0.131)	(0.0935)	(0.0760)	(0.0649)	(0.0585)	(0.0640)	(0.0802)	(0.0986)	(0.135)	(0.0509)	(0.0520)
CFO_TA	-0.166	-0.165**	-0.165**	-0.164***	-0.164***	-0.163***	-0.163**	-0.163*	-0.162	-0.175***	-0.164***
	(0.0872)	(0.0621)	(0.0505)	(0.0431)	(0.0389)	(0.0425)	(0.0533)	(0.0655)	(0.0894)	(0.0322)	(0.0321)
Insti_shares	-0.00124	-0.000584	-0.000224	0.0000747	0.000555	0.000880	0.00131	0.00167	0.00228	0.00111	0.000552
	(0.00386)	(0.00275)	(0.00223)	(0.00191)	(0.00172)	(0.00188)	(0.00236)	(0.00290)	(0.00395)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00227	-0.00238**	-0.00244**	-0.00249***	-0.00257***	-0.00262***	-0.00269***	-0.00275**	-0.00285*	-0.00238***	-0.00257***
	(0.00128)	(0.000912)	(0.000741)	(0.000634)	(0.000571)	(0.000624)	(0.000782)	(0.000962)	(0.00131)	(0.000483)	(0.000534)
GDP	0.00632**	0.00539***	0.00488***	0.00446***	0.00378***	0.00332**	0.00272*	0.00221	0.00134	0.00927**	0.00379
	(0.00209)	(0.00149)	(0.00121)	(0.00103)	(0.000930)	(0.00102)	(0.00127)	(0.00157)	(0.00214)	(0.00286)	(0.00321)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.62 Moderating role of Audit committee independence, Board size and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_size*Audit_indp	-0.0148	-0.0134	-0.0126	-0.0118	-0.0108*	-0.00995*	-0.00861*	-0.00766*	-0.00595	-0.0133*	-0.0106*
	(0.0192)	(0.0145)	(0.0123)	(0.0102)	(0.00847)	(0.00822)	(0.0100)	(0.0124)	(0.0177)	(0.00707)	(0.00706)
BIG4	-0.00379	-0.00199	-0.00105	-0.0000609	0.00126	0.00225	0.00390	0.00508	0.00719	0.00155	0.00149
	(0.0106)	(0.00803)	(0.00679)	(0.00567)	(0.00469)	(0.00456)	(0.00555)	(0.00686)	(0.00978)	(0.00382)	(0.00391)
FIRM_S	0.0239	0.0214	0.0202	0.0188*	0.0171*	0.0157*	0.0135	0.0119	0.00902	0.0114**	0.0167**
	(0.0165)	(0.0124)	(0.0105)	(0.00880)	(0.00728)	(0.00707)	(0.00860)	(0.0106)	(0.0152)	(0.00348)	(0.00546)
LEV	-0.0308	-0.0209	-0.0158	-0.0104	-0.00315	0.00229	0.0113	0.0177	0.0293	-0.0231	-0.00187
	(0.0629)	(0.0475)	(0.0402)	(0.0336)	(0.0278)	(0.0270)	(0.0328)	(0.0406)	(0.0579)	(0.0164)	(0.0175)
GROWTH	-0.0122	-0.00877	-0.00695	-0.00503	-0.00248	-0.000557	0.00264	0.00490	0.00900	-0.00210	-0.00203
	(0.0195)	(0.0147)	(0.0125)	(0.0104)	(0.00862)	(0.00836)	(0.0102)	(0.0126)	(0.0180)	(0.00360)	(0.00354)
MTB	-0.00165	-0.00187	-0.00199	-0.00212	-0.00228	-0.00241	-0.00261	-0.00276	-0.00303	-0.000274	-0.00231**
	(0.00316)	(0.00239)	(0.00202)	(0.00169)	(0.00140)	(0.00136)	(0.00165)	(0.00204)	(0.00291)	(0.000792)	(0.000834)
ROA	-0.158	-0.121	-0.102	-0.0814	-0.0543	-0.0338	0.000238	0.0243	0.0680	-0.0670***	-0.0494*
	(0.0983)	(0.0742)	(0.0628)	(0.0525)	(0.0435)	(0.0423)	(0.0514)	(0.0635)	(0.0906)	(0.0203)	(0.0202)
Intangible_TA	-0.0434	-0.0354	-0.0312	-0.0267	-0.0208	-0.0164	-0.00894	-0.00369	0.00581	0.0279	-0.0198
	(0.103)	(0.0780)	(0.0660)	(0.0551)	(0.0456)	(0.0443)	(0.0539)	(0.0666)	(0.0951)	(0.0340)	(0.0350)
CFO_TA	0.747***	0.747***	0.747***	0.747***	0.746***	0.746***	0.746***	0.746***	0.746***	0.742***	0.746***
	(0.0788)	(0.0595)	(0.0503)	(0.0420)	(0.0348)	(0.0338)	(0.0411)	(0.0508)	(0.0725)	(0.0216)	(0.0215)
Insti_shares	-0.00173	-0.00150	-0.00137	-0.00124	-0.00107	-0.000934	-0.000716	-0.000561	-0.000281	-0.000981	-0.00103
	(0.00280)	(0.00212)	(0.00179)	(0.00150)	(0.00124)	(0.00120)	(0.00146)	(0.00181)	(0.00258)	(0.000927)	(0.000927)
Foreign_insti_shares	0.00127	0.00122	0.00120	0.00117*	0.00113**	0.00110**	0.00106*	0.00102	0.000965	0.00119***	0.00112**
	(0.000975)	(0.000737)	(0.000623)	(0.000521)	(0.000431)	(0.000418)	(0.000509)	(0.000629)	(0.000898)	(0.000317)	(0.000359)
GDP	-0.0123***	-0.0122***	-0.0121***	-0.0120***	-0.0118***	-0.0117***	-0.0116***	-0.0115***	-0.0113***	0.0124***	-0.0118***
	(0.00167)	(0.00126)	(0.00107)	(0.000894)	(0.000740)	(0.000718)	(0.000874)	(0.00108)	(0.00154)	(0.00190)	(0.00216)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (j) Moderating role of audit committee independence in influencing the impact of board independence on earnings management

The moderating role played by audit committee independence in determining the relationship between board independence and AEM has been pronounced (Refer table 4.63). This is evident from the significant and negative coefficients at moderate quantiles at 0.35, 0.50, 0.60 and 0.75. This indicates that the audit committee independence enhances the monitoring mechanism of board independence in reducing AEM revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring AEM.

