

The Impact of Corporate Governance and external audit on controlling discretionary accruals: A study of impacts on earnings management based on FTSE350, UK.

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Abstract

While the interest of shareholders contradicts with the interests of the managers, agency problem appears. However, the principle of the agency theory is to establish the relationship between the shareholders and managers; and this thesis relies on the involvement of corporate governance and external audit who can resolve the issues between them.

The main aim of this study is to identify the impact of corporate governance and external audit on controlling the discretionary accrual based on the FTSE350, in the UK. This study has considered the performance matched discretionary accruals to measure the magnitude of the discretionary accruals. The monitoring devices are established in the segmenting the models in two different categories; these are corporate governance and external audit.

There are two models; first model and second model, formed and the hypotheses are created based on those attributes of the corporate governance and external audit. This study has considered the data from FTSE350 index of the UK; from 2014 – 2019.

The variables of the first model; non-executive director's fees and block holders are positively associated while managerial ownership and non-executive director's meeting are negatively associated at 0.05 significant level. Further, remuneration committee independence is positively associated with earnings management at $P\text{-value} < 0.1$. On the other hand, the variables of second model, non-audit fee is positively associated whereas audit fee, Auditors with industrial specialism, audit expertise are negatively associated at $P\text{-value} < 0.05$.

Table of Contents

Chapter One: Introduction

1.1.	Introduction	11
1.2.	Earnings quality and Earnings management	11
1.3.	Corporate Governance, External Audit and Earnings management	12
1.4.	Addressing the Problem	14
1.5.	Study Motivation	16
1.1.	Contribution of the study	16
1.2.	Structure of the Thesis	19

Chapter Two: Background

2.1.	Introduction	22
2.2.	Earnings Management Definition	22
2.3.	Earnings management Incentives	23
2.3.1.	Stock Markets Incentives	22
2.3.2.	Management compensation Contract Incentives	24
2.3.3.	Debt Contracts Incentives	25
2.3.4.	Political and Regulatory Requirements Incentives	26
2.4.	Earnings Management Measurement Methods	27
2.4.1.	Aggregate Accruals Models	28
2.4.1.1.	Healy Model	29
2.4.1.2.	DeAngelo Model	30
2.4.1.3.	Jones Model	30
2.4.1.4.	Modified Jones Model	32
2.4.1.5.	The Industry Model	32
2.4.1.6.	Performance Matched Discretionary Accruals	33
2.4.2.	Measuring Total Accruals	33
2.5.	Earnings management Monitoring Devices	34
2.5.1.	Corporate Governance Effectiveness as a Monitoring Device	34
2.5.2.	External Audit as a Monitoring Device	35
2.6.	Summary	36

Chapter Three: Literature Review

3.1.	Introduction	38
3.1.1.	Earnings management	40
3.2.	Corporate Governance	42
3.2.1.	Corporate Governance Mechanism	44
3.2.2.	External Corporate Governance	44
3.2.2.1.	The Regulatory System	45
3.2.2.2.	The Takeover Force	46
3.2.3.	Internal Corporate Governance	47

3.2.3.1.	Board Composition	47
3.2.3.2.	Board Independence	49
3.2.3.3.	Board Size	53
3.2.3.4.	Board Meetings	53
3.2.3.5.	Chairman Independence	54
3.2.3.6.	Gender Diversity of Board	56
3.2.3.7.	Nomination Committee Independence	57
3.2.3.8.	Remuneration Committee Independence	57
3.2.3.9.	Non-Executive Directors Commitment	58
3.2.3.10.	Non-Executive Directors Private Meeting Frequency	58
3.2.3.11.	Non-Executive Directors' Fee	58
3.2.3.12.	Summary	59
3.3.	External Audit Factors	59
3.3.1.	Non-Audit Services and Auditor Independence	60
3.3.2.	Association between EM and Non-Audit Services Fees	61
3.3.3.	Association between EM and Audit Fees	62
3.3.4.	Association between Industry Specialised Auditor and Audit Quality	62
3.3.5.	Audit Committee Independence	63
3.4.	Earnings Management; Industrywise	64
3.5.	Earnings management Practice and Managers' Role	65
3.6.	Audit Quality and Earnings Management	66

Chapter Four: Theoretical Framework

4.1.	Introduction	69
4.2.	Agency Theory	69
4.3.	Stewardship Theory	71
4.4.	Stakeholder Theory	72
4.5.	Institutional Theory	73
4.6.	Summary	74

Chapter Five: Research Hypotheses and Methodology

5.1.	Introduction	75
5.2.	Research Philosophy	75
5.2.1.	Research Theoretical Approach	76
5.3.	Hypotheses Development	78
5.3.1.	Measurement of Dependent Variable	78
5.3.2.	Measurement of the Independent Variables	82
5.3.2.1.	Board of Director Composition	82
5.3.2.2.	Board Independence	83
5.3.2.3.	Board Meetings	85
5.3.2.4.	Board Size	86
5.3.2.5.	Board Gender Diversity	88

5.3.2.6.	Nomination Committee Independence	90
5.3.2.7.	Remuneration Committee Independence	91
5.3.2.8.	Non-Executive Directors' Commitment	93
5.3.2.9.	Non-Executive Directors' Private Meeting	94
5.3.2.10.	Non-Executive Director's Fees	96
5.3.2.11.	Ownership Structures	97
5.3.2.12.	Managerial Ownership	98
5.3.2.13.	Institutional Ownership	99
5.3.2.14.	Block holders' Leadership	100
5.3.2.15.	Audit Committee Effectiveness	101
5.3.2.16.	Audit Committee Financial Experts	102
5.3.2.17.	Audit Committee Size	103
5.3.2.18.	Audit Committee Meetings	104
5.3.2.19.	External Auditor Factors	105
5.3.2.19.1.	Auditor Independence	105
5.3.2.19.2.	Audit Quality: Industry Specialised Auditor	107
5.3.2.20.	Measurement of the Control Variables	109
5.3.2.20.1.	Firm Size	110
5.3.2.20.2.	Firm Performance	111
5.3.2.20.3.	Firm Leverage	111
5.3.2.20.4.	Firm Growth	112
5.3.2.20.5.	Cash Flow from operating Activities.....	112
5.3.2.20.6.	Empirical Research Model	113
5.3.2.2.6.1.	The First Model	113
5.3.2.2.6.2.	The Second Model	115
5.4.	Sample selection and Data Collection Procedures	116
5.4.1.	Sample Selection and Data Collection	116
5.4.2.	Analytical Procedures	118
5.4.2.1.	Normality	118
5.4.2.2.	Linearity	119
5.4.2.3.	Homoscedasticity	119
5.4.2.4.	Independence of the Error terms	119
5.5.	Summary	121

Chapter Six: Data Analysis

6.1.	Introduction	123
6.2.	Earnings management (Discretionary Accruals)	123
6.3.	Descriptive statistics and Univariate Analysis	126
6.3.1.	Descriptive Statistics and Univariate Analysis for the First Model	126
6.4.	Second Model: Descriptive statistics and Univariate Analysis	134
6.5.	Industrywise: Descriptive Statistics	140
6.5.1.	Industrywise: Descriptive statistics for First model and Second Model	140
6.6.	Correlation Coefficients	143
6.6.1.	First Model: Correlation Coefficients	143

6.6.2.	Second Model: Correlation Coefficients	145
6.7.	Test of Hypotheses (Multivariate Analysis)	147
6.7.1.	Results and Discussion of the First Model	148
6.7.1.1.	Board of Directors Composition	148
6.7.1.1.1.	Board Independence	149
6.7.1.1.2.	Board Meetings	150
6.7.1.1.3.	Board Size	151
6.7.1.2.	Board Gender Diversity	151
6.7.1.3.	Nomination committee Independence	152
6.7.1.4.	Remuneration Committee independence	153
6.7.1.5.	Non-Executive Directors' Private Meetings	153
6.7.1.6.	Non-Executive Director's Fees	154
6.7.1.7.	Managerial Ownership	154
6.7.1.8.	Institutional Ownership	155
6.7.1.9.	Block holder's Ownership	156
6.7.2.	Results and Discussion of the Second Model	157
6.7.2.1.	Audit Committee Effectiveness	158
6.7.2.1.1.	Audit Committee Accounting and Finance Expertise	158
6.7.2.1.2.	Audit Committee Size	159
6.7.2.1.3.	Audit Committee Meetings	160
6.7.2.2.	External Audit Factors	161
6.7.2.2.1.	Audit and Non-Audit Fees	161
6.7.2.2.2.	Specialised Auditor	162
6.7.2.2.3.	Control Variables: Results and Discussion	162
6.7.2.2.4.	Firm Performance	162
6.7.2.2.5.	Leverage (LEVG)	162
6.7.2.2.6.	Growth	163
6.7.2.2.7.	Cash Flow from Operations	163
6.8.	Further Analysis	163
6.8.1.	Alternative Measurement of Earnings Management	164
6.8.1.1.	First Model Results Using the Alternative Proxy of Earnings Management (GLS Model)	165
6.8.1.2.	Second Model Results Using Alternative Proxy of Earnings Management (GLS).....	167
6.9.	Signed Earnings Management	169
6.9.1.	The First Model Results of Signed Earnings Management Test	169
6.9.2.	The Second Model Signed Earnings Management Test	171
6.10.	Cross Listing: First Model and Second Model	174
6.11.	Analysis of Size Effect	176
6.12.	Big Bath effect of Earnings Management	178
6.13.	Industry Analysis	180
6.14.	Overall Summary	185

Chapter 7: Summary and Conclusion

7.1.	Introduction	186
7.2.	Restatement of the Research Problem and Research Question	186
7.3.	Summary of Research Methodology	186
7.4.	Summary of the Research Results	187
7.5.	Summary of Hypotheses and results	189
7.6.	Potential Limitations of the Research	190
7.6.1.	limitations of the data and sampling out of huge population	191
7.6.2.	The limitations in confirming the variables and constructing them in the model.....	191
7.7.	Implication of Research	192
7.8.	Summary	194
8.	References	195
9.	Appendix	230

List of Tables:

Table	Title of Table	Page No
Table 4.1	Summary of Variable	122
Table 6.1	Estimation of Discretionary Accruals	125
Table 6.2	Descriptive Statistics: First Model	132
Table 6.3	High & Low Earnings Management	134
Table 6.4	Median of Earnings Management: First Model	134
Table 6.5	Descriptive Statistics: Second Model	137
Table 6.6	Median of Earnings Management: Second Model	138
Table 6.7	High & Low Earnings Management: Second Model	139
Table 6.8	Industry-Wise Descriptive Statistics	233
Table 6.9	Correlation Coefficients: First Model	144
Table 6.10	Correlation Coefficients: Second Model	146
Table 6.11	First Model: GLS Test	149
Table 6.12	Second Model: GLS Test	158
Table 6.13	First Model: GLS Test for Current Discretionary Accruals	167
Table 6.14	Second Model: GLS Test for Current Discretionary Accruals	169
Table 6.15	First Model: Negative EM	171
Table 6.16	First Model: Positive EM	171
Table 6.17	Negative EM and Second Model	173
Table 6.18	Second Model and Positive EM	173
Table 6.19	First Model: Cross Listing	176
Table 6.20	Second Model: Cross Listing	177
Table 6.21	First Model: Size Effect	178
Table 6.22	Second Model: Size Effect	179
Table 6.23	First Model: Big Bath Effect	180
Table 6.24	Second Model: Big Bath Effect	181
Table 6.25	Industry-Wise Analysis: First Model	183
Table 6.26	Industry-Wise Analysis: Second Model	185
Table 7.1	Summary of Hypothesis Results	193

Declaration

I hereby confirm that the evidences provided in this research are solely original and prepared by my own effort. I also declare that I have not submitted the part or full section of this study in to any other degree programme or to any other university.

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Dedication

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Chapter one

1. Introduction

This study aims to identify the influence on controlling the manipulation of earnings quality by incorporating the two different controlling devices as corporate governance and external audit. The managers and directors of the organisation have been found being actively involved in manipulating earnings quality by violating accounting rules and standards (Abdoli, 2011). Hence, the standard setters may have to go through additional scrutiny to identify the loopholes in the current standards and find the ways to bridge such gaps.

This research endeavours to estimate the value of discretionary accruals by adopting performance matched discretionary accruals and identifies associations between various factors corporate governance and external audit. Further, this study also finds the other concerns under this topic area; earnings management.

There are further studies (Abdul and Haniffa, 2011; Lipton and Lorsch, 1992; Li *et al.*, 2015) under the topic area of earnings management; in this research, which has considered the current discretionary accruals, industry-wise analysis of the earnings management, positive and negative earnings management, cross-listing companies, size effect and big bath effect. While going through further analysis on earnings management, this study explores the effect of corporate governance and external audit in all the area as above-mentioned.

Research aims and objectives of this study are mentioned below:

Aim: The Impact of Corporate Governance and External Audit on controlling Earnings Management practice in the UK.

Objectives:

- To Estimate the value of Earnings Management by using Performance matched discretionary accruals model.
- To assess the Impacts of Corporate Governance Variables on controlling Earnings Management
- To assess the Impact of external Audit Variables on controlling Earnings management.
- To evaluate the Impact of corporate governance and external audit on discretionary accruals based on Size, Industry and cross listing firms.

1.1. Earnings Quality and Earnings Management

This research has prepared the concept to explore earnings management based on various models. Since Healy (1985) this topic has drawn the attention of the researchers, regulators, accountants, auditors, financial analyst, and other users of financial statements. This research has adopted the method of estimating earnings management driven through accruals

accounting system; hence, identify the impacts of governance factors and external audit factors on manipulating earnings quality.

Subsequently, the development in the study of discretionary earnings management model has been abundantly moved forward. It was developed by Deangelo (1986) with a minor change from Healy (1986). He assumed that the nondiscretionary accruals are constant. This model has ignored the economic changes of the business. Further, Jones (1991) has developed the model where the consideration of changes in revenue and property, plant and equipment was made relevant; while computing non-discretionary accruals. This model was later further developed by Dechow, Sloan, and Sweeney (1995) which is also identified as modified Jones' model. This model has been developed by inserting changes in total receivables while computing non-discretionary accruals. changes in receivables have been reduced from changes in revenue, in the model.

Modified Jones' model (1995) was later concluded as less powerful model in case of extreme financial performance by Dechow *et al.* (1986); the reason is that in these situations isolating discretionary accruals is an issue. The other important changes in advancing models of earnings management have been appeared when Kasznik (1999) developed Kasznik model. This model was formed by introducing another independent variable which is changes in net cash flow from operating activities.

Since Kasznik (1999) another effective earnings management model formed as Kothari-Jones model (2005). This model was basically based on firm performance; hence, this is also called as Performance Matched model. The contribution in developing models after performance matched discretionary accruals has not been very significant despite of changes in IFRS and Corporate Governance codes.

Many papers by Abdullah *et al.* (2011), Yang and Young (2012), Wulandar and Suganda (2021) are written based on the fact that the earnings management practice is affected by corporate governance, accounting standards and external audit. But the updates in the earnings management models are less frequent than examining the impact of various factors like corporate governance, external audit, tax, accounting standards.

The research on earnings management has been even more important since IFRS has been introduced. Capkun *et al.* (2016) has examined by segmenting the data collection based on pre-IFRS and post-IFRS. Moreover, this research also has collected data based on the country wise as IFRS adoption and non-IFRS adoption and concluded that they have identified increase in earnings management; mainly smoothing, from pre-2005 to post-2005.

Therefore, the relevance of the research on earnings management is increasing. Identifying the better explanatory models of earnings management is equally important. The use of manipulating earnings figure has been very important since the rise of larger corporations.

Accounting scandals at the start of first decade of this century has reached in culmination and many corporates has faced bad fortunes due to audit failures around the world for instance; Xerox, Enron, WorldCom, Health South in the USA, Parmalat, Vivendi in Europe, Satyam Computer Services, Sino-Forest in Asia (Abdullahi, 2015; Agrawal and Chatterjee, 2015).

Manipulation of financial reporting basically occurs by recognizing inaccurate, imprecise valuation of balance sheet position. The factors included in balance sheet are Asset, equity and liability (Almahrog *et al.*, 2018). Earnings management, hence, includes the over estimation of assets and underestimation of liabilities. By this practice, the managers can create latent reserves, can improve profitability of a company. This kind of practice may cause many negative consequences such as misleading financial users to make financial decisions, loss of credibility on the profession, ineffectiveness of corporate governance practices and inefficient financial markets and economy (Chang *et al.*, 2010; Arellano and Bober, 1995).

Hence, Lev (1989) suggests that the earnings quality is major part to be considered in the research since there can be manipulations even though accounting standards are followed. The managers and directors consider their discretionary rights and smooth earnings relying of the accounting principles. Hence, the practice of earnings management is undeniable as per the practice of these concepts in today's activities of the corporations (Barnea *et al.*, 1976).

Therefore, there is question always raised because the managers have discretionary rights which may cause them to be opportunistic for bonus or other purposes (Healy & Wahlen, 1999; Rosenfield, 2000; Dechow & Skinner, 2000). Such opportunistic practice in the earnings manipulation can change the financial decision-making perception of the shareholders.

1.2. Corporate Governance, External Audit and Earnings Management

Earnings management does reflect the true value of the financial performance of the organisation; hence, this sometime is not reliable resource to use as a tool for financial decision-making factor. This practice may misguide the stake holders while making financial decision. On the other hand, if the managers' opportunistic behaviour is avoided, the practice of earnings management may create reliable financial report, hence, may help in right decision making to the investors and shareholders (Wild, 1996; Dechow *et al.*, 1995; Chang *et al.*, 2010). The implications of earnings management can have impact on stock markets regulators, shareholders, creditors, suppliers, investors, and other concerned stakeholders. The rise in the concept of earnings management have been started since the larger organisation as mentioned earlier have been collapsed.

Hence, these parties are more interested in controlling earnings management from when corporate governance and auditing started playing very important role. These are considered as monitoring system to earnings management. The main idea of developing the strategy of

putting corporate governance in place is to resolve the issues and concerns of the agent. The agency problem is a tension between the shareholder's interest and manager's interest (Demsetz & Lehn, 1985; Colaco *et al.*, 2011).

Similarly, considering external audit practice; it can be argued that this is next monitoring system for earnings management. External audit can help creating balanced relationship between manager's interest and other stakeholder's interest. In fact, the auditors have strong controlling power and ethical responsibility to control the managerial discretion (Cohen *et al.*, 2007). Moreover, Frankel *et al.* (2002) and Krishnan (2003) have similar views on the roles and responsibilities of external audit in relation to controlling earnings management.

Therefore, corporate governance and external audit are key to reduce the practice of managerial discretion. They prioritise the interest of both parties and helps the corporation to run for long term objectives. Both parties enhance the reliability of the management's objectives and shareholders' objective (Watts & Zimmerman, 1986; Abbott *et al.*, 2004; Dark *et al.*, 2014).

1.3. Addressing the Problem

This research aims to identify the impact of corporate governance and external audit in controlling earnings management. Discretionary accruals have been calculated and considered as proxy of earnings management. This is measured by performance matched discretionary accruals (Kothari *et al.*, 2005).

The prior research has incorporated some factors of the corporate governance and external audit while identifying the impact of such variables in earnings management. This study considers the fact that the independent variables those can have impact on the preparation of the bottom line of the financial statement, have to be incorporated in the regression model; therefore, do minimise the errors. Hence, while investigating, it has been identified that there are nearly 16 factors which can have effect on earnings quality and can shape shareholder's perception. The factors are considered in four different categories which are called as Composition of Directors Composition, Non-Executive Directors Commitment, Audit Committee Effectiveness and Ownership Structures. Similarly, auditor specialisation and audit quality are considered as different categorical group for external audit.

There are some reasons explained below due to which the choice of attributes is relied on:

1. The impact on earnings management can be controlled by corporate governance, mainly in terms of agency theory. This is demonstrated in 4th chapter. While mentioning the inclusion of corporate governance, this mainly includes internal control

measures as suggested by Fama (1980). On the other hand, external audit, audit committees, and the use of non-executive directors are deployed as external factors for monitoring the practice of earnings management.

2. The literature review, in the project, discloses the knowledge gap under the topic of corporate governance which incorporates the idea of commitment of Non-Executive Director, the independence of Nomination Committee, the independence of Remuneration Committee, specialism of the auditor and presence of female members in the board.

The above-mentioned factors are used basically to identify the effect of corporate governance and external audit in controlling earnings management. Hence, the primary research question can be generated as:

Can the factors of Corporate Governance and external audit restrain the practice of earnings management in the UK?

As mentioned earlier, this study basically discloses the answers to the proposed research questions by using the scenario of United Kingdom by considering the corporate governance and external audit. There are some reasons which is why these attributes are chosen:

3. Financial Service Authority in the United Kingdom has introduced the UK corporate governance code with new recommendations. This has brought some changes in the best practice of the corporate governance activities. Nonetheless, in relation to Sarbanes-Oxley Act (SOX), UK corporate Governance Code has not been empirically examined.
4. In addition to some studies of the UK, (Xie *et al.* 2001, Klein 2002, Ashbaugh *et al.* 2003, Abdallaha *et al.*, 2015, Abaddi *et al.*, 2016; Bassiouny *et al.*, 2016) in the US; (Koh 2003, Davidson *et al.* 2005, Seng and Findlay, 2013; Uche, 2021) in Australia. have been taken place to measure the impact of corporate governance on earnings quality and its effectiveness. Nonetheless, the study on the impact of corporate governance and external audit in relation to earnings quality are not significantly examined. There are very limited studies Peasnell *et al.* (2000) and Peasnell *et al.* (2005) made based on the UK corporations.
5. The presentation of financial statement in the UK and in other countries like Australia and US are different because UK uses IFRS whereas other countries like Australia and US have different approaches. The corporations in the UK are affected by the best practice of corporate governance.
6. This study is based on the firms based on the UK where the data are collected from FTSE350 companies. It is quite reasonable collecting the data from the same country since the business environment of the country is quite related to same country's legislations, culture, and other internal and external factors.

1.4. Study Motivations

The study of earnings management discloses the lack of research under the area of the controlling devices of earnings management and impact of corporate governance factors and external audit factors on discretionary accruals. Mainly, the attributes of corporate governance; Commitment of Non-Executive Director, The independence of nomination committee, the independence of remuneration committee and the presence of female in the board.

The literature review of earnings management also discloses the lack of research on the topic related to the impact of corporate governance on discretionary accruals. This further explores the impact of external audit on earnings quality. The study on this topic has not been widely carried out specially in the UK based scenario. This research has used the methods for comprehensive study to improve and update earnings management research in the UK based firms.

UK corporate Governance code have been continuously amended to make best use of the practices to govern the organisations. Despite of that, the usefulness and effectiveness of the current code are not empirically examined. This study has identified the impact of UK corporate governance code.

1.5. Contribution of the study

This research contributes the knowledge on earnings management as this is examined empirically and identified how corporate governance and external audit can impact on the earnings quality. This study also examines the relationship between the corporate governance variables and earnings management. Similarly, the variables of the external audit and the earnings management are also used to identify the relationship between them.

The past literatures have mainly investigated the independence of the non-executive director, but this research has explored more variables than just independence of non-executive directors. The study has included the number of meetings by the non-executive directors, the fees paid to non-executive directors. There have no such studies been made in the past this the current scenario. This study has identified the proxy of earnings management and identified the impact of corporate governance and external audit on earnings management.

This study is the first in terms of exploring the ideas of corporate governance variables and external audit factors in wider range.

In terms of the models of the earnings management, most of the research have used modified Jones' model (1991) to estimate the discretionary accruals. The performance matched discretionary accruals developed by Kothari *et al.* (2005) has been considered as the most effective one out of many models of estimating earnings management. Only few researchers Hoque *et al.* (2017), Hamood (2021) have used this model to estimate earnings management. Since these researchers have identified the performance matched discretionary accruals are the most effective one, this study has considered the model while estimating the value of discretionary accruals; and the impact of variables of corporate governance and external audit on controlling earnings management have been investigated.

The study on the impact on earnings management by audit committee and the independent directors have been empirically tested by Dalton *et al.* (1998) and Klein (2002). There are few studies which have used the variables nomination committees which have overlooked the characteristics and expertise of the board committee members. However, this study has examined the impact of independence of nomination committee and remuneration committee on the discretionary accruals based on FTSE350 data.

The relationship between diversity and earnings management has not been much discussed in context of the UK business scenario. There is few research (Kang *et al.*, 2007; Jayeola *et al.*, 2017) which have investigated the impact of gender on earnings quality. This research has updated the knowledge in this matter by investigation the presence of female members in the board. He further mentions that the board diversity and independence attributes are not significant matters across the national territory because every country has own regulation, economic environments, cultural variations, governance factors and the market. This research is first which has studied how the more female members in the board can impact in the earnings quality. In the past the presence of women used to be very lower than at present. This research has examined the presence of more women in terms of earnings management.

This research has also employed the institutional ownership attributes and examined its impact on earnings management. This has not been previously discussed; however, Peasnell *et al.* (2002, 2005) and Bassiouny *et al.*, (2016) have used the ratio concept by incorporating numbers of shares held by institutional investor to total number of shares. Unlike, this study has calculated the percentage which demonstrate the clear idea while identifying the impact of institutional ownership to earnings quality.

Moreover, Managerial ownership has been also considered as an attribute in this research. This variable has not been previously used in context of corporations in the UK. Hence, this study has examined the impact of managerial ownership to earnings management. As

mentioned earlier, Peasnell *et al.* (2005) has created dummy variables in relations to managerial ownership whereas this research has identified the percentage of managerial ownership and examined how this has impact on earnings management.

The other factor, audit committee, has been used in this research which has not be in practice before. The introduction of the expertise in the audit committee has been recently made in The UK Corporate Governance Code 2016. Hence, this research has used this variable to identify the impact of expertise in audit committee on earnings quality.

This research is the first research to include the idea of concerns of audit committee by encompassing the attributes as an industry specialist auditor to measure the impact on earnings quality, since the update on the UK Corporate Governance Code 2016 has been introduced.

In addition, this study has considered absolute value of earnings management as dependent variables. This study is the first one who has included the idea of performance matched discretionary accruals (Kothari *et al.*, 2005) to identify the value of non-discretionary accruals. The past studies Ashbaugh *et al.* (2003); Ardison *et al.*, (2012), Katmon and Farooque (2017) on earnings management have used different model (John's model) while studying earning's quality. On the other hand, these research have identified the current accruals as a direct proxy of earnings management whereas the discretionary accruals are considered as indirect and long-term discretionary provision of the management. This research has used both ideas which confirms that this study has generated the valid and reliable outcomes.

The other reason of this study is that the UK corporate governance code have been gone through amendments from long before in almost every two years. The examination in identifying the effectiveness of governance code in terms of the practice of earnings management is very essential. Hence, this study has contributed in this area and has identified the effectiveness of UK corporate governance code in managing earnings.

The past studies under this topic have been studied based on the US firms. There is quite little research Peasnell *et al.* (2002, 2005) have been conducted in relation to UK based firms. Even though Hofstede (2001) has claimed as UK and USA are similar business environment, other researchers (Monks and Minow, 2004; Coffee, 2005; Ferguson *et al.*, 2004; De Miguel *et al.*, 2004) have claimed that they are different in many attributes like in forming the structure of the board, combining the executives in the board, the function of audit committee. Hence, this study has contributed to the area of the relationship between earnings management and the UK corporate governance code.

Alternately, the earnings management practice is also practised differently in the UK from the US. As per the arguments by Dechow *et al.* (1995), Brown and Higgins (2001), Tsipouridou and Spathis (2012), it concludes that the managers of US get involved in earnings management

practice quite higher than managers in the UK. Therefore, it is very important to calculate discretionary accruals based on the data of the UK based firms. This study has contributed additional knowledge in the area of Earnings management.

Eventually, this study has contributed knowledge on the effect of corporate governance and external audit function on the practice of earnings management by incorporating the variables of both sides creating separate models. The models are separated for these two different areas to make the study more valid and reliable. This study has used some variables like independence of nomination committee, independence of chairman, specialised auditors in the audit committee, the larger boards, cross-listing firms, industry-wise effect which have not been used before; mainly based on the firms listed in the UK.

This study has also made the unique study which has been considered as 'further study' of the earnings management and its relationship with corporate governance and external audit. Once the main study; the study of the impact of corporate governance and external audit on earnings management has been completed, various other possible factors have been explored and presented in this research.

The impact of the corporate governance and external audit in terms of current discretionary accruals have been explored. The managers to be opportunistic for the short term and for the long term is considered as separate scenario; hence, these can be impact on short term earnings management. There is no research has been take place in this regard; particularly, in terms of the FTSE350 industries.

Further, this study has also analysed the impact of various independent variables on the positive and negative signed earnings management. There is no such research has been conducted before by separating the positive earnings management a negative earnings management to make in-depth analysis.

Moreover, this research has also incorporated the idea of 'cross listing' due to which the earnings management can be influenced. The firms are considered as cross listing while they are listed in more than one stock market. This type of consideration has not been made before in terms of Listing companies of the UK.

Hence, this study has made huge contribution in the area of earnings management and the monitoring devices of the discretionary accruals. There are a lot of other external agents like industry-wise, cross listing, signed earnings management, short term earnings management are used in this research which; hence, has addressed the gap of the knowledge under this topic.

Most of the research, in terms of identifying the association between monitoring devices and earnings management, have ignored the control variable in the regression model. This study

has incorporated the control variables to reduce the errors and identify the impact of corporate governance and external audit on reducing the practice of earnings management.

1.6. Structure of the Thesis

This section of the research has demonstrated the general background of the earnings management, corporate governance, and external audit. Further, the research questions and objectives of the research have been outlined and explained. The contribution of this study in the earnings quality, corporate governance and external audit has been explained in detail.

The chapters following to this section has been organised as below:

Chapter 2 has incorporated the idea of the earnings management by providing the general concept of the topic. This also has discussed the managerial discretionary rights to be involved on manipulating earnings quality and the motivating factors behind this. Further, there are various models of earnings management which have been included in this chapter. Henceforth, what monitoring factors can be associated to earnings have been explored, thus, the idea of corporate governance and external audit have been brought as monitoring factors of earnings management.

Going ahead, in chapter three, this study has presented the extensive analysis on various models of earnings management, theories of corporate governance, concepts of external audit. Further, the connection of corporate governance and external audit to earnings management have been critically analysed. The comprehensive analysis and literature review in terms of each variable of corporate governance and external audit have provided the additional and bridged the gap in these contents.

Further, the theories and models of the corporate governance factors, external audit factors and earnings quality are discussed in chapter four. The analysis on agency theory, stakeholder theory, institutional theory, stewardship theory is presented. Moreover, the connection of these theories with earnings management have been exclusively explained. Similarly, factors of external audit are also discussed in the line with those theories and in association with earnings management.

Following literature review, this research has incorporated the idea of methodology in chapter five. The method of calculating earnings management has been presented. The monitoring factors of the earnings quality; corporate governance and external audit, have been theoretically and practically examined. The hypotheses have been generated in this section. The independent variables and dependent variables have been explained, the regression models have been prepared, the analytical tools are presented, the data collection methods have been explained in detail. The research methods, research philosophy, research

strategies are explained, and the justifiable analytical process and methods are demonstrated.

The detailed analysis of the research outcomes has been explained in chapter six. The hypotheses have been tested and analysed. Moreover, this chapter mainly includes the statistical tools to identify the relationship between corporate governance variables and earnings management; and similar approach has been presented in relation to external audit. The descriptive statistics, correlation, multi-collinearity test, robustness test, significance level is presented.

Following data analysis, this research has summarised the study and concluded the main findings and the implications of the research. This chapter has also included the recommendations and limitations of the study.

Chapter two

2. Background

2.1. Introduction

The deceitful activities in accounting practice can happen in different forms. In this section, this study explains the basic concepts of the earnings management and how earnings management can be led into frauds by the self-interest threat of the managers and directors. Based on this concern, this section encompasses the various methods and models by which earnings management can be measured. Moreover, the monitoring factors, corporate governance and external audit have been discussed in relations to its variables and their impact on earnings management.

2.2. Definition of Earnings management

There is no universally accepted single definition of earnings management. However, most of the researchers have accepted the concept of earnings management as “Earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers.” (Healy and Wahlen, 1999, p.365).

Apart from the definition by Healy and Wahlen, (1999), there are some more definitions of earnings management. Schipper (1989, p.92), who observes that “By earnings management, it really means disclosure management in the sense of a purposeful intervention in the external financial reporting process, with a view to obtaining private gain for shareholders or managers”.

The other researchers Dechow *et al.* (2002), Field *et al.* (2001) argues that the opportunistic behaviour of the managers and their managerial discretionary rights can lead them practising earnings management. Such discretions of the managers can violate the real value of the accounting figure, hence, mislead the stakeholders.

Various terms are used for earnings management out of which creative accounting and aggressive accounting are the popular and most used ones. The earnings can be made smooth by applying the accounting principles because of which the managers practise the creative accounting and aggressive accounting technique. However, these terms do not mean accounting fraud, hence, it is very important to set the boundary line from which the earnings management can be different from accounting fraud. This is not easy as managers can use their discretionary rights in the name of smoothing accounting figures and look for their personal benefit. Obviously, these are against the ethics and objectives of the accounting principles (Dechow *et al.*, 1996; Alareeni and Aljnaidi, 2014).

Following the accounting principles as set by the professional bodies like ACCA, ICAEW are very important. Fraud is considered when there is intent of manipulating the accounting

figures by deception for their self-interest. The main categories are fraudulent financial reporting and misappropriation of assets. Basically, managers and those charged with governance have to create the strong internal control due to which there is proper strategic guidelines to stop fraudulences while practising earnings management (Nor-Farhana *et al.*, 2014).

There are some signs like incentives, opportunistic behaviour, attitude and dishonest can be visible in the organisation before fraudulences takes place. The incentives can lead the managers to admit the fraud which can be due to the pressure from shareholders. The shareholders may intimidate the managers and directors for their personal benefits. On the other hand, the opportunity may occur in an organisation to practise earnings manipulation. This may be because of poor management or poor internal control system. If the managers are given quite many rights in major decision makings, there can be an opportunity for managers to manipulate earnings quality and may lead into fraudulences activity. Similarly, the attitudes and dishonesty are related to ethics, morale and high targets being set. The managers may be obliged or may have a chance to be opportunistic while performing accounting activities (Scott, 2015; Giacomino *et al.*, 2009).

2.3. Earnings Management Incentives

Earnings management is quite popular idea in the accounting practices, hence, Healy and Wahlen (1999) conclude that there is no easy way to convince this practice. They further suggest that while investigating the accounting in the corporations, the analysts and the auditors have to overlook how the bonuses are being provided to the managers and how those provisions are being made unexpectedly by using accrual aspect of the accounting.

The researchers Schipper (1989), Agrawal and Knoeber (1996) in the past have identified various ways of incentives being provided, but, regarding Healy and Wahlen (1999) has alluded mainly three different types of manipulations as capital markets, the contract written for the managers if they are based on the profitability or sales, the requirements by political or regulatory framework in the accounting practices.

As per the definition of earnings management, “Earnings management is the choice by a manager of accounting policies, or actions affecting earnings, so as to achieve some specific reported earnings objective.” (Scott [2009], p.403); this signifies that there can appear mainly two perspectives. The first one is that the practice of earnings manipulation in favour of the management by violating the accounting procedures and the second one is that the control on the reported earnings by practising the real earnings management.

There are various type of earnings management incentives and can be attained by following tactics:

- i. The big bath
- ii. Income minimisation
- iii. Income maximisation

iv. Income smoothing

The term “big bath” is ordinarily defined as “the attempt to increase reported earnings in subsequent periods by charging items that may have a negative future impact to expenses in the current period, further worsening current period business results in an accounting period in which results are bad” (Hashim and Devi, p. 34). The managers practice income decreasing practice of earnings management to present the financial even worse than it actually is; the reason is because the presentation of bad quality of financial statement, anyway, do not give positive impact in the market; hence, the managers use the big bath strategy and make the financial performance of the organisation even worse such that the following accounting period can be made far better (Karamanou and Vafeas, 2005).

On the other hand, income smoothing practices is done to make the financial statement stable. This practice basically makes the financial statement looks better such that the investors, shareholders and other relevant stake holders can be positively motivated (Kumara and Nandamohan, 2018). The profits of one accounting period can be transferred to other period to smooth the earnings. Similarly, the other earnings management incentives like income minimisation and income maximisation can be basically practised by violating accounting principles; for instance, treating revenue expenditure as capital expenditure to maximise the profit and vice-versa (Keiso, 2012).

2.3.1. Stock Markets Incentives

The share price of the organisation matters to attract the investors and also to increase the market value of the shares. Hence, to increase the market value of the stock price, the managers are bound to practice the earnings management. The previous researchers Matis *et al.* (2012), Sandeep (2012) claim that the manipulation of the earnings quality is more in the publicly companies than in private companies. This claim has identified that public limited companies get involved in earnings management by 1.2% more than in private organisation.

The prior researchers Hassan and Ahmed (2012), Man (2013), Rajeevan and Ajward, (2019) argue that the capital markets in terms of incentivising, there are some concerns which are as follows:

- The managers are advised to meet the market value of the shares as per the expectations of the market forces; thus, managers are tempted to be incentivised.
- To meet the expectation of the incentives by the managers in case the share value is raised before initial public or equity offerings, hence, earnings quality gets manipulated.
- To investigate the outcomes of earnings management if the investors are misled.
- Identifying the concerns in the capital markets by the practice of earnings management.

2.3.2. Management Compensation Contracts Incentives

As mentioned earlier the earnings management is most likely practised when there is target of the share price to be met set. The managers do take part in manipulating earnings to meet or beat the target. On the other hand, Managers may actively involve in manipulating earnings while they are made aware that they get extra benefit like bonus, salary increase from such practices (Afzal and Habib, 2018; Kumara, 2021).

In such situations, the interest of the managers and the shareholders are same. They both are benefitted and such that the agency cost can be minimised. The shareholders may agree at a point by creating management compensation plan where managers are provided rewards as per the bottom line of the financial statement.

Healy (1985), Bao and Lewellyn (2017) have made investigation in such concern where it is revealed that managers are provided economic incentives via executive compensation plan if the financial manipulation have been made by incorporating accrual accounting strategy. The findings admit that there is positive relationship between earnings management and managers' role in manipulating earnings. The other research by Leuz *et al.* (2003), Abdallaha *et al.*, (2015) investigates the practice of earnings management according to the opportunistic behaviours of the managers. The bonus scheme, compensation plan, stock option in the end, lead managers to practise in to creating discretionary accruals.

The research on insider trading have been published by Beneish and Vargus (2002), Raza and Karim (2016), Kankanamage, (2015) where they have found that there is positive association between discretionary accruals and executive compensation in relation to stock option. It is obvious that if managers are proposed to be offered some shares based on the profitability the organisation, they more likely practice earnings smoothing, hence, get involved in earnings management.