Table 4.64 reveals that the moderating role played by audit committee independence in determining the relationship between board independence and REM1 has been pronounced. This is evident from the significant and negative coefficients at moderate quantiles at 0.35, 0.50, 0.60 and 0.75. This indicates that the audit committee independence enhances the monitoring mechanism of board independence in reducing REM1 revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring REM1.

Table 4.65 reveals that the moderating role played by audit committee independence in determining the relationship between board independence and REM2 has been pronounced. This is evident from the significant and negative coefficients at moderate quantiles at 0.25, 0.35, 0.50, and 0.60. This indicates that the audit committee independence enhances the monitoring mechanism of board independence in reducing REM2 revealing that when increase in board size is coupled with greater audit committee independence, they are efficient in monitoring REM2.

Table 4.63 Moderating role of Audit committee independence, Board independence and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_indp	-0.0121	-0.0111	-0.0106	-0.0102*	-0.0937*	-0.0858*	-0.0717*	-0.00599	0.00349	-0.0164*	-0.0890*
	(0.335)	(0.274)	(0.240)	(0.215)	(0.170)	(0.133)	(0.113)	(0.153)	(0.299)	(0.0222)	(0.0272)
BIG4	-0.00171	0.00160	0.00345	0.00491	0.00766	0.0104	0.0153	0.0194	0.0280	0.00609	0.00931*
	(0.0642)	(0.0524)	(0.0460)	(0.0411)	(0.0326)	(0.0255)	(0.0217)	(0.0292)	(0.0573)	(0.00353)	(0.00469)
FIRM_S	-0.00633	-0.00177	0.000787	0.00280	0.00659	0.0104	0.0171	0.0228	0.0347	0.00264	0.00887
	(0.100)	(0.0819)	(0.0719)	(0.0643)	(0.0509)	(0.0399)	(0.0339)	(0.0457)	(0.0895)	(0.00177)	(0.00656)
LEV	-0.0523	-0.0143	0.00708	0.0239	0.0556	0.0873	0.144	0.190	0.290	0.0715***	0.0745***
	(0.451)	(0.369)	(0.324)	(0.289)	(0.229)	(0.180)	(0.153)	(0.206)	(0.403)	(0.0128)	(0.0211)
GROWTH	-0.00730	-0.00943	-0.0106	-0.0116	-0.0133	-0.0151	-0.0183	-0.0209	-0.0265	-0.0115**	-0.0144***
	(0.0743)	(0.0607)	(0.0533)	(0.0477)	(0.0377)	(0.0296)	(0.0251)	(0.0338)	(0.0663)	(0.00415)	(0.00424)
MTB	0.00133	-0.0000747	-0.000864	-0.00148	-0.00265	-0.00383	-0.00591	-0.00764	-0.0113	-0.00276***	-0.00335***
	(0.0182)	(0.0149)	(0.0130)	(0.0117)	(0.00924)	(0.00725)	(0.00617)	(0.00831)	(0.0163)	(0.000672)	(0.001000)
ROA	0.117	0.233	0.299	0.350	0.448	0.545	0.718	0.862	1.167	0.449***	0.506***
	(1.581)	(1.291)	(1.133)	(1.014)	(0.803)	(0.630)	(0.536)	(0.722)	(1.413)	(0.0220)	(0.0242)
Intangible_TA	0.0343	0.0485	0.0565	0.0628	0.0747	0.0866	0.108	0.125	0.162	0.0430	0.0818
	(0.473)	(0.386)	(0.339)	(0.303)	(0.240)	(0.188)	(0.160)	(0.215)	(0.422)	(0.0316)	(0.0419)
CFO_TA	-0.220	-0.197	-0.184	-0.174	-0.155	-0.135	-0.101	-0.0728	-0.0123	-0.205***	-0.143***
	(0.701)	(0.573)	(0.503)	(0.449)	(0.356)	(0.279)	(0.237)	(0.319)	(0.625)	(0.0238)	(0.0258)
Insti_shares	0.00162	0.00136	0.00121	0.00110	0.000880	0.000663	0.000277	-0.0000441	-0.000726	-0.000662	0.000750
	(0.0102)	(0.00830)	(0.00729)	(0.00652)	(0.00516)	(0.00404)	(0.00343)	(0.00462)	(0.00906)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000110	-0.000111	-0.000112	-0.000112	-0.000114	-0.000115	-0.000117	-0.000118	-0.000122	0.0000213	-0.000114
	(0.00608)	(0.00497)	(0.00436)	(0.00390)	(0.00309)	(0.00242)	(0.00205)	(0.00277)	(0.00542)	(0.000217)	(0.000430)
GDP	-0.00277	-0.00158	-0.000914	-0.000389	0.000604	0.00160	0.00336	0.00483	0.00795	0.00269	0.00120
	(0.00959)	(0.00784)	(0.00688)	(0.00615)	(0.00487)	(0.00381)	(0.00323)	(0.00436)	(0.00855)	(0.00201)	(0.00263)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.64 Moderating role of Audit committee independence, Board independence and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_indp	-0.0112	-0.0216	-0.0272	-0.0320*	-0.0397*	-0.0446*	-0.0517*	0.0574	0.0671	-0.0404*	-0.0396*
	(0.0784)	(0.0561)	(0.0458)	(0.0391)	(0.0352)	(0.0381)	(0.0482)	(0.0590)	(0.0800)	(0.0337)	(0.0338)
BIG4	-0.0117	-0.00860	-0.00692	-0.00550	-0.00322	-0.00177	0.000336	0.00201	0.00488	-0.00442	-0.00327
	(0.0141)	(0.0101)	(0.00824)	(0.00703)	(0.00634)	(0.00686)	(0.00866)	(0.0106)	(0.0144)	(0.00573)	(0.00583)
FIRM_S	0.0308	0.0239	0.0201	0.0169	0.0118	0.00850	0.00375	-0.0000357	-0.00649	0.000118	0.0119
	(0.0215)	(0.0154)	(0.0126)	(0.0107)	(0.00966)	(0.0105)	(0.0132)	(0.0162)	(0.0219)	(0.00546)	(0.00814)
LEV	0.0730	0.0725	0.0723	0.0721*	0.0718*	0.0716*	0.0713	0.0711	0.0707	0.0998***	0.0718**
	(0.0710)	(0.0508)	(0.0415)	(0.0354)	(0.0319)	(0.0345)	(0.0436)	(0.0534)	(0.0725)	(0.0247)	(0.0262)
GROWTH	0.00673	0.00380	0.00219	0.000831	-0.00135	-0.00274	-0.00475	-0.00636	-0.00910	-0.000113	-0.00130
	(0.00884)	(0.00633)	(0.00516)	(0.00441)	(0.00397)	(0.00430)	(0.00543)	(0.00665)	(0.00903)	(0.00535)	(0.00527)
MTB	-0.00434	-0.00346	-0.00298	-0.00257	-0.00191	-0.00150	-0.000893	-0.000412	0.000410	-0.00438***	-0.00193
	(0.00343)	(0.00246)	(0.00200)	(0.00171)	(0.00154)	(0.00167)	(0.00211)	(0.00258)	(0.00350)	(0.00119)	(0.00124)
ROA	-0.135	-0.131*	-0.129**	-0.128**	-0.125***	-0.124**	-0.121*	-0.119*	-0.116	-0.110***	-0.125***
	(0.0801)	(0.0573)	(0.0468)	(0.0399)	(0.0360)	(0.0390)	(0.0492)	(0.0602)	(0.0817)	(0.0303)	(0.0301)
Intangible_TA	0.0582	0.0740	0.0827	0.0901	0.102	0.109	0.120	0.129	0.144	0.0488	0.102
	(0.131)	(0.0935)	(0.0763)	(0.0651)	(0.0587)	(0.0636)	(0.0802)	(0.0982)	(0.133)	(0.0509)	(0.0521)
CFO_TA	-0.165	-0.165**	-0.165**	-0.165***	-0.165***	-0.165***	-0.165**	-0.165*	-0.165	-0.175***	-0.165***
	(0.0867)	(0.0621)	(0.0506)	(0.0432)	(0.0389)	(0.0422)	(0.0532)	(0.0652)	(0.0885)	(0.0323)	(0.0321)
Insti_shares	-0.00101	-0.000415	-0.0000880	0.000190	0.000634	0.000917	0.00133	0.00165	0.00221	0.00117	0.000625
	(0.00381)	(0.00273)	(0.00223)	(0.00190)	(0.00171)	(0.00185)	(0.00234)	(0.00287)	(0.00389)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00225	-0.00236**	-0.00242**	-0.00247***	-0.00255***	-0.00260***	-0.00267***	-0.00273**	-0.00283*	-0.00238***	-0.00254***
	(0.00128)	(0.000913)	(0.000745)	(0.000636)	(0.000573)	(0.000621)	(0.000784)	(0.000959)	(0.00130)	(0.000483)	(0.000535)
GDP	0.00660**	0.00606***	0.00576***	0.00551***	0.00510***	0.00484***	0.00447***	0.00417**	0.00366	0.0105***	0.00511
	(0.00211)	(0.00151)	(0.00123)	(0.00105)	(0.000948)	(0.00103)	(0.00130)	(0.00159)	(0.00216)	(0.00293)	(0.00327)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.65 Moderating role of Audit committee independence, Board independence and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
Board_indp*Audit_indp	-0.0556	-0.0500	-0.0469*	-0.0441*	-0.0398*	-0.0367*	-0.0316	-0.0278	-0.0215	-0.0383*	-0.0391*
	(0.0529)	(0.0395)	(0.0331)	(0.0282)	(0.0243)	(0.0249)	(0.0317)	(0.0394)	(0.0543)	(0.0225)	(0.0227)
BIG4	-0.00380	-0.00202	-0.00106	-0.000158	0.00119	0.00217	0.00378	0.00496	0.00693	0.00142	0.00139
	(0.00924)	(0.00689)	(0.00578)	(0.00493)	(0.00424)	(0.00435)	(0.00554)	(0.00687)	(0.00949)	(0.00382)	(0.00391)
FIRM_S	0.0243	0.0218*	0.0205*	0.0192*	0.0173**	0.0159*	0.0136	0.0120	0.00918	0.0112**	0.0170**
	(0.0144)	(0.0107)	(0.00898)	(0.00765)	(0.00658)	(0.00676)	(0.00860)	(0.0107)	(0.0147)	(0.00348)	(0.00546)
LEV	-0.0352	-0.0244	-0.0186	-0.0132	-0.00500	0.000886	0.0106	0.0178	0.0297	-0.0243	-0.00380
	(0.0547)	(0.0408)	(0.0342)	(0.0292)	(0.0251)	(0.0258)	(0.0328)	(0.0407)	(0.0562)	(0.0164)	(0.0176)
GROWTH	-0.0118	-0.00845	-0.00665	-0.00496	-0.00243	-0.000606	0.00241	0.00462	0.00831	-0.00218	-0.00206
	(0.0164)	(0.0123)	(0.0103)	(0.00876)	(0.00754)	(0.00774)	(0.00985)	(0.0122)	(0.0169)	(0.00360)	(0.00354)
MTB	-0.00159	-0.00183	-0.00197	-0.00209	-0.00228	-0.00242	-0.00264	-0.00281	-0.00308	-0.000321	-0.00231**
	(0.00275)	(0.00205)	(0.00172)	(0.00147)	(0.00126)	(0.00130)	(0.00165)	(0.00205)	(0.00283)	(0.000791)	(0.000833)
ROA	-0.161	-0.123	-0.103	-0.0834	-0.0548	-0.0342	-0.000124	0.0249	0.0666	-0.0682***	-0.0506*
	(0.0853)	(0.0637)	(0.0534)	(0.0456)	(0.0393)	(0.0403)	(0.0512)	(0.0635)	(0.0877)	(0.0203)	(0.0202)
Intangible_TA	-0.0388	-0.0314	-0.0274	-0.0236	-0.0180	-0.0139	-0.00723	-0.00230	0.00592	0.0308	-0.0172
	(0.0890)	(0.0664)	(0.0557)	(0.0474)	(0.0408)	(0.0419)	(0.0533)	(0.0662)	(0.0913)	(0.0340)	(0.0350)
CFO_TA	0.746***	0.747***	0.747***	0.747***	0.747***	0.748***	0.748***	0.748***	0.749***	0.743***	0.747***
	(0.0683)	(0.0510)	(0.0427)	(0.0364)	(0.0313)	(0.0322)	(0.0409)	(0.0508)	(0.0701)	(0.0216)	(0.0215)
Insti_shares	-0.00177	-0.00153	-0.00139	-0.00127	-0.00109	-0.000954	-0.000734	-0.000573	-0.000304	-0.000999	-0.00106
	(0.00241)	(0.00180)	(0.00151)	(0.00128)	(0.00111)	(0.00113)	(0.00144)	(0.00179)	(0.00247)	(0.000927)	(0.000926)
Foreign_insti_shares	0.00121	0.00118	0.00116*	0.00114*	0.00112**	0.00110**	0.00107*	0.00104	0.00101	0.00120***	0.00111**
	(0.000847)	(0.000632)	(0.000530)	(0.000452)	(0.000389)	(0.000399)	(0.000507)	(0.000630)	(0.000870)	(0.000318)	(0.000359)
GDP	-0.0139***	-0.0135***	-0.0133***	-0.0132***	-0.0129***	-0.0127***	-0.0124***	-0.0122***	-0.0118***	-0.0133***	-0.0129***
	(0.00148)	(0.00110)	(0.000923)	(0.000786)	(0.000676)	(0.000694)	(0.000883)	(0.00110)	(0.00151)	(0.00194)	(0.00220)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.5 (k) Moderating role of audit committee independence in influencing the impact of CEO duality on earnings management