2.3.3. Debt Contract Incentives

While dealing with agency theory, it has been revealed that the interest of managers and directors get conflict with the interest of shareholders. Similarly, while dealing with the relationship between the interest of directors and the interest of debt holders, it has been found that they also conflict to each other. Jensen and Meckling (1976), Katmon and Faroque (2017), Lachar and Richardson, (2004) have argued that the shareholders want to obtain more dividend while the debt holder cannot get convinced with such decision made by the managers. They obviously want the debt to get paid, hence, the increase of dividend-pay to the shareholders is not the interest of the debt holders.

Hence, while dealing with the conflicts in the interest of shareholders and debt holders, the agency cost can appear to monitor and prepare the bonding contracts. This can create the incentives to the managers by taking part in monitoring and preparing bonding contracts. By doing so, the organisation can basically save the agency cost of the debt (Puat and Susela, 2013; Mnzaneque *et al.*, 2016).

The balance between shareholders and debt holders is very essential, therefore, executive compensation contracts are established. According to Kasanen *et al.* (1996), Seng and Findlay, (2013), It has been identified that the managers are put in the place to prepare and accommodate the restrictive covenants to issue debt or to provide dividend to the shareholders. However, the managers are hired to accomplish the interest of investors over creditors, hence, this can moderate the situation of providing higher dividend, or issuing more debt, or restricting debt holders demand of repayment. Hence, the earnings management practice can be more flexible in the organisation while such incentives are provided (Rao and Dandale, 2008).

As mentioned above by Kasanen *et al.* (1996), Jensen and Meckling (1976), they have concluded that the association between earnings management and debt contract incentives is positive. But the late research by Field *et al.* (2001), Abaddi *et al.* (2016), Subhasinghe and Kehelwalatenna (2021) have been observed, they have not been able to make such conclusions. Again, next research by Hunt (1990), Roodposhti and Chashmi (2011), Almahrog *et al.* (2015) have identified that more than half of the sample have made a covenant on dividend side, and 33% of the sample has been agreed to working capital covenant, and about 29% of the sample have covenant for debt-equity ratio. This research approves that the managers, prioritise the dividend and then other factors like debt. Hence, bond covenant is necessary to secure the financial position of the bond holders.

The researchers Beatty and Weber (2003); and Ardison *et al.* (2012) have alluded that the debt contracts are formed from borrowers' convenience, hence, the accounting choices are chosen, the conclusion is that the borrowers are in a position of preparing financial statement which is based on income-increasing approach. In addition, Defond and Jiambalvo, (1994); Bassiouny *et al.* (2016) argues as per the samples, 90% of the firms practised income accelerating earnings management one year prior to breaching covenants.

2.3.4. Political and Regulatory Requirements Incentives

In the previous topics it has been discussed that earnings managements are practised to impact on the shareholders' financial decision making; similarly, the decision of the managers also can be influenced by other stakeholders' concern. The other stakeholders can be bank, government, tax, who can influence in the practise of earnings management (Haw *et al.*, 2005; Cai *et al.*, 2015). In the research, it is identified that the government regulation can impact on the value of discretionary accruals.

As the research is based on the firms of China, the regulation of the government demands that there should be increment in return on equity as a minimum of 10% so that the organisation can offer shares or issue bonds, hence, there has income increasing earnings management practices been practised. Conversely, Johnston and Rock (2005), Nugroho (2011), Veronica (2020) have examined and identified that the firms who are affected by Superfund Act are like to adopt income-decreasing earnings management.

There is other research, Eze (2017), which was prepared based on industry regulation. In this study, it has been revealed that the political costs can have impact on the value of discretionary accruals. The research was carried out based on the Cable TV industry where the managers have made the selection of the accounting principles and choices of the accounting treatment based to avoid the congressional scrutiny and the industry regulation. The other example, Abdel (2012), Al-zaifi and Amer (2017), can be taken to evident the impact of Political cost and political consequences on the earnings management. The report has identified that there were choices of income-decreasing accounting principles during the Persian War time; where the research was conducted based on the corporations of Iraq. in the Gulf to present lower profit level due to price increase in retail industry.

Further, the managers are motivated to practice manipulating earnings quality for matching purpose where regulatory constraints are in a place as per the need of the regulated financial institutions. The managers have to prepare financial statements to meet certain requirements, hence, they are obliged to manipulate due to on-going concern or other contractual reasons. Beaver and Engel (1996), Cai *et al.* (2015) admit that the banks those are in a situation of having low capital competence most likely fall in a situation to practice earnings management.

The other researchers Susanto (2013) has used four different models to estimate the discretionary accruals; proxies of earnings management and those estimated values are used to compare the old economy firms and new economy firms; to investigate how the earnings management practice have been changed over the time. They have revealed that the new economy firms have practised the methods that reduces that value of discretionary. The change is not in great deal, however, the slight changes in the earnings management still approves that the new regulations are in effective use. This research was conducted based on the firms listed in Australian Stock Exchange; over ten-year period.

Similarly, Becket *et al.* (1998), Wiyadi *et al.* (2015) has investigated the impact of the accounting standard and regulation on the earnings management performance in Australia, New Zealand and the UK. Their research has concluded that there was no earnings management taken place in Australian and New Zealand firms whereas the UK firms had practised the creative accounting techniques just before the new regulation of the asset revaluation was introduced. This results that the directors and managers find the gaps out of the set regulations and be involved in the earnings management.

2.4. Earnings Management Measurement Methods

The consideration of the earnings management can be agreed as a successful act only when this practice can be invisible. This kind of activities and practices create very tougher environment for the researchers to find the value of discretionary accruals. Also, this makes the investors, creators, debt holders, bond holders difficult to decide whether the earnings management practice have been taken place (Saleh *et al.*, 2005).

There are a lot of researchers who have been engaged in identifying the value of earnings management. As this research deals with accruals based accounting and earnings

management cause by the consequences of accrual accounting, this mainly focuses in the managerial discretionary rights. This is also called as abnormal accruals on which many researchers (Bowman and Navissi, 2003; Batov *et al.*, 2001; Teoh *et al.*, 1998; Dechow *et al.*, 1995; DeFond and Jimbalvo; 1994; Boynton *et al.*, 1992; Jones, 1991) have conducted research to identify the value of discretionary accruals.

So, while discussing the calculations of earnings management, the researchers are more aware of earnings those are not managed. Therefore, discretionary accruals as observed and non-discretionary accruals as unobserved data are considered. Also, the discretionary accruals are considered as managed earnings and non-discretionary accruals are considered as unmanaged earnings. Healy (1985) has examined and identified that only the discretionary accruals are used by management for their managerial discretion.

The concepts of earnings management and measurement of earnings management have been all time the topic for discussion after the fall of some corporations like Enron and WorldCom. Earlier, the researchers in this topic have followed the accruals based accounting system to examine the consequences of the earnings management (Zmijeswki and Hangeman, 1981; McNichols and Wilson, 1988). Moreover, total accruals are calculated by using balance sheet approach. The separation of discretionary accruals from total accruals is very essential matter to identify the non-discretionary accruals.

Since the theories of the earnings management have been evolved, many models are formed to detect the earnings management. For instance, Healy (1985) has mentioned that total accruals, in totality, as a proxy of earnings management whereas DeAngelo (1986) later criticises the Healy's model and recommended that the difference between the total accruals from the previous years and following year as a proxy of earnings management.

Both Healy's model and DeAngelo's model have been criticised by Jones (1991) and advised that the economic condition of the business paly significant role in manipulating earnings quality. Which is explained in section 2.

Further, as this is very widely discussed area in recent literatures of the accounting and finance, McNicholas (2000) has investigated by employing three different design of the earnings management as aggregate accruals, specific accruals and the distribution approach. These models are discussed below:

2.4.1. Aggregate Accruals Models

Research Objective:

- a. To estimate the value of earnings management by using Performance matched discretionary accruals model.

This method basically incorporates the idea of discretionary accruals and non-discretionary accruals. Discretionary. Discretionary accruals are observed accruals which can be

determined by the management whereas non-discretionary are unobserved and cannot be determined by management. The managers, in most of the cases, encompasses the idea of calculating discretionary to practice earnings management. This is basically done by incorporating the accounting principles and different choices of IFRS or GAAP or other Accounting principles; based on the regulations (e.g. Bowman and Navissi, 2003; Batov *et al.*, 2001, Kasznik, 1999; Dechow *et al.*, 1995; Gaver *et al.*, 1995; Holthausen *et al.*, 1995; Warfield *et al.*, 1995; DeFond and Jiambalvo, 1994; Sweeny, 1994; Cahan, 1992; Jones, 1991; Healy, 1985).

Furthermore, while calculating discretionary accruals, this method isolates the discretionary accruals from non-discretionary accruals where earnings management is considered as a proxy for discretionary accruals. It is a complex process to separate total accruals as observed and unobserved components. Hence, there is limitation to breakdown the total accruals in the form of discretionary accruals and non-discretionary accruals.

There are range of methods in calculating earnings management. Based on the past study, this range is spread from simple methods to complex methods. One of the methods develops the concept of earnings management as a proxy of change in total accruals where as other methods, complex one, relies on separating discretionary accruals from non-discretionary by using regression analysis.

This study has identified different types of models to calculate earnings management. After careful scrutiny, one of the most significant models has been selected to conduct the research and to identify the value of earnings management based on that models. However, the mostly discussed models of discretionary accruals are discussed below:

- i. Healy model
- ii. DeAngelo model
- iii. Jones cross-section model
- iv. Modified Jones model.
- v. The Industry model.
- vi. Performance Matched Discretionary Accruals model.

2.4.1.1. Healy Model

The assumption of Healy (1985) for earnings management is based on the value of non-discretionary accruals. According to him, non-discretionary accruals follow white noise in regression line which means the average value is zero. He assumed accruals as a proxy for discretionary accruals which means the value of discretionary accrual is zero. To control the firm size effect, the value of accruals has been deflated by lagged total assets.

To get inferences, the apportioned samples in terms of earnings decreasing and earnings increasing, he has calculated the mean of accruals for each sub-sample and makes the comparison between two. Hence, the assumption is that non-discretionary accruals remain constant between portioned samples. The non-zero value of total accruals which is sum of

discretionary accruals and non-discretionary accruals signifies that the practice of earnings management has taken place. This model uses cross-sectional comparison to estimate the value of non-discretionary accruals.

Basically, this model considers that the values of discretionary accruals are zero. The firms that have discretionary accruals below zero have considered increasing profits whereas the firms those have above zero have considered decreasing profits.

$$DA_{i,t} = \frac{TA_{i,t}}{A_{i(t-1)}} \dots\dots\dots (i)$$

Where, A= total Assets;

2.4.1.2. DeAngelo Model

In this model, it is assumed that non-discretionary accruals follow random walk. DeAngelo (1986) has computed the changes in accruals between two adjacent years. In regard to control firm size effect, the value of accruals is deflated by lagged total asset.

DeAngelo also assumes that in stationery position of a company, the value of non-discretionary accruals in year t is equal to in year (t-1). Therefore, the difference in the value of non-discretionary accrual between year t and year (t-1) is considered as the value of discretionary accruals. Hence, this model considers the prior year to estimate non-discretionary accruals.

$$DA_{i,t} = \frac{TA_{i,t} - TA_{i(t-1)}}{A_{i,t}} \dots\dots\dots (ii)$$

2.4.1.3. Jones Model

Jones (1991) proposes the effect of economic changes of the firm in regard to its non-discretionary accruals where Healy (1985) model and DeAngello (1986) model are based on the constant value of economic circumstances which in practice is not possible. They assume that non-discretionary accruals are constant. Therefore, these models cannot calculate non-discretionary accruals if non-discretionary values are not constant in the course of time and discretionary values are zero in the estimation period.

Jones (1991) has become aware of the economic changes of the firm. The variables, in this model, basically have been considered are total assets, gross revenue and gross property plant and equipment. It has identified that the changes in these variables are the determinants of non-discretionary accruals. Hence, unlike prior models, this model concludes that non-discretionary accruals cannot be constant as its determining factors keep changing with time changes.

Jones (1991) has revealed sales revenue as a proxy for economic events that can produce current non-discretionary accruals. Moreover, the gross PPE also has been an important variable to control non-discretionary accruals which are concerned on Depreciation expense.

Jones (1991) model is based on following specific features:

It rejects the assumption that non-discretionary accruals remain constant over time

It tries to control the effects of changes in operating performance of the company over the measurement of non-discretionary accruals.

Despite of being more precise, in terms of its empirical study, than former models, this model still has some limitation. This model eludes the potential manipulation done by managers while achieving revenues.

Jones model (1991) has got three stages to split total accruals into discretionary and non-discretionary factors. The first stage uses balance sheet approach to calculate total accruals while the second stage is used to compute non-discretionary accruals.

The heteroscedasticity in this model could be the problem because of the variables involved in the regression analysis due to which the original variables are deflated by total asset at (t-1). Additionally, many researchers (Chen & Zhang, 2012; Teoh *et al.*, 1998; Fields *et al.*, 2001; Greene, 2014) admit that variables used in accrual models including Jones model are deflated by average total assets to lessen heteroscedasticity.

Thirdly, discretionary accruals are computed by $DA_{i,t} = TA_{i,t} - NDA_{i,t}$

Jones models for non-discretionary accruals in the event year can be expressed in form of equation as follow:

$$NDA_t = \alpha_1 \left(\frac{1}{A_{t-1}}\right) + \alpha_2(\Delta Rev_t) + \alpha_3(PPE_t)$$

Where,

Rev_t = revenues in year t less revenues in year t-1 scaled by total assets at t -1;

PPE_t = Gross property plant and equipment in year t scaled by total assets at t-1;

A_{t-1} = total asset at t -1. And

$\alpha_1, \alpha_2, \alpha_3$ = firm-specific parameters.

Estimates of the firm specific parameters $\alpha_1, \alpha_2, \alpha_3$ are generated using the following model in the estimation period.

$$TA_t = \beta_1 \left(\frac{1}{A_{t-1}}\right) + \beta_2(\Delta Rev_t) + \beta_3(PPE_t) + ut \dots\dots\dots (iii)$$

Where,

$\beta_1, \beta_2, \beta_3$ denote Ordinary Least Square (OLS) estimated of $\alpha_1, \alpha_2, \alpha_3$ and TA is total accruals scaled by lagged total assets.

Dechow et.al. (1995) concludes that the results of total accrual computed using Jones model (1991) can explain around one quarter of the variation.

2.4.1.4. Modified Jones Model

As the development in identifying discretionary accruals is continuously encompassing different variables and models, Jones model has been changed into modified Jones model later by Dechow, Sloan, and Sweeney (1994). This model is also called as Dechow model. In this model, they have employed the concept of change in receivable. As the change in receivable is not included in revenue of the current period; it has to be reduced from revenue; hence, the model is found as following.

$$TA_t = \beta_1 \left(\frac{1}{A_{t-1}} \right) + \beta_2 (\Delta Rev_{it} - \Delta Rec_{it}) + \beta_3 (PPE_{it}) + u_t \dots \dots \dots (iv)$$

To calculate earnings management from this method; it has three step in which at first total accruals (TA) is calculated by using balance sheet approach. The formula for this is as mentioned:

$$TA_t = (\Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta STDEBT_t - Dep_t) \dots \dots \dots (V)$$

The second step is to calculate discretionary accruals; the formula to calculate is as follows:

$$NDA_t = \alpha_1 \left(\frac{1}{A_{t-1}} \right) + \alpha_2 (\Delta Rev_t - \Delta Rec_t) + \alpha_3 (PPE_t)$$

The third step of the calculation is done as follow:

$$DA = TA - NDA$$

2.4.1.5. The Industry Model

This is another accrual model proposed by Dechow & Sloan (1991). This model is also based on the concept that non-discretionary accruals does not remain constant over time, however, it has limited the variations in the determinants of nondiscretionary accruals. This model basically relies on that the firms of the same industry have got common in the variation of the determinants of nondiscretionary accruals.

This can be represented in the form of equation as follow:

$$NDA_t = \gamma_1 + \gamma_2 \text{ median1 } TA_t$$

Here,

median1 TA_t = the median of TA scaled by lagged assets for all non-sample firms in the same 2-digit standard industrial classification (SIC) code.

Whereas,

γ_1, γ_2 are estimated parameters using OLS on the observations in the estimation period.

Hence, this model has attempted to decrease the error in computed value of discretionary accruals which simply relies on two conditions.

2.4.1.6. Performance matched discretionary accruals

In the analysis made by Dechow *et al.* (1995) and Kasznik (1999), it is alluded that the discretionary accruals estimated by using Jones model (1991) is positively associated with return on assets. This method of calculating the value of abnormal accruals is misspecified, to elude this performance related misspecification, Kothari *et al.* (2005) has added a matched-firm or portfolio technique to reduce the errors in earnings management.

The value of discretionary accruals contains severe error because Jones and modified Jones model do not suggest controlling the prior performance of the firms. As argued by Kothari *et al.* (2005), they input the lag of return on asset in the model that have intercept and control for firm's performance. This helps in mitigating the issues of heteroscedasticity that exists in Jones model and modified Jones model.

This model has added previous year's return on asset (ROA) as a variable in modified Jones model because the latter model does not concentrate on a specific event and correlation issues. Hence, this study uses Kothari *et al.* (2005) model in estimating the value of abnormal accruals. Thus, the discretionary accruals will be estimated by the residuals of the following cross-sectional model:

$$TAC_{i,t} = \alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t} - \Delta Rec_{i,t}}{TA_{i,(t-1)}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{TA_{i,(t-1)}} \right) + \beta_3 (ROA_{i,(t-1)}) + \epsilon_{i,t} \dots \dots \dots (Vi)$$

2.4.2. Measuring Total Accruals

Discretionary accruals; also known as abnormal accrual or unexpected accruals, are based on manager's discretionary power when the accounting values are abnormally manipulated. Some examples of discretionary accruals are allowance for doubtful receivables, worthless receivables, provisions for debt, reorganizational expenditures, impacts in changing accounting values, deferred revenues, accrued expenses, and profit or loss appeared when selling assets. Non-discretionary accruals are known as normal accruals. These accruals are basically related to everyday financial activities of a firm (Kothari, *et al.*, 2005).

The choice of accounting policy actually indicates the involvement of discretionary accruals in the financial statements. Accruals are actually the different between operating cash flows and

earnings which have been formed as total accrual. To measure discretionary accruals total accruals and non- discretionary have to be calculated where Total accruals = discretionary accruals + non-discretionary accruals (Aerts *et al.*, 2013).

It has been found that total accruals can be calculated from two different approaches which are balance sheet approach and cash flow statement- based approach. Healy (1985) and Jones (1991) have used balance sheet approach, as mentioned in equation (v), to calculate total accruals in which following formula has been used. This can be mentioned as below:

$$TA_t = (\Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta STDEBT_t - Dep_t) \dots\dots\dots (v)$$

Where,

ΔCA_t = Change in current assets in year t;

$\Delta Cash_t$ = Change in cash in year t;

ΔCL_t = Change in current liability in year t;

$\Delta STDEBT_t$ = Change in current maturities of long term debt and other short term debt included in current liabilities between current year t and previous year t-1;

Dep_t = Depreciation and amortisation expense in year t.

Hence, Accruals and manager’s flexibility basically causes the earnings management practices. Numerous researches are being outgrown in this topic as it has unsolvable problems. Researchers are approaching to reduce the fraudulences that are involved in while practising earnings management. Various models have been found to investigate the degree of problems and measures for them (Bajra & Cadez, 2017).

2.5. Earnings Management Monitoring Devices

2.5.1. Corporate Governance Effectiveness as a Monitoring Device

The relationship between the corporate governance and earnings management have been widely discussed. Hence, this can be considered as monitoring device of earnings management basically to check and balance the fraudulences in this practice. In the Global Corporate Governance Forum (2000), cited in (Cadbury, 2002, p.13), Sir Adrian Cadbury defines the aims of corporate governance, saying “The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, corporations and society”.

Further, corporate governance by the Organisation of Economic Cooperation and Development (OECD) has been defined as “The system by which business corporations are directed and controlled. The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the corporation, such as the board, managers, shareholders and other stakeholders and spells out the rules and procedures for making decisions on corporate affairs. By doing this, it also provides the structure through

which the company objectives are set, and the means of attaining those objectives and monitoring performance” (OECD, 1999, p. 24).

In the study by Jiraporn *et al.* (2008), Scott (2015) and Wulandari and Suganda, (2021), it has been argued that when there is no monitoring from corporate governance to the management, there is higher chance that the managers can manipulation the earnings quality. This creates the higher degree of asymmetric information, hence, blurred the vision of the shareholders and can be unable to monitor the management practices and manager’s activities. In such situations, managers can take opportunity to make the decisions for their own favour rather the for shareholder’s interest. As a result, earnings management practice becomes more prevalent while no effective monitoring system is put in place, in fact, this increases the agency cost.

As discussed by Fama and Jensen (1983b), Zang, (2012) and Alreen and Aljnaidi (2014) the reduction of agency cost can be controlled by forming a system to monitor the malpractices in the organisation. Corporate governance is, so, very important monitoring device to earnings management practices. This system can limit the power of the management, internal control can be strengthened, hence, can limit the managerial discretionary rights and can control the self-interest of the managers. This system also helps to secure the rights of the shareholders, and reduce the agency cost. However, the research by Hart (1995), and Trisnawati *et al.* (2015) have contradictory view and claims that this kind of monitoring system can restrict the manager’s potentials effective use of skills in developing and growing the organisation.

The value of corporate governance mechanism has been widely discussed since last the end of 20th century and rise of 21st century. Fama and Jensen (1983) admits that the corporate governance mechanism can ensure the investors, shareholders and regulators. There are such attributes those have been put in place as independent non-executive directors, independent chairman, independent audit committee to control the managerial opportunistic behaviour, reduce the agency cost and secure the rights of the concerned stakeholders. For instance, it was advocated by SEC chairman (Levitt, 1998) that SEC has to consider the value of corporate governance and establish this mechanism to control the earnings quality.

2.5.2. External Audit as a Monitoring Device

The other monitoring device is external audit which basically reviews the system of internal control and make opinion of true and fair view on the financial statements. They also evaluate the control procedures of the organisation and operate on preventing the material misstatement in the financial statements which eventually helps in controlling the earnings management (Saleh *et al.*, 2021).

While reviewing the literature back to 1980s; Wallace (1980), Beasley (1996) have commented the investors pay very high attention on the audited financial statements so that they can feel safe while investing. It concludes that the auditing process is very important; therefore, systemising and advancing the auditing task controls the manipulation of the earnings quality.

The impact of auditing on the financial statements and internal control has been constantly empirically examined. Moorland (1995) and Qaiser and Abdullahi (2016), Wang *et al.* (2021) have investigated the impact of audit in relation to enforcement actions/sanctions against auditor by the SEC. This study has compared the impact on earnings quality before and after the enforcement has taken action; and found that there is declined in the manipulation of the earnings quality.

Shareholders feel confidence on financial statements and can feel secure to make financial decision while the auditors give their opinion on the financial statements. Hence, the independence of the auditors is very essential not to be influenced by any of the parties; this truly help the stakeholders including shareholders in making financial decisions. There is risk of being influenced the independence of the audit committee by the non-audit services. Therefore, in the study by (Becker *et al.*, 1998; Sharma and Sidhu, 2001; Wiyadi *et al.*, 2015). They have found that attributes of the external audit can influence in reducing the manipulation of the earnings management.

The academic research and their empirical study have identified the mixed opinions in terms of independence of the audit committee. Many of them have investigated that non-audit fees are subject to impair the independence of the audit committee. There is belief that the failures of the Enron, WorldCom, Global Crossing are due to the impairment of the audit committee. Hence, SEC has implemented the regulation that the disclosures of audit fees and non-audit fees are necessary because they believe that this can improve the independence of the audit committee (Pindyck and Rubinfeld, 2012).

In the study by Nelson *et al.* (2005), Uche (2021); they have examined the effectiveness of auditing the financial statements. They have surveyed 515 auditors who are involved in big 5 firms in terms of controlling the practice of earnings management. The issues like recognising reserves, asset impairment, mistreatment, capitalising the expenses, increment of the provisions of the debt, capitalising or deferring too much or too little, reducing previous accruals such as deferred tax, asset valuation allowance, adjusting depreciation, deferring revenue, bill-and-hold sales, sale-and-lease-back transactions, revenue recognition, treatment of intangible asset, recognising R&D as an investment instead of Expense, misestimating percentage of completion, income statement classification, avoiding consolidation have been found by the auditors (Shams, 2020; Tang, 2017).

Since the importance of the auditors has been realised in the business, they have been constantly employed in controlling activities and verifying activities, therefore, it is very important that independence of the audit committee, disclosures of audit fees and non-audit fees, professionalism, professional scepticism are very important attributes of the external audit to control the manipulations in the earning quality (DeAngelo, 1986; Balsam *et al.*, 2003; Sumiadji, 2019).

Considering the importance of the external audit in the practice of earnings management, this study has considered the attributes audit fees, non-audit fees, expertise of the audit, industry specialist are considered as some independent variables in the regression model.

2.6. Summary

This section has included the analytical understanding of the manipulation of the earnings management. The insight on the earnings management have been explored and clearly presented. This section has also discussed the different estimation models of the earnings management; the purpose is that the analytical interpretation of the earnings management can be an addition contribution of this study in this area.

Moreover, this section has also involved the opportunistic behaviour of the management which eventually lead the managers in involving in the manipulation of the financial statements; hence, the earnings management has been estimated by using performance matched discretionary accrual which states the less errors as investigate by previous researchers (Francis *et al.*, 1999; Kaycheng, 2014). This also states that there are two different types of monitoring devices of the earnings management and they are corporate governance and external audit.

Chapter three

Literature Review

3.1. Introduction

This paper aims to investigate the impact of corporate governance practices and external audit on controlling earnings management based on the FTSE350 companies of the UK. This research considers the discretionary accruals where managers have opportunity to manipulate earnings. Due to practice of earnings management, since the last decade of 20th century, mainly by American firms Xerox, Enron, WorldCom, Health South etc., by European firms Parmalat, Vivendi etc., and by Asian firms Satyam Computer Services, Sino-Forest etc. the accounting scandals have become the serious problems in financial markets (Kaycheng, 2014).

Since the accounting and auditing scandals have taken place in late 20th century, the research on earnings management started to be developed enormously. The necessity of the academic research on this topic has been realised when Enron, WorldCom, Parmalat corporate scandals spread over the world (Rao & Dandale, 2008).

Therefore, corporate governance remains active and updates its code according to occurring business complexity so that there can persist restrictions for the managers while using their discretion. It is found that additional measures in regulations and corporate governance code will mitigate the negative impact that could possibly occur for the firms by earnings management practices (White, 1980; Karamanou & vafeas, 2005).

This research includes the reviews of corporate governance mechanisms found in related literatures, summarises earnings management, its practices in a latest diagnostic system. The reviews of the corporate governance explore the various factors of the corporate governance and their impacts on controlling earnings management. This study, in the literature review, hence, has analysed the impact of various factors of the corporate governance on earnings management. Similarly, the lack of knowledge in area of corporate governance factors and earnings management have been bridged by this research.

Moreover, the external audit factors are of importance as equal as corporate governance factors in terms of exploring the impacts on controlling earnings management. This research has critically analysed the impact of the variables of the external audit on controlling earnings management. The knowledge in the area of external factors and earnings management has to be intensely analysed; hence, this research has bridged the gap and contributed the knowledge on the area of discretionary accruals and how this can be controlled by the factors of external audit (Tang, 2017).

Practising earnings management indeed hides the true picture of financial information from its users. This practice can mislead the investors and shareholders when making financial decision (Chang *et al.*, 2011). Hence, investors, shareholders, suppliers and other concerned stakeholders might not be able to make efficient allocation of financial resources (Chang *et al.*, 2011; Theresia *et al.*, 2021).

The managers of the firms could exercise earnings' manipulation for tax reduction purposes by reducing incomes and increasing expenses. On the other hand, it can be practised to raise the stock value by increasing profit. Moreover, earnings manipulation can also be done when managers are motivated by their self-interest like bonus plan and other contractual issues (Chang *et al.*, 2011).

According to chen (2010), Marchini (2018) earnings management has been the reasonable and legal accounting act to bring stable and predictable financial results. She further addressed that majority of the people have a concept that the earnings of the company are considered as their net income or net profit. This value is considered as the most important one due to which analysts rely on net profit while commenting on the company's performance. Further, net profit is the value which is one of the determinants to increase or decrease share value of a company. In a recent paper by Chen (2010), Earnings management has been argued as an accounting is not a perfect science. It is not perfect science in a sense that there are some Factors involved in the calculation of the earnings management. Not same variables are used by all models while estimating the value of discretionary accruals. Various models are formed to estimate the value of discretionary accruals; hence, different value of discretionary accruals get calculated. The Most used models are Healey model (1985), Deangelo model (1986), Jones model (1991), Modified Jones model (1995) and Performance Matched discretionary accruals model (2005); which estimate the value of discretionary different. It allows managers to use their discretion to prepare financial statements. He has clarified his statement by providing an example of bad debts in which the managers can change the estimation of bad debt expenses and delay asset write-offs. In both definitions it can be concluded that earnings management practice is used to change the bottom line value as per the need of the organisation.

However, Healy and Wahlen (1999, p. 368) has defined earnings management as "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." From this definition it can be argued that the managers some time mislead the stakeholders for their self-benefit purpose. The previous studies (i.e. Healy, 1985 & Kasznik, 1999) have evidenced that earnings management practice can be taken place to manipulate

accruals. Managers can shift profit of future earnings through the acceleration of revenues or deceleration of expenses.

The other aspect of earning management can be dealt basing on real earnings management. Real earnings management takes place when real activities, such as decreasing discretionary or advertising expenses (Dechow & Sloan 1991; Roychowdhury 2006; Wstland, 2010)) are manipulated. Managers may practice avoiding reporting losses by using real earnings management. This also can be practised to maintain positive reporting profit trends (Bartouev *et al.* 2002).

Therefore, there are fundamental differences between accrual-based earnings management and real earnings management. Accrual based accounting is basically inter-temporal. This invites profit to shift from one period to other but real earnings management changes the activity level. This practice may have negative impact on future performance. The manager can practice increasing net income by reducing advertising cost which may create significant loss in future.

Earnings' manipulation could be practised from tax-reduction perspectives when managers practice decreasing incomes and increasing expenditures or it can be exercised to obtain higher stock values when manager can increase incomes and decrease expenditures. There could be many other reasons behind practising earnings management as sometimes managers are motivated by bonus and other contractual issues (Katmon & Farooque, 2017). Managers can practice the method of lowering the stock value for their self-interest. Practicing earnings management either increase profit; for instance, considering consignment sales as normal sales, or decrease profit; by considering sales and marketing expenditure as research and development expenditure in accruals based accounting policy (Chang *et al.*, 2011).

3.1.1. Earnings Management

The deviation in the quality of accounting has been very high if it is compared with modern accounting from Anglo-Saxon one. The assumption then was that the financial statements have to be truth. The investors, credit agencies, suppliers and other stakeholders used to get the truth figure to make financial decisions at that period. The accuracy of the financial decisions was expected from high quality financial statements which can reflect clear and accurate financial position of a firm. The quality of accounting is considered as high when it has features like accuracy, timeliness, comparability, accessibility and relevance (Peasnel *et al.*, 2005).

Creating a single description of accounting policy would not be impossible but differences in financial systems, complexity in markets, various accounting policies, legal factors, economic policies, make the literature complex in accounting theories. As mentioned above regarding the truthfulness of the financial statements, the flaws in it would be the investors and other potential stakeholders might not necessarily be ambitious (Katmon & Farooque, 2017). In this

kind of situations that financial statements might not motivate them to invest. Many companies would lose the investors, suppliers as a result the capital formation would fall in huge crisis. Therefore, earnings management seems to be essential factors to be practised in the financial world. The managers normally would like to make the financial statements smooth by manipulating original figures by numerous motives and incentives (Klein, 2002; Lee and Vettler, 2015).

Most of the researches based on accounting theories have been done on choice of a single accounting method for instance; the choice of depreciation. The choice of combinations of accounting methods has been ignored in the past studies even though the power of the test actually remains strong. Managers of the firms are motivated on how the earnings have been affected by the use of combinations of accounting methods. Basically, accrual based accounting has made the accounting practices challenging and complex (Bhattachary *et al.*, 2003; Sun & Rath, 2009; Wilson, 2011).

Despite of the fact that accruals make the financial performance of the firm different from its actual position, it cannot be denied that this method of accounting brings clean accounting information. The reason behind this is because it records the financial events when it takes place, not when cash are collected or paid. On the contrary, cash flows as per the periodic principles have reverse impact from the accrual based accounting has. For instance, the manager can make decision to make debt pay next accounting period to write up the cash flows of current year. The additive impact on cash flow for this year will have deductive effect in next accounting period whereas in accrual based accounting managers cannot have this opportunity as the financial transactions have to be recorded when they are taken place (Yang *et al.*, 2009; Nor-Farhana *et al.*, 2014).

According to Dechow and Skinner (2000), Susanto (2013) it is natural act of managers to be involved in decision making in the process of valuation, depreciation and amortisation and in provisions in accrual based accounting. Accruals provide managers opportunity to make judgements and decisions. Teoh *et al.* (1998), Bekeris and Doukakis, (2011) have classified accruals as discretionary and nondiscretionary accruals.

Out of being used various models in detecting earnings management, most researches from past literatures till present, accrual-based models are considered as more reliable because of its popular approaches which practically have been implemented in most of the firms (Aerts *et al.*, 2013).

Analysis of earnings management basically deals with the decision made by managers. Their decisions simply concentrate on discretionary component of reported earnings (Aerts *et al.*, 2013).

Prior studies in detecting earnings management have been found as using Jones model and modified Jones model which has been criticised by Kothari *et al.* (2005) as discretionary accrual estimated by these models cannot be as effective as performance matched discretionary accrual model. The value of earnings management can be elevated or depressed for the

companies which have faced extreme performance if these models are followed. It is referred that the error in the value of discretionary accruals by following ROA-matched models as suggested by Kothari *et al.* (2005) will be reduced.

Wu (1973), Keung & Shih (2013) have also made a comparative study between Jones model, Modified Jones model and ROA-matched models. In their empirical test, they have investigated that ROA-matched models have less errors than in other models when identifying discretionary accruals. In the model developed by Kothari *et al.* (2005), they have increased the number of accounting variables which ultimately helps in reducing the errors in the value of discretionary accruals. In addition, their model also provides additional control over heteroscedasticity. In compare to John's model, this model has an additional constant term which helps to better address the test issues.

3.2. Corporate Governance

Research Objective:

- b. To assess the Impacts of Corporate Governance Variables on controlling Earnings Management

While analysing the variables of corporate governance, this explores the factors of the corporate governance and identify the relevance of each factor in controlling the practice of manipulating earnings quality. The positive and negative side of the factors of the corporate governance can be understood and analyse their impacts on earnings management.

The regulatory bodies can be made aware of the strengths and weakness of the policies those are in place in terms of manipulating earnings management and the impact of the manipulation on the important stake holders.

Corporate Governance is defined as an internal system that comprises policies, processes, and people which govern the firm by directing and controlling management activities and leads to good business practices, objectivity, and integrity (Bhagat & Black, 2011; Hu *et al.*, 2015).

The best practice of corporate governance is reliant on legal matters, commitments, supports to form and safeguards policies and processes. Corporate governance is formed to ensure that the management has worked for shareholders, investors and other stakeholders' interest. The team have to be aware of obtaining reasonable return on capital, return on assets, allocation of assets etc. (Aerts *et al.*, 2013).

The management team might work for their self-benefit being motivated for bonus, salary increment and other contractual issues. Outsiders like investors and shareholders invest their fund to get more and more profit. Therefore, corporate governance is a body of an organisation that can protect those outsiders against the expropriation by managers and also

they have right to make decisions for the welfare of insiders (McNicholas, 1998; La Porta *et al.*, 2000). Corporate Governance; a mechanism of an organisation, has been formed to implement applicable laws, rules, and functions.

Zhou & Chen (2004) has discussed legal and functional convergence to refer the importance in developing corporate governance mechanisms. According to him legal convergence indicates that the firms' performance can be improved by bringing changes in legal matters like rules and enforcement mechanisms. He also refers functional convergence which basically deals with changes that are related to market which can bring more firms and assets and also guarantee the safer environment from the support of effective investor legal protection.

They emphasise legal convergence and suggests that corporate governance can be improved by making radical changes in legal system which comprises amendments to the securities, company, giving proper attention to increase disclosure of material statements which can protect shareholders from bankruptcy. The company laws enable minority shareholders to act in enforcement of their interests.

The past literatures have got different opinions in regard to the importance of corporate governance. Teshima & Shuto (2008), Eze (2017) discusses on this topic as it has got practical influence on the organisation. Other researchers Easterbrook and Sireghar and Utama (2008) have experimented the importance of corporate governance system based on American firms and concluded that it has positive impacts for organisations. Prior studies by Zulkafli *et al.* (2005) and Yang *et al.* (2005) have discussed on the importance of corporate governance code replacing American and UK corporate governance systems by German and Japanese systems. Keung & Shin (2013) and Greene (2014), Veronica (2020) based on Italian corporations, have alluded that they are less organised than other developed countries in relation to measuring the effectiveness of corporate governance and corporations.

Contrarily, there are some emerging countries that do not employ corporate governance mechanisms as per the study by (Harmalin & Weisbach, 2014; Nugroho, 2011). Back in mid of the 19th century, Alchian (1950) and Stigler (1958) have not found any benefits in improving corporate governance mechanisms. This is because the firms, due to high competition, adopt corporate governance to reduce the cost of capital. These researches in terms of market competition seem to have reasonable conclusions; nonetheless, it might be longer for emerging process. Therefore, those capital providers might face loss during this time, despite of their expectation of receiving some returns in future.

The developments and updates of corporate governance in the country have huge impacts in increasing market competition; moreover, these mechanisms impose legal factors while

governing firms (Financial Reporting Council, 2017). Corporate governance mechanisms can be considered as successful when it avoids the insiders to act for their self-interest.

For example, in 1933, the US government introduced securities market regulation in order to increase corporate disclosure. In 1929, the US experienced a Great Depression in part because of insufficient disclosures about the fair values of assets. In addition to the passage of the Smoot-Hawley Tariff Act (Roychowdhury, 2016; Al-zaifi and Amer, 2017), this factor also partially contributed to a capital markets crash in 1929.

The other important aspect is agency problem while discussing on corporate governance. This problem appears while the ownership gets separated from control. The investors and shareholders have to rely on insiders due to which they have to pay agency cost. It is investigated that some managers are motivated for their self-interest, bonus scheme. Instead of practising to maximise shareholder's wealth, they intend to maximise their own wealth by utilising the assets and capital of other parties (Sheikh & Ali, 2016).

In addition, there can be made a contract which allows managers to disclose the financial information with shareholders and investors, banks; basically main financial providers. Nevertheless, the accounting information prepared by the managers (Sheikh & Ali, 2016) may not reflect the true pictures as the accounting system allows managers to have discretion to use their accounting estimates and standards.

3.2.1. Corporate Governance Mechanism

Various kinds of corporate governance mechanisms have been in practice around the world. Some of them can be listed as follows:

- i. the Anglo-American
- ii. Japanese system
- iii. German systems

In this study, Anglo-American system will be discussed because this mechanism has been considered as the most effective corporate governance system.

Corporate governance mechanism basically has been classified into two different types which are named as internal and external. Tang & Chang (2014), Afzal and Habib (2018) have identified that regulators mostly focus on internal mechanism and suggested that external mechanism is equally important as internal one.

Internal mechanisms; adopted by internal factors that include insider shareholders, board structure and functions, decisions to include number of independent directors and directors,

audit committees, remuneration committees, and ownership structures (Aaker & Gjesdal, 2010; Wang *et al.*, (2021).

External mechanisms are decided by outside factors which propose to establish mechanism to favour the interest of the stakeholders. External mechanisms also refer to legal protection and takeover rules (Aaker & Gjesdal, 2010).

3.2.2. External Corporate Governance

3.2.2.1. The Regulatory System

Charters and bylaws will be created between shareholders and managers which are generated from their contractual relationships. The shareholders are bound to have this relationship once they provide capital to firms because this capital will be controlled by management (Al-fayoumi *et al.*, 2010; Abdel, 2012). In case the rules are violated by the managers, the common law allows the shareholders to take legal action against them. The common law has a provision for shareholders to remove existing directors and appoint new directors by voting system. They have rights to alter charters and bylaws of firm, to approve compensation contracts of executive service (Siregar & Utama, 2008; Abdallaha, *et al.*, 2015).

Even though, the common law provides shareholders legal rights to act against executives when management is not working for their best interest, it can cost a lot because the law has also protected the executives. The statutory requirements as mentioned in the common law are qualifications, disclosures, power limit, the duty of care, fiduciary duty etc. (Financial Reporting Council, 2017).

In the comparative studies from past literature, made by Chen *et al.* (2011), he has alluded that the common law countries have the provision of stronger degree of protection for the shareholders. His study of corporate governance on legal matters have investigated that the firms that have more outside directors do remove top managers when the firm cannot make reasonable profit.

He also has investigated that the shareholders are put in higher risk than their employees and creditors because employees get paid immediately after they serve and creditors get their principal with interest in case liquidation occurs before the dividend is provided. He even suggested that shareholders need to be provided stronger protection. However, the common law has a provision for shareholders as duty of care and duty of loyalty. Duty of loyalty; called as Fiduciary duty, simply safeguards the shareholder by controlling insiders in self-dealings and act on their own self-interests (Banderlipe, 2009; Saleh *et al.*, 2020).

The corporate governance mechanism in the UK considers the independence of directors, disclosure of accounting information, compensation approval from shareholder etc. The board should balance executive and non-executive directors because independence of board members is really important. It is necessary because the business related judgement should be free from any biasness and personal interest (Ashbaugh *et al.*, 2008; Olowookere, 2014).

The study by Kim & Yoon (2008), Soyemi and Adeyemi (2020) found that the majority of directors should be independent in case of listed companies in the US. It is mentioned by NYSE that majority of independent directors lessen the conflicts of interest that can stop the progress for the firms and increase the quality of board. Moreover, it also can reduce the self-interest behaviour of managers whereas in Hong Kong, the board requires at least three independent non-executive directors in the listed companies.

The UK corporate governance code mentions that audit committee, for listed companies, should include at least three directors and two directors for smaller companies in which all of these members have to be independent and at least one of the has to be financial expert. The code demands that the majority of the directors should be independent non-executive directors. It also confirms that the chairman of the board should not be the same person who is in the audit committee; this should be mentioned in the annual report and financial accounts (Rahman & Ali, 2006; Zuo and Guan, 2014).

On the other hand, US used to acknowledge only independent directors in an audit committee. Nonetheless, later NYSE, ASE and NASDAQ have admitted three independent directors in the audit committee in which all of them have to be financially literate. In the UK, the code concedes that the listed companies have to have remuneration committee which consist at least three non-executive independent directors (Rahman & Ali, 2006; Soyemi *et al.*, 2017).

The corporate governance mechanism, which is why, is so important that it has to make shareholders, investors and suppliers believe that they will be risk free in getting return on their investment. The legal system cannot ensure that the shareholders can get full protection. Therefore, the firm can be given under the control of block holders. By doing so, it helps to reduce the agency problem in a firm (Rahman & Ali, 2006; Tyokosso and Tsegba, 2015).

3.2.2.2. The Takeover Force

In the study by Prawitt *et al.* (2009), he finds that many corporate takeovers have been practised in USA since late 20th century. When firms cannot perform better by not being able

to maintain the actual and potential values of firm, the outside parties start to show their interest to control the firm by reallocating capital. Moreover, from cost effective perspective, the risk will be increased to be taken over. However, this risk can be minimised or firm improve its cost efficiency (Hsu & Koh, 2005). When there is opportunity to occur premium in share price, outsiders want the firm to be taken over (Denis and McConnell, 2003).

Previous literatures by Javed & Iqbal (2008), Eccles (2001), Defond & Jiambalvo (1994) mentioned that the existing management team will be under pressure to increase the firm's value. In case management cannot perform better, they will have risk of being replaced in take over process.

In the past study by Hashim & Devi (2008), he has concluded that the hostile takeover can be taken place when the management cannot deal with profit maximisation and wealth maximisation for shareholders. In this process of the new management is more competitive and more productive, the shareholders can get higher share value. Nevertheless, Ali *et al.* (2008) allude that the takeover process can increase the size of business but it might waste the resources of the firm by paying for acquisitions. Otherwise, that amount would help shareholders to get dividend.

Therefore, this threat of being taken over can create compulsive responsibility for the managers to get better result in regard to increasing firm size and firm value. Hence, this can be a good mechanism of corporate governance for the (Badolato *et al.*, 2014).

Abdullah & Haniffa (2011) mentioned that the takeover force can be a part of composite governance variable. They have divided corporate governance into two categories as

- i. Internal Corporate Governance
- ii. External Corporate Governance

External corporate governance has been identified by the level of anti-takeover protection. By applying poison pills, staggered boards if firm applies tougher anti-takeover measures, corporate governance is considered as less effective in the market.

X-inefficiency could drop the share price if the managers cannot compete in the markets. Hence, shareholders may face loss because of anti-takeover actions taken by managers for their personal benefit. On the other hand, that tendency of the existing manager could get other management taken over at low price. The efficient management can get the share value increased. Bekiris (2012) concluded that efficient managers can handle resources efficiently. Hence, x-efficient managers need to be more careful to perform better.

It appears that overall, takeover corporate governance seems to be effective in controlling management self-interests. However, Jones *et al.* (2007); Lopes (2018) considers other

corporate governance mechanisms and finds that corporate governance has a major significant effect on managers' behaviour, and that takeovers are a part of the process that eventually reorganizes inefficient organizations.

3.2.3. Internal Corporate Governance

3.2.3.1. Board Composition

Shareholders are the main body in an organisation as they provide capital for the firm. Corporate governance mechanism should be able to guarantee the safety of their investment. Therefore, corporate governance forms board of directors who consider the interest of shareholders. The board has its roles and responsibilities to look after management actions. Moreover, they can also direct and monitor senior management to obtain corporate legal ethical compliance (financial Reporting Council, 2017).

Simply, Board composition consists of its size, independent directors and nomination of new member in the board, remuneration system for board members.

The term independence is hugely discussed in many literatures. This is because none of the decisions should favour some particular party or members. The chairperson and directors in a board have to be independent because they are involved in various decision-making process such as the growth of firm, distribution of dividend, allocation of wages etc.

Regarding the effectiveness of gender, it is argued that the gender differences actually influence in the decision-making activities and behaviour of the board. The study on this topic has not been largely widespread, however, few literatures Abdullah *et al.* (2012), Ali *et al.* (2013) have discussed on the attributes of board of directors. The past literatures have not concentrated on its effect on earnings management. Hence, it is recommended to study on this topic whether the gender in board of directors has effect on earnings management.

Shareholders are those stakeholders of the organisation who want to add value of the organisation. They are motivated by the mission and vision statement of the organisation. For those purpose, shareholders want to form a quality corporate governance who can look after overall financial and non-financial aspects of the organisation. Shareholders have to remain in the state where they have to depend on corporate activities for various activities like risk management system, the structure of the governance of the organisation, processes of the organisation and board to meet their objectives (Watts *et al.*, 1983; Francis *et al.*, 1999; Soyemi *et al.*, 2017).

Hence, corporate governance structure has to consider highly experienced and calibre directors, independent board members, prevention of concentration of power in one

individual like chairman's independence, independent board as a whole and agreement made by shareholders to control the power of controlling shareholders (Lopes, 2018).

The chairman is one of the most important power in an organisation because they are the one who controls other important powers, various agendas of the board meeting. They play very influential role to control the market and change the perception of the stakeholders in the market. They also have power on controlling earnings quality, hence, in this study, this has been considered as an independent variable (Jordan *et al.*, 2010). He further argues that chairman can have authority to control the activities of chief executive officer. Therefore, the power concentration is big concern in the discussion of CEO duality. If CEO and chairman is elected as a same person, there is high chance of self-interest threat. Shareholders' interest can be impeded due the concentration of the power in the same person. The effectiveness of the management activities could be diminished too.

The chairman independence includes some criteria according to Corporate Governance Code 2003; which suggests that the chairman should not have been an employee within last five years. The person should not have any type of connection in terms of material business connection with organisation within three years' period from the followings:

- c. As a partner
- d. As a shareholder
- e. As a director or senior employee of a body
- f. No connection on additional remuneration apart from the director's fees
- g. No connection with pension scheme of the company, share option, performance based pay.
- h. No connection as a family member
- i. Not served more than nine years for the organisation as a chairman.

A dummy variable is created and considered 1 if there is independence otherwise it is considered as zero.

3.2.3.2. Board Independence

As per the study by peasnell (2005), Xie *et al.* (2013), Bankel *et al.* (2016), Niu (2016), it has been concluded that the presence of independent directors in the board has negative relationship with fraudulences in financial statements.

In the study of boards' independence and audit committee independence by Xie *et al.* (2013), he has concluded that they support in constraining in the value of discretionary accruals. Their literature basically based on discretionary current accruals, also called Jones model (1991), to measure earnings management. In their study, the data is collected from 282 US companies based on years 1992 to 1996.

Their hypothesis was based on the relationship between independent directors and earnings management. They assume that the higher number of independent directors in the board has negative relationship with earnings management. In their finding; the result has supported the hypothesis made by them. In the research they used two control variables firm size and year. The control on firm size was made by using log on the market value of equity whereas; the control on year was done by using two dummy variables.

Moreover, Klein (2012) examines the effect on earnings management. In her research she has proposed the features of board and the composition of audit committee considering the data of 687 companies from US listed firms from 1991 to 1993. The calculation of earnings management was based on modified Jones model (1991). Regarding control variables, she uses firm size, growth, performance, leverage, managerial ownership and block holders' ownership.

In her research she found that the numbers of independent directors in the board has negative relationship with earnings management. Her research on independent audit committee also concludes that it has negative relationship with the value of discretionary accruals.

Audit committee is a sub-committee of board which implies that the independent directors in an audit committee are considered as independent non-executive directors on the board. The high correlation effect in the statistical data analysis might appear which is why Xie *et al.* (2013) has followed two different models whereas; Klein (2012) has ignored this effect.

Furthermore, the research on board independence and its effect on earnings management by Peasnell *et al.* (2005), based on UK data, he has identified that the firm with larger numbers of independent directors coerce the managers to produce less income-increasing accruals when earnings cannot remain above or at the threshold line. Nonetheless, in the situation when earnings made by the firm are above or at threshold line, in presence of more independent directors in the board, it allows the management to prepare financial statements based on income-decreasing earnings management.

The study on this topic in the UK based data has not been widely found. However, Peasnell *et al.* (2005) also have done some research on the relationship between board composition and discretionary accruals. They have compared the relationship between pre and post-Cadbury periods. Both periods have been consistent in terms of accrual management to get the earnings targets. Despite of that, post-Cadbury period signals less income increasing earnings management which helps to prevent earnings losses in case of higher proportion of independent directors.

From above mentioned literatures, all the researchers have found that the higher proportion of independent directors in the board have negative impact on earnings management. In

further study by Peasnell *et al.* (2005), it is identified that income-increasing discretionary accruals to elude accounting losses are negatively related to the larger numbers of independent directors. In his research he is more critical in finding the impact of outside directors on the earnings that is slightly in loss. He concluded that in that situation outside directors still does not let managers manipulate earnings.

Other researcher, recently, Osma (2016) investigates the earnings manipulation on different background than other past researcher. Her study was based on research & development expense. Managers do attempt to manipulate spending as well. Her research was based on the UK in which she considered all the firms in the UK those are non-financial. 3,438 firm-years are accumulated from 1990 – 2002. She has concluded that the managers cannot hide the spending amount basically on the topic research & development if higher proportion of outside directors is in the board.

The researches on this topic, by Park & Shin (2014) also have been done based on the data from Canadian firms but come in to the conclusion that contradicts to other contemporary and past researchers. Their sample data were from 539 firms. They also have used modified Jones model (1991). In their research they conclude that not independent director avoid earnings management. It is rather based on qualification they have achieved. If they are financial intermediaries and active shareholders support to reduce the value of discretionary accruals.

Another research based on Canadian firms by Niu (2016) has investigated the effect of corporate governance on earnings quality. The variables of corporate governance used in this research are board composition, management shareholding, shareholder's right, and disclosures of governance practices. The samples are collected from 2001-2004. In this research, value of discretionary accruals is calculated by using Kothari *et al.* (2005). In this empirical study, she has concluded that the independence of directors is negatively related to the level of abnormal accruals.

If these Canadian studies are analysed critically, Park and Shin (2014) and Niu (2016), the latter one can be considered as the most reliable one. The first research adopts modified Jones model. This model does not control the impact of firm's performance on discretionary accruals. Niu (2016) has calculated earnings management by using Kothari *et al.* (2005), which controls firm's performance.

In case of Australian firms, Benkel, *et al.* (2016) has studied the effect of independent directors and audit committees on earnings management. In their research, samples were collected from 666 firm-year from 2001 – 2003. To calculate discretionary accruals, this research has used DeAngelo (1986) model. They have concluded that in presence of independent directors and audit committees, the managers use reduced levels of discretionary accruals.

There are some more researches done in context of Asian firms to find the effectiveness of independent directors, board size and audit committees on discretionary accrual which is a proxy of earnings management. Addul, Rahman & Ali (2012) has investigated the impact of outside directors and independent audit committee on restraining the value of abnormal accruals. The findings were made from the sample data of 97 Malaysian listed companies over 2007 – 2010. In their study, they find that board size has positive impact on abnormal accruals whereas, in regard to independent directors and independent audit committee, they impact negatively on earnings management.

In Indonesian firms by Siregar and Utama (2013) has studied on effectiveness of ownership structure, firm size and corporate governance practices on discretionary accruals. The time period in this study were from 1995, 1996 and 1999- 2002. The sample data were collected from 144 Indonesian firms listed in Jakarta Stock Exchange. In calculating abnormal accruals, they have used various models and found the results from making comparisons critically. The models used in their research were Jones (1991), modified Jones (1995), Kasznik (1999), and Dechow *et al.* (2002).

Jaggi *et al.* (2015) have brought quite different firms from past literatures in their study. They concentrated on the firms that are controlled by family. The research was based on Hong Kong where they have made 770 firm-year observations. They use Kothari *et al.* (2005) and Francis *et al.* (2005) to find earnings management. They revealed that the independent board can be effective to calculate discretionary accruals. Nevertheless, in family controlled firms, they did not find the consistent result with other researchers. According to them, it is concluded that it is very unlikely the independent directors and audit committee are effective in family-controlled firms.

Based on Chinese firms, Lo *et al.* (2010), has studied 266 firms listed in Shanghai stock exchange as per the data available in 2004. In the research, they have tested managerial behaviour in estimating abnormal accruals in presence of good corporate governance. They have concluded from based on the data analysis that the independent directors in the board control in earnings management.

If western firms and some of Asian firms as discussed above are compared based on the results, they are confliction each other. The possible reason could be suspected on the estimation method of discretionary accruals. As per the calculation done, in both kinds of studies they employ basic earnings management but the results conflict each other. In the study by Abdul, Rehman & Ali (2012) has used Jones model (1991) to estimate abnormal accruals whereas, Xie *et al.* (2013) has used the same model. However, the findings are not consistent. The other researchers Siregar and Utama (2013) and Jaggi *et al.* (2013) have estimated earnings management by using performance matched discretionary model. This model is considered as more advanced and sophisticated to measure earnings management.

Their findings follow exactly the same pattern of findings as Osma (2016) and Peasnell (2013) have found. Hence, estimation methods for abnormal accruals cannot be considered as a reason which is why the findings conflict each other.

From the literatures above, the first and second research have concluded that the independence of board of director simply does not bring wide change in management's decision whereas, other studies investigated that the independence of directors and audit committee is very effective they avoid managers to manipulate earnings. On the other hand, those firms that are family related actually do not show any concern on independence directors and audit committee (Jordan *et al.*, 2010; Jayeola *et al.*, 2017).

This conclusion drawn from one research is varying from each other. For instance, finding from Xie *et al.* (2013) is different from Jaggi *et al.* (2015) because of their different sample size. Jaggi *et al.* (2015) have larger sample size which is 770 firm year observation where as Xie *et al.* (2013) have smaller than Jaggi *et al.* (2015) have.

3.2.3.3. Board Size

Anderson *et al.* (2003), Alves (2012), Mohammed and Abibakar, (2018) has revealed their findings as the size of the board considers the effectiveness of corporate governance mechanisms. The larger the board size, the more time they take to discuss on the issues of a firm. The other researcher Klein (2012) finds that the board can work efficiently and effectively with larger board size because they can divide the work load to greater number of directors of the board. They conclude that the larger board negotiate on the issues of managerial discretion. Hence, it is negatively associated with earnings management.

Xie *et al.* (2013) has calculated abnormal accruals based on Jones model (1991) where that sample data was collected from 282 US firms from 2002, 2004 and 2006. In their research, they opine that the larger board size controls earnings management. Similarly, Yu (2014) concludes that the smaller board cannot detect errors in estimation of abnormal accruals.

Adversely, Abdullah *et al.* (2012) argue that the large board provide each member opportunity to discuss in every small issue due to which most of the time the issues cannot find conclusion and the coordination among directors becomes weaker. Hence, the management can take advantage and work for their opportunistic behaviours. Therefore, the effects of larger board have positive impact on earnings management.

Rehman & Ali (2006) investigate the extent of the effectiveness of the board of directors, the audit committee and concentrated ownership in constraining earnings management among 97 Malaysian listed firms over the period 2002-2003. Their study reveals that earnings management is positively related to the size of the board of directors.

3.2.3.4. Board Meetings

Discussing on the management's decision in estimating discretionary accrual has been widely famous since couple of decades before. However, Researchers to identify the permanent solution in calculating accurate value of discretionary accrual has become failure notion though many renowned researchers have been working throughout last couple of decades. This indeed made accounting innovation failure.

Therefore, Academics have come forward if corporate board mechanisms can control in management's discretion. Board meeting is one of many other variables that can help in controlling in estimation of discretionary accruals (Healy & Wahlen, 1999; Matis *et al.*, 2010; Abdallaha; 2015).

Basically, it can be considered that the meetings among directors on board if carried out frequently, they can more likely work for the issues of management, shareholders' interest. If they meet more time, they can discuss more in the issues of abnormal accruals, conflicts of interest between shareholder and managers, and also can monitor management more closely. In opposition, the directors on the board who meet very rarely, actually, cannot understand those issues; and they just have to agree on management plans which may not necessarily support shareholders' interest (Kao & Chen, 2004; Puat & Susela, 2013).

The research work on Board independence and board size has been widely done whereas; effect of number of board meeting on abnormal accruals has not been much discussed. Xie *et al.* (2013); Raza and Karim (2016), Veronica (2020) have investigated that those directors who rarely agree board meeting, they cannot have capacity to negotiate with management. As a result, the only option they have is to signing off management's plan and acting as just listeners when management is presenting their plan. Therefore, those board members may not be able to negotiate with managers in earnings management issues. In the research, they employ a sample of 282 firms in the observation process and identified that board meetings have negative relationship with earnings management.

However, it may not be a good reason that number of meetings always helps in the issues of estimation discretionary accruals. It is commented that outside directors play a role like advisor, monitor, and counsellor of the management (Dhaliwal & Navissi, 2010). In his large survey, they revealed that those directors provide productive and effective feedbacks and suggestion to the management which is more important than the board meetings. They also found that CEO mostly discuss on the complex issues with those directors.

3.2.3.5. Chairman Independence

In the investigation of chairman independence, many literatures argue on Duality issues. Duality is happened when same person plays the role of Chairman and CEO. Kasznik (1999) alludes that if CEO plays the role of chairman of the board, the independence in the role of chairman may get lost. The power gets centralised in one person and may influence other members of board with self-interest agendas.

However, in this research, chairman independence will not be considered as one of the variable to understand its impact on estimation of discretionary accruals. This is because the UK corporate governance code 2016 has mentioned the need of chairman independence and CEO and chairman have to be separated to different persons. As the sample is going to be from FTSE 350 UK firms, the test with this variable will be unreliable as all listed companies in the UK has to follow the UK corporate governance code.

In the prior study by Dechow *et al.* (1996), it is identified that the companies whose chairman plays the role of CEO are more likely to be considered as violation of GAAP and subjected to accounting enforcement action by Securities and exchange committees (SEC).

Moreover, Rajgopal *et al.* (1997) has investigated that the separation of powers impact positively on discretionary accruals; Contrarily, Klein (2012) has revealed that the duality role of CEO and chairman is positively related to earnings management.

In further research by Peasnell *et al.* (2005) has alluded that CEO duality has no relationship with abnormal accruals. in his research he has collected data from 1000 listed firms of the UK. Bedard *et al.* (2014) and Xie *et al.* (2013) also found that there is no association between CEO duality and earnings management.

Shareholders are those stakeholders of the organisation who want to add value of the organisation. They are motivated by the mission and vision statement of the organisation. For those purpose, shareholders want to form a quality corporate governance who can look after overall financial and non-financial aspects of the organisation. Shareholders have to remain in the state where they have to depend on corporate activities for various activities like risk management system, the structure of the governance of the organisation, processes of the organisation and board to meet their objectives (Watts *et al.*, 1983; Francis *et al.*, 1999; Soyemi *et al.*, 2017).

Hence, corporate governance structure has to consider highly experienced and calibre directors, independent board members, prevention of concentration of power in one individual like chairman's independence, independent board as a whole and agreement made by shareholders to control the power of controlling shareholders (Lopes, 2018).

The chairman is one of the most important power in an organisation because they are the one who controls other important powers, various agendas of the board meeting. They play very influential role to control the market and change the perception of the stakeholders in

the market. They also have power on controlling earnings quality, hence, in this study, this has been considered as an independent variable (Jordan *et al.*, 2010). He further argues that chairman can have authority to control the activities of chief executive officer. Therefore, the power concentration is big concern in the discussion of CEO duality. If CEO and chairman is elected as a same person, there is high chance of self-interest threat. Shareholders' interest can be impeded due the concentration of the power in the same person. The effectiveness of the management activities could be diminished too.

The chairman independence includes some criteria according to Corporate Governance Code 2003; which suggests that the chairman should not have been an employee within last five years. The person should not have any type of connection in terms of material business connection with organisation within three years' period from the followings:

- a. As a partner
- b. As a shareholder
- c. As a director or senior employee of a body
- d. No connection on additional remuneration apart from the director's fees
- e. No connection with pension scheme of the company, share option, performance based pay.
- f. No connection as a family member
- g. Not served more than nine years for the organisation as a chairman.

3.2.3.6. Gender Diversity of Board

Since modernism started; 1960, gender issue is every area has become debated issue. Women are marching forward to lead companies playing a senior role. The prior researches argue on the effectiveness of governance if women are present on a board. Inclusivity has been the most important issues in the board in this era. Board diversity has been a growing area of corporate governance research in recent years. However, the issues of gender and earnings management have not been found much discussed. Only few papers have been found that have addressed the presence of women on the board. Concerning only on issues between gender and earnings management have not been found to have been discussed till date.

Saleh *et al.* (2005), in his research he has made a survey on accounting students to identify if gender differences and nationalities variance make any impact on earnings management. This is just an understanding attitudes of the students towards discretionary accruals behaviour. According the views of those students it has been found that there are no specific differences in estimating earnings management because of being men or women in a board.

Roodposhti & Chasmi (2011), Saleh *et al.* (2020) also had a survey with managers and external auditors of firms. The research was done in Jordan to ensure the effect of gender on earnings management. In this research, as well, they concluded that there are no significant differences in earnings management by a reason of being men or women on a board.

In further investigation of this research for gender issues on earnings management, the work done by Abdullah *et al.* (2012) has been found that their research is more scientific and conclusive. In their research, they have examined the gender issues by studying on higher percentages of women directors on the board to lower women on their boards. The time period they covered was from 1996 to 2005. They used the technique of accounting conservatism to measure the quality of earnings. The conclusion was that the presence of higher percentage of women in a board makes positive impact on earnings quality and also the stock prices have gone than those boards that have fewer women. The research was done by using Catalyst annual censuses of women as corporate officers and top earners for 353 of the Fortune 500 companies. They find that earnings quality is positively associated with gender diversity.

3.2.3.7. Nomination Committee Independence

The researches on the effect of nomination committee independence in the estimation of abnormal accruals are not found much discussed. So far, two literatures by Klein (2008), Klein (2012), Osama and Beasley (1996) have been found those have discussed on this topic. Two studies investigate the effect of nomination committee independence on earnings management. Klein (2012) following her previous two researches has investigated that the board independence CEO's presence in Nomination committee have had negative relationship.

She has used dummy variables in her research in which the data was collected from 2005 to 2008. She wanted to identify if there exist positive relationship between CEO's presence in the remuneration committee but she concluded that there are no relations. In the research she has collected data from 687 large companies that are listed in US.

In other literature by Badolato *et al.* (2013), they have studied firms those are listed in Spain. Their research is to test the effect of the presence of board monitoring committees on estimation of abnormal accruals. In the study, they employ 155 firms from 2007-2010. By using Jones model (1991), they concluded that the independent nomination committee support in estimation of abnormal accruals.

3.2.3.8. Remuneration Committee Independence

Only few literatures are found on the impact of remuneration committee independence on earnings management. One research has been found that it has dealt with the issues on

presence of CEO in remuneration committees and its impact on calculating discretionary accruals. There is no research found yet which concentrates solely on the influence of independent remuneration committee on calculation abnormal accruals.

Klein (2012) has reported that there are earnings are negatively affected in presence of independence remuneration committee. In her further research Klein (2012), she identified that presence of CEO in remuneration committee has positive relationship with earnings management. In this research she uses dummy variables where the data were collected from 687 large companies of US during the period of 2005 till 2008.

There was a limitation in her study which is basically correlation matrix between board and audit committee variables. She did not mention this in the research. There could appear quite high correlation if independence remuneration committee and audit committee independence are put in the same model.

3.2.3.9. Non-executive Directors Commitment

The existence of non-executive directors on the board has not been widely explored in previous literatures. Basically, it does not seem a complex issue to be measured their participation in board meetings.

The activity of non-executive directors cannot be seen in the diligence of the board but there are some more activities like preparation before meetings, participation before meetings, participations during meetings and follow-up; have to happen though they are not reported in the board diligence.

Carcello *et al.* (2002) mention that there are only two activities included in board diligence and they are

- i) Meeting privately held
- ii) Fees paid for the activity

3.2.3.10. Non-executive Directors Private Meeting Frequency

The UK corporate governance code (2016) mentions the responsibilities of non-executive directors who should confirm the integrity of accounting information. They need to ensure the robustness of the systems of risk management and financial control. The previous researches have not compared the presence of NED's meeting and its impact on earnings management. The code also mentions the evaluation of NED's activities is done by their contribution in the meeting. It reveals that the NED's meeting should be held without the presence of executives.

The practice of their roles and responsibilities indeed influence on shareholders' interest which actually have impact on earnings management. However, there are no prior literatures found to have studied the impact of non-executive directors on earnings management (Ashari *et al.*, 1994; Subhasinghe and Kehelwalatenna, 2021).

3.2.3.11. Non-executive Directors' Fee

Few researches Bedard *et al.* (2014), (Chen *et al.* (2007) have discussed on NED's ownership and its impact on estimation of discretionary accruals. They found negative association between them because they can concentrate on short term benefit like temporary rise in share value.

Prawitt *et al.* (2009) reveals that NEDs have to be arranged the value of their contribution and time which could motivate them to play role in responsible manner. However, she also opines that share owned by them might have negative impact for the firm performance.

The previous researches have not tested the impact NED's fees on estimating discretionary accruals. This research is employing NEDs fees as one of the independent variables which will help to identify its association with earnings management.

3.2.3.12. Summary

Contractual obligations, primarily, in most of the companies regarding manager's incentives, are linked to its financial performance which may lead managers to work for their self-interest by giving the better appearance to financial statements through earnings management system. In many companies, managers are compensated both directly (in terms of salary and bonus) and indirectly (in terms of prestige, future promotions, and job security) depending on a firm's earnings performance relative to some pre-established benchmark. This combination of management's discretion over reported earnings and the effect these earnings have on their compensation leads to a potential agency problem (Bajra and Cadez, 2017).

The latest study to identify the impacts on earnings management has been focussed mainly on internal audit, disclosures, firm's performance and tax management (Tang & Chang, 2014; Katmon & Farooque, 2017; Sheikh & Ali Shah, 2014). Including these researches most of the researches are basically done based on American and Australian firms and also have not been found employing enough variables of corporate governance and external auditors when identifying their impacts on earnings management. Prior studies in detecting earnings management have been found as using Jones model and modified Jones model which has been criticised by Kothari *et al.* (2005) as discretionary accrual estimated by these models cannot be as

effective as performance matched discretionary accrual model. The value of earnings management can be elevated or depressed for the companies which have faced extreme performance if these models are followed.

3.3. External Audit Factors

Research Objective:

- c. To assess the Impact of external Audit Variables on controlling Earnings management.

The variables of the external audit have been considered while modelling the regression line. The variables of the external audit are considered as independent variables while the estimated value of discretionary accruals is considered as independent variables. The impact of the external audit variables, hence, can be measured by running regression analysis.

Basically, the financial statements are prepared by the management under the control of managers. Managers can use their discretions mainly on those entries which require judgements. It cannot be ensured that managers use their judgements based on shareholders' interest or of their own interest. Therefore, external auditors are required for the form to have financial statements checked where they think the risk is existed.

Simply, external audit is considered as external governance mechanism that analyses the financial statements and evaluates the internal controls of their client. The external auditors mention their opinions in the audit report after reviewing material statements. The high quality auditors simply do not accept any doubtful accounts; they rather report errors and any irregularities in their audit report. Hence, external audit can be a factor that can impact on earnings management (Bajra and Cadez, 2017).

Shareholders, suppliers, investors, banks and other interested parties trust the bank statements once they have been examined by external auditors. Therefore, the assumption of the independent audit committee should not be violated because everyone who has put their fund on the firm does rely on the audit report. In addition to this, it is highly recommended that the auditors have to have higher level of professional knowledge and skills as sometimes the financial statements are prepared with complex accounting transactions and use of manager's discretion (Field *et al.*, 2001).

Hence, the independence of the audit committee and the quality of auditors in the committee actually can impact on earnings management. The independence audit committee is measured by employing the magnitude of non-audit fees whereas quality is measured by using audit fees and industry specialisation (Bajra and Cadez, 2017).

This section of the literature review is organised as follows. The discussion on auditor independence looks at studies that examine auditor independence in general before

exploring studies that examine non-audit fees (NAF) and audit fees (AF) in the context of earnings management. Subsequently, the discussion on the industry specialised auditor is organised similarly (Chang *et al.*, 2011).

3.3.1. Non-Audit Services Fees and Auditor Independence

The companies Act 1989 and 1991 regulations mention that the UK large companies require to report the amount paid for non-audit work in their annual report. The magnitude of non-audit fees could mitigate the behaviour of the auditors and could challenge the auditor's independence. The independence could be impaired by following reason mainly if non-audit services are provided.

- i. Self-interest threat
- ii. Intimidation threat
- iii. Self-review threat
- iv. Threat of familiarity

(Katmon & Farooque, 2017).

However, it may allow the auditors opportunity to increase the independence in a situation when they charge higher in auditing services than they charge in other non-audit services (Bhagat & Black, 2011).

In the research by Aerts *et al.* (2013), they reveal the fees paid to the audit firms may violate the auditors' independence. In that case auditors may not dictate the problems in the accounts. Therefore, the fees charged by the auditors are examined in national and local office level to regulate the ISA rule. Since 1989 mergers, the authorities concentrate on the dependence of audit fees and restrain the effects of non-audit service fee dependence.

Nevertheless, Harmalin & Weisbach (2014) reveals that for non-audit services, the audit partners could qualify the accounts that cannot qualify and that behaviour of auditors cannot make them independent. On the other hand, Kim & Yoon (2008) have classified as Non-audit services as non-recurring and recurring in which non-recurring may impair independence more than recurring but there has no evidence been found.

3.3.2. Association between Earnings Management and Non Audit Services Fees

In the past literature, they have discussed on non-audit fees can be considered as a proxy for non-independent auditors and it has effects on earnings management. Keung & Shin (2013) has discussed on the relation between non audit services and earnings management and reveal that it has positive relationship with absolute abnormal accruals. On the other hand,

Ashbaugh *et al.* (2008) has found that non audit services controls the value of discretionary accruals.

Moreover, Chen *et al.* (2010) allude that the client's importance by considering the amount of fees collected with earnings management and found no relation between them. As a regular monitoring mechanism to create credibility and reduce errors in financial statements, internal governance system has set up a mechanism called audit committee.

External auditor is another mechanism which directly observes the financial statements and makes an audit report that has direct impact on earnings management. The past literatures have no tradition set up that the audit committee and external audit can work jointly due to which there is influence on earnings management.

3.3.3. Association between Earnings Management and Audit Fees

Auditors evaluate the condition that involves both aggressive earnings management and insufficient corporate governance relying on audit fees. Auditors can select transactions of specific time period such as the transactions during the end of accounting period when there is more possibility in earnings manipulations.

Roychowdhury (2016) alluded that auditing is more important than non-audit services from the view point of management of discretionary accruals. According to the UK governance code, the listed companies have an obligatory need to employ audit services but non-audit services are not. They conclude that audit fees are the reflection of auditing efforts which have impacts on management of discretionary accruals.

Peasnell *et al.* (2016) reveals that the audit fees have positive relationship with abnormal accruals. In this research, they employ 648 Australian firms from OLS regression analysis. The other researcher Abbot *et al.* (2014) have investigated that lower audit fees have negative relationship with discretionary abnormal accruals. In their research 429 public, non-regulated, big 5 audited companies have been used for the year 2007.

3.3.4. Association between Earnings Management and Industry Specialised Auditor

In a research by Chen *et al.* (2010), he has concluded that the value of discretionary accruals seems higher in the clients of non-specialised auditors than in the clients of specialised auditors. The research was carried out collecting the sample of 4,422 firms from 2002 to 2008 which are audited by big 6 auditors.

The other researcher Alves (2012) has revealed that the clients of qualified auditors have lower level of discretionary accruals than the clients of unqualified auditors. They made analytical study to compare the nature of auditors whether qualified or unqualified and the

level of discretionary accruals. The data used from 2000 to 2009 were more than 50,000 firms-year observation.

Bloomfield and Shackman (2008) study the relationship between audit firm industry specialisation and the occurrence of financial statement restatements in 250 public companies that announced financial statement restatements from January 1, 2001 to June 30, 2002. They find strong and conclusive evidence of a negative association between the occurrence of financial statement restatements and industry specialised auditor.

Lim and Tan (2007) use Ashbaugh *et al.* (2008) to measure discretionary accruals for a sample of 9,501 USA firm-years observations, for fiscal years 2000–2001. They document that industry specialist auditors are more likely than non-specialists to be concerned about reputation losses and litigation exposure, and to benefit from knowledge spill overs from the provision of non-audit services. They also find that earnings-response increases with the level of non-audit fees purchased from industry specialist auditors compared to those purchased from non-specialist auditors.

From the demonstration of prior studies in this section of external audit factors, several gaps can be identified. First, in the UK, the literature on audit quality and earnings management tends to focus on audit-quality differences between Big 4 and non-Big 4 auditors and implicitly treats the Big 4 auditors as a homogeneous group in terms of audit quality. This study will take the literature on the relationship between earnings management and audit quality in the UK a step forward by using auditor industry specialisation as a proxy for audit quality, and test its relationship with earnings management for the first time. Secondly, this is the first study that controls for the effect of the audit committee when testing the relationship between NAF, industry specialist auditor with earnings management.

The audit committee oversees the external auditor's independence, and it is involved in the appointment and dismissal of the external auditor. It also supervises the level of audit and non-audit fees paid to the external auditor. Prior studies have not considered the extent to which the auditor and the audit committee interact and thus jointly affect the quality of financial reporting. Therefore, this study extends Larcker and Richardson (2004) by incorporating audit committee characteristics and auditor independence in the same model.

3.3.5. Audit Committee Independence

It is arguable that the audit committee can be practically independent as they are a part of management. Which is why ACCA Code of Ethics has emphasized independent nature of audit committee by setting up some rules and restriction as self-interest threat, self-review threat, intimidation, advocacy threat. They also have encouraged the auditors to remain in the standard of accounting principles and aware the directors if they are unaware of the rules. In case of intimidation, the code has suggested the accountant to resign rather than being

affected by them against rules and principles. This practice definitely helps in generating good quality of Financial statements.

UK Corporate Governance Code (2018, p.17) has revealed the audit committee's independence as "while all directors have a duty to act in the interests of the company, the audit committee has a particular role, acting independently from the executive, to ensure that the interests of shareholders are properly protected in relation to financial reporting and internal control".

The other researcher Bekeris and Doukakis (2011), Al-Zaifi and Amer (2017) have stated the importance of audit committee to govern the internal activities of the firm, therefore, emphasized on the importance of independent nature of auditors from internal executive directors. Other researcher Choi *et al.* (2004), Eze (2017) has identified the effectiveness of audit committee if they are independent otherwise they get involved in earnings manipulation. In his research, he collected the data for the firms where auditors have bought shares. Based on these firms, this report has revealed that the audit committee in these firms have been found as supporting earnings management practice.