The moderating role played by audit committee independence in determining the relationship between CEO duality and AEM has not been statistically pronounced (Refer table 4.66). This is evident from the insignificant coefficients for all quantiles of AEM even though negative at certain quantiles. This indicates that moderating role of the audit committee independence in determining the relationship between CEO duality and AEM is not statistically significant.

The results of table 4.67 indicates that the moderating role played by audit committee independence in determining the relationship between CEO duality and REM1 has not been statistically pronounced. This is evident from the insignificant coefficients for all quantiles of REM1. This indicates that moderating role of the audit committee independence in determining the relationship between CEO duality and REM1 is not statistically significant.

From table 4.68, it is evident that the moderating role played by audit committee independence in determining the relationship between CEO duality and REM2 has not been statistically pronounced. This is evident from the insignificant coefficients for all quantiles of REM2 even though negative at certain quantiles. This indicates that moderating role of the audit committee independence in determining the relationship between CEO duality and REM2 is not statistically significant.

Table 4.66 Moderating role of Audit committee independence, CEO duality and AEM– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_indp	0.00535	0.00292	0.00149	0.000299	-0.00184	-0.00394	-0.00780	-0.0111	-0.0179	-0.00374	-0.00311
	(0.263)	(0.218)	(0.192)	(0.171)	(0.133)	(0.0978)	(0.0530)	(0.0733)	(0.187)	(0.00682)	(0.0103)
BIG4	-0.00128	0.00175	0.00353	0.00501	0.00767	0.0103	0.0151	0.0192	0.0276	0.00606	0.00925*
	(0.119)	(0.0984)	(0.0867)	(0.0770)	(0.0600)	(0.0441)	(0.0239)	(0.0331)	(0.0845)	(0.00354)	(0.00470)
FIRM_S	-0.00593	-0.00167	0.000832	0.00291	0.00665	0.0103	0.0171	0.0228	0.0347	0.00277	0.00888
	(0.186)	(0.155)	(0.136)	(0.121)	(0.0942)	(0.0693)	(0.0376)	(0.0520)	(0.133)	(0.00178)	(0.00656)
LEV	-0.0509	-0.0149	0.00616	0.0237	0.0553	0.0863	0.143	0.192	0.292	0.0707***	0.0741***
	(0.843)	(0.699)	(0.616)	(0.547)	(0.426)	(0.313)	(0.170)	(0.235)	(0.601)	(0.0128)	(0.0210)
GROWTH	-0.00728	-0.00930	-0.0105	-0.0115	-0.0132	-0.0150	-0.0182	-0.0209	-0.0266	-0.0116**	-0.0143***
	(0.138)	(0.115)	(0.101)	(0.0896)	(0.0698)	(0.0514)	(0.0279)	(0.0385)	(0.0984)	(0.00415)	(0.00424)
MTB	0.00129	-0.0000459	-0.000827	-0.00148	-0.00265	-0.00379	-0.00591	-0.00769	-0.0114	-0.00273***	-0.00334***
	(0.0342)	(0.0284)	(0.0250)	(0.0222)	(0.0173)	(0.0127)	(0.00692)	(0.00955)	(0.0244)	(0.000671)	(0.000999)
ROA	0.123	0.233	0.298	0.351	0.448	0.543	0.717	0.865	1.173	0.449***	0.506***
	(2.948)	(2.445)	(2.153)	(1.913)	(1.490)	(1.096)	(0.597)	(0.824)	(2.103)	(0.0220)	(0.0242)
Intangible_TA	0.0361	0.0493	0.0569	0.0633	0.0748	0.0861	0.107	0.124	0.161	0.0428	0.0817
	(0.873)	(0.724)	(0.638)	(0.566)	(0.441)	(0.325)	(0.176)	(0.243)	(0.622)	(0.0316)	(0.0420)
CFO_TA	-0.219	-0.197	-0.184	-0.174	-0.154	-0.136	-0.101	-0.0722	-0.0114	-0.205***	-0.143***
	(1.312)	(1.089)	(0.959)	(0.852)	(0.663)	(0.488)	(0.265)	(0.366)	(0.935)	(0.0238)	(0.0258)
Insti_shares	0.00162	0.00137	0.00122	0.00110	0.000884	0.000668	0.000272	-0.0000622	-0.000761	-0.000686	0.000753