In addition to this The UK Governance Code (2018) also has emphasized on this stating as "The board should establish an audit committee of at least three, or in the case of smaller companies, two members. All members of the committee should be independent non-executive directors." There are other researchers (e.g. DeFond and Jiambalvo, 1991; Beasley, 1996 and Bradbury, 2006; Cai *et al.*, 2015) in the past who has identified that audit committee has positive relationship in mitigating the practice of earnings manipulation.

Hence, this research has identified audit committee independence as one of the most important one which can have impact in earnings quality. This is computed in the form of percentage due to having various audit committee size in different firms. The computation of independence is calculated based on the number of independent non-executive directors on the audit committee to the total number of auditors in the committee.

3.4. Earnings management practice; Industry wise

There are 11 different industries being placed in this research to investigate the performance of earnings management in relation to industry-wise. The industries are categorised as Engineering and consultancy, Distribution and Supplier, Food Services, Home and Building services, Hospitality Industry, IT Company, Manufacturing Company, Oil and Gas Company, Pharmaceutical Company, Retail Industry, Support Industry, Trading and Mining Company.

The prior researches on earnings management and corporate governance are primarily based on the companies that are listed without considering industry wise. Not many researchers have considered that if the firms are separated according to the industry they are related on;

the results on earnings management could be different. There are very view literatures found who have attempted to analyse the impact of corporate governance and external auditors on earnings management. The research conducted by Gul *et al.* (2009) suggested that the estimation of discretionary accruals based on cross-sectional data concludes the noisy and biased towards the resulting test which would have been calculated on the samples based on industry wise.

Basically, earnings management analysis in regards to industry wise is practised by Craswell *et al.* (1995) to identify whether the results might get change from those analyses on earnings management done based on cross-sectional data. Also, he has accounted the analysis considering the demand for, and supply of, non-audited services, together with the impact of the expertise auditors which could differ industry wise.

The other researchers Frankel *et al.* (2002) and Srinidhi & Gul (2007) have conducted the analysis industry wise. In their research they use the economic bonding variables to identify their impact on earnings management by employing six largest industries as Restaurants, Pubs & Breweries, Construction & Building Materials, Media & Photography, Leisure, and Entertainment & Hotels. Moreover, based on industry wise research Carcello *et al.* (2002) and Abbott *et al.* (2006) has considered industry dummy variable for each of the industries by putting the value of one if the firm belongs to that particular industry, and zero if not.

3.5. Earnings Management Practice and Managers' Role

Earnings manipulation basically is taken place when managers decide to alter the values of entities while structuring the financial transaction in financial statement. Healey & Wahlen (1999) stated that the managers use their judgement to organise the discretionary accruals with reasons. The first reason is that they have intention to mislead some stakeholders who could be impacted adversely in financial decision-making behaviour; the other reason could be to gain self-benefit and other contractual outcomes like bonus. Simply, earnings management is practiced by manipulating the values in reported earnings inaccurately.

The past literatures by Graham *et al.* (2005), Chen & Tsai (2010), Mizik (2010) have identified that there are various underlying motives for organisations to practice the earnings management. Chen & Tsai (2010) have alluded that there exist three different reasons for earnings management which are because of altruistic motivation, Speculative motivation and the intention of affiliated parties. According to them, the managers practice earnings management to avoid loss of confidence of employees and lenders, to increase the value of share price in the market, to reduce the tax amount and to maintain the threshold line of public listing.

In addition, Mizik, (2010) further asserts that the financial analyst in the market pressurise the managers to be involved in earnings management practice to meet the earnings

predictions otherwise there is fear to get the share price dropped. In the survey by Graham *et al.* (2005), it is observed that eighty percent of CFO (chief executive Officer) practice decreasing discretionary accrual method at the time when desired earnings targets are not met. In the survey, it is found that the credibility of the firms can be maintained in the required standard if the earnings benchmarks are settled as per the expectations of financial analyst and others like watchdog and whistle blowers.

Furthermore, in Chen & Tsai (2010) study; in relation to speculative motivation while practicing manipulation of discretionary accruals, it rather considers the personal interests of the managers. The managers are motivated by personal bonus and increment in remuneration, to gain promotion opportunities and of course, to meet annual profit target. Peasnell *et al.* (2000) has revealed, in his study, that the managers get involved in manipulating earning's figure to smooth it and give better look. This also could leave positive impact on earnings performance of a company. Similarly, Latridis & Kadorinis (2009) argued on the intention of managers to participate on earnings management. They reveal that managers could use this technique to boost their compensation too.

Yang *et al.* (2002) has conducted a research on earnings management based on Chinese companies. They have revealed that the shareholders are reluctant to get delisted from Chinese Stock Exchange. Therefore, earnings management is very common in China and managers get incentives because of this practice. They also have identified that in highly concentrated ownership structure; more relevant in Chinese business setting, managers conduct earnings manipulation mainly to make shareholders happy.

3.6. Audit Quality and Earnings Management

Roy Chowdhury (2016) in the recent literature has explored on the issue of auditor's competence and their independence in regard to detecting real earnings management through business activities. She revealed that currently the confidence on large and veteran public accountants is being deteriorated and same with large public limited companies as they practice earnings management. In connection with real earnings management, this research identifies its impact on financial decision making and cash flow and confirms that this practice is even more harmful than accrual earnings management. This is because the auditors pay less attention to this practice, hence, the auditor opinion is considered as reliable as the real earnings management do not indeed deal with estimation Like accrual earnings management.

Furthermore, the researchers have discussed on the agency theory perspective as shareholder's interest and manager's interest conflicts. Hence, audit quality bridges the gap between them reducing information asymmetry. As per Sun & Liu (2012), Zuo and Guan (2014) the auditors can identify fraudulences only if they have the specific knowledge of the client's business; on the other hand, the competent HR and skilled audit services are partaking in accounting scandals.

From the research by Chi *et al.* (2011), it has been found industrial auditors in the real earnings management have positive relationship with earnings management. What this means is that the results found in the past to identify the relationship between real earnings management and industrial auditors are inconsistent. If the research outcomes between Sun & Liu (2012) and Chi *et al.* (2011) are compared they are not consistent to each other. This actually has left the researcher working more in this regard. The shareholders, other investors and related stakeholders can not actually be confident on their financial decision making. Again, another researchers Havazi & Darabi (2016), Veronica (2020) have revealed that the quality of financial reporting has negative relationship with earnings manipulation as mentioned by Sun & Liu (2012). Again, other researcher Rusmin (2010) has investigated opposite outcome from Sun & Liu (2012). Hence, the research between audit quality and earnings management requires more findings. It is very important to reveal right outcomes as practised in the real business scenario.

While mentioning the nature of business to be understood by auditors for true and fair quality of financial statement, for that business, it is very important to check material misstatement as material misstatement can cause huge damage to interested parties of financial statement. Furthermore, Zgarni *et al.* (2016) could not actually identify the relationship between specialist auditors and discretionary accruals.

As per the research carried out by Bartov & Gul (2000), Qaiser and Abdullahi (2016) they have identified that the active role of auditor can reduce agency cost. This research has basically targeted on discretionary accruals where manager's use their discretionary right to manage earnings and criticises that the fear of auditors on these agents causes reduction in agency cost. In addition to the research, regarding earnings management and the impact of auditor's in earnings management, Horst (1994), Zerni *et al.* (2012) supported by identifying the sensitivity to discretionary accruals through both income increasing and income decreasing accruals. His practice has used mainly the focusses on the ability of auditors by addressing their qualification. Furthermore, the former researchers Dopuch, Holthausen and Leftwich (1986), Choi and Jeter (1992), and Loudder, *et al.* (1992) have identified the relationship between stock price and audit qualifications; which is found as negative relationship between them.

In addition to this, Bartov & Gul (2000), Ardison *et al.* (2012) have evaluated various models of discretionary accruals and found the best of them. Moreover, they have further investigated how auditor's qualification has caused negative relationship with earnings management. The argument on the research is that discretionary accruals detection basically is under the quality of audit. In this regard, in 1981 by DeAngelo has claimed that audit quality is one of the important factors to identify material misstatement. He has focussed mainly on auditor's independence. The audit firms who are more concerned on the quality are prioritising skilled professionals. Those auditors can dictate material misstatements of the

financial statement. The discretionary choices of the managers are monitored and they are more confident on the job they are performing; hence, they do not become victimised by intimidation or threat. They are prone to apply accounting principles reasonably and report errors and irregularities.

When discussing in regard to big-six auditors; they are considered as higher quality auditors. They are capable of having technological capability to identify discretionary accruals. Interested parties show confidence on them in terms of reporting the detected earnings management. In the past research by Teoh and Wong (1993); Katmon and Farooque (2017) have reported about Big-Eight firms. In their research, they found that earnings response coefficients are higher in the research based on Big-Eight firms than non-Big-Eight firms. The conclusion was made as the financial statement prepared by them are more credible than other firms.

Chapter Four: Theoretical Framework

4.1. Introduction

This study has highlighted the core content and relevant subject matters while dealing with previous chapters 'introduction' and 'literature review'. The main area of this study grounds on three factors earnings management, corporate governance and external audit. This study aims to identify the relationship between earnings management and corporate governance; and relation between earnings management and external audit.

Since the research aim, research objectives and literature review in terms of the relevant topics of this study have been explored, it is very important to provide the theoretical insight before developing the hypotheses and examining them. Hence, this chapter basically identifies the relevant theoretical framework in relation to the research title, research aim and research objectives.

The theoretical approaches in terms of corporate governance cannot be bound in certain fixed framework as there are various point of views in establishing, operating and developing the business activities. However, as per the concerned matters of this study, mainly, this study deals with four different types of theoretical framework names as agency theory, stakeholder theory, stewardship theory and institutional theory.

4.2. Agency Theory

This theory deals with the relationship between the owners and the managers. This theory alludes that all the interested parties are motivated by their own interest; hence, this may cause the contradiction between the parties' interest. For instance, employees are interested to bonuses and pay-rise while shareholders are interested in profit maximisation and wealth maximisation. Therefore, the organisation needs someone who basically represent the agent and play the intermediary role to solve the issues among different parties (Xu *et al.*, 2010).

This concept is even more relevant in the modernised industry as the shareholders do not get directly involved in the management activities. In terms of accounting concept, while adopting agency theories, the interest of the owners and administrators are separately handled (Wulandari & Suganda, 2021). The shareholders hire managers to run the organisation by making best use of the available resources. As the interest of the managers conflict with the interest of the shareholders, the shareholders are more cautious with the behaviour of the management; therefore, the potential agreements are developed in the contractual form. Monitoring activities by the shareholders results very expensive economic

practice which may, in practice, result the salary of managers get reduced (Wulandari & Suganda, 2021).

Further, the managers are recruited in the organisation to adopt the interest of the shareholders and work for the in expense to the salary they receive. It is not assumed that they are hired for their interest, but, because of their self-interest and opportunistic behaviour, the shareholders cannot really trust on them. Therefore, a lot of monitoring process and controlling activities to restrain such behaviours of the managers, it cost a lot money for the organisation (Xu *et al.*, 2010).

Resultantly, the company directors and managers can have opportunity to manipulate earnings quality as they have been provided authority by the shareholders to prepare the financial statements. Hence, they can be motivated by their self-interest and opportunistic behaviour (U, 2014). They can adopt income increasing or income decreasing approach to present the reported earnings according to their own benefit. This practices, in fact, declines the reliability on the financial statement as the decision made based on such financial statements cannot help the interested parties to make financial decision. This type of practices, eventually, further increases the agency cost (Prawitt *et al.*, 2009).

Therefore, the shareholders and other interested parties of the corporations do not develop their trust in the activities performed by the managers; hence, they keep the strong control procedures and monitoring process in practice in the organisation. Some examples can be mentioned as the board of directors, auditing, internal control team, internal audit committee which actually reduces the profitability of the organisation (Osama & Nogur, 2017).

Hence, there is challenge to control the agency cost due to the fact that the ownership and the control are separate factors; Fama and Jensen (1983) has revealed the fact the decision management and decision control have to be separately monitored to limit the agency cost, hence, the organisation can work on the share-holder's interest as well.

Researchcers Osama & Nogur (2017), Mardnly *et al.* (2021) acclaim that the role of the corporate governance primarily is to resolve the concerns and issues caused by agent by additional scrutiny to understand the behaviours of the managers and cultures set in the organisation. They also need to pay a lot of attention in inspecting the financial reporting process and whether the accounting standards are followed correctly. Such practices of the corporate governance, in the end, mitigate the agency cost and secure the interest of the investors and shareholders; then, create the balanced position in the interests of all interest parties of the organisation.

There are many researchers Lee & Vetter (2018), Lopes (2018), Katmon & Farooque (2017) who have investigated the impact of the factors of the corporate governance on earnings management by relying on the concept of the agency theory. They have interpreted the

association between them by exploiting the idea of boards of the directors and other factors of the corporate governance. For instance, the deployment of the audit committee in the organisation supports in decision making factors and internal control procedures. These practices also help to attain the positive opinion of the external audit while audit committee independently works and supports the management.

Hence, considering agency theory in terms of linking the concept on earnings management, the practice of manipulation may take place due to the agency problem. The opportunistic behaviour of the managers and the interest of the shareholders contradicts, hence, agency problems get created. This may result the practice of earnings management. Therefore, as monitoring device, the inclusion of the corporate governance mechanisms in the monitoring system is very essential to control the practice of aggressive earnings management (Kankanamage, 2015).

4.3. Stewardship Theory

Stewardship theory basically deals with psychological and sociological drive. This is quite opposite concept of agency theory; as per stewardship theory, the objectives of the organisation and the shareholders play key role while the corporate executives perform their role within the organisation. This concept basically rests on empowerment and facilitation rather than control and direct. This theory does not accept the concept of the agency theory because agency theory is more individualistic and relied on the fact that the corporate executives are more motivated with their self-interest (Kankanamage, 2015).

The perspectives of the stewardship are different from the perspectives of the agency theory. In stewardship theory, it is believed that the managers and directors of the organisation are reliable and trustworthy, hence, consideration of huge efforts and money in monitoring the performance of the managers is not necessary (Kankanamage, 2015). The belief is that the agents like managers and directors are not led by their opportunistic behaviour and self-interest purpose.

Moreover, this concept believes that the managers and directors focus on collective practice due to the fact that they are motivated by the objectives of the organisation. The managers are motivated by the interests of the owners rather than being individualistic; hence, they generate more profit and share more dividend to the owners of the business; and it is more obvious that the share price gets increased (Katmon & Farooque, 2017).

In terms of governance aspect, this concept believes on the need of optimum governance structure to create smooth and effective co-ordination in the organisation. The stewards are more motivated with organisational and shareholders' objectives, hence, focus on wealth maximisation and wealth maximisation. In terms of the satisfaction, the stewards believe on

the achievement of the shareholders and organisation. Therefore, the remain quite satisfied when organisation objectives are achieved and shareholders' wealth is maximised; the non-financial motives are in higher priority in such managers (Kao & Chen, 2004).

Further, this theory advocates that the board directors have to be aware of the vision and mission of the organisation and shareholders. The decision made by them have to be in the line with the corporate objectives. The maximisation of the wealth and profit is the main motifs of the shareholders, since all related parties perform collectively to meet the objectives, there does not occur any opportunistic behaviours and self-interest threat (Kao & Chen, 2004).

Hence, to conduct the research, this study has considered the importance of the stewardship theory. The belief is that the directors, managers and other involved parties in the organisation perform the task to achieve the objectives of the corporations, hence, they tend to act in reducing the practice of earnings management. This theory also considers that the recognition, leadership, implementation and capacity of decision making play the crucial role in the organisation; hence, this approves the better regulation and legislation in the organisation (Javed & Iqbal, 2008).

Nonetheless, there are opinions Hu *et al.* (2015), Hoque at al (2017) against stewardship theory who proclaim that the board those are dominated by non-executive directors has to play active role in organisations. The independence of the board, remuneration committee, audit committee are crucial segments to of the corporate governance and can smoothly run the business, hence, can challenge the practice of earnings management (Haw *et al.*, 2011).

4.4. Stakeholder Theory

The concept of the stakeholder theory was developed around 1940s and re-emerged in 1980s which defines stakeholder as the party who can influence and gets influenced by the organisations' objectives. Hence, stakeholder incorporates many different parties who have interest on the organisation. There are some stakeholders like employees, investors, customers who are considered as directors. Government can be considered as indirect stakeholders who indirectly influence the organisation (Hasan & Ahmed, 2012).

This theory admits the multilateral agreement between the organisation and all stakeholders. The company and the internal stakeholders are associated by formal and informal regulations. As these stakeholders are directly related, the history they have created can basically form the norm. on the other hand, the external stake holders like shareholders provide the financial support to the organisation. Similarly, customers, suppliers and community are other external stakeholders who also have interest in the organisation and restricted by the formal and informal rules and regulations of the organisation (Hasim and Devi, 2008).

Moreover, the theory claims that the organisations and communities are dependent to each other, hence, the organisation requires to show their responsibilities to the society than only considering the interest of the shareholders. The researchers Greene (2014), Gaston (2017) has considered the presence of stakeholders in governance structure. The presence of managers, bankers, employees, customers and other members of the community should have space in the governance structure.

The other researchers Filip & Raffournier (2012), Fields *et al.* (2001) have claimed that the indirect stakeholders cannot have much influence in policy making while governing the organisation from view point of corporate governance. However, they have practical, historical and intellectual interest and support the organisations.

The researcher Fergusson *et al.* (2004) alludes that the stakeholder theory has been linked to the practice of the earnings management. They further explained that the managers and directors are much interested in fulfilling their opportunistic behaviours by incorporating the resources of shareholders and other stakeholders.

The consideration of the external audit and corporate governance as controlling devices have been adopted by the concept of the stakeholder theory. Therefore, it is argued that the corporate governance mechanisms have to address the development of strategic strength to reduce the manipulation of the earnings quality. Similarly, the concerns on the audit quality have to be monitored by the good external audit mechanisms which can help the shareholders to be benefitted (Fergusson *et al.*, 2004).

4.5. Institutional Theory

Institutional theory believes on the organisational rules and regulations; and these rules and regulation actually govern the organisation efficiently. The access to the resources, the activities in the organisation have to be legitimately managed. However, it cannot be guaranteed that conformation of the rules and regulation actually lead the company successfully (effendi *et al.*, 2007).

In terms of corporate governance as suggested by institutional theory, they are established to ascertain the goals and objectives of the organisation are clearly defined. Corporate governance has to ensure that the business environment, social structure, historical context is in the line with the objectives of the organisation (effendi *et al.*, 2007).

This theory suggests that corporate governance has to ensure that the change management has been appropriately considered and the changes are integrated within the organisational process. Institutional theory further claims that the changes can be adopted or rejected as per the suitable environment of the organisation. The social, environmental and historical

context of the organisation have to be appropriately analysed before adopting or rejecting changes (Ebrahim, 2007).

Researchers Have claimed that isomorphism; where the organisation has to adopt the characteristics and business strategies as per other organisations who are in similar type of environment regardless whether this is effective and productive (Ebrahim, 2007).

However, in terms of earnings management, the institutional theory believes that the adoption of institutional theory can control the practice of earnings management. The norms and standards of the rules and regulations of the organisation basically establish the ethics within the organisation, hence, the manipulation in the reported earnings can be reduced (Eccles, 2001).

4.6. Summary

In terms of the theory discussed, agency theory has drawn the attention of the most researchers. In terms of the earnings management too, it has been argued that the managers and directors of the organisation are most likely practice the manipulation of the earnings quality because of the opportunistic behaviour.

On contrary, the other theories; stewardship theory, stakeholder theory and institutional theories condemn the ethics concerns and anti-social activities in the organisation for personal benefit. Hence, it can be agreed that the adoption of these theories can reduce the practice of earnings management. The roles of corporate governance and external audit can ethically and socially be guided, hence, they can have impacts on controlling earnings management.

In terms of the study of the earnings management, it is argued that the agency theory influences the managers or agents of the organisation to manipulate the value of discretionary accruals because they are guided by their self- interest or contractual obligation. The interest of the shareholders is not their main priority, instead, the managers are motivated their profit maximisation. Therefore, the study of earnings management is very essential due to the nature of the agency theory which allows the managers adopt the manipulative practices of earnings management.

While other theories like stewardship, institutional theories have different principles from agency theory. Stewardship theory guides the managers and directors of the organisation to adopt the principles that creates the profit and wealth maximisation of the organisation. Similarly, institutional theory encourages the managers to establish the rules and regulation in the organisation.

Chapter 5

Research Hypothesis and Methodology

5.1. Introduction

This paper has highlighted the theoretical approaches in the previous part. The description is made addressing the research title as the title suggests the impact of corporate governance and external audit in controlling earnings management. The previous chapter has highlighted theories of corporate governance in relation to earnings management, theories of auditors in relation to earnings management. Literature review part has also described the bases of data, the variables and earnings management model to test how earnings management gets affected by the activity of corporate governance and external audit.

This chapter initially deals with theoretical perspectives of the research and subsequently followed by dependent variables. Dependent variable is considered as earnings management which is a proxy of discretionary accruals. The research after presenting the discussion on earnings management as dependent variable, in this part, demonstrate the full information on how each independent variable gets measured. As the hypotheses are important part of the research; in this part this will be demonstrated and explained. The independent variables in this research basically have been categorised in five different groups. These groups are formed as board composition, non-executive directors' commitment, Ownership structures, audit committee effectiveness, and external audit factors. In the next phase, this part discuss on how sample selection is organised, what data base is used to collect data. Afterwards, this research is developed by entailing various possible analytical procedures to identify their suitability and relevance.

The research is followed by analytical procedures and their explanations. At the end, this part will be completed by encompassing the summary of variables, models and hypotheses. This chapter will allow to evolve chapter 6 where the results and out comes will be presented.

5.2. Research Philosophy

A social science researcher must ensure that right research philosophy has been chosen. The importance of ontological assumption, epistemological assumption and methodological assumption is undeniable in scientific research. These paradigms are inter-related to each other. The epistemological assumption; being consider as researchers' position, helps in identifying research philosophy, its relevance in data collection, application of models in the data and their analysis, eventually to interpretation of results.

In regard to paradigms in research philosophy; they are interpreted in two ways as positivistic and interpretative (Hussey and Hussey, 1997; Patton, 1990). The social science research is

concerned with these two different paradigms which signifies the end of continuum. This also presents the association among ontological, epistemological and methodological assumptions. Further, in regard to research philosophy, this can be widely separated in to positivism, interpretivism, and realism which primarily relies on the researcher's way of dealing with philosophy (Saunders *et al.* 2003).

In relation to this project, this study has primarily focussed on the empirical side of the research. Therefore, the primary data from FAME has been collected. The research philosophy as chosen for the study is positivism, hence, the data are mined and the empirical results get interpreted. The deductive research approach has been used; which supports this research to test the hypotheses.

Various researchers have different interpretations of positivism; mainly, it is described as a belief that the world can be able to make objective interpretation. On the other hand, the other group of researcher believe that social science should consider methodologies and methods in natural science for empirical study. This paradigm prefers to look into observable social reality. This philosophy is explained by quantitative or scientific approaches, predictive analysis and testable hypotheses.

In contrast, interpretative philosophical paradigm considers the subjective analysis which means they are dependent on observers because this paradigm represents the actual part of what is being observed; hence, this is emphasised by qualitative approaches (Ticehurst and Veal 1999). This philosophical paradigm entails subjective analysis in which researchers explore valued social action, not only external or observable behaviour (Saunders *et al.* 2003). This approach is proclaimed as right one because for the research in business and operation as the business environment keeps changing. Therefore, the positivist by using quantitative method from generalised data set may not address the special issue in the research.

Apart from these two paradigms, realism is other one which links positivistic and interpretivistic. Hence, realism basically comments on these both paradigms as positivism fails in dealing with meanings of real people whereas interpretivism becomes too subjective (Ryan *et al.*, 2002). Moreover, this approach determines the social reality similar to positivisms while preferring to changes and conflict that may arise confusions. This approach considers social beliefs, assumptions ethnic values, therefore, researcher requires understanding history and performing research by adopting those values.

5.2.1. Research Theoretical Approach

Concerning the approach, in this research, positivism is found as the most appropriate one. As mention by Clarke (2004), for the research on corporate governance, external audit, the best suitable methodologies are suggested as questionnaires, surveys those are related to data base, interviews with related members, and the analytical observations. It cannot be

confirmed that one method can be the best from other; however, this approach as proposed for this research is the most suitable one (Clark, 2004).

It is very important to discuss on inductive and deductive approach. For this research, deductive approach is considered as suitable because this approach is revealed by the development of theory. This approach equally focus hypothesis to test hypothesis (Ticehurst and Veal 1999). Importantly, inductive approach deals with theory development from data analysis. In this approach, initially the data is collected and the they are interpreted. The data basically reveals the theory which is what deductive approach deals with.

As this research method is based on quantitative method, the impact of corporate governance on earnings management is empirically tasted by including financial data in the analysis. Various board composition factors are being involved such as the independence of board and audit committee in the research. They are calculated in the form of ratio; for instance, the ratio of non-executive directors to total directors. The expertise of auditors is measured based on ACCA qualified to total number of auditors being employed in the audit team. These data analyses basically support in making interpretation of identifying their impacts on discretionary accruals.

Basically, this research is not considering qualitative approach as the data in regard to corporate governance cannot be feasible because the senior management team in most of the organisation keeps confidential. Hence, due to the nature of researcher in regard to time limitation and availability of data, this can be irrelevant so quantitative research method has been taken in place in this research. Moreover, there can exist higher error in earnings quality.

As the collection of data and accuracy on these sometime cannot be easily available, hence, other techniques like realism and interpretivism are being considered. In these situations, for the data to be collected this research employs medias, reports those are published in the journals.

On the one hand, most of the research are mainly done based on quantitative analysis not in quality as a result the research on this topic are scarce. The main reason behind this is because of confidential nature of the earnings quality and the best practice of corporate governance.

Despite of this nature of corporate governance and earnings quality, in this research, from dogmatic perspective, realism and interpretivism are being considered when required as mentioned above from media and other secondary resources for data concern.

From the analysis of existing research methods, approaches and other dogmatic principles, this research has aimed at identifying the impact of external audit and corporate governance in the practice of earnings management. Subsequently, the data analysis is being presented by considering quantitative research method; that considers the variables of earnings management and other set of independent variables. This technique and research method

basically confirms the relationships of those variables of discretionary accruals and variables of corporate governance and variables of external audit. There are variables being included from ownership structures and other control variables too. This practice basically is being carried out in this research from the view point of testing theory. This enables the research be more pragmatic and generalised to analyse the sample population as a whole. This feature is being prioritised because of the nature of the research as many variables from related functions have been used.

5.3. Hypothesis Development

5.3.1. Measurements of the Dependant Variable

Previously in chapter 2, there has been discussed, in detail, about earnings management. Basically, this is bringing discretionary part of the financial statements which is why discretionary accruals as a proxy of earnings management has mainly been discussed. This part has discussed on the various considerations of accrual accounting; hence, the managers can manipulate the financial statement.

The timing factor is very important in recognising certain events which are related to revenue and expenses. The manager can have discretion on adopting accounting choices and changes. However, in accounting, disclosures are very important as an example; IAS 24 deals with related party disclosure. Also, accounting as being addressed based on accruals, managers do practice their discretionary rights because of its nature as these are less visible and also not easy to detect.

The practice of earnings management is caused by the accrual based accounting system although there are certain circumstances in real accounting too which can support earnings management. This method is highly utilised in earnings management in the situations like capturing the impacts of discretionary accrual management and techniques of earnings management. Techniques of earnings management basically reflects to changing in accounting estimates and using discretionary rights in recognising expense and income in regard timing. The managers may manipulate the timing transactions when it has taken place based on their contractual right and self-interest.

Because of those reasons the research on earnings management are clustered on discretionary nature of accounting rather than based on the nature of real accounting system. The researchers have identified earnings management as a proxy of discretionary accruals and they have used various models to calculate discretionary accruals within total accruals. Discretionary accruals are basically difference between total accrual and discretionary accrual.

In this research, various earnings management models have been discussed and also basically the best model is being chosen that demonstrate less errors. The errors as mentioned in here are tested and being used to address the relationship among variables.

To determine hypothesis, this research has investigated earnings management models. As discussed in section 2 the development of earnings management model helps in identifying various variables used in discretionary accruals. This research starts from Healy (1985) model which illustrate that non-discretionary accruals are then identified by calculating mean of total accruals over an estimation period to the event period. As assumed by Healy in 1985, discretionary accruals can be identified by finding the difference between total accruals of the event period and non-discretionary period.

Further, DeAngelo (1986) has developed Healy's concept of earnings management model as $NDA_{it} = TA_{i(t-1)}$. This concept is not primarily varying from the universal concept of $DA = TA - NDA$ Where DA = Discretionary accruals, TA = Total Accruals and NDA = Non-discretionary accruals. His assumption is that the non-discretionary accruals at estimation period is equal to discretionary accruals in the event period.

The model as being developed, Jones (1991) has come with scientific methodology in which he has used regression analysis to identify discretionary accruals as separate entity. He has formed the relationship among discretionary accruals, non-discretionary accruals and total accruals. While addressing to them, this model has considered economic conditions which considers PPE, change in revenue etc. These variable can basically be considered as explanatory variables to address changes in economic circumstances of the organisation.

As depreciation can be an issue in earnings management calculation, this model has considered Gross PPE for estimated depreciation adjustment and also the changes in revenues adjustment as per the accounting policy where working capital is considered. This models

The Jones (1991) model differs from the previous two studies in that it does not assume that nondiscretionary accruals are consistent over time but assumes that these accruals are affected by changes in the firm's economic conditions. The model introduces the change in revenues and the level of the gross property, plant and equipment to capture these economic conditions. Therefore, non-discretionary accruals in the Jones model are estimated as follows:

$$TA_{it} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \frac{\beta_2}{A_{it-1}} (\Delta Rev_{it} - \Delta Rec_{it}) + \frac{\beta_3}{A_{it-1}} (PPE_{it}) + ut \dots\dots\dots (Vii)$$

This model has been more scientific and advanced from past ones. While calculating discretionary accruals, previous models did not consider the condition of economic changes. Dechow *et al.* (1995) has considered change in receivables and subtracted from change in

revenue. This is because of the issues held in receivables as this is not collected in current year.

Hence, the value of errors in discretionary accruals becomes higher than what this should be. On the other hand, the manager has less opportunity to manipulate receivable; although this is not impossible for manipulation. As in IAS 24 disclosure of related parties, the key personnel can have provision of benefitting with financial aid but this has to be disclosed under certain conditions. In order to take own benefit, senior managers of the organisation cannot have discretion of manipulating such values. They have duty to disclose such transactions of entity due to which the financial user does not get misled.

As per the equation above, change in receivables is calculated by taking net receivables from the event period and reducing net receivables of the previous year which is scaled by total assets of previous year as identified by Dechow *et al.* (1995).

The parameters are estimated based on the data collected in the event period when earnings management takes place whereas aggressive accounting or non-systematic earnings management, on the other hand, occurs in the estimation period. β_1 , β_2 , β_3 are obtained based on details collected to calculate earnings management.

Later Kothari *et al.* (2005) has revised this model and identified that there can be less errors in discretionary accruals if earnings management is calculated based on lag on return on asset. According to them, Jones model (1991) and modified Jones Modified model (1995) have still resulted severe measurement errors in earnings management calculation. In their model, they have tested calculation of discretionary accrual by using the lag of return on assets. The injection of lag of return on assets in the model, according to them, mitigate the issues of heteroscedasticity. They further claimed that this model also addressed to reducing mis-specified issues those are prevalent in Jones and Modified Jones Model. This model suggests to include one more variable in the equation. Return on asset of the t-1 has been suggested to input as an additional variable in modified Jones model.

They claimed that this model can mitigate the issues of discretionary accruals, those were existed in previous models like Healy model, DeAngelo model, Jones model and modified Jones model etc. they have assumed that this model can identify the net impact of all discretionary issues that actually effect on net bottom. As per the research done in past literatures, it is revealed that the auditing practices cannot address aggressive accounting nor corporate governance (McNichols, 2000).

Further, while considering the research by Beslic *et al.* (2015), various models of earnings management; Jones model, Dechow model, Kasznik model, and performance matched discretionary accruals, have been tested. This study has found that performance matched discretionary accruals by Kothari *et al.* (2005) has highest explanatory power. In this research,

it has been found that the explanatory power of Jones model was 11.5% while the explanatory power of Dechow model has been identified as only 4.4%. Similarly, the Kasznik model presents only 4.2% but performance matched discretionary model has presented the highest explanatory power (30.1%). Hence, this study has considered the performance matched discretionary accruals to estimate the value of discretionary accruals.

However, the best model to estimate the value of earnings management has been under discussion from long time, many researchers McNicholas, (2000), Kothari *et al.* (2009), RoyChowdhury *et al.* (2012), Beslic *et al.*, (2015) have made huge contribution in testing the models and developing the models. Kothari *et al.* (2005) has identified the importance of return on asset in the model. They also have identified that this model has reduced the error terms while detecting earnings management.

This research considers the changes in economic circumstances but not a specific event. Hence, it is being aligned with Kothari (2005) and Kasznik (1999). When stating about considering economic circumstances, this primarily mean following the line of model by Dechow *et al.* (1995) named as Modified Jones model which considers the change in receivables to estimate the coefficients from the model. Due the fact that performance matched discretionary accruals considers both conditions of the model to estimate discretionary accruals.

The model of the total accruals can be expressed as below:

$$TA_{it} = \beta_1 \left(\frac{1}{A_{it-1}} \right) + \frac{\beta_2}{A_{it-1}} (\Delta Rev_{it} - \Delta Rec_{it}) + \frac{\beta_3}{A_{it-1}} (PPE_{it}) + \frac{\beta_4}{A_{it-1}} ROA_{it} + u_t \dots\dots\dots (viii)$$

As discussed already in section 2, the value of total accruals can be calculated by two methods. Which are as:

2. Balanced sheet approach
3. Cash Flow approach.

Balanced Sheet approach has been already discussed above in literature review which can be calculated from following equation.

$$\frac{TA_{it}}{A_{t-1}} = (\Delta CA_t - \Delta Cash_t - \Delta CL_t + \Delta STDEBT_t - Dep_t) / A_{t-1} \dots\dots\dots (ix)$$

There are some studies Beslic *et al.* (2015), Zuo and Guan (2014) used the cash flow approach to measure total accruals (TAC). Thus, TAC is the difference between income before extraordinary items, discontinued operations (NI) and net cash flows from operating activities (CFO) as follows (1):

$$TA_{it} = NI_{it} - CFO_{it} \dots\dots\dots (x)$$

Where:

NI_{it} = This is regarded as earnings before extraordinary items of firm i in year t ,

CFO_{it} = This is considered as net cash flows from operating activities of firm i in year t ,

This study has mainly focussed on performance based discretionary accruals model generated by Kothari *et al.* (2005) to calculate discretionary accruals and total accruals. Moreover, in this research, it also admits Kothari *et al.* (2005) model by using current accruals as suggested by ashbaugh *et al.* (2003).

Many other researchers like Guenther (1994) and Becker *et al.* (1998) also advise that the managers can have opportunity to use their discretionary right while deciding provision for current accruals over long-term accruals. Moreover, Sloan (1996) has discussed on this regard by comparing total accruals and current accruals. According to him, the fluctuations in the values of total accrual are depend on current accruals. In the model used in current accruals, current assets and current liabilities are used. Their adjustment is considered in this practice where the managers can have higher chance of discretion to be involved in which may cause aggressive earnings management. The possibilities can be by recognising revenue before it actually received by an entity. Further, the manager can delay to recognise expenses by making reduced amount of provisions for bad debt. Resultantly, managers do practice of creating accounting.

As mentioned earlier about this research, it has not considered the particular event to detect earnings management; this rather has focused on direction of discretionary accruals not on the magnitude of earnings management. Earnings management; as being proxy of discretionary accruals, in its absolute value; is being considered as dependent variable. Moreover, discretionary accruals are measured by highlighting its direction rather than magnitude. Chung & Kallapur (2003), Benkel *et al.* (2006) and Choi and Lee (2009) has used this technic in their research too.

5.3.2. Measurement of the Independent Variables

The subsequent parts of the research deals with independent variables. Earnings management as being extensively discussed in this research have been revealed that this can be impacted by the set of activities of corporate governance and external audit. Considering corporate governance factors, it is categorised in five different parts as board of directors, non-executive directors, ownership structures, usefulness of audit committee, and external audit factors.

The variable as mentioned above are individually discussed as follows:

5.3.2.1. Board Directors Composition

This research presents various characteristics of the board and its impacts in earnings management. The main concern for this part is agency theory as discussed in literature review part. This part is organised in the research by encompassing board size, board independence, board meetings, board's diversity, chairman independence, nomination committee independence, and remuneration committee independence

Being earnings management as an integral activity in the organisation and managing directors as being an important individual possibly to be engaged in this practice, independence at the board level is very important to establish sound financial statement. Due to the fact that independence is important, this research has considered and size of the board of directors (Matis *et al.*, 2012). This research has made certain assumption in identifying directors. Hence, in this study, while collecting information about board directors, it has considered six months of time period of working with an entity, at least. On the other hand, the directors who has resigned before the accounting period is not being considered in this research while admitting the date about them in the research (Sandeep, 2012). The reason behind this is because the organisation prepares the report of the corporate governance at year end. Hence, directors can have opportunity to monitor the financial status of company. They can obtain ideas and develop knowledge based on the year end state of financial performance and can, indeed, make decision for future (Hasan and Ahmed, 2012; Abbadi *et al.*, 2016).

5.3.2.2. Board Independence

Many literatures fama (1980), Jensen (1983), Man (2013), Raeewan and Ajward, (2019) have demonstrated in their paper as the board of directors are strong organ of the corporations. Corporate governance structure can be viewed as internal and external governance structure in which board of directors are considered as an internal corporate governance structure. In addition to this, they made an argument on the status of board of the company whose main objective is to make effective monitoring to the management actions.

As this body of corporate governance is very important, they mainly play the role of being vigilant to obtain profit maximisation as well as wealth maximisation. The involvement of non-executive directors primarily is for the purpose of making independent decisions and supporting those ones. They actually play mediatory role in which they work for both shareholders and managers. Moreover, non-executive directors do make overview of the decisions before they are implemented from which they can make a judgement of the impact on each stakeholder (Bao and Lewellyn, 2017).

Furthermore, the organisation requires non-executive directors in order to monitor the executive task of managers. Shareholders appoint the board of directors for their favour and be ensured on the activities of management as they get supervised for NEDs. Shareholders' best interests are discussed in board meeting when CEO gets informed the mission and vision

of the organisation. Henceforth, the roles of CEO are to direct employees to achieve the interest of shareholders. However, there is different views from (Bao and Lewellyn, 2017) who further acclaims that the board of directors are mainly governed by the insiders who are more inclined to focus on their self-interest; hence, self-interest threat may cause the organisation not to meet the mission and vision of the organisation.

In addition, other researchers like Bassiouny *et al.* (2016) and Katmon and Farooque (2017) has made contribution in their research based on board of directors. In their empirical study they examined that board independence can have positive impacts on the performance of company and activities of the board and also in financial disclosure.

According to Cadbury Report (1992), in context of the UK, independence has been introduced for the board to be supported for significant contribution to be implemented in the organisation. They defined that independent boards can be achieved by employing minimum of three independent directors. UK Corporate Governance Code has constantly updated its best practice and made necessary amendments according to the business complexities. Corporate governance code (2018) has emphasized on the value of independent directors and recommended 50% members have to be independent non-executive directors in the board.

The roles of non-executive directors have been distinctively highlighted as to have a look on financial statements and have to suggest on its relevance. Moreover, non-executive directors are to identify underlying risk factors in the business. Non-executive directors can have very well impact in making decision in favour shareholders, hence, they can control management while trying to make opportunistic decisions.

According to UK Corporate Governance Code (2018) and onwards, it states that the board has to specify the independence of non-executive directors in the annual report. In the report it has to be disclosed that if the directors have any kind of relationship with the company. If independence is questionable, they have to be disclosed in the report so that the stakeholders can be aware of the situation. The users of financial statements can have better opportunity in making financial decisions.

Despite of the issues on independence in the business practice, however, in this research, only the disclosures of independence those are revealed have not been made as a measuring rod. This study also has been aware of UK Corporate Governance Code (2018) which defines the independence of directors. Independence of non-executive directors can be measured in various ways. This research has focussed one most of the relevant criteria to identify the director are independent. There are various rules as set by UK Corporate Governance Code, these are considered in the research.

For instance; after following consultation in 2018, UK Corporate Governance Code (2018) has revealed the changes made from its previous codes. They mainly have considered on the right mix of the skills and experience, promoting diversity while forming the team. Furthermore, the code has highlighted nine years to be considered as maximum serving time to remain independent, otherwise, if longer than nine years, this is considered as non-independent.

There are some past literatures (Beasley, 1996; Peasnell *et al.*, 2000; Peasnell *et al.*, 2005; Chtourou *et al.*, 2001; Klein, 2002; Xie *et al.*, 2003; Ardison *et al.* 2012; Eze, 2017, Marchine *et al.*, 2018) who has investigated on the impact of independent members of the board have negative effect in discretionary accruals. The board size is different from one organisation to other; hence, the computation of the non-executive directors can be done in the form of percentage so that the results can be comparable. The percentage is found after calculating the ratio of non-executive directors to the total members of the board. Based on the nature of dichotomy in measuring independent or non-independent of this variable, the hypothesis is formed as

H1: The relationship between independent boards and discretionary accruals is negatively associated.

5.3.2.3. Board Meetings

Board meeting is one of the most important activities of corporate governance. This is mainly practised in decision making factors which can be financial or non-financial. In this research, as per the concern on effectiveness of board meetings, it is important to decide how often meetings should be done (Vafeas, 1999; Carcello, *et al.* 2002; Subbasinghe and Kehelwalatenna, 2021). Aligning with the principle of the best practice of corporate governance, this enriches the overall performance of the organisation. However, the issue in the research is to test whether earnings quality gets affected from corporate governance. Hence, number of board meetings are considered as one of the independent variables in this research which can have impact on earnings quality.

This research has admitted the term 'board diligent' by Carcello, *et al.* (2002) while discussing on board meetings. Primarily, board diligent considers number of board meetings, contribution to improvement on bottom line, analysing and monitoring auditing task; moreover, this also balance the activities of preparing meetings, ensuring the well participations of the board meeting, effectiveness of board meetings, followings the members after meeting and preparing report.

Other researchers Abdel (2012) and Salch *et al.* (2020) have argued on board meeting as one of the most important aspects in integrating earnings quality as this frequently aware management about the ethical aspects of financial preparation. On the other hand, Zuo and Guan (2014), Lopes (2018) have advised that there is issue on finding right time for every

member of the board. Hence, lack of time becomes an issue to get collective work from the involvement of all members of the board. However, they have brought same ideas as Abdel (2012) and Salch *et al.* (2020), which signifies the better earnings quality when making board meeting frequently. Shareholder's interests also get addressed due to this practice.

Furthermore, board meetings can be argued from the perspectives of agency theory, as board diligent makes aware of responsibilities of management and board members while initiating meetings. Regarding the impact of board meeting on earnings management Seng and Findley (2013) has argued that they are negatively related to each other. On the contrary, Mardnly, *et al.* (2021) has not found the significant relationship between board meetings and earnings quality.

As per the relationship between board meetings and earnings quality and as argued by various researchers (Wilson, 2011; Ahmed *et al.*, 2013; Gilchrist *et al.*, 2021) they either have positive relationship whereas other researchers Xie *et al.* (2003), Uzun, *et al.* (2004), Olowookere Oladejo (2014) and Hu *et al.* (2015) have argued on there is no consistencies between board meetings and earnings quality. This study has considered the number of board meetings taken place to annually and analyse if there is any relationship between these variables. Hence, next hypothesis has been developed as:

H2: The relationship between Board meetings and earnings management is negatively associated.

5.3.2.4. Board Size

The research on impact of corporate governance on earnings management is continually done since accounting manipulation reached in its pinnacle point. Board size has been chosen as one of the variables which has impact on earnings quality. This independent variable in relation to discretionary variables has been discussed from various dimension by (Jensen, 1993; Yermack, 1996; Dalton *et al.*, 1998; Harmalin & Weisbach, 2003; Puat and Susela, 2013; Bassiouny *et al.*, 2016).

Board size in this study represents the number of members in a board. Hence, agency theory emphasizes on larger size of the board. They believe that larger board size can be vigilant to address agency problems. The management may have been directed for their self-interest. As the members are more in larger boards, they have better efficiency to control agency problems. Moreover, the organisation is governed by the dominance of CEO (Seng and Findley, 2013).

But chief executive officer may have been driven by some contractual obligations or self – interest issues or by both. They may intimidate the other managers and internal auditors. Larger board can be a remedial source in this kind of situation. Thus, the profit maximisation

or wealth maximisation or other objectives those can be market development, market growth as per the interest of shareholders. In such cases, Larger board can be positive source to make decisions and act on them according to the interest of shareholders (Abbadi *et al.*, 2016).

So, it can be argued that board size plays effective role in controlling management activities and improve the productivity of board function. They can be supportive in advising and operating the business activities being an advisor of the management (e.g., Anderson *et al.* 2004; Coles *et al.* 2008; Soyemi, 2017). This is also argued that the larger board is the constituents of many expertise, hence, various ideas get evolved and effectiveness be increased as a result they can delegate executive roles and responsibilities to managers of an organisation (Menon and Williams, 1994 and Xie *et al.*, 2003; Nugroho, 2011; Abdel, 2012).

There are arguments by Ebrahim (2007) and Tsipouridou and Spathis (2012) who put their notion as the relationship between board size and audit committee. Audit committee's independent relies on the performance of directors and size of board size. Hence, Board size actually influences on the independence of the audit committee. To support this arguments other researcher Ali *et al.* (2008), Alzolibi (2016) contributes their findings by identifying the impact of board size on independence of the directors and audit committee too.

Ali *et al.* (2008), Alzolibi (2016) also argue that small board size limits the number of independent directors available to serve on the audit committee, and they report evidence that audit committee independence increases with the size of the board. There are many researchers who has admitted that the larger the board size the better the earnings quality (e.g. Peasnell *et al.*, 2000; Chtourou *et al.*, 2001; Abbadi *et al.*, 2016; Kankanamage, 2015), a few others suggest that smaller boards may result in enhancing reporting quality (e.g. Yermack, 1996; Alonso *et al.*, 2000; Nguyen *et al.*, 2007; Katmon and Farooque, 2017; Nugroho, 2011).

From the study of these literatures it can be argued that not one kind of board is perfect. Kind of board is in a sense of its size whether this is small or large. The argument is that the smaller the board size the easier in making decision whereas the probability of being independent directors gets down in smaller board size. Because of influence of management in the smaller boards, the effectiveness in the corporate governance activities goes down. Therefore, the impact on discretionary accruals will be positively associated (Cai *et al.*, 2015).

On contrary, larger boards finds difficulty in getting the point where they can make decision because of diverse opinion and many arguments. The management have to face more challenges and hurdles in making own way of decisions. It is more bureaucratic which influences positively in the practice of earnings management. Some time they have conflicts and disagreement (Hu *et al.*, 2015).

Apart from monitoring earnings quality and strategic aspects management decision, board size is also concerned on monitoring the role of the directors who in the board are. Saleh *et al.*, (2020) and Al-shaer and Zaman (2021) have commented on the perspectives of the board size and emphasize on larger board size with a view that they help in monitoring earnings quality, strategic decisions, effectiveness of board meetings and productivity of the organisation (e.g. Geiger and Raghunandan, 2002; Benerjee *et al.*, 2012; Mohammed and Abibakar, 2018).

Further, there are many researchers who has empirically tested the effectiveness of board size in controlling earning management practice. They concluded that larger boards are more effective than smaller one. Abdel (2012), Cai *et al.*, (2015), Rajeevan and Ajward, (2019) also have agreed that the boards those are larger have stronger relationship in reducing earnings management.

This research has addressed board size as an independent variable; Considering the number of directors in the board, board size is measured as suggested by Jordan *et al.* (2010), Tyokosso and Tsegba, (2015), and Al-zaifi, (2017).

H3: The relationship between board size and discretionary accruals is negatively associated.

5.3.2.5. Board Gender Diversity

This study has considered board gender diversity as another independent variable. Board diversity itself means the inclusivity of diverse people in a board. Those members of the board are talented people which signifies that board diversity supports to encourage qualified, experienced, talent and brilliant people of the world. Attracting top talent members in the board is very important who helps in making strategic decisions to gain competitive advantage, profitability, employees benefit, shareholders' interest. To accomplish those challenges appealing 100 percent of the brilliant members are very crucial rather than 50 percent or lower. This can be possible when females' involvement in the board is made (Sandeep, 2021).

This concept is strongly employed in the research by Milliken and Martins (1996), Seng and Findlay, (2013) which has also been addressed in agency theory. This clarifies the importance of balance in the board in regard to gender diversity. By involving diverse members in a board helps in evolving discussions in various important agendas. This also restricts an individual's monopolistic influence on the board.

Another research by Hampel (1998), Jayeola, (2017), Mardnly *et al.* (2021) examine on board effectiveness while board involves female members. This basically merges diverse skills, capacities from gender varieties, abilities, fresh and updated perspectives by making board more competent (Jamali *et al.*, 2007; Al-shaer and Zaman, 2021). Hence, involvement of

various backgrounds, abilities, skills, and qualifications creates unique and rare point of view in the discussions which can support in executive and strategic decisions. The report prepared by Zelechowski & Bilimoria (2004), Zerni *et al.* (2021) has revealed that the active involvement of women in the board energise the skills incurred in male directors.

They together can work for the betterment of the organisation's functional activities such as marketing, finance, accounting, manufacturing, sales and accounting. Moreover, the act of women in the board activities can influence the best practice of corporate governance. Their wisdom and democratic behaviour open the floor for the healthy and constructive discussion (Fondas & Sassalos, 2000; Huse & Solberg, 2006), thereafter, it can address the better earnings quality.

While comparing the inclusivity of members in regard to gender issue between the UK and the USA; UK corporate governance codes have not paid serious attention on this whereas, in the USA, the National Association of Corporate Directors and Blue Ribbon Commission recommend have addressed to the fact that inclusivity of gender, race, age, and nationality diversity can have positive impact on corporate governance functions.

Other researchers Eze *et al.* (2017), Hu *et al.* (2015), Bassiouny *et al.* (2016) have admitted the influence of gender diversity in the board to the stock value of the firm. In this research, the 832 firms were observed from 2014 to 2016. The firm in this research were based on Australian firms. These findings have concluded that the involvement of women in the board can have positive impacts on shareholders' value. Further, in the research by Afzal and Habib (2018), it has been found that shareholder's value, profit maximisation and wealth maximisation are obtained by encompassing higher proportion of women in the board.

Apart from this, there is other research which has concluded that women are more risk averse than Wilson (2011). He has experimented this one from the view point of two different thoughts which are biological differences and sociocultural reasons. The former has made judgement on risk preferences. In his study he has revealed the study of Zukerman (1994), Anderson and Reeb (2003) and Alzoubi (2016) who have reported that woman releases more monoamine oxidise, hence, they require advice on risk taking situations. The latter one deals with sociocultural reasons which identifies that men involve in greater risk taking instances than women.

Apart from these two schools of thought by Felton *et al.* (2003) and Nugroho (2013), other school of thought can be viewed from psychological dimensional perspectives. To support this perspective Cai *et al.* (2015) has reviewed 150 resources those were based on psychology and made an overview of the thought that men are higher risk takers than women. Further, this is also revealed in the research paper by Abbadi, *et al.* (2016) who have investigated the correlation between personality and accounting quality. This research has measured the personality by using various variables like age, gender, position and educational

qualifications. In the report it is identified that those forms involved in accounting frauds are directed by men are 75% higher than directed by female.

In addition, while measuring moral character in terms of accounting treatment by Bernarjee (2012), it is identified that women are better than men. Women have scored higher than men. The research by Raza and Karim (2016) has investigated on ethical issues of accounting quality. They also have identified that women followed the line of accounting principles than men. They revealed that women do follow the ethical principles than men. Therefore, it can be argued that the involvement of women in the board can impact negatively to the practice of earnings management.

Overall, it can be assumed that women's involvement in the board can direct the board directors in better and profitable way. They are capable of creating sustainable environment in the organisation as researchers has proved they are reluctant to get engaged in unethical activities. Thus, Women's involvement is supportive to reduce earnings management (Lopes, 2016). Therefore, the hypothesis can be formed as below:

H4: The relationship between number of women in the board and earnings management is negatively associated.

5.3.2.6. Nomination Committee Independence

There are many literatures which involve the values of different board committees. They have quite influential role in the activities of the corporate board. Nomination committed is one of the most influential one. They are established to identify the needs of the organisation, advancing the recruitment procedures of the board members, observing and analysing the performance of the board, removing and appointing the directors. The committee also assess the competencies of the directors of the board (Soyemi and Adeyemi, 2020). Hence, this can enhance the best practice of board which also support the board to achieve its integrity and direct them towards achieving shareholder's objective.

In addition, this committee also support to fulfil the core principle of agency theory. Nomination committee has very crucial role to create independent board as they are the one who recommend the directors of the board (Jensen, 1993; Firstenberg and Malkiel, 1994; Wilson, 2011; Veronica, 2018) resultantly the domination of the management gets diminished. Nomination committee, as support the agency theory, also support the activities of senior management of the company. Therefore, this helps in meeting shareholder's expectation. Independent nomination committee is very crucial to establish all categories of corporate governance, therefore, this helps in addressing the functions of management for wealth and profit maximisation.

Therefore, it is recommended that nomination committee requires being independent as it plays significant role in governance activities of the firm. The UK Corporate Governance Code (2018) highlights the importance of nomination committee as this confirms the roles and responsibilities of the directors, so, it is strongly important the directors to be independent. Mathew, (2019) argues that the nomination committee to be independent is very essential.

Lee *et al.* (1996) has further clarified on what happens if the nomination committee has less proportion of non-independent non-executive directors. Their empirical testing has determined that less proportion of independent non-executive directors can be dominated by senior management, hence, shareholders' interest may be ignored.

In the empirical study by Klein (2002), he examined the impact of board independence on audit committee. He has experimented this research by collecting the data where CEO is in nomination committee. The result revealed that board independence is negatively associated with audit committee. It can be argued based on this research that non-independence audit committee will have negative impact on effectiveness in the functions of corporate governance, resultantly, the performance of the firm cannot support shareholder's interest. The management more likely concentrates on meeting their self-interest and contractual obligations. Hence, this kind of situation may lead the managers to practice earnings management.

Further, other researcher Osma and Nogue (2007) who have employed 155 Spanish firms and has considered independent nomination committee. In their empirical test, they have identified the result just opposite to the Anglo-American. Their result support to diminish the practice of earnings management. The independent nomination committee has negative relationship with discretionary accruals.

This research has considered the firms from UK from FTSE 350 companies as it is rarely performed. As independent board, independent nomination committee is also computed by using the proportion method. The proportion of independent non-executive directors in respect to total members of nomination is computed and considered as one of the independent variables of the research. Therefore, the hypothesis based on this variable is created as:

H5: The relationship between independent nomination committee in the board and earnings management is negatively associated.

5.3.2.7. Remuneration Committee Independence

Gregory-Smith (2012) has made a contribution to identify the impact of independent remuneration committee on the pay-rise of chief executive officer. This research has based its data on FTSE350 and the selected time period was 1996 and 2008. The researcher has assessed the impact of remuneration committee on the pay-setting process of chief executive

officer. He has examined whether independent remuneration committee has influenced on inflating CEOs own remuneration. From this it can be assumed that the CEOs are operationalising the managerial task to meet interests of the shareholders. This researcher could not find any correlation between independence of the directors and CEO pay.

Other researcher Vance (1983) admits that there is significant relationship between remuneration committee and CEOs pay. They do have positive relationship in controlling the pay of chief executive officer, hence, support to reduce the cost of the organisation. Resultantly, this research concluded that the managers do not require to practice unethically to meet contractual obligations. His research also has identified the impact of outside directors on remuneration committees and audit committees. He concluded that the involvement of outside directors supports positively in handling agency issues.

The UK Corporate Governance Code (2018) has highlighted about this issue. This has suggested that the remuneration committee is better if they are comprised of all independent directors. This amended code also has clarified the roles and responsibilities of the remuneration committee which are as planning for executive remuneration amount, incentives schemes, retirement arrangements and remuneration of managing directors.

The UK Corporate Governance Code (2018) as suggested the remuneration committee and audit committee to be independent, the researcher has identified that they have positive impact in the conflicts between shareholders and management. Hence, this supports in minimising the practice of earnings management.

Furthermore, while making discussion on this part, it can be argued that independent directors in the board committees like audit committee, remuneration committee, board committee act on the line of agency theory and also work in reducing disputes between shareholders and employees. Literatures by Dechow *et al.* (1994) has argued on the relationship between remuneration committee and CEO. According to him, CEO prevents the opportunistic behaviour in the organisation if the independent remuneration committee looks after the difficulties of the management.

Hence, remuneration committee is a key part on corporate governance and independent directors are crucial part to make fair decisions. This encourages both shareholders and management to work towards strategic goals and objectives of the organisation. They are appointed to ensure the remuneration scheme for various key players of the organisation. By the consideration of independent directors in remuneration committee and their fair contribution to address shareholders interest and management's interest, they can minimise the self- interest threat which can have positive impact in practising earnings management.

In the empirical study, Klein (2002) estimates the value of discretionary accruals and examines the impact of corporate governance in presence of CEO in the remuneration committee and

identified that they are positively associated to each other, hence, the objective of the firm, shareholders' interest gets ignored.

Therefore, this research has considered this variable as dummy variable which signifies that the value of independent variable is one or zero as per the presence of independent directors' presence in the remuneration committee. The hypothesis is created as follow:

H6: The relationship between independent remuneration committee in the board and earnings management is negatively associated.

5.3.2.8. Non-executive Directors' Commitment

The past literatures have ignored the existence of non-executive directors' commitment while measuring its impact in the performance of the board and how important this is in corporate governance functions. As mentioned earlier, there are various independent variables to be encompassed in the model in this research; For instance, independent remuneration committee, audit committee, board size. By involving them does not mean their function becomes effective. The effective corporate governance can be achieved when those non-executive directors are committed to play significant role. The researcher has engaged the performance level of non-executive director's involvement in the meeting, the frequency of their private meeting, and the fees they are offered (Seng and Findley, 2013).

Very few researches are found who have addressed its influence in board activities. Most of the past literatures are focussed on the independent nature of the board to measure its impacts on the function of the board and their effectiveness of the activities. They are also focussed on the size of the board, role of the board.

Financial performance is one of the most important function of the organisation. Non-executive directors are more involved in the financial performance of the firm which is the core function of the organisation (Fama and Jensen, 1983).

Fama and Jensen, (1983) has discussed on this variable as one of the important one because of some reasons. At first, none-executive directors' commitment is one of the core component of the corporate governance factors.

Next one is the fame of the directors. If the firms do not go well as per their monitor, they cannot predominantly exist in the market. Thirdly, as advised by Weisbach (1998), Susanto (2013), Marchini *et al.* (2018), Katmon and Farooque (2017) non-executive directors can challenge the activities of CEOs and can take decision against them if they are poorly performing.

The reason behind the need of non-executive directors is to establish the system who can represent the shareholders, who can address shareholders' objectives and aims. Shareholders

are not aware of the daily business activities, hence, there are possibilities why agency problems can be occurred. The commitment of non-executive director by addressing agency theory principles minimise agency cost otherwise the firm requires spending more money in the agency cost.

The UK Corporate Governance Code (2018, P. 32) mentions that “Individual evaluation should aim to show whether each director continues to contribute effectively and to demonstrate commitment to the role (including commitment of time for board and committee meetings and any other duties).”

From the critical analysis on and careful observation of the code it has been identified that there are two strategic mechanisms in the governance structure which measures commitment of non-executive directors. This study has identified private meetings of the non-executive directors and activity fees charged on them.

5.3.2.9. Non-executive Directors’ Private Meetings

Non-executive directors’ are appointed for special reasons from the governance perspectives to protect both shareholders right and agency’s rights. Financial integrity, preparation of financial information and financial control are very important strategic aspects of the organisation. Hence, The UK Corporate Governance Code (2018. P.6) has stated that “The chairman should hold meetings with the non-executive directors without the executives present”. Private meeting among non-executive directors are strongly advised by the code. The code suggests that the performance and commitment of the non-executive directors are measured on the integrity of financial information, risk management, strategic capabilities in decision making. The UK Corporate Governance Code (2018, p10) has recognised the need of identifying individual contribution of the non-executive directors. It has stated as “Individual evaluation should aim to show whether each director continues to contribute effectively and to demonstrate commitment to the role (including commitment of time for board and committee meetings and any other duties).”

Corporate governance has been changing the code continuously to address the changing business environment. Previous researchers have mainly targeted their research on corporate governance and earnings management where non-executive directors are involved in as an independent variable (e.g. Bhagat and Black, 2011; Kiel and Nicholson, 2003; Dulewicz and Herbert, 2004).

It is not very easy to measure the commitment of non-executive directors. There are many arguments those have been put forward to discuss on this issue. As discussed by Gilson & Kraakman (1991) and Patton & Baker (1987), they revealed that the directors do not get involved in board meeting due to being intimidated, lack of real independence, being busy in various other activities, and not have appropriate information.

The other researcher Stiles and Taylor, (2002) has examined the presence of non-executive directors and their values to govern institutions by supporting making strategic decisions in financial and non-financial activities. Hence, this position should be considered as a grant due to the fact that the executive directors are basically driven by the non-executive directors. Non-executive directors are less informed about organisation and they have their own busy life, therefore, these directors lack knowledge and time due to which they require working being engaged with executive directors (Keasey *et al.* 2002; Marchini *et al.*, 2018). The code deems the non-executive director to be independent but due to those reasons their independence gets impaired.

But as discovered by Charles (2005), Hu *et al.* (2015) in the past, it was not problem in relying on the information provided by the employees; they could help in strategic decision making for the organisation to address shareholders' interest. In these days the situation has not remained same as before. As the agenda is in high level due to the complex situation of current business environment, trust on the employees has been diminished, therefore, non-executive directors require sufficient time to be updated with reliable information.

In the paper revealed by Higgs (2003), Susanto (2013), Seng and Findley (2013), they have identified that the non-executive directors are very hard to be identified. Higgs (2003) has studied 600 directors including both executive and non-executive directors from the UK-listed firms. He has discovered 48% of them are recruited from familiarity perspectives. Most of them have personal connection with board members. He also has revealed that only 4% are appointed through formal procedures.

As a result, it is suggested that the private meeting is very crucial to discuss on various agendas by excluding executive directors which then can bridge the gap of the knowledge, information and other required strategic objectives to be addressed. This also diminishes dependent relationship between executive directors and non-executive directors.

Further, other critic, Fich and Shivdasani (2006) has arguments on unavailability of non-executive directors due to their busy life. They are not readily available due to their other responsibilities and involvements in other organisations. This research has detected the weaknesses of those boards who have busy non-executive directors for their commitments and work on part time bases with a firm. Even in the research by Jiraporn *et al.* (2008), it has been admitted that busy directors are not good idea to be employed in the board although they are competent and well experienced.

Based on the research (Oehmichen *et al.*, 2009), it has been argued that the busy non-executive directors are not productive resources a firm. The data was collected from US-based firms. Hence, this clarifies that not only one-tier firms are affected from this but also two tier firms are having same issues. The effectiveness of the board gets reduced when non-executive directors start being busier in their personal commitment.

Other researcher Song and Windram (2004) has admitted FTSE 500 companies of the UK to measure the effectiveness of operating activities of audit committees in which the main issue was to schedule the time as the directors are busy in their personal commitments. Hence, the pressure from the executive directors comes more to the audit committee.

Therefore, the researchers have concluded that there are non-executive directors who have provided sufficient time to the meeting and have made significant involvement being integrated within the team are found to be taking less responsibility in other firms. It is not considered as perfect measurement being done to measure commitment of the non-executive directors, however, the idea is that those directors should have some strategic questions and answers which support in identifying difference, similarities, ways to negotiate within the business environment (Dixon and Ogan, 2003). These researcher has measured the commitment of the directors based on strategy and performance. They identified that the committed directors have variety of questionnaires to ask, probe, discuss, inform, and debate which eventually proves that they are influential and worthy non-executive directors.

In general, board diligence is very important to be established in the organisation from financial, accounting, marketing and other functional perspectives. To smooth this, non-executive director's private meetings are very important. In the report prepared by Carcello *et al.* (2002) has revealed that not only board meetings are sufficient factor to meet board diligence but this is one of the important factors to be held.

Moreover, the past researchers Vafeas, (1999); Beasley *et al.*, (2000); Carcello *et al.* (2002) have examined board diligence based on this variable; meetings of the board members. These researcher has considered this variable in the research if it has correlation with earnings management.

This is not addressed in the UK Corporate Governance Code (2018) as how many meetings for a particular time period is effective not in accounting disclosures. Hence, this research has endeavoured to identify the impact of board meeting on earnings management, hence, it is considered as one of the independent variables. The variable is being used as a dummy variable which means in their presence this is considered as one otherwise zero. The hypothesis can be generated as following:

H7: The relationship between non-executive director's private meetings and earnings management is negatively associated.

5.3.2.10. Non-executive directors' Fees

The former researchers (e.g. Bhagat and Black, 1999; Bhagat *et al.*, 1999) have documented in their report about shared ownership. They argue that higher share ownership helps the organisation to be on the line of agency theory. The directors get monitored sufficiently in

this model of the firm. Other statement on the behalf of this topic is found as “NEDs remuneration can be a useful and legitimate way of aligning the directors’ interests with those of shareholders” (Hampel Report, 1997, p.10).

Other researcher Jensen (1989) has investigated the agency problem based on larger equity ownership and smaller equity ownership. The report has identified that the larger equity ownership is more favourable to reduce the agency cost and improve the cost effectiveness than the smaller equity ownership. In addition to this, Chtourou *et al.* (2001) also recognises the positive relationship between reducing discretionary accruals and non-executives’ ownership.

In regard to this research, it is assumed that the non-executive directors are paid appropriate fees. This is also assumed that the time utilised, commitment and devotion of the non-executive directors are valued reasonably. This statement has been reinforced by Mallin (2007) in her research as the fees paid for the directors determines the meeting involvement and its effectiveness of the board activity. The firm gets benefitted by getting appropriate advice, long term goals, shareholders’ interest.

Moreover, Mallin (2007) has worked on this topic collecting a large panel data which are publicly listed firms from the year 1996 to 2003. They have investigated that the directors are interested to attend meeting if the fees are higher which the lead to minimise the agency problems and misrepresentation of material statement in the financial statement.

To support this argument a research by Adams and Ferreira (2008) has investigated the relationship between fees paid and involvement of Non-executive directors and identify that the firms have paid well and they have respected the independent and competent; the morale of the position.

This research has considered this one as one of the independent variables. The fees are calculated in the form of percentage by computing total fees paid to directors to the board size; total number of non-executive directors. In regard to this variable, the former researcher has not considered this variable as a variable that can make impact in earnings management in context of FTSE 350 companies. Hence, this study has formed the hypothesis based on this variable as following:

H8: The relationship between non-executive director’s fees and earnings management is negatively associated.

5.3.2.11. Ownership Structure

This topic has already been largely discussed in the literature review section. This model of the business can make huge difference in quality earnings in any firm. Aligning the line of this theory and its impacts in computing discretionary accruals, this research has designed three

main variables which can be expressed as managerial ownership, institutional ownership, and block-holder ownership (Pergola, 2005; Puat and Sesela, 2013; Marchini, 2018). These variables mainly fall in internal ownership and external ownership.

5.3.2.12. Managerial Ownership

During both the research and business practice managerial ownership has been appeared to control agency problems. Agency problem is basically a big problem which is why shareholders try to identify the ways that can address those problems, hence, as suggested by Jensen and Meckling (1976) management ownership concept started to be appeared. In this model of business agency problems remains diminished. According to him the larger the owners in the management, the better the performance of the of the firm. They also identified that in these kind of firms the managers do not conceal the information and long for long-term planning. The managers are more likely to expand the business than sharing the dividends in this business model. Hence, this business model encourages managers to prepare financial performance focussing on earnings quality.

Many other researchers (e.g. Agrawal and Knoeber, 1996; Yermack, 1996; Zuo and Guan, 2014; Lopes, 2018) have found same results in their research. They have identified the impact of higher managerial ownership on firm's value. The have identified the positive relationship between them. Moreover, there are other researchers (e.g. Stein, 1989; Jensen, 1986; Hu *et al.*, 2015; Nugroho, 2011) who are on the same line of the relationship between managerial ownership and value of the firm. Their research was focussed on low managerial ownership and found that the managers are not very much supportive. They practised on income-increasing earnings management.

From all above researchers' report, the positive relationship between managers and firms' value have been identified. Contrarily, firms those are governed by less managerial ownership are focussed on short term objectives, tried to meet the contractual obligation by practising accounting manipulations.

On the other hand, there are other researchers like (Gul *et al.*, 2003; Klein, 2002; Cai *et al.*, 2015) who have identified different experience in the relationship between earnings management and managerial ownership. They revealed that there is higher level of manipulation while generating earnings. Hence, this report and the previous reports are not on the same line; therefore, this research has considered this variable to examine the impact of managerial ownership on earnings management. Wright *et al.* (2006) has criticised that the managers are most of the time risk averse, so, they are very unlikely ready to invest the fund in other business opportunities.

Primarily, as this research is based on UK firms, Peasnell *et al.* (2005) has studied in this context to identify how earnings management gets affected from this variable. In the research

they have studied the impact of the proportion of non-executive directors and audit committee on practice of discretionary accruals. In relation to managerial ownership, they have revealed that managerial ownership has positive impact in reducing the practice of earnings management.

Despite of adverse interpretations on this fact as above, many researchers (Fama, 1980; Jensen and Meckling, 1976; Chung and Pruitt, 1996; Tsipouridou and Spathis, 2012; Wang *et al.*, 2021) have identified the positive relationship in managing earnings. This is achieved as managers in this kind of model is more interested to reduce the risk factors and improve the quality of the business focussing on the long term business objectives.

This research is not following the line of Peasnell *et al.* (2005) in regard to identifying managerial ownership but aligning with Hutchinson and Gul, (2004) and Gul *et al.* (2009). Managerial ownership is being measured in the form of percentage which is computed by using the variables as total shares obtained by executives and total number of shares. This can be formulated as:

$$\text{Managerial ownership} = \frac{\text{Total Shares held by executive directors}}{\text{total number of shares}} \times 100\%$$

Hence, following hypothesis has been formed in this research:

H9: The relationship between high managerial ownership and earnings management is negatively associated.

5.3.2.13. Institutional Ownership

The research currently in this topic has been very popular because of the agency problem existing all the time. Black (1992) has suggested that the institutional investors are more capable than small shareholders to control agency problems. The argument was made on small institutional shareholders and larger institutional shareholders; and examined that the larger institutional investors are able to reduce the self-interest threat of the organisation. The managers cannot act upon own interest due to the presence of larger institutional investors. They have power being concentrated to watch and evaluate management functions. They have resources to monitor the internal control activities and management practices of the firm (Coffee, 1991). It is also suggested by the UK Corporate Governance Combined Code (2018, p.24) addressing on institutional ownership as “Institutional shareholders should enter into a dialogue with companies based on the mutual understanding of objectives”.

Other researcher Bushee (1998) has examined whether the investment on research and development gets manipulated. The researcher noticed that in higher institutional ownership

this practice seems very less likely. Apart from this as identified by (Clay, 2000 and Hartzell and Starks, 2003; Hu *et al.*, 2015, Bassiouny *et al.*, 2016), there are other factors such as: board structures and executive compensation which get impacted by the involvement of higher institutional ownership. Other researchers Liu (2006), Yu (2014), Charitou *et al.* (2007) and Cheng and Reitenga (2009), Olowookere and Oladejo (2014), Mohammed and Abibakar, (2018) have tested to identify the impact of institutional ownership on creative accounting. They have concluded that there is negative relationship between aggressive accounting and institutional ownership; hence, recommended that institutional governance is an effective governance.

Not much research is found on this topic as per the data concerned in the UK. Peasnell *et al.* (2005) has observed the firms of the UK collecting data from 1993 to 1996 based on institutional roles and its impact on discretionary accruals where he concluded that they have no correlation. Hence, to identify impact of this variable to earnings, this research has attempted to encompass UK data from the companies those are listed in FTSE350. The hypothesis is formed as follows:

H10: The relationship between high Institutional ownership and earnings management is negatively associated.

5.3.2.14. Block holders' Leadership

As discussed by (Jensen and Meckling, 1976; Shleifer and Vishny, 1997), block holders have more influence in company decision making opportunity than small shareholder those are acting externally. These researchers actually started identifying if block holders affect in managing accounting manipulation. Jensen and Meckling (1976) were those ones who studied on block holders to examine whether they can have impact on agency cost and identified that block holders make very positive impact on reducing agency cost. The reason is that the block holders can effectively control the behaviour of the manager and can monitor in the discretionary rights of the managers (Shleifer and Vishny, 1997; Barclay and Holderness, 1991).

From the research on this part as well, as found in institutional ownership and managerial ownership, block holders made positive impact on the governance oversight. This concept basically was reviewed and supported to the view that this monitors the activities of executive directors. Apart from this, in the empirical test by Cronqvist *et al.* (2008); Persons, (2006), this has been approved as being supported to the idea that the block holders monitor the functions of executive directors. They control the discretionary rights of the managing directors. Hence, this has impact on earnings quality. There are various accounting practices those can support manipulation, however, aggressive accounting can be controlled and block holder's presence in firm monitor the internal control. So, this is argued as positive relationship in reducing earnings management practices in presence of block holders.

Block holders have voting powers to support for the decisions they want to make and can have control over the business objectives. The researcher as mentioned earlier Peasnell *et al.* (2005) has examined the impact of block holders on earnings management. In the report, they have considered as one when the ownership of block holders is 10% or above and considered as zero if less than 10%. In the research by them have identified as no co-relation between these variables.

Being aligned with Peasnell *et al.* (2005), this study has considered UK firms from FTSE350 and has measured relationship with earnings management as an indicator variable. This report has considered as one when the ownership of the block holders exceeds 10% or equal to 10 % and zero if this is less than 10%. Moreover, it has considered the condition of ownership by external or internal directors. If they hold higher ownership than block holders, then the block holders are disregarded due to the fact that the block holders get controlled by external and internal owners.

The data collection is being considered from the company's annual report to collect block holder's ownership. In this research, the data is considered from UK firms, hence this variable to identify is feasible because the listed companies have to disclose the report if an entity has more than 3% shares in accordance with sections 198 to 208 of the Company Act 1985. Therefore, the hypothesis is created as following:

H11: The relationship between a block holding of 10% or more; and earnings management is negatively associated.

5.3.2.15. Audit Committee Effectiveness

Audit committee is one of most important body in an organisation as they execute internal controls and advise the directors (Fama, 1980; Fama & Jensen, 1983; Arellano and Bover, 1995; Jayeola *et al.*, 2017). They predominantly execute the task both ways; by providing advice to directors and by following director's advice. This activity helps the firm to reduce the agency cost (Jensen and Meckling, 1976; Watts and Zimmerman, 1986); Kesner (1988) and Vance (1983).

Due to the effectiveness of audit committee, the UK Corporate Governance Code (2018) has emphasized on the value of audit committee and recommended that this requires to be strictly independent and very active with members of financial expertise. The emphasis on audit committee is also given by the Blue Ribbon Commission Report to improve the usefulness and effectiveness. They revealed ten important points of recommendations similarly, SEC has raised the importance of disclosures of audit committee members and their control measures on behalf of financial users. From these regulations and updates on audit committee, the activities of audit committed gets better and ensures the faithful representation of financial statement.

Frequent updates on IFRS system and corporate governance code have update the various activities of audit committee. The UK Corporate Governance Code (2018) highlights the importance of audit committee who ensure the quality of earnings in the financial statement and true and fair representation by identifying recognition and de-recognition of asset and liabilities. Which promotes the integrity of financial statement and effectiveness of audit committee (Lopes, 2018).

The UK Corporate Governance Code (2018) has emphasised the effective use of audit committee to support stewardship and control agency cost. Moreover, they have highlighted the factors like audit committee, independence, competence, size and frequency of meeting who have influenced on creative accounting.

5.3.2.16. Audit Committee Financial Experts

Being established audit committee is itself a strong variable as suggested above to impact on earnings management. Further investigation was made in term of audit committee and The UK Corporate Governance Code (2018 p. 16) has introduced “The board should satisfy itself that at least one member of the audit committee has recent and relevant financial experience.” As suggested, the committee should have at least one member who is financial experts and should have been qualified by CPA, ACCA, or CIMA.

The qualified members are considered as an asset of an organisation. They are basically employed by independent members of the board in which these members can provide profession support while making judgments on various factors in the organisation. For instance, useful life of asset, accounting choices, treating the material statements correctly are some issues those take place in discretionary right of the executive directors.

As investigated by Xie *et al.* (2003), Ardison *et al.* (2012) He concluded that the presence of financial expertise in audit committee is effective in governing financial and accounting aspects of organisation. They can support the organisation by making them aware of the possibilities of earnings management. His study has identified this information from financial statement where there is an annual report section; to provide the information of members of the audit committee who are qualified from ACCA or other recognised awarding body. There are many other researchers Chtourou *et al.* (2001), Choi *et al.* (2004), Abbott *et al.* (2004), and Bedard *et al.* (2014); Hu *et al.*, (2015) who has considered this variable as an important one which impact on discretionary accruals. The expertise of the member in the board, as they have identified, has positive relationship in reducing the practice of earnings management.