	(0.0189)	(0.0157)	(0.0138)	(0.0123)	(0.00956)	(0.00703)	(0.00381)	(0.00527)	(0.0135)	(0.00100)	(0.00111)
Foreign_insti_shares	-0.000107	-0.000111	-0.000113	-0.000115	-0.000118	-0.000121	-0.000127	-0.000133	-0.000143	-0.00000198	-0.000120
	(0.0114)	(0.00942)	(0.00829)	(0.00737)	(0.00574)	(0.00422)	(0.00229)	(0.00316)	(0.00809)	(0.000214)	(0.000431)
GDP	-0.00309	-0.00188	-0.00117	-0.000578	0.000484	0.00153	0.00345	0.00507	0.00846	0.00302	0.00112
	(0.0181)	(0.0150)	(0.0132)	(0.0118)	(0.00916)	(0.00674)	(0.00365)	(0.00504)	(0.0129)	(0.00198)	(0.00260)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.67 Moderating role of Audit committee independence, CEO duality and REM1– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_indp	0.00624	0.00829	0.00945	0.0104	0.0118	0.0129	0.0142	0.0153	0.0172	0.00559	0.0119
	(0.0289)	(0.0208)	(0.0168)	(0.0143)	(0.0126)	(0.0134)	(0.0168)	(0.0205)	(0.0279)	(0.0123)	(0.0128)
BIG4	-0.0121	-0.00876	-0.00687	-0.00537	-0.00300	-0.00130	0.000929	0.00270	0.00575	-0.00428	-0.00294
	(0.0146)	(0.0105)	(0.00845)	(0.00721)	(0.00633)	(0.00676)	(0.00844)	(0.0103)	(0.0140)	(0.00574)	(0.00583)
FIRM_S	0.0313	0.0244	0.0204	0.0173	0.0124	0.00886	0.00421	0.000524	-0.00581	0.000255	0.0123
	(0.0222)	(0.0159)	(0.0129)	(0.0110)	(0.00964)	(0.0103)	(0.0129)	(0.0157)	(0.0213)	(0.00547)	(0.00814)
LEV	0.0720	0.0714	0.0711	0.0709	0.0705*	0.0702*	0.0698	0.0695	0.0690	0.0988***	0.0705**
	(0.0735)	(0.0528)	(0.0427)	(0.0364)	(0.0319)	(0.0341)	(0.0426)	(0.0520)	(0.0707)	(0.0247)	(0.0261)
GROWTH	0.00698	0.00399	0.00230	0.000961	-0.00116	-0.00268	-0.00469	-0.00627	-0.00900	0.0000668	-0.00121
	(0.00918)	(0.00659)	(0.00533)	(0.00455)	(0.00399)	(0.00426)	(0.00532)	(0.00650)	(0.00884)	(0.00535)	(0.00527)
MTB	-0.00441	-0.00347	-0.00294	-0.00252	-0.00185	-0.00137	-0.000737	-0.000237	0.000623	-0.00431***	-0.00183
	(0.00355)	(0.00255)	(0.00206)	(0.00176)	(0.00154)	(0.00165)	(0.00206)	(0.00251)	(0.00342)	(0.00119)	(0.00124)
ROA	-0.135	-0.132*	-0.130**	-0.128**	-0.126***	-0.124**	-0.122*	-0.120*	-0.117	-0.111***	-0.126***
	(0.0822)	(0.0590)	(0.0477)	(0.0407)	(0.0357)	(0.0381)	(0.0476)	(0.0581)	(0.0791)	(0.0303)	(0.0301)
Intangible_TA	0.0578	0.0751	0.0849	0.0926	0.105	0.114	0.125	0.134	0.150	0.0515	0.105*
	(0.133)	(0.0958)	(0.0774)	(0.0660)	(0.0579)	(0.0619)	(0.0773)	(0.0944)	(0.128)	(0.0510)	(0.0521)
CFO_TA	-0.162	-0.162*	-0.163**	-0.163***	-0.163***	-0.163***	-0.164**	-0.164**	-0.164	-0.174***	-0.163***
	(0.0897)	(0.0644)	(0.0521)	(0.0444)	(0.0390)	(0.0416)	(0.0520)	(0.0635)	(0.0864)	(0.0322)	(0.0321)
Insti_shares	-0.00108	-0.000446	-0.0000862	0.000198	0.000650	0.000973	0.00140	0.00173	0.00231	0.00120	0.000660
	(0.00395)	(0.00283)	(0.00229)	(0.00196)	(0.00171)	(0.00183)	(0.00229)	(0.00279)	(0.00380)	(0.00138)	(0.00138)
Foreign_insti_shares	-0.00226	-0.00236*	-0.00241**	-0.00245***	-0.00252***	-0.00257***	-0.00263***	-0.00268**	-0.00277*	-0.00236***	-0.00252***
	(0.00132)	(0.000945)	(0.000764)	(0.000651)	(0.000571)	(0.000611)	(0.000763)	(0.000931)	(0.00127)	(0.000483)	(0.000535)
GDP	0.00632**	0.00546***	0.00498***	0.00459***	0.00398***	0.00355***	0.00297*	0.00252	0.00173	0.00959***	0.00397
	(0.00216)	(0.00155)	(0.00125)	(0.00107)	(0.000937)	(0.00100)	(0.00125)	(0.00153)	(0.00208)	(0.00287)	(0.00323)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

Table 4.68 Moderating role of Audit committee independence, CEO duality and REM2– Quantile regression

	(1) Q0.05	(2) Q0.15	(3) Q0.25	(4) Q0.35	(5) Q0.50	(6) Q0.60	(7) Q0.75	(8) Q0.85	(9) Q0.95	(10) OLS	(11) RE-GLS
CEO_D*Audit_indp	-0.0191	-0.0136	-0.0106	-0.00737	-0.00321	-0.000536	0.00537	0.00925	0.0159	0.000725	-0.00244
	(0.0217)	(0.0166)	(0.0140)	(0.0117)	(0.00964)	(0.00925)	(0.0112)	(0.0140)	(0.0198)	(0.00819)	(0.00860)
BIG4	-0.00450	-0.00260	-0.00154	-0.000430	0.00102	0.00211	0.00400	0.00535	0.00766	0.00142	0.00128
	(0.0109)	(0.00833)	(0.00703)	(0.00586)	(0.00483)	(0.00463)	(0.00560)	(0.00698)	(0.00992)	(0.00383)	(0.00392)
FIRM_S	0.0245	0.0219	0.0205	0.0190*	0.0171*	0.0156*	0.0131	0.0113	0.00816	0.0110**	0.0167**
	(0.0169)	(0.0129)	(0.0109)	(0.00909)	(0.00749)	(0.00718)	(0.00870)	(0.0108)	(0.0154)	(0.00349)	(0.00547)
LEV	-0.0324	-0.0225	-0.0170	-0.0112	-0.00365	0.00205	0.0119	0.0189	0.0309	-0.0232	-0.00227
	(0.0645)	(0.0494)	(0.0417)	(0.0348)	(0.0286)	(0.0275)	(0.0332)	(0.0414)	(0.0588)	(0.0164)	(0.0175)
GROWTH	-0.0120	-0.00882	-0.00703	-0.00516	-0.00272	-0.000869	0.00231	0.00459	0.00849	-0.00243	-0.00227
	(0.0196)	(0.0150)	(0.0127)	(0.0106)	(0.00871)	(0.00836)	(0.0101)	(0.0126)	(0.0179)	(0.00360)	(0.00354)
MTB	-0.00180	-0.00199	-0.00210	-0.00222	-0.00236	-0.00247	-0.00267	-0.00280	-0.00304	-0.000364	-0.00239**
	(0.00323)	(0.00248)	(0.00209)	(0.00174)	(0.00143)	(0.00138)	(0.00167)	(0.00208)	(0.00295)	(0.000792)	(0.000833)
ROA	-0.158	-0.122	-0.102	-0.0816	-0.0546	-0.0341	0.00108	0.0263	0.0695	-0.0671***	-0.0496*
	(0.0992)	(0.0760)	(0.0642)	(0.0535)	(0.0441)	(0.0424)	(0.0512)	(0.0638)	(0.0906)	(0.0203)	(0.0202)
Intangible_TA	-0.0474	-0.0381	-0.0330	-0.0276	-0.0205	-0.0152	-0.00601	0.000573	0.0118	0.0295	-0.0192
	(0.105)	(0.0805)	(0.0680)	(0.0567)	(0.0467)	(0.0448)	(0.0542)	(0.0676)	(0.0960)	(0.0340)	(0.0350)
CFO_TA	0.747***	0.747***	0.747***	0.747***	0.746***	0.746***	0.746***	0.746***	0.745***	0.742***	0.746***
	(0.0801)	(0.0613)	(0.0518)	(0.0432)	(0.0355)	(0.0341)	(0.0413)	(0.0514)	(0.0731)	(0.0216)	(0.0216)
Insti_shares	-0.00184	-0.00159	-0.00146	-0.00131	-0.00112	-0.000978	-0.000731	-0.000555	-0.000252	-0.00103	-0.00109
	(0.00287)	(0.00219)	(0.00185)	(0.00154)	(0.00127)	(0.00122)	(0.00148)	(0.00184)	(0.00261)	(0.000927)	(0.000927)
Foreign_insti_shares	0.00120	0.00117	0.00115	0.00113*	0.00111*	0.00109**	0.00106*	0.00104	0.00101	0.00118***	0.00111**
	(0.000995)	(0.000762)	(0.000644)	(0.000537)	(0.000442)	(0.000424)	(0.000513)	(0.000639)	(0.000908)	(0.000318)	(0.000359)
GDP	-0.0125***	-0.0123***	-0.0122***	-0.0122***	-0.0120***	-0.0120***	-0.0118***	-0.0117***	-0.0115***	-0.0126***	-0.0120***
	(0.00172)	(0.00132)	(0.00111)	(0.000928)	(0.000764)	(0.000733)	(0.000888)	(0.00111)	(0.00157)	(0.00191)	(0.00217)