Moreover, Yermack (2006) and Bassiouny *et al.* (2016) have admitted the sensitivity of share price to the expertise of director. The directors with professional qualification become more reactive that other members of the board whereas other researchers DeZoort and Salterio

(2001), Hassan and Ahmed (2012), Subhasinghe and Kehelwalatenna (2021) have argued on possibilities of disputes to be taken between the audit committee and executive directors. Further, next researcher, Defond *et al.* (2005) has argued that financial expert who has years of experience shows positive interest in reducing accounting manipulation.

Understanding the effectiveness of the presence of accounting and finance expertise in the audit committee, this research has considered this variable as one of the independent variables. This variable is also regarded as dummy variable which means the committee that has at least one member in audit committee who is financial expert is given the value as 1 and if none of the members are financial expert, this will be considered as zero. Hence, the hypothesis is considered as follow:

H12: The relationship between audit committee with financial experts and earnings management is negatively associated.

5.3.2.17. Audit Committee Size

Many researchers Lipton and Lorsch (1992), Jensen (1993), Yermack (1996), Sumiadji (2019), Al-shaer and Zaman (2021) have investigated if this variable has any control over the decisions made in audit committee. They have identified audit committee size is highly correlated with decisions of the committee. Other researcher Bedard *et al.* (2014), Lopes (2018), on the other hand, confirm that the larger committee is not supportive to make decision quicker. As many expertise and directors from various background may have arguments as a result it is very distracting and ineffective to find common ground of the decision, however, he has supported this factor with the view that the involvement of more directors in an audit committee gives opportunity to get the potential problems be disclosed. This practice pragmatically supports to reduce the agency cost and make the internal control system stronger.

Further, Chen and Zhou (2007) has augmented this research further to measure these variables in context of Big 4 auditors. He has revealed that larger auditing system are more focussed on the reputation of their firm, hence, they precisely attempt to involve Big 4 auditors while auditing assuming the fact that they provide higher quality auditing services. This is also supported by next researcher Bariotta (2000), Jordan *et al.* (2010), Zuo and Guan (2014) where They have declared that larger firms are good at carrying out the task of professional judgement, he further suggests that the larger committee should not be that larger which creates complexities to make decisions and find the point to be agreed.

Some research examines the impact of small audit committees on decision making and identifies that presence of only one or two members are considered as ineffective. The executive directors can easily motivate them and put pressure to fulfil their interest. According to them, larger committee are formed by comprising various directors from different background, hence, it makes the task more complex the it is in reality.

This is recommended by the UK Corporate Governance Code (2018) as well for their independence. They suggested that the committee has to have at least three independent members. There are various studies being done on this topic and these empirical test has revealed the relationship between earnings management and audit committee size. In addition to this, Xie *et al.* (2003) and Bedard *et al.* (2014) have studied on the impact of audit committee size on accounting manipulation. Their studies revealed that the audit committee size does not show any effect on earnings management. Further, this idea is also supported by Abbot *et al.* (2004) as their empirical study identifies that there is no correlation between audit committee size and earnings management. On contrary to this, Lin *et al.* (2006) and Pindyck and Rubinfeld (2012) have studied to identify if there is any relationship between them and investigate that the audit committee size is has negative impact on discretionary accruals.

Therefore, this study has selected this variable as one of the important one because of various opinions. The assumption is that the audit committee with larger number of directors actually does better control and monitor the loopholes of the internal control measure. The executive directors are less likely to be motivated in their opportunistic motivations. Hence, the hypothesis is created as below:

H13: The relationship between audit committee size and earnings management is negatively associated.

5.3.2.18. Audit Committee Meetings

The audit committee is formed with a purpose which supports to reduce the agency cost and balance between stewardship and agents. Hence, researchers have revealed that regular meetings are important to discuss on the agendas and plan. The continuous meetings are required among external auditors, internal auditors and other board members. They also require to be aware of the objective of shareholders and executive directors. The internal control systems can be made stronger from the commitment of all parties which is why meetings are very important. The number of meetings recording in annual report is important as this represents the devotion of the audit committee which then can support the firm by mitigating the risks and strengthening the internal controls which eventually mitigate the risk of manipulating earnings quality.

As this topic is discussed earlier by mardnly *et al.* (2021), he revealed that the diligence of the board is visible from the frequency of meeting as this indicates that the board members are quite committed to work for the firm, which at the end results to improve the firm performance. The audit committee those are quite focussed on diligence and stewardship can improve the earnings quality. Audit committee 's predominant function is to improve the internal control and improve financial statements. Hence, frequent meeting is considered as

one of the important indicators. But The UK Corporate Governance Code (2018 P. 17) advises that “It is recommended there should be no fewer than three meetings during the year”.

Moreover, other researchers Xie *et al.* (2001), and Ardison *et al.* (2012) examine the impact of meeting of audit committee on the quality of financial reporting. He advised that the frequent meetings have reduced the accounting manipulation. To support this idea, it is argued that the auditors if act actively, the discretionary accruals get reduced as it monitors more to executive directors. On the other hand, Spira (1999) and Tsipouridou and Spathis (2012) have identified the impact of ceremonial meetings on earnings and revealed that this is less effective to monitor earnings quality.

In consideration to all above discussion regarding audit committee, this research has chosen the number of meetings of audit committee is an independent variable which has impact on controlling earnings management. The number of meeting can be found in the annual report of the financial statement which is disclosed by corporate governance. Hence, the hypothesis is created as below:

H14: The relationship between number of audit committee meeting and earnings management is negatively associated.

5.3.2.19. External Audit Factors

5.3.2.19.1. Auditor Independence (Non-independence)

Independence has been the topic of huge importance in board, internal audit committee and also for external audit committee. Watts and Zimmerman (1983) has advised the independence audit committee can prevent the breaching of accounting standards. Auditors are liable to work according to the ethics and code. Despite of pressure from stakeholders’, auditors have to align their conduct with codes which allows to improve the quality of financial reporting.

Shareholders hire managers to achieve their objectives; in contrast, the managers want to be benefitted by using resources of the shareholders, hence, the tension gets created between agency theory and stewardship theory. To maintain that gap and support each other’s objectives, external auditors are contracted by the firm (Jensen & Meckling, 1976, Arillano and Bover, 1995, Ali *et al.*, 2007;). Therefore, the auditors play the role of mediator and expected to work to maximise the shareholders’ value as well as to support to justifiable income for agency (Antle, 1982; Watts & Zimmerman, 1986; Ashbaugh *et al.*, 2004; Saleh, 2020).

Antle (1984) has reported that some auditors are monitored by the executive directors due to non-audit services. They get huge amount from no-audit services, in such cases, auditors may be motivated by their self-interest. Because of those side-payments, they get the

independence quality impaired; hence, the objective of shareholders be ignored. It does not support to what Jensen and Meckling (1976) reckons their views as external auditors are there to reduce agency cost and support the organisation. Later by Watts and Zimmermann (1983) reviewed the pragmatic influence of hiring auditors independently and concluded that independent external auditors support to reduce agency cost. Their study has included the 85% of the data from New York Stock Exchanging (NYSE) where independent directors were hired in 1926. Those days were far ago when the Security Acts delegated external auditing. Therefore, both by theoretically and practically, this has been supported that external auditors can reduce agency costs.

In addition to this, it is to be considered that auditors do show their interests in non-audit services from where they can make large sum of money; therefore, independence can be impaired. When working for clients, they may tempt the auditors by non-audit services and gifts. In such situation, the shareholders may not get right support to reduce agency cost and stewardship of the employees may be impaired. The auditors those are providing audit services if are given other opportunities in regard to non-auditing services like taxes, depreciation and amortisation, impairments, they are highly likely to favour managers and the integrity in the financial statements gets manipulated (Jayeola *et al.*, 2017).

Therefore, because of these dual service nature, there is high regulation. The regulator monitors the auditing activities very strictly, hence, there are many restrictions in terms of gifts, fees payment, accounting standards, ethic and codes.

Also, the discussion is on the amount of fees if audit fees are higher than non-audit fees. DeAngelo, (1981) suggested that because of audit and non-audit services being interdependent, the material statement in the financial report can be manipulated. Regulator are highly concerned on this and aware of the situation that can motivate auditors to support director's discretionary provisions.

The other important ethics is objectivity which could be jeopardised because of consulting services. The auditors are formed with nature of counselling as this is a part of their job while providing non-audit services. This can put auditors in risk of being independent. Hence, earnings management in such condition is highly probable (e.g. Jenkins & Krawczyk, 2002; Francis & Ke, 2004; Chien & Chen, 2005; Lopes, 2018; Uche, 2021).

While examining the past literatures who has dealt on non-audit services and its impact on auditors to be independent. Many of the researchers have identified that Non-audit services has impaired the independent nature of the auditors. On the other hand, it does not support auditors to mitigate the risk of being in ethical behaviour and ACCA Codes. Later, Frank *et al.* (2002), Zermi *et al.* (2012) have admitted the measurement auditor's independence based on the ratio. The ratio of non-audit fees to total fees can be used as a measuring tool of auditors' independence.

The regulators show much concerned on this issue believing in the fact that the internal controls can be strengthen; hence, earnings quality can be improved. The companies 1989 (Disclosure of remuneration for Non-Audit Work) 1991, those firms based on UK has to reveal the amount in annual report in the form of remuneration to external auditors separately for audit and non-audit services. Hence, this research collects the data form annual report of the firms directly in case it is not available in the data base (FAME) as recommended in this study. This study relies on annual report of the listed firms from FTSE350 which signifies the highest accuracy and the best suited while running regression analysis as these variables have impacts on earnings management. Discussion on this factors of external auditors can suggest identifying following hypothesis:

H15: The relationship between non-audit fees and earnings management is positively associated.

H16. The relationship between higher audit fees and earnings management is negatively associated.

5.3.2.19.2. Audit Quality: Industry Specialised Auditor

Earlier by DeAngello (1981) has investigated on how auditors' report can have error. He advises that the issue on report by the auditor can occur based on their specialism. He has suggested that audit quality is the outcome of the joint combination of auditors' discovering, observing and reporting material statement in financial information. The previous part has explained about brand aspect of the auditor which explained that big name of auditor is a proxy of auditing quality but later the researchers identified the issues and had conflict views but they have not produced plausible explanations.

The reason for narrowing the audit quality is due to the domination of Big 4 audit firms. This study uses the data from FTSE350; more than 98% of them, use the auditors from Big 4 audit firms for their auditing function. So, reliability of the outcomes may high likely be impaired. Due to this concern, this research has used another proxy for audit quality. Moreover, there may occur issue in relying on auditor opinion to measure the audit quality seems unrealistic as the samples for this study encompasses rare cases of auditors who has presented qualified auditor opinion. The study has identified that less than 15 examples, from 2012- 2016, are there where the audit report has produced their opinion against true and fair view. Thus, it is believed audit quality based on Big 4 firms' report can be statistically unreliable.

Based on prior research Geiger and Raghunandan (2002), Aharony *et al.* (2000), Alzoubi (2016); it is identified that the quality of research is based on auditor's rotation. The research has collected 36 cases where firms have switched to other auditors from the past ones. This samples represents the 8% of the total ones; and concluded that the opinion of auditors is more reliable than continuing with same auditors. Despite of the fact that they are more

reliable; the researcher concludes that this reliant is not powerful enough, hence, this study assumes this variable for the purpose of sensitivity analysis.

Therefore, there are some literatures which have studied the audit quality by narrowing their field of auditors relating to their specialisation. They found better significant results by both view-point of logically and consistency (e.g., Craswell *et al.*, 1995 and Beasley and Petroni, 2001; Wiyadi *et al.*, 2015; Wang *et al.*, 2021). Many other studies have used various proxies to identify auditor's industry specialisation as they cannot be measured in very specific manner. Market share has been used as one of more repeatedly used one as a proxy of this to represent industry expertise.

This is one of the most influential component while considering market share approach which introduces audit firms as an industrial expert which means these firms are differentiated from other audit firms to develop market share of the firm within that industry. The main idea in this way is to develop the knowledge and expertise of the auditors who are working for the particular type of industry. In addition to this, this approach of developing market share helps the audit form to concentrate on more advanced industry – specific technology which then supports to form better audit quality (Olowookere, 2014).

The practice of this approach suggests that market share can be used as a proxy for auditor industry specialisation. This further supports to be differentiated from other audit firms. In this practice, the auditors be more specialised and become better than its competitors. Mayhew and Wilkins (2002) and Zuo & Guan (2014) supports this idea of increasing market share which eventually supports to generate better audit quality.

This research has considered this idea as the increments of market share supports the auditor to be specialised for that industry and can be better competitive than its competitors. As suggested by previous researchers (e.g. Balsam *et al.*, 2000; Gramling *et al.*, 2001; Carcello and Nagy, 2002), those firms who work for industry specific are better competent for that industry and can generate better audit report. Hence, this eventually has impact on earnings quality. In the study by Dunn and Mayhew (2004), Jordan *et al.* (2010), Lopes (2018), it is examined that the auditors those are better specialised for an industry- specific are ranked as higher quality firms in terms of disclosure as identified by financial analysts.

In further investigation it is identified that non-specialist auditors are forming higher discretionary accruals than those of industry - specific specialist (e.g., Balsam *et al.* 2003; Krishnan, 2003; Soyemi and Adeyemi, 2020). In general, they suggest that the firms and clients, and other users get benefit from this when a firm hires industry – specific expertise due to their competitiveness, auditors can enhance the earnings quality and auditing quality.

Furthermore, various researchers have identified various results while studying the impact of auditors' industry – specific expertise on earnings quality. As an example, it is argued that the

benefits received by hiring industry-specific auditors for a larger number of industry or some large clients.

Some other research (Neal and Riley, 2004; Seng and Findlay, 2013; Bao and Lewellyn, 2017) has identified the portfolio share ratio as an alternative for market share ratio but this study has not considered this as proxy of industry-specific auditors because the earnings quality has not been found as being correlated to portfolio share ratio. Moreover, those researches which have used portfolio share ratio have not addressed the variation in industry-specific while the clients' firms are with same size within the same industry (Stanley *et al.*, 2007; Sandeep, 2012).

Because of issues on identifying appropriate relationship between industry specific expertise and earnings management. This research has used two proxies. The first concept has been referred to Balsam *et al.* (2003), carcello and navy (2004), Krishnan (2003), Dunn and Mayhew (2004) and Lim *et al.* (2008), Puat and Susela (2013), Veronica, (2020) who have measured the proxy for industry-specific by accommodating industry market share. According to this, industry market shares for an audit firm represent revenue based on the payment made by the client which will be divided by total revenues by the audit firm from the same industry.

The second one is considered as examined by Mayhew and Wilkins (2003) and Abdel (2012), who suggested to measure the number of firms of a specific industry. This is required to mitigate the risk of being bias towards the larger clients. They suggest that the considering sales value as a base can help to avoid the bias. Therefore, this is critical to think on if an audit firm has small clients within the same industry and has considered idea to be specialist, this can be controlled by the number of clients measure and market share gets ignored. So, this discussion leads to generate following hypothesis.

H17: Firms that are audited by a specialised auditor have less earnings management

5.3.2.20. Measurement of the Control Variables

This research has already identified necessary independent variables to carry out the impact of those variable on earnings management. To support this research, there are some control variables too, which can have impact on controlling earnings management. This research has considered some control variables which are the variables from non-corporate governance which can make influence on earnings management by controlling the certain characteristic of other competitors or other companies. This research has basically targeted to measure the impact of corporate governance and external audit on discretionary accruals, hence, it assumes that controlling the variables those have impact on earnings management of a firm is very important (Ardison, 2012).

However, it is not easy to restrict the incentives and other benefits for the managers, hence, certain factors like management portfolio, style, integrity, organisation culture requires some adjustment and they actually contain costs, and managers can take opportunity to use their discretionary rights (Archambeault, 2002; Eze, 2017). While reviewing the papers and reports based on this topic, it has been identified that there are six main control variables found as relevance to this research.

These variable are considered as firm size, firm performance, leverage, firm growth, cash flow from operations and IFRS system. This research has brought these ideas and have discussed one by one together with the method to examine each of these. The research has not made any prediction to identify coefficient sign.

5.3.2.20.1. Firm Size

Researchers like Booth *et al.* (2002), Peasnell *et al.* (2005), Raza and Karim (2016) have examined the various examples of governance structure and suggested that the firm can practice any of them as this in internal concern. Internal governance structure is, according to their research, substitutable, hence the directors can make their choices. The governance structure, basically, depends on the size of the corporations as the small firm may be working on different structure whereas large firm may not have same structure.

Other researcher Boone *et al.* (2007) and Marchini *et al.* (2018) have investigated that the larger organisations use more diversified structure, hence, this variable is considered as proxy of the complexity of the firm as referred by (Fama & Jensen, 1983; Booth & Deli, 1996). Further, other researcher Lehn (2004) has examined whether the influence of board size depends on firm size. He has identified that the impact of board size has positive impact on firm size whereas they influenced negatively to growth opportunities.

As the firm size varies, the business strategy, the scale and complexity are different; therefore, the larger company can be inconsistent while measuring the impact of board characteristics on discretionary accruals. This could also lead the agency cost to be increased and let directors use higher level of discretionary rights and self-interest threat (Jensen & Meckling, 1976; Barton and Simko, 2002; Gilchrist, 2021).

Moreover, the research by Bartov (1993) and Jayeola *et al.* (2017), as the firm size grows up, the potential of practising earnings management also grows up. The other issue also arise as the firms grows which invites higher political cost as suggested by Watts and Zimmerman (1990), therefore, the manager can use higher opportunity of manipulating discretionary accruals so that they can practice reducing political cost. This is later supported by Lopes (2018).

In addition to this, Pincus and Rajgopal (2002) and Kankanamage (2015) has examined that larger firms have higher level of pressure to prepare the earnings as predicted by analysts in the market. Another researcher Lobo and Zhou (2006) suggested that as the firms size becomes larger, the practice of earnings management level grows more.

There are various characters as discussed earlier like board size, number of board meetings, independent non-executive directors can be affected by firm size. In this research, firm size has been used as a control variable to measure the impact of corporate governance on earnings management and also the impact of external audit on discretionary accruals. This is suggested to be measured as the logarithm of the total asset at the year-end by past researchers (e.g. Jaggi *et al.*, 2009; Machuga and Teitel, 2009 and Dimitropoulos and Asteriou 2010).

5.3.2.20.2. Firm Performance

As suggested by (e.g. Kothari *et al.*, 2005; Kiel & Nicholson, 2003; Carter *et al.*, 2003) to control errors in discretionary accruals return on asset has been used in many research papers. As a firm performance, return on asset (ROA) has been suggested to be used in this research too. This variable predominantly can indicate the performance of the business, hence, can measure the ability of the management which then measure how efficiently the resources have been employed by the corporate governance mechanisms. In addition to this, other researcher has supported the fact that ROA can explain Tobin's Q and firms' performance significantly. Thus, ROA can be considered as a robust measure of firm performance.

This research has considered the concept of Ashbaugh *et al.* (2003), Colaco *et al.*, (2011) who has identified the value of return on asset; dividing net income by total asset at the beginning of the testing period. The data is basically suggested to be collected from FAME in this research.

5.3.2.20.3. Firm Leverage

An organisation may need to meet the contractual agreements of the debt which is made between lender and organisation based on the leverage. Hence, it is very crucial for the organisation to meet the contractual agreements. Hence, the firm more likely can be in a position to manipulate the figure while calculating debt to equity ratio. Based on the research by Elayan *et al.*, (2008); it is found that the impact of the leverage on discretionary accruals has been positively related.

Hence, the argument is that the managers can manipulate the value of liabilities and assets to bring the leverage in right position so that the agreement remains stable or favourable. The managers are in a position to overstate the assets and understate the liabilities. Efendi *et*

al. (2007) argues that the firms can manipulate the values of liabilities and assets when they are on the border-line of debt covenants.

From the studies by Dechow *et al.* (1996), Richardson, Tuna, & Wu (2002); it is admitted that leverage is associated with earnings management and other fraudulence. The manager sometime decides for financial restatements too. Furthermore, Defond and Jiambalvo (1994) assumes that when the firm is struggling to meet debt covenant, they are likely to incentivise the financial statements by approaching to income increasing discretionary accruals.

Nevertheless, other researchers Becker *et al.* (1998), Agrawal and Knoeber (1996) have admitted different view from their research. They have argued that the relationship between leverage and discretionary accruals are negatively associated. The points for them to consider is that the leverage can impact the firm in a way that can incentivise; hence foster earnings management where Leverage is calculated as total long term debt divided by total assets.

5.3.2.20.4. Firm Growth

It is argued that the firm's growth has to be controlled because the company struggles to maintain the profitability of the organisation. Resultantly, the directors do practice earnings management (*Carcello et al., 2004; Abbott et al., 2004; Yang, 2010; Jahmani et al., 2016; Bepari et al., 2013*).

In contrast, Matsomoto (2002) and Cimini (2015) have revealed the rapid growth of the firm actively take part in managing earnings. However, it is defined that the growth and earnings management are co-related to each other.

Further, as defined by Myers (1977) and Gaver *et al.* (1995), Filip and Raffournier (2012), it is admitted that the growth of the firm is measured by identifying the value of the difference between firm's current value and current assets which is referred as market-to-book ratio. It is considered as market value of asset is a proxy of the firm's value and the book value of the asset as a proxy of current assets; the higher the market-to book the greater the growth opportunities in a firm.

5.3.2.20.5. Cash Flow from operating Activities

In this research the impact of the cash flow from operating activities has been considered in relation to control the differences in relation to the firms those have different financial performances from different industries; hence, the earnings management activity can be better observed. Moreover, this also helps to control the relationship between discretionary accruals and cash flow from operating activities. According to Jiang *et al.* (2008), Lobo and Zhou (2006), this has been argued that the firms who has good cash flow from operating activities are less likely to involve in the activities of earnings management. The upward earnings management does not get considered by those firms whose cash flow from

operating is already high. Hence, considering the fact, on contrary, the firms those are performing less in relation to cash flow from operating activities are prone to practice downwards earnings management (Dechow *et al.*, 1995; Paolone *et al.*, 2015).

5.3.2.20.6. Empirical Research Models

As per the research conducted by the researchers Klein (2002), Xie *et al.* (2003); they argued that the multi-collinearity concern among variable; primarily among board independent, Audit committee independent if they remain in one side. Further, the concerns of multi-collinearity are also there with Audit independent and nomination committee independent. The correlation coefficient identified in relation to these independent variables have been found as more than 75%; hence, this signals that multi-collinearity may cause some effects adversely to the research outcomes. Therefore, to resolve this out, in this research, two different models have been adopted to test hypotheses.

Further, the interrelationship between internal audit committee and external audit mostly be considered as complementary to one to other, hence, the significance level might be impacted adversely while modelling them as one. As argued by Hay *et al.* (2008) the multi-collinearity concerns can be removed by forming two different models.

Hence, the models are formed as follows:

5.3.2.20.6.1. The first Model

The past literatures have mainly investigated the independence of the non-executive director, but this research has explored more variables than just independence of non-executive directors. The study has included the number of meetings by the non-executive directors, the fees paid to non-executive directors. There have no such studies been made in the past based on this the current scenario.

The relationship between diversity and earnings management has not been much discussed in context of the UK business scenario. There is few research (Kang *et al.*, 2007; Jayeola *et al.*, 2017) which have investigated the impact of gender on earnings quality.

This research has also employed the institutional ownership attributes and examined its impact on earnings management. This has not been previously discussed; however, Peasnell *et al.* (2002, 2005) and Bassiouny *et al.*, (2016) have used the ratio concept by incorporating numbers of shares held by institutional investor to total number of shares.

Moreover, Managerial ownership has been also considered as an attribute in this research. This variable has not been previously used in context of corporations in the UK. Hence, this study has examined the impact of managerial ownership to earnings management.

The other factor, audit committee, has been used in this research which has not be in practice before. The introduction of the expertise in the audit committee has been recently made in The UK Corporate Governance Code 2016.

The first model comprises 11 independent variables which is related to corporate governance, and 4 control variables which can have impact on earnings management; hence, reduce the error terms. The factors of the corporate governance have been considered as monitoring devices of the earnings management. Hence, the first model is related to first 11 hypotheses as mentioned in section 5, while developing hypotheses.

$$DAC_{ij} = Boardsize_{ij} + Boardind_{ij} + Brdmeet_{ij} + chairmanind_{ij} + Remcommind_{ij} + Noncommind_{ij} + Femaleboard_{ij} + NEDFee_{ij} + Blockholder_{ij} + Manown_{ij} + Instown_{ij} + Leverage_{ij} + CFO_{it} + ROA_{it} \dots\dots\dots (Xi)$$

DAC = Discretionary Accruals in its absolute value based on performance measured discretionary accruals model.

Board Composition:

Boardsize: The total number of directors in the board committee.

Boardind: The independence of the board is measured dividing total board members by independent non-executive members.

Brdmeet: the number of meetings held in an accounting period by the board members.

Chairmanind: This has been created as dummy variable. The value is taken as 1 if the chairman in independent otherwise it is 0.

Remcommind: This is also dummy variable, which considers one if the members of the committee are entirely independent; and zero otherwise.

Femaleboard: The percentage of female presence in the board.

Noncommind: The presence of Non-executive directors in the board in the form of proportion.

NED's Commitment:

NonEXMeet: This is considered as dummy variables if the non-executive directors meet in absence of chairman, zero otherwise.

NEDFee: The total amount in a year paid to each Non-executive director.

Ownership Structures:

Manown: managerial ownership is calculated as the percentage of shares held by executives out of the total number of shares.

Instown: The percentage of shares outstanding owned by institutional owners.

Blockholder: This is regarded as a dummy variable. The value one is considered when the external stockholder owned 10% and more; zero otherwise.

Control Variables:

Leverage: This is ratio between the long-term debt and total asset.

CFO: This is calculated by considering cash flow from operating activities and value of total asset of the beginning of the accounting year.

ROA: return on asset.

5.3.2.20.6.2. The Second Model

Audit committee, has been used in this research which has not be in practice before. The introduction of the expertise in the audit committee has been recently made in The UK Corporate Governance Code 2016. Hence, this research has used this variable to identify the impact of expertise in audit committee on earnings quality.

This research is the first research to include the idea of concerns of audit committee by encompassing the attributes as an industry specialist auditor to measure the impact on earnings quality, since the update on the UK Corporate Governance Code 2016 has been introduced.

The second model has been formed by incorporating the variables of audit committee and external audit. This model is formed to address the hypothesis 12th to 17th; which has been explained and clarified in the section 5.1. The independent variables used in this model are controlling devices of the earnings management which has been largely discussed in context of various scenarios other than UK. Hence, this study has created the model including those variables to identify the impact of these variables on the earnings management.

$$DAC_{ij} = AudFee_{ij} + Non - AudFee_{ij} + Audcomsize_{ij} + IndusSpec_{ij} + AudExp_{ij} + AudMeet_{ij} + AudInd_{ij} + Leverage_{ij} + Manown_{ij} + Leverage_{ij} + CFO_{it} + ROA_{it} \dots\dots\dots(xii)$$

DAC = Discretionary Accruals in its absolute value based on performance matched discretionary accruals Model.

External Auditor Factors:

NonAudFee: The fees paid for non-auditing services.

AudFee: The fees paid for auditing services.

IndusSpec: This is regarded as dummy variable. If the firm has been audited by specialised auditor, the value has been considered as 1; otherwise, zero.

Audit committee characteristics:

Audcomsize: The committee is formed by employing members; hence, the total members involved in the audit committee are considered as this variable 'Audcomsize'.

AuditMeet: Audit committee requires certain number of times; hence, this number of times is considered as one of the independent variables.

AudExp: This is considered as dummy variable. The value one is taken if there is financial expertise in the committee, otherwise, zero.

Control Variables:

Leverage: This is ratio between the long-term debt and total asset.

CFO: This is calculated by considering cash flow from operating activities and value of total asset of the beginning of the accounting year.

ROA: return on asset.

Size: This is log value of total assets at the end of the accounting period.

5.4. Sample Selection and Data collection procedures

5.4.1. Sample Selection and data collection

The data collection was made based on the FTSE350 companies of the UK. The reporting period initially for 10 years was targeted, from 2010 – 2020. The data has been collected from FAME (Financial Analysis Made Easy). The data are not available for all the variables in; hence, this research incorporates the data of 6 years from 2014 – 2019. This study has considered the UK Corporate Governance Code based on which the data has been collected. As the UK Corporate Governance Code keeps on changing, its effect on the financial reporting may effective differently. Hence, to measure the current situation of the earnings management, and the impact on this by corporate governance and external audit is very essential. This helps to identify the situations of earnings management and the effectiveness of corporate governance and external audit in current business context.

The firms listed in FTSE350 index are highly monitored by Corporate governance law and also by external audit, hence, the data in relation to this index is quite relevant to measure the effect of both of them on earnings management. The corporations used in this study are listed companies, hence, the data are publicly available.

On the other hand, there are various regulations and compliances the publicly listed companies have to abide, hence, this study has chosen these corporations to identify the impact of corporate governance and external audit on earnings management. The regulations set by corporate governance are strongly adopted in these organisation; in addition, the impact of audit report will have direct impact in the capital market. Hence, these, public listed companies are chosen in this research as the factors of both corporate governance and external audit can have impact on shaping earnings quality in such corporations.

Further, since the data of all the variables and all the years have not been available via FAME, this study has used other sources for data collection. This study has collected the data those are freely available from MSN, National statistics, Gurufocus, and Nasdaq as per the need to conduct this empirical research.

Moreover, there are 11 independent variables based on corporate governance which has been used to from first regression model and 4 control variables, 6 independent variables used in the second model which are based on second model. The independent variables include the factors of audit committee, external audit and other 4 control variables as explained in the first and second model above in section 5.1.

Moreover, as mentioned in equation (v) in chapter, the variables used to calculate total accruals are current asset, current liability, Long-term debt paid in current year, property, plant and equipment, cash; hence, 6 additional variables are used in this research. In addition to this, this study has also estimated the discretionary accruals by using performance matched discretionary accruals. Hence, the variables used in this model are total accruals, total asset, revenue, receivables, property plant and equipment, return on asset. Hence, in total, there are 27 different variables used in this study to conduct the empirical research in terms of hypothesis testing.

In addition to this, there are other further analysis made to analyse the impact of other factors in controlling earnings management considering the first and second model separately. The cross listing, industry wise, positive and negative signed earnings management, big bath effect of the earnings management. While making analysis based on industry-wise, there are 11 different industries and they have been examined separately including them separately in the first and second model. Hence, there are 15 other types of variables used in further analysis of earnings management which has been presented in chapter 6.

Considering all the variables in this study, there are 42 different types of variables used and the data has been collected from 2014 – 2019. The data has been collected based on FTSE350 index; hence, as per the availability of the data, there are 304 companies being sampled in this study. There are 1824 times of data for each variable which makes 76,608 observations.

5.4.2. Analytical Procedure

As this research has embraced the quantitative research methods, hence, various statistical tools are chosen to get the collected data analysed. The statistical analysis has been observed from two different dimensions, which are parametric and non-parametric. The researchers Lin (2011), Hoque *et al.* (2016), Tang (2017) have argued that the data analysis by using parametric test is more robust while the data set are less. This test generates strong results and the inferences can produce better conclusions than non-parametric tests.

However, Parametric tests requires some data validation like the data has to be normally distributed. This approves that the data points have to follow the bell-shaped curve. The skewness test has to fulfil the standard as no skewness at above or below the mean.

Similarly, the other type of test, non-parametric test does not require all these validation as it does not need the data to be in any specific type of distribution; or it can be discussed that it can analyse the distribution free methods. Distribution free methods does not consider the statistical assumption of probability distribution for the data and it does not consider that those data have to be drawn from such particular distribution. Hence, it can be argued that non-parametric test is opposite of parametric test. Therefore, non-parametric test includes non-parametric descriptive statistics, statistical models, inference and statistical tests.

Non-parametric test has been considered as a suitable test in this study too as this test can be considered to be a function of the data those are sampled with no dependency on a parameter. The interpretation of such data necessarily does not show any particular relation with the population fitting of the parameterised distributions.

The nature of the data, the characteristics of the data, basically, signify that what type of analysis and what type of methods to be used. According to Gujarati (2003), Kim *et al.* (2015), it has been suggested that there are four different critical assumptions that must be met to utilise parametric test. The conditions as required for the parametric test has further been investigated and explained below:

5.4.2.1. Normality

This assumption basically considers that the samples must represent the samples from normal distribution populations. While plotting graph based on this kind of data, the graph forms a bell to inverted U shape; the mean value remains in a situation which divides the curve symmetrically on both sides of the mean.

The normal distribution; also recognised as Gaussian Distribution, is basically defined as the most continuous significant continuous probability distribution. When the data is in perfect normal distribution, the statistical calculation presents that Mean = Median = Mode.

5.4.2.2. Linearity

According to this assumption, the parameters should be in the form of linear line: like $Ax + By + C = 0$.

5.4.2.3. Homoscedasticity

According to this assumption, the standard deviation or variance has to be equal while calculating for dependent variables within the group. This assumption requires the variance or standard deviation of the dependent variable within the group to be equal (Salah, 2017; p. 141).

5.4.2.4. Independence of error terms

According to this assumption, the error terms have to be independent and not correlated with other variables of the model.

Simply, as mentioned above, if all the assumptions are met the parametric test are reliable (Judge *et al.*, 1985; Hall and Asterion, 2011). On the other hand, if the assumptions mentioned are not met, parametric test becomes ineffective, hence, non-parametric test is to be required to test (Balian, 1982).

In general, parametric tests are more powerful when all assumptions are met and when the variables under analysis are measured on at least an interval scale (Judge *et al.* 1985). However, if any of the previously mentioned assumptions are violated by the nature of data; non-parametric tests become more appropriate (Balian, 1982; Hall and Asterion, 2012).

As discussed by Judge *et al.* (1985), Westland (2010), the consideration as an alternative of parametric techniques can be made for non-parametric statistical test. This basically does not require making assumptions as above. Interval scale, distribution of the populations, normality, and homogeneity of variance; all of these do not need to be met in non-parametric test.

To ensure the parametric test has been approved, in the next chapter various tools like skewness and kurtosis which helps to ensure the normality assumption as suggested by Mark (2008). Further, there is homoscedasticity assumption to be tested which can be basically done by visual inspection of the residuals. As argued by Mark (2008), Xu *et al.*, (2010), the graphical representation of the residuals value against the independent variables that may

cause the heteroscedasticity. Hence, heteroscedasticity test has been carried out by using SPSS.

In the end, the multi-collinearity test has been taken place by considering the correlation coefficient and variance inflation factors. All 306 companies are included in the test. From the test it can be concluded that the tolerance factor closes to 0 and VIF greater than 10 represents that there is multi-collinearity concern. The researchers Hair (1998) and Kennedy (2008); Hall and Asterion (2011) present that the $VIF > 10$ is harmful as this suggests that there is multi-collinearity concern.

As per the interpretation made above, parametric tests are carried out to examine the data against the OLS considerations. Hence, Non-parametric tests have been carried out in this research since parametric test based on the data in this research has not been approved. Therefore, non-parametric test has been adopted.

Since the normality assumption does not effectively fit while testing, Ordinary Least square test becomes ineffective too. Greene (2007) and Raza and Karim (2016) argues that in such case, the test generates the standard errors, but these standard errors become inconsistent and biased. In such conditioned, pooled regression is reliable as the coefficients over the time period represent constant. The pooled regression provided greater flexibility while modelling the differences in the specific behaviour of the samples where the cross-section is not (Greene, 2007; Abbadi, *et al.*, 2016).

Moreover, GLS regression can be of advantages over OLS regression because of some other reasons too. The homoscedasticity issues and the serial correlation concerns caused inconsistencies and biased under OLS which is not the case under GLS regression. In addition to this GLS regression can be useful in case of the omitted variable bias, auto correlation and heteroscedasticity in the kind of pooled time series data.

Hence, general least squares method is considered as the effective method when the data does not fit the assumptions of the parametric test. This method is useful to fit the coefficients of the independent variables which eventually identify the statistical results in terms of the relationship between independent and dependent variables.

While the conditions of the OLS has not met, the inferences bring the bias results, hence, non-parametric test has been considered in this study so that the biases, while calculating, get reduced.

5.5. Summary

While conducting research, it is very crucial to use right methods of the research. The research methods are designed as per the aims and objectives of the project; hence, in this section, it has been explained in detail to clarify what the research design and research processes are. There are various steps in each phase of this study. Firstly, this study has recommended to estimate the discretionary accruals, which is processed stepwise as suggested above. Secondly, there are monitoring devices which are considered as independent variables. These variables are further divided in two different categories as the attributes of the corporate governance and external audit. Lastly, two different models are formed based on the discretionary accruals and monitoring devices.

Further, the data has been collected from FAME, mainly and used other data base MSN, Nasdaq, Yahoo, and GuruFocus. These data bases are used mainly to find the data for the variables of corporate governance and external audit. This research has incorporated the data from 2014 till 2019. This study has been prepared based on the quantitative methods, hence, positivism philosophy has been adopted. The study has used GLS regression to test the model where hypotheses are tested, this study has followed the cross-sectional approach.

The summary of the variables is presented in the table below:

Symbol	Variable	Operationalisation
EM	Earnings management	Discretionary Accruals in its absolute value based on performance measured discretionary accruals model.
BoardSize	Board Size	The total number of directors in the board committee.
BoardInd	Board Independence	The independence of the board measured dividing total board members by independent non-executive members.
BrdMeet	Board Meetings	The number of meetings held in an accounting period by the board members.
chairmanind	Chairman Independence	This has been created as dummy variable. The value is taken as 1 if the chairman is independent otherwise it is 0.
FemaleBoard	Gender diversity	The percentage of female presence in the board.
NomComInd	Nomination Committee Independence	The presence of Non-executive directors in the board in the form of proportion.
Remcomind	Remuneration Committee Independence	This is also dummy variable, which considers one if the members of the committee are entirely independent; and zero otherwise.

NEDMeet	Non-executive Directors' Meetings	This is considered as dummy variables if the non-executive directors meet in absence of chairman, zero otherwise.
NEDFee	Non-executive directors' fees	The total amount in a year paid to each Non-executive director.
Blockholder	Block holders' ownership	This is regarded as a dummy variable. The value one is considered when the external stockholder owned 10% and more; zero otherwise.
ManOwn	Managerial Ownership	managerial ownership is calculated as the percentage of shares held by executives out of the total number of shares.
InstOwn	Institutional Ownership	The percentage of shares outstanding owned by institutional owners.
ROA	Return on Asset	The percentage of return on Asset.
AudFee	Auditing fees	The fees paid for auditing services.
NonAudFee	Non-auditing fees	The fees paid to non-auditing Services.
AudComSize	Audit Committee Size	Total number of Members in the audit committee.
AudComMeet	Audit Committee Meetings	Total Number of Meetings by audit committee held in a year.
IndusSpec	Auditors with Industrial specialist	This is regarded as dummy variable. If the firm has been audited by specialised auditor, the value has been considered as 1; otherwise, zero.
AudExp	Auditors' Expertise	This is considered as dummy variable. The value one is taken if there is financial expertise in the committee, otherwise, zero.
Leverage	Leverage	This is ratio between the long-term debt and total asset.
CFO/TA	Cash Flow from Operating Activities	This is calculated dividing cash flow from operating activities by value of total asset of the beginning of the accounting year.