Standard errors in parentheses

† p<0.10 * p<0.05 ** p<0.01 *** p<0.001

4.6 Robustness check

Any study that explores the relationship between the corporate governance mechanisms, audit committee characteristics and earnings management should account for potential endogeneity issues. Hence the present study accounting for endogeneity issues replicated the entire analysis following prior literature by substituting the AEM with that of the absolute values of discretionary accruals obtained from the Kothari et al. (2005). The study also redid the analysis by using the individual components of REM by following Roychowdhury (2007). The results of the robustness tests also revealed the findings of the present is robust from endogeneity thereby the conclusion and findings of the study remain the same. We also did the quantile regression with the different proxies of earnings management as mentioned above and the findings reveals that corporate governance mechanisms and moderating role of audit committee characteristics are moderately mitigating the earnings management of the sample companies.

4.7 Summary

In this chapter a detailed analysis of the relationship between corporate governance, audit committee characteristics and earnings management has been carried out. An exhaustive empirical overview is given by exploring the symmetric relationship between corporate governance and earnings management by employing fixed effects regression model. In addition, we also throw light on the asymmetric relationship between the dependent, independent, and moderating variables by using fixed effects quantile regression models. The main findings of the study are summarized in the table given below.

Table 4.69 Summary of the empirical results

Independent variables	AEM	REM1	REM2
Panel A: Corporate governance			
Board Size	Negative	Negative	Negative
Board Independence	No relationship	No relationship	No relationship
CEO duality	No relationship	No relationship	No relationship
Panel B: Audit committee characteristics			
Audit Committee Size	No relationship	No relationship	No relationship
Audit Committee Independence	No relationship	No relationship	No relationship
Panel C: Moderating role of audit committee size			
Audit_size*Board_size	Negative	Negative	Negative
Audit_size*Board_indp	Negative	Negative	Negative
Audit_size*CEO_D	No relationship	No relationship	No relationship
Panel D: Moderating role of audit committee independence			
Audit_indp*Board_size	Negative	Negative	Negative
Audit_indp*Board_indp	Negative	Negative	Negative
Audit_indp*CEO_D	No relationship	No relationship	No relationship

Chapter V

Summary of findings, managerial implications, suggestions, and scope for further research

5.1 Introduction

The effectiveness of CG mechanisms in limiting earnings manipulation behaviour is the subject of intense debate. Misuse of this discretion in reporting earnings figures can exacerbate the problems. It is generally found that management opportunism is evident in earnings management. Among the incentives for managing earnings are capital market, contracting, and regulatory motivations (Healy &Wahlen, 1999). In early studies of earnings management, agency problems and information asymmetries were proposed to explain the motivations behind EM (Davidson, Goodwin-Stewart, & Kent, 2005). It has become increasingly important to investigate the phenomenon of earnings management in the light of corporate malfeasances. It is important to keep in mind that empirical evidence in the literature is not always consistent with the agency theory argument. Some previous studies have taken into account the role played by the corporate governance mechanisms in mitigating the earnings management. For instance, it has been shown by Beasley (1996) that independent directors reduce the risk of financial statement fraud. Conversely, Monks and Minow (1995) find no correlation between higher board independence and lower EM. With regard to board size and earnings management, previous studies have given mixed results with positive and negative association with the earnings management. There is evidence that a larger board of directors provides more effective supervision of top managers who engage in aggressive accounting practices. For example, Xie et al. (2003) found a negative correlation between board size and EM for a U.S. sample. Peasnell, Pope, and Young (2005) confirm the findings of Xie et al. (2003). In contrast, others studies for instance Hong Kong, Chin, Firth, and Kim (2006) reveal that the board size is positively and significantly

associated with earnings management. Regarding the relationship between audit committee characteristics and earnings management, previous studies have given inconclusive results with both positive and negative relations in various developed and developing nations (Klein, 2002; Xie et al, 2003; Davidson et al, 2005 ; Abbott et al, 2004 ; Yang and Krishnan, 2005 ; Lin et al, 2006; Baxter and Cotter, 2009). Given these ambiguities with regard to relationship between corporate governance mechanisms, audit committee characteristics and earnings management, the present study explores holistically the symmetric as well as the asymmetric relationship between them. The major findings of the study, suggestions, managerial implications and scope for future research are detailed in this final chapter.

5.2 Major findings

The major empirical findings are summarized in this section

5.2.1 Findings on the relationship between corporate governance and earnings management

With regard to the relationship between the corporate governance mechanisms and the earnings management, it is revealed that only the board size is a significant factor in mitigating the earnings management be it AEM, REM1 or REM2. The results from the fixed effects quantile regression reveals that board size is efficient in reducing the earnings management at moderate levels (0.25 to 0.60).

The role of board independence and CEO duality is not statistically significant in reducing the earnings management. The results of the quantile regression also indicates that the board independence and CEO duality have no significant role in mitigating earnings management at all quantiles.

5.2.2 Findings on the relationship between audit committee characteristics and earnings management

The audit committee characteristics when explored alone about its relationship with the earnings management proxies reveal that they are not statistically significant in mitigating the earnings management.The results of the quantile regression also conform to the same results revealing no significant impact by the audit committee on earnings management.

5.2.3 Findings on the moderating role of audit committee in the relationship between corporate governance and earnings management

With regarding to moderating nature of the audit committee characteristics in strengthening or weaking the relationship between corporate governance and earnings management, audit committee size and independence plays a significant role in the moderating the relationship.The moderating role of audit committee size is significant in determining the relationship between board size and earnings management. The results of quantile regression also reveals that the moderating role is significant for the quantiles of earnings management ranging from 0.15 to 0.95. This indicates when the increase in board size is accompanied with the increase in audit committee size, the mechanisms are efficient in detecting and deterring the earnings management practices be it AEM or REM.