Table: 4.1

Chapter – Six: Data Analysis

6.1. Introduction

The presentation of the data, the calculations, the analysis based on the data and research methods are demonstrated in this section. As per the primary question of the research is ‘do the variables of corporate governance and external audit impact on the earnings quality?’, this research has performed various tests and provided empirical evidences; and the analysis are made based on those evidences and tests.

There are seventeen hypotheses formed; hence, this chapter includes the tests based on those hypotheses by adopting the idea of the empirical research models as formed in chapter five.

As the analysis grow in this section, there are different types of tables formed. The relationship between different variables of non-discretionary accruals; and discretionary variables are presented in table 6.2. Table 6.3 illustrates univariate analysis including descriptive statistics. Further, table 6.4 illustrates the correlation coefficients, 5.6 represents the tests of hypotheses, 6.6 demonstrates the development parts and more analysis including robustness checks. Table 6.7 presents the summary part of the analysis and findings.

6.2. Earnings Management (Discretionary Accruals)

As discussed in the chapter five, the present study uses discretionary accruals as a measure of earnings management. Discretionary accruals (DAC) are defined as the difference between total accruals and non-discretionary accruals, where discretionary accruals are estimated using the Kothari *et al.* (2005) model as follows:

$$TAC_{i,t} = \alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t} - \Delta Rec_{i,t}}{TA_{i,(t-1)}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{TA_{i,(t-1)}} \right) + \beta_3 (ROA_{i,(t-1)}) + \epsilon_{i,t} \dots\dots\dots (Xiii)$$

TAC = Total accruals,

TA = Total assets of the beginning of the year,

ΔREV = Change in net revenue,

ΔREC= Change in account receivables,

PPE = Gross Property, plant, and equipment,

ROA= Lagged return on assets.

The above equation (xiii) has been used to estimate the value of total accruals which is used to identify performance matched discretionary accruals developed by Kothari *et al.* (2005). The table 6.1 presents the estimation of the total accruals.

The parameters developed in table 6.1 helps to identify the value of non-discretionary accruals and the formula for this has been presented in equation xv. Total accruals have been developed by the sum of discretionary accruals and non-discretionary accruals. Hence, this can be expressed in equation form as $TA = NDA + DA$ (xiv)

Based on the above equation, non-discretionary accruals can be calculated as $NDA = TA - DA$; & discretionary accruals is considered as $DA = TA - NDA$ (xv)

Hence, this can also be expressed as:

$$DAC_{i,t} = TA - \left(\alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t} - \Delta Rec_{i,t}}{TA_{i,(t-1)}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{TA_{i,(t-1)}} \right) + \beta_3 (ROA_{i,(t-1)}) \right) \dots\dots\dots (xvi)$$

The equation to calculate for non-discretionary accruals, as per the table 6.1, has been identified as follow:

From the calculation of Earnings management, this is identified that the most of the corporations have practised income decreasing discretionary accruals, which means that the organisations have practised earnings manipulation to lower the profit amount of the companies. This finding is also supported by Mora and Sabater (2008) who has identified that the corporations have practised income decreasing practices of earnings management. They argue that the companies do take part in such activities due to income smoothing technique. The purpose of income smoothing is to bring stable financial status in the statements.

Income smoothing technique is identified in almost all industries of the organisations while there are better results in financial statements. The evidence from the past researchers Jansen & Nahuis (2015), Leuz *et al.* (2016) allude that when the corporations are doing better or gaining more profit, they most likely perform the income decreasing accounting practices. Hence, this is obvious that the economy was getting better from 2011 onward in the UK, which caused income decreasing earnings management practices.

The other reason also can be because that corporations act just in opposite way from above mentioned when economy is in downturn. The research on earnings management has found that earnings management the corporations practise earnings manipulation as income increasing earnings management in the economic crisis and income decreasing earnings management in economic surge Jansen & Nahuis (2015), Leuz *et al.* (2016).

The value of earnings management is used in form of absolute value considering only the magnitude which indeed helps the analysis to be made better. The direction aspect of the discretionary accruals has not been considered while making analysis.

Further, the coefficients are estimated by using Ordinary Least Square method based on the sampled data from FTSE350 index. Hence, non-discretionary accruals are calculated based on the obtained parameters from regressions of the total accruals; by using the linear equation

as suggested by performance matched discretionary accruals model. Obviously, discretionary accruals are calculated as per the formula $DA = TA - NDA$. The calculation of the total accruals is done by incorporating the corporations of FTSE350 companies; out of which, this research has embraced 304 companies from 16 different industries including the data from year 2014 till 2019.

Model			Unstandard- ized Coeffi- cients B	Sig.
1	(Constant)		-.052	0.020
	1/TA	α	-1453.340	0.051
	Change in (Sales-Rec)/TA	β_1	.003	0.0576
	PPE/TA	β_2	-.435	0.000
	ROATA	β_3	-2.743	0.0843

Table 6.1

$$NDA = -0.052 - 1453.340 * 1/TA + 0.003 * \text{Change in}(\text{Sales-Rec})/TA - 0.435 * PPE/TA - 2.743 * ROATA. \dots\dots\dots (xvii)$$

The table 6.1 above presents the coefficients to calculate the earnings management based on the performance matched discretionary accruals model. This table presents the negative sign (β_3) in respect to property plant and equipment which signals the income decreasing earnings management; this is obvious as depreciation and amortisation factors are used while performing the financial statements.

The coefficient β_1 has positive sign which represents the relationship between Changes in revenue and total accruals, hence, there is positive impact of discretionary accruals. The main idea in this is because the sales have been increased from years to years which represents that the change in revenue is positive which has positive impact in generating profit; most of the time. However, there is impact on increasing and decreasing earnings management as per the increment in account receivable and payable, respectively.

While mentioning the relevance of performance matched discretionary models, this model has been the most effective model. Many researchers have identified that the performance matched discretionary accruals is the most significant by the past research. It is identified that this model is significant at 1% confidence level. The power of the model has been identified as 57% by the researchers, hence, this research has adopted the idea of this model (Bernard and Skinner, 1996 and Davidson *et al.*, 2005).

After this justified reason which indicates that the performance matched discretionary accruals is the most significant one, this research has embraced the idea of this model and has calculated the nondiscretionary accruals. Discretionary accruals, then, has been calculated by reducing non-discretionary accruals from total accruals.

6.3. Descriptive statistics and Univariate Analyses

The table 6.2 encompasses all the variables of the corporate governance whereas table 6.3 has encompassed the descriptive data of high and low earnings management. The median of the first model has been presented in table 6.4. The median of the earnings management has been used to identify the high earnings management and low earnings management; where high earnings management is greater than median of earnings management; and low earnings management is smaller than median of earnings management.

Further, the descriptive statistics has been used in table 6.5 while 6.6 has included low and high earnings management based on the second model. As in the first model, the median of the table 6.7 has been used to identify the value of high earnings management and low earnings management. This table has been used to compare the relationship between high earnings management and independent variables of the external audit; and low earnings management and variables of external audit.

The descriptive tables are formed by using SPSS. The calculation includes the maximum value, minimum value, the mean, median, standard deviation, Skewness and Kurtosis. This is basically used to observe the data and analyse the descriptive data in relation to the earnings management.

6.3.1. Descriptive Statistics and Univariate Analysis for the First Model

The concern on earnings management has been immensely an important topic of discussion since 2000 and after. Currently, the discussion on this topic has not prioritised, hence, this research has been done to re-open the discussion on earnings manipulation. From the table 6.2, the absolute minimum value of earnings management is 0.001 which is similar value to the previous research done by Klein (2002) based on the US firms. However, the absolute minimum value is quite far away from the absolute mean value (0.49) which is different from the researchers of the past researchers (Habbash, 2009). The difference between minimum value and mean value was quite closer in the research done in the past literatures as the minimum value is 0.0001 and the mean value is 0.05. Hence, it can be said that the practice of earnings management in recent days are widely made. Similarly, the absolute mean based on Canadian firms are found as 0.06 and 0.03 based on the French firms by Zeghal (2006). Moreover, it can be argued that the various values of discretionary accrual between firms signifies that the different managers have different level of opportunistic behaviours and different level of discretionary rights.

Furthermore, considering the independence factors in relation to board of directors and nomination committees, in this study, are found as 49% and 60% respectively. The practice of independence has been much improved in these days from the days it used to be practised

before. In the past, the research done by Surya (2012), Vishnu (2015), Kumar (2017), have identified that the independence committee in those time periods were less than 40% and 45%. However, according to the code, the independent directors in the board have to represent at least 50%.

The independence of the nomination committee has to be 100% according to UK Corporate Governance Code, hence, this has not been maintained by most of FTSE350 companies as per sample selected in this research. From FTSE350 companies, the data of the 304 companies was available for the research. The reason for the earnings management practice may have been still more because of such reasons. The governance of the corporations has not been totally followed the UK corporate Governance Code.

According to the Code, at least 50% of the directors have to be non-executive directors if the chairman is not independent, conversely; if the chairman is independent, 33% of independence in the board has to be maintained; hence, in relation to board independence, 99% of the companies from the sampled data have met this criterion. Out of which 164 companies have less than 50% independent members in the board whereas 140 companies have employed more than 50% members in the board.

Further, almost 75% of the companies based on the sampled date have managed to maintain the independence of remuneration committee and 100% independence for the independence of chairman in FTSE350 companies. The best corporate governance practice advises to have separate CEO and chairman which has been established by the organisation listed in FTSE350 companies.

In the past research, when the presence of CEO and chairman were same person, the selection of these two variables used to be relevant for the analysis in the past. Considering the present situation of FTSE when the existence of CEO and chairman are different person, inclusion of the variable in the model is not relevant. The concentration of the power used to be in one person. In many past literatures Colaco *et al.* (2011), Jahmani *et al.*, (2016), Chatterjee (2021) it has been found that the presence of CEO and Chairman are same person due to which the power gets concentrated in one place. In such situation the manipulation was most likely done while preparing financial statements.

Hence, the new model after omitting Chairman independence is as follow:

$$DAC_{ij} = Boardsize_{ij} + Boardind_{ij} + Brdmeet_{ij} + Remcommind_{ij} + Noncommind_{ij} + Femaleboard_{ij} + NEDFee_{ij} + Blockholder_{ij} + Manown_{ij} + Instown_{ij} + Leverage_{ij} + CFO_{it} + size_{ij} + ROA_{it}$$

73.37% companies have independent directors in the remuneration committee. While calculating the mean value of discretionary accruals based on the independent directors it has been found as 0.48 whereas the mean value of earnings management is 0.49 where there is no

independence of the remuneration committee. This simply represents that the earnings management practice is negatively associated with the independence of the remuneration committee.

While observing the standard deviation, this is 0.313 with the organisations where independence directors in the remuneration committee are and it is 0.315 where there are no independence directors in the committee. While comparing both figures, it can be concluded that there is no very high significant different in the practice of earnings management, however, it has been identified that the independence director can restrict the practice of earnings management by the directors.

In the past, the study of earnings management according to the presence of independence of remuneration committee has not been done in this manner. However, Maurya, (2009), U (2014) has discussed the influence of remuneration committee independence on earnings management. He has also found the same result. He admitted that the independence of the directors has negative influence on the manipulation of the earnings quality.

Further, while considering board size, the minimum members in the board are 3 and the larger members in the board are 16. The average numbers of members in the board based on the FTSE350 companies are found as 9.828. In practice, the range of the board members are from 3 to 31 in the UK. The FTSE350 companies are within the set of the UK culture.

While comparing the effectiveness of board size in controlling the manipulation of the earnings quality, this research has categorised the board size as more than average and less than average. While categorising it has been identified that 54% of the companies have more than average and 46% of the companies have less than average. While comparing the value of earnings management based on larger numbers of board and smaller numbers of board, it has been identified that the average of EM value in larger boards is 0.498 while the average of EM in smaller boards are found as 0.477.

This study finds that the practice of earnings management in larger boards are higher than in the smaller board. This finding does not support the hypotheses, however, the past literatures (Peasnell, 2005; Maurya, 2009) have similar findings while identifying the relationship between board size and earnings management. They also have similar understanding; hence, concluded that while there are larger boards, the meeting cannot end with productive conclusive. The arguments go on and cannot reach in the constructive conclusion. So, it cannot basically restrict the earnings management because the meeting cannot pay proper attention in this matter while the meetings are held in many board members.

While observing the presence of in the board, the average value of the female presence in FTSE350 companies are 46.94 percent. According to Grosvold, *et al.* (2007), Bhattacharya *et al.* (2013) it has been found that the presence of female members in the board have been massively increased. They are almost 50% these days but their presence used to be quite low before. If the data is observed, they were 5% in 2003 and 8% in 2006. This type of female representation in the board has been increased and at present, this is 46.94%.

With regard to the presence of female in terms of earnings management, there is lower value of earnings management while the presence of female is higher. The value of earnings management is only 0.22 while the presence of female in the board is 48%. Similarly, the value of earnings management is 0.76 while the female presence in the board is 46%. Hence, this can be concluded that the more presence of female in the board can have negative impact in earnings management.

The finding of this study has been supported by the findings of (Brammer, *et al.*, 2007; Kumar, 2017) in which he has identified that the presence of female in the board has reduced the level of earnings management. However, in their study, they found that the presence of women in the board is quite less. Their research was based on the 543 public limited companies of the UK as per the list in FTSE All-Share Index 2002. They also concluded that the gender diversity has to be much increased.

Considering the meeting of non-executive directors, this study has created dummy variables. The meeting held by non-executive directors in absence of is considered as 1 otherwise, it is considered as zero. While observing the data, it is found that 73.7% of the sample corporations have managed to hold the meeting among non-executive directors. This is good practice in comparison to the past performance as Maurya, (2009); Jahmani *et al.* (2016) has found only 58% of the sampled firms have managed to get the meetings held by non-executive directors in absence of the executive directors.

While observing the data based on the meetings held by non-executive directors, this is identified that the meetings are held at least 1 time and maximum 4 time a year by non-executive directors while board meetings are held 5 time in average. Similarly, in terms for fees of non-executive directors, it is found that £26,341.75 the minimum and at maximum level it is £98,135.84. The mean value of non-executive director's fees has been found as £51,963.88. In comparison to past literatures, the fees for the non-executive directors have been massively increased. As per the report by Maurya, (2009); it has been admitted that £34,000 has been found as an average value which has increased to 51,963 at present.

However, while associating Non-executive directors meeting, the fees paid to them with earnings management, it is found that the number of meetings has negative relationship with the manipulation of earnings. While the average fees are 53037.31, the value of discretionary accruals is 0.76; but the value of earnings management at average fees (50887.61) of Low earnings management is 0.22. This signifies that the more meetings are held, hence, more fees to pay to the non-executive directors. Also, more meeting if continued without conclusions, this obviously cost more money for the organisation. On the other hand, ineffective and inconclusive meeting just cost money but no output for organisation. Hence, more meeting does not seem to be effective in controlling earnings management.

Further, the next variable is ownership structure which has been considered as independent variable in the first model of this study. While investigating the impact of ownership structures on controlling earnings management, this study has used three variables which are managerial ownership and institutional ownership, block holders. While observing the data in those variables it is identified that the average of managerial ownership is 0.14% and institutional

ownership is 39.51%. This study accommodates that the managerial ownership at present has gone down in compare to past research. In the study by Peasnell *et al.* (2005) has reported that there was 2% of the shares were owned by managers of the organisation whereas mean of institutional ownership was only 24%.

In comparison to past data, it has been observed that the managerial ownership has gone down whereas the institutional ownership. In relation to earnings management, this study has provided very strong evidence on managerial ownership has negative relationship with earnings management. The average high EM is 0.76 while the average managerial ownership is 0.13 whereas the average Low EM is 0.22 while the average managerial ownership is 0.15. Hence, it seems that the more the managerial ownership the less the earnings management.

The average institutional ownership of the FTSE350 corporations are calculated as 39.51. The data according to the past literatures it has been found that 21%, this represents that the business is progressing via institutional ownership model. This may be because modern days are quite complex in terms of business start-up and to run. Hence, institutional ownership has taken over the other models. While scrutinising the relationship between earnings management and institutional ownership, it is found that the institutional ownership has not made visible impact on controlling earnings management. The average institutional ownership almost similar in cases of both high and low EM.

This finding is in the line with the findings of Peasnell *et al.* (2005) and Short and Keasy *et al.* (2002); Zang, (2012). They have presented their findings based on the FTSE350 companies which arguments the managerial ownership has negative relationship with the value of discretionary accruals. In case of Institutional ownership, this study has findings similar to past research by Bergstresser and Philippon (2006). They have identified the slight different in the average value of institutional ownership with high and low earnings management. This cannot really conclude that the ownership structures have any significant impact of earnings management.

In terms of block holders, this study confirms that the average value of earnings management is 0.49 where there is presence of the block holders and it is only 0.47 when there are no block holders. While creating this variable, it is considered that the external shareholders who owned more than 10% and more are considered as 1 and who owns less than 10% are considered as zero. Based on this, it is identified that there is positive relationship of block holders with earnings management. It seems that the block holders are motivated with their own interest hence, support in manipulating earnings quality.

This study has argued in a way the other researcher Ronen *et al.*, (2006) has argued. Their findings in relation to identify the impact of block holders on earnings management have been found as positive. Hence, their research also has not supported to hypothesis as this study. It was assumed that there is negative relationship between earnings management and block holders but this has been rejected as per the descriptive analysis.

In terms of CFO, the mean value is .023 with lagged by total asset. This value seems to have been increased at present in compare to Peasnell *et al.* (2005) and Maurya, (2009) who has

identified -0.11 in both times. This value is much lower than the average value of ROA; where average value of ROA is 8.38. While observing the relationship of ROA and CFO with earnings management, it is found that the value of earnings management has been increased with increased value of ROA and CFO.

The tables 6.2, 6.3 and 6.4 are prepared based on first models. The variables of the corporate governance are used as independent variables of the first model; therefore, the comparative study between corporate governance variables and earnings management have been analytically made. Similarly, tables 6.5, 6.6 and 6.7 are prepared based on second models. The variables of external audit have been considered as independent variables to form the second model; hence, the comparative study has been made analytically based on these tables. In the following, parametric and non-parametric tests have been presented.

This research basically attempts to identify the impact of corporate governance and external audit in constraining earnings management. Various models including Deangelo model, Jones model, modified Jones model, performance matched discretionary models can be used to identify discretionary accruals. However, Performance matched discretionary accruals have been considered as the best one because of its variables used which enable to reduce the errors. It has been discussed that corporate governance and external audit variables have significant impact on earnings management. Moreover, it has been analysed that the impact earnings management can be differ from industry to industry and the managers' intentions and obligations in practice of earnings management.

Moreover, the table 6.2 presents the minimum and maximum value of the variables for first models. This also presents that how much the higher and lower values of each variable away from the mean and median. The minimum and maximum values of each variable basically show the higher and lower value of the sample. These values basically tell that how high and low the performance of the respective variable are. For instance, the descriptive data of the

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DAC1	1520	0.0002	1.34	0.4882	0.31	0.125	0.063	-1.050	0.125
BoardSize	1520	3.0000	16.00	9.8289	2.45	0.104	0.063	0.089	0.125
BoardInd	1520	30.0000	70.00	48.7529	8.03	0.210	0.063	-0.376	0.125
BrdMeet	1520	4.0000	8.00	4.7533	0.92	1.229	0.063	0.974	0.125
ChairManInd	1520	1.0000	1.00	1.0000	0.00				
RemComInd	1520	0.0000	1.00	0.7336	0.44	-1.058	0.063	-0.883	0.125
NomCommInd	1520	51.0000	71.00	59.6954	4.17	-0.460	0.063	-0.280	0.125
FemaleBoard	1520	13.3333	100.00	46.9460	14.01	0.391	0.063	0.065	0.125
NEDMeet	1520	0.0000	1.00	0.7368	0.44	-1.077	0.063	-0.842	0.125
NEDFee	1520	26341.7472	98135.84	51963.8779	15177.36	0.544	0.063	-0.577	0.125
Blockholder	1520	0.0000	1.00	0.7007	0.46	-0.877	0.063	-1.232	0.125
ManOWN	1520	0.0142	2.31	0.1402	0.17	8.790	0.063	96.616	0.125
InstOwn	1520	0.0000	98.75	39.5106	28.36	0.003	0.063	-1.240	0.125
ROA	1520	-63.2525	311.17	8.3777	18.57	9.581	0.063	129.379	0.125
CFO/TA	1520	-6.2717	0.99	0.0231	0.41	-3.821	0.063	47.596	0.125
Growth	1520	0.1330	850.71	29.1752	49.16	8.803	0.063	107.791	0.125
Leverage	1520	-211.8571	330.92	0.6223	16.36	13.255	0.063	301.635	0.125
Valid (listwise) N	1520								

Table 6.2

board size has represented that there is smaller board including 3 members whereas the larger board size has 16 members. There are indeed huge differences as the range is 13 (16-3). Similarly, if the descriptive data of the board meeting shows that there are 4 meetings held annually as minimum; whereas the maximum meetings held by the board are 8. Again, the range in numbers of meeting are quite bigger. Further, based on the female participation in the board, the minimum presence of the female member in the board is only 13.33% which is lower. If the maximum value is observed, it is identified that 100% presence of the female in the boards are practised by some corporations.

Further, while segmenting the Earnings management as high and low for both models, the relationship between discretionary accruals and corresponding variables can be interpreted.

According to past researchers Davidson *et al.* (2005), Dechow *et al.*, (1996), Dechow and Di-chov, (2002) and Yang (2010) the high and low value of earnings management has relationship with variables of corporate governance but as per the data based on FTSE350 companies, this has not really been relevant. The data is presented below:

While observing the descriptive values in terms of mean and standard deviation, the mean does not seem to demonstrate any significant relationship between the corporate governance variables and discretionary accruals. According to the research presented by past researchers Latridis, (2009) and Paolone *et al.* (2015), in context of corporations of Cyprus, the same result has been identified. However, the other researcher has obtained the negative relationship of earnings management with number of Board members, independence of remuneration committee, nomination committee, presence of more female on the board.

As per the findings in this research based on FTSE 350, it has been identified that the earnings management is slightly lower when the presence of women in the board is slightly higher. This can conclude that the higher the female members in the board, the lower the earnings management. Similar situation is with Return on Asset. The earnings management practice has gone down when there is slight change in return on asset. However, there is no significant relationship between the variables of corporate governance and earnings management according to the availability of the data presented below in the table.

The high EM is considered when the EM value is more than the median (0.51), otherwise, it is lower when it is less than median value (0.51). Similarly, the standard deviation value represents that how competitive the data are. This computation was made by using SPSS which is presented in table 6.4. The table 6.3 presents the mean value and standard deviation of the data based on the high earnings management and low earnings management. All the data related to higher earnings management and lower earnings management are separately categorised; and mean and standard deviation of the data are separately calculated.

First Model High EM			First Model Low EM	
	Mean	St Dev	Mean	St Dev
DAC1	0.758255	0.166648	0.21737	0.151315742
BoardSize	9.99343	2.387734	9.664032	2.506279202
BoardInd	48.64846	8.167076	48.8577	7.902638429
BoardMeet	4.751643	0.929106	4.754941	0.901785807
ChairmanInd	1	0	1	0
RemComInd	0.737188	0.440451	0.729908	0.444300009
NomCommInd	59.80444	4.144089	59.58615	4.197701833
FemaleBoard	46.1711	13.08833	47.72287	14.84601472
NEDMeet	0.738502	0.43974	0.735178	0.44152941
NEDFee	53037.31	15673.62	50887.61	14594.13311
Blockholder	0.717477	0.450522	0.683794	0.46530081
ManOwn	0.130309	0.113074	0.150068	0.2122238
InstOwn	39.51706	29.02721	39.50406	27.69985125

ROA	8.490268	18.49484	8.264787	18.65337234
CFOTA1	0.025149	0.434915	0.021018	0.376172833
Growth	28.36266	42.63959	29.98994	54.94709149
Leverage	0.913058	17.73129	0.330825	14.86895154

Table 6.3

	N	
	Statistic	Median
DAC	1520	0.51
BoardSize	1520	10.00
BoardInd	1520	48.61
BrdMeet	1520	5.00
ChairManInd	1520	1.00
RemComInd	1520	1.00
NomCommInd	1520	62.00
FemaleBoard	1520	44.44
NEDMeet	1520	1.00
NEDFee	1520	48961.87
Blockholder	1520	1.0
ManOWN	1520	0.11
InstOwn	1520	45.49
Leverage	1520	0.22
ROA	1520	5.44
CFO	1520	4236.50
Growth	1520	18.62
Valid N (listwise)	1520	.025

Table 6.4

6.4. Second Model: Descriptive statistics and Univariate analysis

As per the data presented in table 6.5; which has been prepared to study the impact of corporate governance on the earnings management, the mean value of discretionary accrual has been found as 0.488 and the minimum value is found as 0.00018 which is close to zero. These values are in the line with the previous tables 6.2 which was prepared for the study of the impact of corporate governance on earnings management.

The practice of earnings management in these periods (2014 – 2019) seems to be higher than in the past period. Maurya, (2009 has studied the earnings management based on the FTSE350 and found that the average value of discretionary accruals is 0.07. However, the minimum value is close to the value found by this study.

As argued by Peasnell *et al.* (2005), the practice of earnings can be much higher when there is good economic condition, this study has admitted similar kind of conclusions as the

economic conditions in the UK in those periods were getting better and the practice of earnings management seems to be much higher.

The data from 2014 to 2019 for the second model in terms of audit fees and non-audit fees shows that 74.62% and 25.38% respectively. As per the calculation, the average value of earnings management is 0.76 while average value of audit fees is 3121.47. Similarly, the average value of EM is 0.22 while the audit fees is £2484.45. While observing the impact of audit fees on earnings management, it can be seen that the higher the audit fees is, the more in the value of discretionary accruals. In other words, it also can be concluded that audit fees are positively associated with audit fees.

In terms of non-audit fees, the evidence approves the hypothesis according to descriptive statistics. The value of average value non-audit fees is 1018.774 while the EM is higher (0.76). Similarly, the non-audit fees are 888.4617 while the value of earnings management is lower (0.22). This approves that the higher the non-audit fees the higher the manipulation in earnings quality.

While considering audit committee meeting, it is identified that the average meetings of audit committee is 6.52 which is similar to US figure as per the research by (Afzal and Habib, 2018). The corporate governance of the UK, at the start, of the 21st century used to be considered as less effective than US (Xie *et al.*, 2003). Considering the number of meetings held by audit committee, it seems that the UK corporate governance is being stronger that before.

If the data is observed in the UK the average number of meetings used to be 3.45 while the average number of meetings in the US was 4.53 in 2009 (Maurya, 2009). The other reason of being number of audit committee meetings lower may be because of the requirements of corporate governance of the nation. However, the effectiveness of the meeting has been empirically tested such that the new regulations have been implemented.

Considering the effectiveness of the audit committee meetings in terms of earnings management, this study can admit that the number of meetings have negative relationship with manipulating earnings quality. While observing data the average of higher EM is 0.76 while the average meetings of audit committee are 6.47. Similarly, the average of lower EM is 0.22 while the average meetings of audit committee is 6.57. The data does not show the significant negative relation because the values of number of meetings are slightly different, which is just 0.10. contrarily, it can also be argued that the small change in number of meetings can have huge impact on earnings management.

The other independent variables associated with second model is auditors those are specialist in the specific industry. This is represented as IndusSpec. This is created as dummy variable.

If the specialised auditors of a relevant industry are present in the audit committee, this considers the value 1 otherwise zero. Hence, to identify the impact of this variable on earnings management, the value 1 & 0 has been selected separately.

The average value of earnings management represents the impact whether the earnings management has been affected by IndusSpec. The average value of earnings management is 0.49 while there is presence of auditors with industry specialism whereas the average value of earnings management is 0.46 while there is no presence of auditors with industrial specialism. From the observation it is found that IndusSpec does not have any significant impact on the earnings management.

This study also has considered the audit committee size as one of the independent variables in the second model. The calculation of the data presents that the average members in the board is 12.80. This data is much higher than the past audit committee size. In the accounting period ending in 2000 was 2.56 while this figure has been increased to 3.58 in 2003 while UK Corporate Governance Code has recommended that there should be at least 3 members in the committee. This figure has massively gone up by 2019.

From the descriptive data analysis, in terms of the size of the audit committee, it has been found that the larger audit committee size has negative relationship with the earnings manipulation. This has rejected the null hypothesis. The average of audit committee size is 12.71 while the average of higher EM is 0.76. Similarly, the average of audit committee size is 12.89 while the average of lower earnings management is 0.22. Hence, it can be concluded that the small change in audit committee size can have huge impact on manipulation of the earnings quality. These findings are in the line with the findings of Yang and Krishnan (2005) who have concluded that the audit committee sizes are negatively associated to earnings management.

Nonetheless, the study by Lipton & Lossch (1992), Zuo and Guan (2014) have argued that the meetings held by larger board may not necessarily find constructive conclusion and may not reach to agreement, hence, meeting can be increased. Their study identified that the number of audit committee meetings and larger audit committee size cause higher level of manipulation in earnings quality. Holding more audit meetings suggest that the directors of the committee have spent their time on bureaucratic meetings, so, they have been able to discuss on the earnings quality agendas.

This study presents that 90.79 firms from FTSE350 companies have expertise in the audit committee. This figure shows that there are huge improvements in terms of making qualified and strong audit committee. Based on the research by Maurya, (2009), 77% of the firms from FTSE350 have included the expertise in the committee. In this research, AudExp is one of the independent variables of the second model. Presence of expertise is believed to have significant impact on earnings management as per the past researchers Salch *et al.* (2020), Lopes (2018) who have identified the relationship between them.

This study presents that while there is presence of expertise in the committee the average value of earnings management is 0.49 whereas the average value of earnings management is only 0.44 where there is no presence of expertise in the committee. This study has considered as presence of expertise in the audit committee where there is at least one member who is qualified in accounting and finance. Hence, dummy variable is created. The presence of expertise is considered as 1; otherwise zero. Based on the descriptive data, this study presents that there is no significant relationship between accounting expertise and earnings management.

There are some control variables included in the model where cash flow from operating activities and managerial ownership are present in both models. They are not significant in both models where the other common variable for both model is growth. This has significant impact on earnings management. The higher the growth, the lower the value of earnings management. Contrarily, the past researcher by Peasnell, (2005) and Maurya, (2009) present that cash from operating activities and managerial ownership have significant relationship but growth has no significant relationship with earnings management.

The use of descriptive study in this research has played very important role to identify the impact of corporate governance factors and external audit factors on the manipulation of earnings quality. However, the findings are further tested and analysed by using multivariate methods.

Descriptive Statistics									
	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
DAC1	1520	0.000	1.34	0.49	0.314	0.125	0.063	-1.050	0.125
AudFee	1520	3.800	136442.00	2803.38	8175.256	9.970	0.063	136.450	0.125
NonAudFee	1520	1.000	106718.00	953.70	3630.453	18.373	0.063	487.831	0.125
AudComSize	1520	7.000	22.00	12.80	2.799	0.389	0.063	-0.177	0.125
AudComMeet	1520	4.000	14.00	6.52	2.035	0.646	0.063	0.114	0.125
IndusSpec	1520	0.000	1.00	0.89	0.311	-2.519	0.063	4.352	0.125
AudExp	1520	0.000	1.00	0.91	0.289	-2.824	0.063	5.982	0.125
Leverage	1520	-211.857	330.92	0.62	16.362	13.255	0.063	301.635	0.125
CFO/TA	1520	-6.272	0.99	0.02	0.407	-3.821	0.063	47.596	0.125
ManOWN	1520	0.014	2.31	0.14	0.170	8.790	0.063	96.616	0.125
ROA	1520	-63.253	311.17	8.38	18.568	9.581	0.063	129.379	0.125

Growth	1520	0.133	850.71	29.18	49.162	8.803	0.063	107.79 1	0.125
Valid (listwise)	N 1520								

Table 6.5

Median: Second Model

	N	
	Statistic	Median
DAC	1520	0.51
Audfee	1520	700.00
NonAudFee	1520	200
AudComSize	1520	12.00
AudComMeet	1520	6.00
IndusSpec	1520	1.00
AudExp	1520	1.00
ManOwn	1520	0.11
Growth	1520	18.62
Leverage	1520	0.22
ROA	1520	5.45
CFO/TA	1520	4236.50
Valid N (listwise)	1520	.025

Table 6.6

The median of the earnings management as presented in table 6.6 has been calculated for the second model too. SPSS has been used to calculate the median value in relation to second model too. This median value has been considered to find the separation between the higher EM and lower EM. The higher value than the median (0.51) has been categorised as high earnings management and lower value than median value (0.51) has been considered as low EM. Base on the higher and low earnings management, all the variables are categorised and mean and standard deviation of those variables have been calculated so that the impact of those variables on earnings management can be analysed.

Second Model	Second Model
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High EM			Low EM	
	Mean	St Dev	Mean	St Dev
DAC1	0.758255	0.166648	0.21737	0.151316
AudFee	3121.472	10103.23	2484.448	5602.33
NonAudFee	1018.774	4637.415	888.4617	2200.379
AudComSize	12.70696	2.757681	12.89196	2.8394
AudComMeet	6.47569	2.018272	6.5639	2.051658
IndusSpec	0.906702	0.291041	0.876153	0.329624
AudExp	0.923784	0.265517	0.891963	0.310632
Leverage	0.913058	17.73129	0.330878	14.86895
CFOTA1	0.025149	0.434915	0.021018	0.376173
ManOWN	0.130309	0.113074	0.150068	0.212224
RoA	8.490268	18.49484	8.264787	18.65337
Growth	28.36266	42.63959	29.98994	54.94709

Table 6.7

6.5. Industry-wise: Descriptive statistics

6.5.1. Industrywise: Descriptive Statistics for First Model & Second Model

This research in the previous section has analysed the impact of corporate governance and external audit on earnings management; based on the descriptive statistics. In addition, the practice of earnings management may have been done differently by different types of organisation. Hence, the performance of the earnings management based on the industry may be similar or maybe not. This study investigates the impact of same variables of first model and second by categorising the samples in respective industry on the earnings quality.

There are some researchers Frankel *et al.* (2002) and Srinidhi and Gul, (2007), Maurya, (2009), Zermi *et al.* (2012) who have studied the performance of earnings management industry-wise and the impact of corporate governance on the earnings quality. In their research they have collected the data from six largest industries. Following those research, this study has included 11 largest industries from FTSE350 index based on the UK. These industry has included 70.41% of the sampled firms.

The industries are categorised as Engineering and consultancy, Distribution and Supplier, Food Services, Home and Building services, Hospitality Industry, IT Company, Manufacturing Company, Oil and Gas Company, Pharmaceutical Company, Retail Industry, Support Industry, Trading and Mining Company.

The presentation of the variables in the table 6.8; in the appendix section, demonstrates the industry-wise mean, median and standard deviation of variables. The average value of discretionary accruals is presented in terms of each industry. The value of discretionary accruals varies from industry to industry. This study has identified that the value of discretionary accruals in Engineering and Consultancy is different from the value of Food services and Home and Building Services.

Further, there are other industries Hospitality Industry, Manufacturing Company, Pharmaceutical Company, Retail Stores and Trading and Mining Company have different level of earnings management (closely equal to 0.51). The average value of earnings management (closely equal to 0.50) is almost equal to Engineering and Consultancy; Distributor and Supplier, IT Company, Oil and Gas Company. Similarly, there are some other industries like Food Services, Home and building services has equal amount (closely equal to 0.48) earnings management.

In this study, it has been paid proper attention to the earnings management industry-wise and identified that the performance of earnings management varies as the industry varies. The Hospitality Industry has shown closely higher level of performance of earnings management than other industries where it shows that the value of discretionary accrual is

0.5135 where Home and Building Services shows the lower level of earnings management which is about 0.479.

Hospitality Industry, Pharmaceutical Industry and Trading and Mining Company have slightly higher level of earnings management out of other industries for the Samples of FTSE350 companies of the UK. This practice of manipulation in such industries is because these industries are more complex in nature; hence, these companies have higher interest in manipulating earnings quality due to their motives and scopes in compare to other industries.

Hospitality industries are more complex because of their seasonality. The revenue in certain periods of the year are produced really high whereas in quiet months of the year the revenue goes to slow. Due to which the earnings manipulation is very prevalent in hospitality industry to smooth the bottom line of the organisation.

On the other hand, the pharmaceutical companies incorporate the firms those have issues in revenue recognition as too many research and development activities takes place. The research and development in this sector is a lot more severe than any other industry, hence, these is higher chance of manipulation on earnings quality. Similar issues have been found in trading and mining company due to the complex nature of such business.

The results of the study have been supported by the researcher Beasley *et al.*, (2000); Jayola *et al.*, (2017) which have admitted the variations of earnings management level as the industry varies. According to them, the fraudulences activities are of different nature in different types of industries.

While observing industry-wise data, mainly, in terms of Board Independence, the mean value is about 49% and the average of Board meeting is 5 times a year as per the sampled data collected from FTSE350 UK. Moreover, the board size in average in case of all industries, most of them have close to 10 members but food services has average value of 11 members. These values are quite higher than previous results where Maurya, (2009) and Al-shaer and Zaman (2021) have reported that board independence is about 40% and meetings, in average, were 8 times.

While observing the impact of board composition and earnings management closely, it is found that the presence of higher independence of the directors in the board has negative impact on earnings management. In engineering and Consultancy, the average value of earnings management is 0.496 while the board size is 10.288 and board independence is 49.898. In Distributor and Supplier, the average value of board size is 10.07 and board independence is 48.53. This data presents that while the value of board independence and board size are slightly increased, the value of earnings management has been reduced with significant amount. This concludes that the presence of board independence and board size is negatively associated while observing this relationship industry-wise.

Moreover, similar type of relationship can be identified while observing the relationship between board independence and board size with earnings management in terms of IT companies and Manufacturing Companies. While observing the data of Pharmaceutical industry and Retail Industry, this also approves the negative relationship between the board composition and earnings management. However, this kind of relationship does not exist in terms of other industries; food services; home and building services.

The sampled data of this study, in terms of nomination committee, the average value of nomination committee in all types of industries are same. This is because the organisations have to follow the nation's regulations, however; while observing the data in comparison to the average value of earnings management, it does not reject the null hypothesis.