The same has been the case with regard to audit committee independence in moderating the relationship between board size and earnings management. The results of quantile regression indicates that board size and audit committee independence interaction mitigate earnings management at different quantiles ranging from 0.25 to 0.85. Hence it is safe to conclude that when the increase in board size is accompanied by the increase in audit committee independence, they are efficient in reducing the earnings management.

Even though the role of board independence is not significant in reducing earnings management, when the moderating role of audit committee size is included in the relationship, there is a significant relationship between the variables and the earnings management proxies. This implies when board independence is accompanied by increase in board size, it is efficient in reducing the earnings management. The results of quantile regression reveal that moderating role of audit committee independence is pronounced in mitigating earnings management at quantiles of earnings management ranging from 0.25 to 0.75. Main finding from this is that a mere independence of the board does not have efficient monitoring mechanism and only with audit committee size, the efficiency mechanism increases with regard to earnings management.

Similarly when the moderating role of audit committee independence is included in the relationship between board independence and earnings management, there is statistically negative relationship with the earnings management. The fixed effects quantile regression reveals that moderating nature of the audit committee independence in determining the relationship between board independence and earnings management is significant for quantiles between 0.25 to 0.75.

Only when it comes to CEO duality, the moderating role of audit committee characteristics be it the audit committee size and independence are not so significant. The results of fixed effects quantile regression models also indicated there is no significant moderating role of audit committee characteristics in influencing CEO duality and earnings management.

5.3 Managerial implications

This present study is extremely useful for a variety of stakeholders. Legislators are concerned with protecting minority shareholders' rights, which includes ensuring fair treatment to each and every shareholder, by reducing the information asymmetry and better

financial reporting quality regardless of the size of their investment. By identifying the role played by the in-house mechanisms and regulatory framework, the law makers will be able to put in place better legislations that is best suited for all the stakeholders. Additionally, the lawmakers could consider developing corporate governance mechanisms that is best suited to the domestic needs. This is because in India, the business environment, socio-cultural and economic situations are different from other developed and developing nations.

Additionally for the companies, better management and good quality financial reporting practices will bring in transparency in the functioning thereby gaining confidence among the investors and regulators. This in turn will be favourable for the companies by bringing in more investments and better concessions from the regulatory agencies. Moreover, as suggested by the companies act, 2013 to have more than half members on audit committee to be independent directors proved to play a significant moderating role in mitigating the earnings management practices.

Further, in line with the suggestion of professional bodies such as Institute of Chartered Accountants of India (ICAI), Institute of Company Secretaries of India (ICSI) and Institute of Cost of and Management Accountants of India (ICMAI) with regard to the appointment of independent directors on board for efficient management and monitoring, the present study throws positive light on the monitoring role played by the independent directors. The professional bodies can also look into the results of the study with regard to the composition of the audit committee and necessary recommendations, especially with regard to audit committee size and independence can be given to the policymakers.

The present study has given a unique insight that corporate governance mechanisms and audit committee characteristics when isolated do not play a significant role in monitoring the earnings management but when these are coupled with each, they have a greater say in the monitoring capability especially in reducing earnings management. This implies to the

policymakers, regulators, investors and other such stakeholders that these two has to be considered together while considering to improve the monitoring mechanism and improving financial reporting quality. While the findings of the studies from western and developed nations have mixed results, the present study clearly indicates that audit committee characteristics coupled with corporate governance plays a significant role.

5.4 Suggestions

Based on the findings of the present study, the first and foremost important suggestion which in line with section 177 of the companies act, 2013 is to increase the minimum threshold of members to present in audit committee from the present three and retaining the clause related to having a majority of them as independent directors. When the increase in membership in audit committee is implemented, there could be better monitoring mechanisms in mitigating the earnings management coupled with good corporate governance mechanisms. In light of our empirical findings, companies and policymakers in India are advised to continue engaging and improving corporate governance mechanisms in order to constrain managerial earnings manipulation. This is because corporate governance mechanisms, are an effective way to constrain managerial earnings manipulation and with dynamic market conditions, the regulatory framework and other mechanisms should also be evolving.

Additionally, the policymakers should also address the heterogeneity between the firms and should come up with innovative diverse approach in framing the regulatory practices and corporate governance mechanisms instead of relying on the 'one-size-fits-all' viewpoint. Additionally, majority of Indian companies are family-owned companies with concentrated ownership. It is therefore necessary to protect the minority shareholders from expropriation by controlling shareholders by enforcing corporate governance norms.

However, the current provisions of the various regulations, guidelines and the companies act, 2013 do not provide much clarity in this regard.

5.5 Directions for future research

The present study can be extended by considering other qualitive aspects related to corporate governance such as identifying the nationality, expertise and experience of board members, board selection criteria in addition to board size, board independence and CEO duality in exploring the relationship with earnings management. Further, other qualitative aspects audit committee characteristics such as the educational background, expertise in addition to the size and independence can be added to extend the present research. The sample size can also be extended to have a better picture by identifying the relationship before and after implementation of the companies act, 2013. Moreover, in India the type 2 agency problem (wherein the minority shareholders are exploited by the majority or family owners) is significant since most of the firms in India are family owned. Hence inclusion of ownership in determining the relationship between corporate governance, audit committee characteristics and earnings management can be a value addition to the existing literature. We have employed techniques to estimate the linear and asymmetric relationship. Given the recent development with regard to artificial neural networks, the present study can be extended by employing these techniques since their predicting or forecasting efficiency is higher compared to the traditional econometric models.

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