While observing industry-wise, 73% of the sampled firms have managed to hold the meeting without presence of executive directors. In comparison to this, the board meetings are held quite a lot of times which is about 5 times a year. This study finds that the meetings seem to have been decreased from past practices as Maurya, (2009) reports that the board meeting used to be held in average of 8 times a year by each industry of FTSE350 companies.

Further, this study finds that the average fee of non-executive directors is about £26,341 per year. The industry which pay the highest amount to the non-executive directors is Retail industry which is about £51,588 per year. This amount is quite higher from the lowest amount paid about £45,524 by Food and Services Industry. The relationship with earnings management in terms of pay to the non-executive directors does not show the significant results in this study. The lowest amount is paid by Food and Services Industry; also, the average earnings management value is also found low in this industry.

While observing the data, regarding ownership, this study finds that the low average value of managerial ownership is 0.124% in Engineering and Consultancy Industry while the block holders and institutional ownership are far more than managerial ownership. These value has exceeded the standard assumption (10%) in each industry. The managerial ownership is low; this may be because the external stake holder like institutional owners and block holders exerts the pressure to have ownership of the organisation.

In terms of another monitoring control (external audit) of the earnings management, this study has considered the factors as audit fees and non-audit fees. It is identified that the lowest amount of audit fees and non-audit fees is paid by Hospitality Industry. While observing the relationship between these fees with the value of discretionary accruals it can be concluded that the audit fees and non-audit fees are negatively associated. The lowest the fees paid but the value of earnings management is quite higher (0.51) in this industry. The result of this study is also supported by Craswell *et al.* (1995) who have identified that there is negative association between audit fees and discretionary accruals and similar with non-audit fees.

While considering the audit committee meeting, the average meeting held in each type of industry is about 6.5 times a year. Despite this, the IT Company and Oil and Gas Company have performed the high level of compliance in terms of meeting and due diligence. The other industry of the sampled data has less value in terms of audit committee meeting. Nevertheless, the concerns are on how this variable impact on earnings management. Hence, this study cannot find significant changes in earnings management due to the numbers of meetings of the audit committee.

6.6. Correlation Coefficients

Since the research on the impact of corporate governance and external audit have been identified and analysed by using descriptive statistics, this study has made further analysis in terms investigating the earnings management and the factors that have impact on it. Hence, Pearson correlations and Spearman rank correlation have been used as a research tool to examine the correlation coefficients. This helps the research identify if the collinearity is very high among the independent variables. Table 6.9 demonstrates the status of the collinearity of the first model whereas table 6.10 demonstrates the second model's one.

The correlations coefficients are measured basically to identify if there are any issues in terms of multi-collinearity. Ascertaining the relationship between the independent variables are very important in terms of running regression analysis. If multi-collinearity issue is ignored, the statistical inferences can be misled and the interpretation may go to wrong direction, similarly, the error terms may not represent the true value of the unobserved factors (Abdul & Ali, 2006; Dimitropoulos and Asteriou, 2010).

6.6.1. First Model: Correlation Coefficients

The 6.9 below presents the correlations coefficients of the first model. The thorough observation of the table presents that there is higher collinearity in between non-executive committees' independence and non-executive director's meetings. The value of Pearson correlation between these variable has been appeared as 0.992. This is very high collinearity, hence, one of the variable (remuneration committee's independence) has been omitted.

Once the variable; independence of remuneration committee has been omitted, there is no issue of high correlation. Hence, there is no concern on the collinearity matter in this model such that other independent variables have any type of threat. While making close observation on the value of Pearson correlation, it has been identified that the highest correlation which is about 71.3%; between remuneration committee independence and non-executive director's meetings but this value is considered as adoptable and advised as no harm for the model. While analysing the research paper by Abdul Rahman and Ali *et al.* (2006), it has been found that they have considered 77% of the Pearson correlation value and reported that there is no harm in this matter.

Simply, there is higher correlation between non-executive meetings and board independence meetings which is 70.6. This concerns have been importantly dealt and identified that many prior researchers have similar type of concerns. Gujarati, (2003) and Hair *et al.*, (2005) have recommended that the threat of the multi-collinearity threshold is 0.80. Some Other Researchers Yang (2010), Trisnawati *et al.* (2015), Soyemi *et al.* (2017) have claimed that the threshold of the multi-collinearity concerns between the independent variables is 0.9. Hence, apart from remuneration independent committee and board independence, there is further concerns on multi-collinearity issue. To ensure that there is multi-collinearity issue, the VIF test has been examined.

In terms of correlation between board non-executive director's meeting and remuneration independent committee, this approves that the ratio of independent directors of the board and independence of the remuneration committee are strongly related; as one increases while other increases; they have strong positive relationship.

Correlations																	Before removing RemInd	After Removing RemInd	
	DAC1	BoardSize	BoardInd	BrdMeet	RemComInd	NomCommInd	FemaleBoard	NEDMeet	NEDFee	Blockholder	ManOWN	InstOwn	ROA	CFO/TA	Growth	Leverage	VIF	VIF	
Pearson Correlation	DAC1	1.000																	
	BoardSize	0.028	1.000														1.569	1.561	
	BoardInd	-0.030	0.115	1.000	-												2.22	2.158	
	BrdMeet	0.018	-0.157	-0.065	1.000												1.053	1.051	
	RemComInd	-0.014	0.055	0.713	-0.097	1.000											65.494		
	NomCommInd	0.022	0.083	-0.083	-0.036	-0.333	1.000										1.237	1.233	
	FemaleBoard	-0.023	-0.567	-0.034	0.146	0.006	-0.136	1.000									1.516	1.516	
	NEDMeet	-0.018	0.071	0.706	-0.096	0.992	-0.330	-0.004	1.000								64.179	2.882	
	NEDFee	0.092	0.116	-0.066	0.008	-0.023	0.086	-0.049	-0.013	1.000							1.067	1.066	
	Blockholder	0.032	0.016	0.382	-0.051	0.548	-0.186	0.034	0.555	-0.058	1.000						1.472	1.471	
	ManOWN	-0.054	0.152	-0.047	-0.016	-0.089	0.052	-0.093	-0.062	0.096	-0.008	1.000					1.094	1.053	
	InstOwn	0.008	-0.048	-0.001	-0.038	0.010	-0.060	0.033	0.001	-0.053	0.044	0.006	1.000				1.019	1.015	
	ROA	0.009	-0.009	0.104	-0.057	0.083	-0.063	0.013	0.080	0.084	-0.024	-0.052	-0.026	1.000			1.039	1.039	
	CFO/TA	0.001	0.023	-0.002	-0.016	-0.003	0.012	-0.037	-0.006	0.034	0.007	0.008	-0.003	0.042	1.000		1.007	1.006	
	Growth	-0.027	-0.013	0.027	0.032	0.036	0.009	-0.006	0.034	0.096	-0.009	0.102	-0.002	0.019	-0.026	1.000	1.027	1.026	
	Leverage	0.020	-0.028	0.029	0.018	0.047	-0.038	-0.048	0.047	-0.018	0.024	0.022	0.043	0.001	0.025	-0.002	1.000	1.015	1.015

Table 6.9

- The yellow colour in the cell of table represents that there are no issues of multi-collinearity.
- The orange colour in the cell of the table represents that there are issues of Multi-collinearity.

This study is in the line with the past researchers' findings which has alluded that the managerial ownership becomes high while the independence of the board grows less (Lasfer, 2006). Hence, it has been concluded that managerial ownership is negatively associated with the value of discretionary accruals.

In the first model of multi-collinearity test, it has been found that two of the variables are correlated by 92.2% which may have significant impact on the regression model. Non-executive directors meeting and the independence of the remuneration committee have been found as highly correlated; hence, these cannot be put in the same model as they are both independent variables of the first model. Moreover, VIF Test has been carried out, where it has been found that almost 65% for independence of remuneration committee and almost 64% of non-executive director's meeting. Therefore, this has to be further tested by removing one of the variables. Normally, it has been advised that the maximum acceptance of the VIF Test is up to 10%. Hence, most of the variables of the first model are good to proceed for hypothesis testing but above mentioned two variables are not fit for the model as they have been on multi-collinearity concern. Hence, independence of the remuneration committee has been removed from the first model in the further test.

6.1.1. Second Model: Correlation Coefficients

While making observation on correlation coefficients of the second model in table 6.9, It has been found that there is no concern on higher collinearity among the regressors. Hence, there is multi-collinearity concern in the second model. While scrutinising with careful attention, it has been found that there is high correlation (0.771) between the variables audit fee and non-audit fee. This also means that the firms those pay higher amount of audit fees also pay higher amount of non-audit fees. This kind of issue have been dealt in the previous research by Maurya, (2009) who has admitted that this brings no concerns while making hypothesis testing. It is also argued that the larger firms require strong internal control procedures and external audit activities, hence, the strong positive at this level is expected and it does bring any bias outputs.

Correlations

		DAC1	AudFee	NonAudFee	AudComSize	AudComMeet	IndusSpec	AudExp	Leverage	CFO/TA	ManOWN	ROA	Growth	VIF	
Pearson Correlation	DAC1	1.000													
	AudFee	0.021	1.000											2.572	
	NonAudFee	0.002	0.771	1.000										2.484	
	AudComSize	-0.018	0.145	0.072	1.000									1.832	
	AudComMeet	-0.024	0.078	0.040	0.660	1.000								1.799	
	IndusSpec	0.027	0.087	0.058	0.069	0.037	1.000								6.083
	AudExp	0.046	0.078	0.051	0.050	0.048	0.913	1.000							6.049
	Leverage	0.020	-0.033	-0.001	-0.012	-0.002	0.033	0.029	1.000						1.005
	CFO/TA	0.001	0.020	0.016	0.007	0.024	0.063	0.039	0.025	1.000					1.011
	ManOWN	-0.054	0.158	0.111	0.044	0.007	0.038	0.039	0.022	0.008	1.000				1.042
	ROA	0.009	-0.065	-0.045	0.021	-0.010	0.047	0.047	0.001	0.042	-0.052	1.000			1.014
	Growth	-0.027	0.017	-0.013	0.003	0.057	0.031	0.027	-0.002	-0.026	0.102	0.019	1.000		1.021

Table 6.10

- The yellow colour in the cell of table represents that there are no issues of multi-collinearity.

In the table, it has been also observed that there is high positive correlation (0.66) between audit committee size and audit committee meetings. This suggests that the larger the size the more meeting held. As discussed in the descriptive statistic section, this finding also approves the concept that the more meetings get held while there is larger audit committee size. The larger committee size has more members in the board, hence, have more opinions. Sometime, the meeting ends up without any firm conclusion. Therefore, the latter meeting has to be followed up and discussed again in the same agenda. So, this is expected as argued by Maurya, (2009); and does not bring any bias result in the analysis. Further, as argued by Lasfer, (2006), Ahmed-Zaluki (2011), Cimini *et al.* (2015) the multi-collinearity concerns appeared when the correlation is very high which is higher than 90%; otherwise, there is no concerns between independent variables.

Further, the audit fees and non-audit fees seems to have higher correlation; hence, VIF test has been carried out to ensure that if there are any concerns. The results of the VIF test has not brought any result for the area of concerns. The VIF test in the table presents that all results are less than 10 and they are acceptable as recommended by Gujarati (2003) and Bhattacharya *et al.* (2013). The maximum value of VIF 6.083 which is related to industrial specialism of the auditor which is less than 10 and has not concern in terms of multi-collinearity matter.

Apart from Pearson's correlation test, Variance inflation factor (VIF) is another widely used research tool to detect whether multi-collinearity exists in a regression model.

This test presents the value of inflated variance or standard error of the estimated regression coefficient because of the collinearity concerns. Simply, if the value of $VIF > 4$; this represents that there is existence of the multi-collinearity; which suggests that there requires further investigation. Moreover, according to Zuo and Guan (2014), if the value of $VIF > 10$, this signals that there are serious concerns on multi-collinearity among the independent variables and has to be corrected.

The Table 6.9 presents the VIF test for the first model. There is very high correlation (99.2%) between non-executive directors meeting and the independence of the remuneration committee. Hence, while conducting multivariate analysis, there exists the multi-collinearity issues because these both variables stand for the independent variables of the first model.

Therefore, there appears multi-collinearity, hence, the variables in the model do not produce effective results. In the table above, the value of VIF in terms of remuneration committee independence is 65.494 while the value of non-executive directors meeting is 64.179. These values signal the multi-collinearity problem as the value of $VIF > 10$ in terms of both of these variables. Hence, the following table 6.10, presents the VIF test after removing one of the variables (remuneration committee independence) to ensure that the multivariate test can be carried out to address the hypotheses testing.

Table 6.9 also presents the value of VIF before and after removing the independence of the remuneration committee. Before removing this variable, the value of VIF of non-executive directors meeting is 64.179 which signals the multi-collinearity concerns. Hence, the action has to be taken to remove this concerns.

Later, the VIF test has been carried out after removing the independence of the remuneration committee. This time, the value of VIF is less than 10, hence, the multi-collinearity concerns have been removed from the model. The model has been re-organised after removing the variable; independence of the remuneration committee.

Table 6.10 also presents the VIF test of the second model; and ensures that there is no concern on multi-collinearity among the independent variables of the second model. While observing the value of VIF, the higher value of VIF is found 6.083 and 6.049 which does not indicate the major issues in terms of multi-collinearity. Zuo and Guan (2014) has confirmed that there are no multi-collinearity concerns while the value of $VIF < 10$. Hence, this test approves that the second model is fit for running multivariate analysis, hence, the hypothesis test can be carried out.

6.1. Test of Hypotheses (Multi-variate Analysis)

Simply, the analysis made based on the univariate analysis remain compatible and consistent, however, to make in-depth analysis, in this research, regression test has been selected. The identified results, then, get compared and be evaluated with the past literatures and findings if made based on the UK Corporations.

The presentation in the research is made in orderly manner; as the first model is discussed at first; then, second model.

After careful consideration to make hypothesis testing, regression analysis has been used; this has been widely used by the past researchers and fit with the aims and objectives of this research. Primarily, Multivariate analysis has been considered as per the consideration made for hypothesis testing. Despite of the fact that ordinary least square is the strong tools and technique which can help to progress the research to hypothesis testing, basically, in a situation when there are dummy variables and continuous variables. However, as per the concern mentioned in the previous chapter of this study, OLS can be performed when the data is under certain conditions.

The dependent variable of this study has not been in the line with normal distribution; hence, this does not eliminate the outliers of the variable. There are extreme values of discretionary accruals under some firms' calculation who create big bath or large positive accruals; hence, in such situations GLS has been taken into consideration.

Considering the conditions of the OLS and the normality test of the data; based on Skewness, Kurtosis, parametric test cannot be carried forward in this study. However, this was not unexpected part of the research in this kind of study, as advised by Kao & Chen (2004), OLS cannot be the research tools in such kind of regression where the absolute value has been created for the dependent variable. Hence, in this study, the absolute value of earnings management has been created.

Simply, as per the advice of the researchers Jones (1991), Ahmed-Zaluki (2011), Cimini (2015), parametric tests are considered as the most relevant tools in a situation when all the conditions are fulfilled but, in a situation, where the conditions of ordinary least square are violated, non-parametric tests are more relevant and powerful. Non-parametric test does not demand the conditions of normal distribution and homogeneity of variance to be met.

Hence, based on the discussion made in above, this study uses non-parametric tests, so, general least square is being considered in place of ordinary least square in the multivariate test.

6.1.1. Results and Discussion of the First Model

Regarding Adjusted R², the outcome of this study is in the line with the discussion made by Frankel *et al.* (2002), Ashbaugh, *et al.* (2003), Abdul & Ali (2006), Dimitropoulos and Asteriou (2010), the constant value is positive and represent the significant level as $P < 0.05$.

First Model GLS Test				
Coefficients^{a,b}				
Model		Unstandardized	Z	Sig.
		Coefficients		
		B		
1	(Constant)	0.309	1.936	0.053
	BoardSize	0.004	0.898	0.369
	BoardInd	-0.001	-0.978	0.328
	BrdMeet	0.008	0.884	0.377
	RemComInd	0.217	1.692	0.091
	NomCommInd	0.001	0.577	0.564
	FemaleBoard	0.000	-0.235	0.814
	NEDMeet	-0.237	-1.865	0.062
	NEDFee	2.059E-06	3.837	0.000
	Blockholder	0.053	2.537	0.011
	ManOWN	-0.110	-2.311	0.021
	InstOwn	0.000	0.460	0.645
	ROA	-7.093E-05	-0.224	0.822
	CFO/TA	-0.018	-1.065	0.029
	Growth	0.000	-1.266	0.206
	Leverage	-0.001	1.768	0.047
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedVariable				

Table: 6.11

The table 6.11 incorporates the variables of corporate governance. These variables are included in the first model to identify the impact of the variables of the corporate governance on the earnings management. The estimation of the discretionary accruals has been identified; therefore, the proxy of earnings management has been considered as discretionary accruals.

In the table the positive and negative sign represents the relationship of the independent variables with the dependent variable. This study has adopted earnings management as an independent variable. The table also presents the P-value. This p-value actually represents the significance of the relationship between an independent variable and dependent variables.

As this table presents the β -value and P-value, the hypotheses test has been made clearer and easy to make interpretation. This clearly shows the type of relationship; whether positive or negative, between dependent and independent variables. The hypotheses created based on each independent variable has been individually dealt in the following.

6.1.1.1. Board of Directors Composition

6.1.1.1.1. Board Independence

H1: The relationship between independent boards and discretionary accruals is negatively associated.

As mentioned in the hypothesis testing, the proportion of the board independence and the earnings management have negative relationship with each other. As per the result found in the table, coefficient $\beta = -0.001$, and P value is greater than 0.10). This study finds that board independence has negative relationship with earnings management but considering the P-value, this reflects that the two variables; board independence and earnings are not significant. This finding is based on the FTSE350 data which is similar to the findings of Anglo-American countries.

These results reflect to the findings of some Asian countries like Malaysia (Abdul *et al.*, 2006), Indonesia (Siregar & Utama, 2008) and Hong Kong (Jaggi *et al.*, 2009), Kumar (2017). The results based on those countries have been found as no significant relationship between outside directors and earnings management.

On the other hand, this result is different from the findings by Klein (2002b), Xie *et al.* (2003), Peasnell *et al.* (2005), Davidson *et al.* (2005), Benkel *et al.* (2006), Dimitropoulos and Asteriou (2010), Paolone (2015) where they have investigated the relationship between the independent directors and earnings management are negatively related and the significance level is quite high.

The result found in this research is different from the previous research findings based on UK data by Peasnell *et al.* (2005). In the finding they have identified that the independence of the board directors is negatively related to managerial discretionary rights, especially while performing income-increasing earnings management; hence, they perform the task to eliminate reporting losses and earnings reductions.

6.1.1.1.2. Board Meetings

H2: The relationship between Board meetings and earnings management is negatively associated.

As per the expectations, the result is not consistent with hypothesis. It is positive coefficients, and p-value (0.4) represents that board meetings are not significant in controlling earnings management. This indicates that the meeting held by the board is not to control the practice of abnormal accrual, it is rather to focus on the urgent manner of the business planning and decision making. This was interpreted and alluded in research by Wu (1973) and Lorsch &

Maclver (1989). As per their papers, it has been explained that the meeting is held in urgent matter, hence, there is increment in the numbers of meeting if the business complexities grow. Hence, it cannot be concluded that the number of meetings causes the improvement in the earnings quality.

Similarly, in the empirical study by Vafeas (1999) based on the US firms, it has been argued that the frequency of the board meeting was increased due to the crisis and appeared concerning challenges in the business activities. Further, the results as found in this study advise that meeting are held by the directors not for the purpose of the earnings quality, but mostly these meeting are for bureaucratic purposes which in fact make the meetings makes the directors less responsive to the mainstream of the business and necessary risks.

While making observation on the result of the impact of board size on earnings management, it can be argued that the number of members in the board have negative impact on earnings management, on the other hand, the number of meetings of the board have no significant relationship in earnings quality. Hence, the conclusion can be as the larger numbers of the directors, it is difficult to come to the conclusive decision, hence, the frequency of meetings can be higher since the constructive and potential decision out of the meeting have not been achieved. Therefore, the fruitful decision can be occurred with a smaller number of members in the board. Considering board size in this study, generally, the board size in FTSE350 companies have been larger, the board meetings have not been effective.

This study concludes that it cannot be guaranteed that the number of meetings always brings good results, mainly, in relation to earnings quality. This finding is in the line with previous findings made by Adams *et al.* (2009). In Adam's research, the paper was prepared by including large survey, basically, to identify roles of managers and directors as business advisors and monitors in management activities. In his findings he has identified that the managers who are active in management activities and effectively running administration of the job activities have less opportunity to take part in the meeting.

Despite of the above interpretation, it cannot be in explained that activities of managers are less effective in terms of delegating meetings to constrain the abnormal accruals. The regressors used in this study cannot ensure that this is the perfect outcome as quantitative research methods cannot measure capture other many measures of the board diligence (Carcello *et al.*, 2002; Bepari *et al.*, 2013).

6.1.1.1.3. Board Size

H3: The relationship between board size and discretionary accruals is negatively associated.

The hypothesis, in terms of the relationship between board size and abnormal accrual has not been rejected; hence, it is argued that the there is no significant relationship between board

size and earnings management. This study is in the line with the research evidence from Taiwanese and Malaysian firms by Kao & Chen (2004) and Abdul and Ali (2006) respectively. Bhattaracharya *et al.* (2015) have also commented that the board size is significantly related to the manipulation of earnings quality and the recommended that the are negatively associated.

However, this finding is different from Defond and Jiambalvo (1994), John and Senbet (2012), Cimini *et al.* (2015) who have identified that the board size constrains the practice of earnings management, hence, have negative relationship to each other. The argument is that the larger board comprises expertise from accounting and finance background, experienced people. They also argued that the inclusion of more members attracts the opportunity to involve the independent directors.

Despite of the hypothesis being rejected in this study; it cannot be argued that the smaller sizes of the board are less effective. If the comparison is made from the relationship of abnormal accruals to board meetings and board size; the similar kind of effect have been found. The number of meetings in this study have not been found as effective corporate governance variables to constrain earnings management and so the board size do. There are compatibilities in board size and board meetings in relation to controlling earnings management, which concludes that there is no significant relationship between abnormal accruals and board size.

6.1.1.2. Board Gender diversity

H4: The relationship between number of women in the board and earnings management is negatively associated.

The hypothesis overlooks the view of the negative relationship between the presence of female members in the board. This study finds that there is no significant relationship between the female presence and earnings quality. Therefore, the findings in this study does not support the view that the gender diversity can restrain the earnings management.

Some research based on past papers have identified that there is positive impact on earnings quality by the presence of female members in the board. Smith (2016), Huse & Solberg, (2016), Watson and MNaughton, (2017) argue that the nature of women is risk averse; and concludes that gender is the factor which is effective in ethical aspects of the business activities.

Further, it has not been identified, so far, in the research based on UK corporations, that the presence of women in the board has impact earnings quality. This may be because the presence of female members in the board is not still sufficient so that they can make significant impact in this matter.

However, the presence of women has been increased in recent days which is supported by this study too. In the descriptive study, the average value of the presence of female in the board is 46.7% which was only 33% as per the research conducted by Maurya, (2015). Hence, this study advises that to make significant impact on earnings quality, the presence of women and their activities still need to be increased in the board.

6.1.1.3. Nomination Committee Independence

H5: The relationship between independent nomination committee in the board and earnings management is negatively associated.

The hypothesis formed based on nomination committee independence has not been rejected. The insignificant positive coefficient does not help to conclude the findings that the nomination committee has any significant impacts on the earnings quality. The result identified in this research is like Klein (2012), Filip and Raffourmer (2012) where they have identified that the independence of nomination committee has not significant relationship with earnings management. In the research by Klein (2012), she employed 228 corporations and nomination committees.

However, there are some other researchers Latridis (2009), Kumar (2017) and Paolone *et al.* (2018) who have found that independence nomination committee has negative and significant impact on earnings management. They have concluded that the increase in independence of nomination committee can play significant role in controlling earnings management.

6.1.1.4. Remuneration Committee Independence

H6: The relationship between independent remuneration committee in the board and earnings management is negatively associated.

The hypothesis in terms of remuneration committee independence and earnings management has been formed as they are negatively associated. In this research independence of the remuneration committee has been omitted after conducting Pearson's collinearity test and VIF Test.

While conducting the multi-collinearity test, it has been identified that the collinearity between remuneration committee independence and private meeting of the non-executive director is very high (99.2%). Hence, the relevance of the variable putting in the model has been examined by using VIF test. It has been found that the value of VIF is far higher than 10; which are 65.494 and 64.179. Hence, the test has been conducted after removing this variable; and VIF test confirms that there is no further issue of multi-collinearity among the other independent variables.

However, considering agency theory, it is argued that the independent remuneration committee plays very significant role in controlling earnings management because this committee makes right control

over the fair and appropriate distribution of the remuneration, therefore, this controls the opportunistic behaviour of the managers.

Despite the fact that the opportunistic behaviour can be controlled by remuneration committee which then controls the managers to practise the earnings management, the prior research by Peasnell *et al.* (2005) has identified that there is no significant impact by the remuneration committee on the value of discretionary accruals. Further, Main and Johnston (2013) has conducted the research by using the data of 220 sampled firms from large publicly held British companies. They also admit that the effectiveness of the remuneration committee has been proven strong in terms of controlling earnings management.

6.1.1.5. Non-Executive Directors' Private Meetings

H7: The relationship between non-executive director's private meetings and earnings management is negatively associated.

The hypothesis in terms of the private meeting of non-executive directors and its impact of controlling earnings management has been predicted as these variables are negatively associated. While running the regression line and making general least square test, it has been identified that $\beta = -0.237$ and $P\text{-value} < 0.1$.

The dummy variable has been created while identifying the presence of private meeting of the non-executive directors in the regression model. The value 1 has been used if the meetings among the non-executive directors are privately held; without presence of the executive directors. The value has been considered as zero while the meetings of the non-executive directors are not private. In this particular variable, it would have been better if the study has used the continuous variable as this may identify the different relationship. To consider this variable as continuous, the data has not been available in terms of how many meeting in a year have been taken place. Majority of the data based on the sample firms has been available in the disclosure which has mentioned that whether the meetings are privately held in any accounting period.

Based on the table 6.14, it has been identified that the private meeting of the non-executive directors has negative association with manipulating earnings quality. The p-value is less than 0.1, hence, the relationship between earnings management and private meetings of the non-executive directors have been found significant at 90% confidence level.

This finding is in the line with Chen and Tesai, (2010), Buallay *et al.*, (2019), Chatterjee (2021) who have admitted that the private meeting of the non-executive directors represents the independence of the non-executive directors; however, this study cannot capture the effect of the number of private meetings in an accounting period in manipulating earnings quality because of this variable being formed as dummy variable in this study. Obviously, this conclusion in terms of the relationship between earnings management and private meetings lead to be negatively associated as argued by Boynton *et al.* (2010).

6.1.1.6. Non-executive Director's Fees

H8: *The relationship between non-executive director's fees and earnings management is negatively associated.*

This study based on FTSE350 companies of the UK, has identified that non-executive director's fees are negatively associated to earnings management and this is in significant level where Coefficient = -0.000002 and P-value = 0.00156. This finding is consistent with the notion that committed independent outside directors are effective monitors of accrual management and that firms with highly paid outside directors tend to be less involved in accrual management.

The finding of this study suggest that the contribution of the non-executive directors is measured as per the fees paid to them. They have to spend a lot of time and energy to play the role in the board meetings and various business agendas. Hence, these results, in fact, supports that UK regularity 231 recommendations on Greenbury's guidance that there should be payment to non-executive directors for their time and effort.

This result provides modest support for the findings of Adams and Ferreira (2008) who use a large panel data set on directors' attendance at board meetings in publicly-listed firms for the period from 2005 to 2012. They provide robust evidence that directors are less likely to have attendance problems at board meetings when board meeting fees are higher. They suggest that directors appear to perform their monitoring roles for even very small financial rewards.

6.1.1.7. Managerial Ownership

H9: *The relationship between high managerial ownership and earnings management is negatively associated.*

The null hypothesis has been rejected as the effect of managerial ownership has negative relationship with discretionary accruals. The coefficient is -0.128 and p-value is 0.004. Hence, the managerial ownership is significant and have negative relationship with earnings management. This result is in the line with Warfield *et al.* (2015). They have argued that the managerial ownership holds the position of the managers strong in the organisation, which also eliminate the managerial discretionary act in manipulative manner.

However, considering the past findings, the evidence shows that there are mixed results. Some researchers: Gul *et al.* (2013), Bergstresser and Philippon (2016), Ronen *et al.* (2016), in the past have found that there is positive relationship between managerial ownership and earnings management.

Conversely, there are some studies Schipper (1989), Peasnell *et al.*, (2005), Maurya, (2009), Persakis and Latridis (2015) who have argued that the managerial ownership cannot have significant impact on abnormal accruals when the ownership is too low. On the other hand, other corporate governance variables such as independent board and independent audit committee are negatively associated in constraining earnings management.

This study identifies that the managerial ownership is significant and has negative relationship with abnormal accruals. Hence, the practice of agency theory in FTSE350 companies in the UK has been effectively applied. This study confirms that the managerial ownership has negative relationship in controlling earnings management. Further, the professional directors, managers and shareholders have no interest on conflicting, hence, work together to meet the organisational goals.

6.1.1.8. Institutional Ownership

H10: The relationship between high Institutional ownership and earnings management is negatively associated.

Based on the research paper by Bushee, (1998), El-Gazzar, (1998), Bartov *et al.*, (2001), U (2014), Zang (2011) in terms of institutional ownership, it is recommended that the institutional investors are motivated more by wealth maximisation. Hence, they consider the value of stock to be increased for the long-term, hence, the short term impact on the stock price and market reactions play minor role to them. It is argued that these investors are financially strong, hence, they do not think too much on short term impacts on the share markets. This variable, therefore, is considered as good corporate governance factors which can monitor the manipulation in earnings quality.

The findings of this study is not in the line with the past researcher and has got different findings. The coefficient is 0.00 and the significance level is 0.645. This presents that there is no such relationship between the earnings management and institutional ownership. This finding demonstrates that there is no significant relationship between the earnings management and ownership structures; based on the sampled data. However, many past research Rajgopal and Venkatachalam, (1998), Bushee (2001), Yu (2014) and Charitou *et al.* (2007) have recommended that the impact of ownership structure on the earnings management is negatively associated and the significance level is very high. Their study has used the data from the Firms based on the US where as other researchers Koh and Hsu (2005) has collected the data from Australian Firms, Park and Shin (2004) has experimented based on the Canadian Firms.

Despite of disagreement with the researchers above mentioned, this finding of this research is in the line with Peasnell *et al.*, (2005) and Maurya, (2009), Kumar and Nandamohan (2018) who have identified that the there is no impact on earnings management by institutional ownership. Based on these findings, there can be a concern on the characteristics of institutional investors of the UK and their informed choices, and awareness to manager's discretionary rights.

This finding has presented no connection between the value of discretionary accruals and institutional ownership based on the sampled firms. This may be because the compliance factors, rules and regulations, characteristic and strategies of institutional investors in the UK are different from US, Australia, Canada and other part of the world. Ferreira and Matos (2006), Lenux *et al.* (2018) and Masri *et al.* (2019) have argued that the institutional owners are interested in the large, liquid stocks; hence, considered as a factor of the good corporate governance.

Nonetheless, Khurshed *et al.*, (2007) and Mortais and Egmond (2018) have recommended that the institutional investors in the UK are motivated for the firms those are in small size, small boards, and low liquidity. They also have identified that the institutional investors of the UK have negative relationship with dividend yield after the tax exemption of the dividend income was terminated.

6.1.1.9. Block holder's Ownership

H11: The relationship between a block holding of 10% or more; and earnings management is negatively associated.

While analysing data, in the table 6.12, it has been identified that block holder's ownership is positively related to the value of discretionary accruals and they are highly significant. The coefficient is 0.053 and p-value is 0.011. This finding is not on the line with hypothesis as the hypothesis is created as they have negative relations. This finding contradicts while the hypothesis is about the negative relationship with earnings management. This finding has reported that the relationship between block holders' ownership and institutional ownership are opposite in terms of controlling earnings management.

As recommended by Jensen and Meckling (1976), Zang (2011), Park (2017) the shareholders who owns higher level of stock in the organisation exerts pressure to the management in terms of lowering the opportunistic behaviour of the managers. This actually reduces the agency problem but this study argued that there is positive relationship between the manipulation of the earnings quality and block-holder's ownership. This approves that the block holders are not effective attribute as suggest by agency theorists in terms of reducing the agency problem and controlling the earnings management practices.

In terms of the relationship between earnings management and block holders' ownership, the prior researchers have not contributed much in this context. However, Park and Shin, (2006), Abdul and Haniffa (2005), Pratiwi and Siregar (2019) have made empirical study to investigate the impact of block holder's ownership on the quality of earnings but their study also has not found the controlling impact on the discretionary accruals. Further, in context of the UK organisation, Goergen *et al.*, (2005), Persakes and Latridis (2018) have developed the opinion that the corporate governance system who has practised the institutional ownership,

managerial ownership and block holder's ownership, they create their specific type of agency cost and problems.

The findings of the research have been supported by Zhong *et al.*, (2007) who has identified that the block holders' want to control the earnings management if their control on the management is higher than the shareholders; at the same time, these block holders may be influenced by obtaining higher return, hence, they may exert pressure to the management for earnings manipulation. He has studied about this topic based on US firms; 1994 to 2003. They have concluded that the block holders do not have power to control the earnings management when they have small portion of the shares; hence, cannot have influence on earnings quality. However, when they obtain significant amount of shares, they actually put pressure on the management to obtain the higher return, hence, higher manipulation.

6.1.2. Results and discussions of the second Model

This section investigates the impact of the external audit on earnings management. The proxy of earnings management has been considered as discretionary accruals and the effectiveness of the external audit on discretionary accruals have been analysed in this section. Moreover, the value of adjusted R-square has been identified; which is in the line with the former researchers Frank *et al.* (2002) & Ashbaugh *et al.* (2003), Pucheta-Martinez (2019) who have studied this model. In the general least square results, it has also been approved that the constant is negative and significant where P-value is less than 0.05.

GLS Test for Second Model					
Coefficients ^{a,b}					
Model		Unstandardized Coefficients		Z	Sig.
		B			
1	(Constant)	-0.498		10.953	0.000
	NonAudFee	2.518E-06		1.869	0.042
	AudFee	-2.665E-06		-1.538	0.012
	AudComSize	-0.001		-0.272	0.785
	AudComMeet	-0.004		-0.709	0.478
	IndusSpec	-0.085		-1.279	0.020
	AudExp	-0.134		-1.873	0.041
	Leverage	0.000		-1.376	0.017
	CFO/TA	-0.009		-0.468	0.040
	ManOWN	-0.117		-2.689	0.007
	ROA	0.000		0.770	0.044

	Growth	0.000	-0.846	0.398
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedResidual				

Table 6.12

The table 6.12 is prepared for the multivariate analysis of the second model of this study. This table incorporates the variables of the audit and presents the nature of the relationship between earnings management and the attributes of the external audit. Moreover, the positive and negative sign of the β -value represents the direct and indirect association of the earnings management to the variables of the external audit respectively. The P-value of the table represents the significance of the relationship between the dependent and independent variables of the second model. Most importantly, this table has been used for hypothesis testing; which are analysed as below:

6.1.2.1. Audit Committee Effectiveness

6.1.2.1.1. Audit Committee Accounting and finance expertise

H12: The relationship between audit committee with financial experts and earnings management is negatively associated.

The negative coefficients and the significant level (coefficient = -0.134 & P-value = 0.041) has approved that this study has rejected the null hypothesis. Therefore, the financial and accounting expertise has negative relationship in controlling abnormal accruals. This result concludes that the inclusion of financial expertise in the committee can support the business from financial perspective and can restrain in manipulating earnings quality. This study infers that the presence of accounting expertise in the audit committee are likely to discourage to manipulate the earnings quality.

Nevertheless, there are some researchers (Abdul & Ali, 2016) who have different opinion in this matter which was based on their findings. They have observed Malaysian firms and cannot find the satisfactory evidence to reject the null hypothesis as they set 'Financial expertise has no negative relationship with earnings management'. This kind of inferences may have appeared because of their sample size as the sample size was quite small or the type of earnings manipulation was done differently. Regardless of their finding, it is very understandable and global acceptance on the fact that the presence expertise in the financial and accounting in the audit committee help in reducing manipulating earnings quality.

The other researchers Peasnell *et al.*, (2005), based on the firms of the UK, also identifies that there is direct relationship between the presence of the audit committee and earnings quality; neither for income-increasing nor for income-decreasing. However, their research was only on the presence of audit committee and its influence on earnings management but what major concerns in the study is that whether the independence and presence of financial

expertise has direct impact on manipulating earnings quality. These variables are basically not under strong observation in their research, but this study has made a special test on this matter and found significant relationship in controlling the practice of earnings management.

6.1.2.1.2. Audit Committee Size

H13: The relationship between audit committee size and earnings management is negatively associated.

In terms of audit committee size, in the table 6.14, It is found that audit committee is negatively associated with earnings management but while observing the significance level, $P > 0.05$. Therefore, it is concluded that there is no significant relationship between audit committee size and the earnings quality. While concluding this fact, this finding may bring different opinion because the size of the audit committee is large in compare to the audit committee size of other countries. Hence, the next opinion can be as the audit committee those are larger do not have significant relationship to impact on earnings management.

This finding is not consistent with the past researchers Yang and Krishnan, (2005) larger audit committee has significant impact to lessen the practice of the manipulation in financial reporting; Felo *et al.*, (2005) and Cuong *et al.* (2018) argued that the larger audit committee supports in enhancing the quality of earnings in the financial statements.

Nevertheless, this finding is consistent with the findings of Xie *et al.*, (2003), Abbott *et al.*, (2004), Bedard *et al.*, (2014), Davidson *et al.*, (2005) and Baxter and Cotter (2009), Bullay *et al.* (2019) who have examined the impact of the size of the audit committee and identified that there is no significant relationship between those variables.

While making thorough observation to the data, it is found that there is statistical significant but the coefficient between the variables suggests that they have negative relationship which has also been approved from the univariate analysis; hence, it can be concluded that there is meek relationship between these variables but support to reduce the manipulation in the earnings quality.

6.1.2.1.3. Audit Committee Meetings

H14: The relationship between number of audit committee meeting and earnings management is negatively associated.

The relationship between audit committee meetings and earnings management has been found as insignificant. This results present the statistical insignificant but it also suggests that audit committee is negatively associated with the earnings management as per the sign of the coefficient.

This finding is consistent with the prior research by Davidson *et al.*, (2005) Kumar (2017) and Almahrog (2018) who have found that there is insignificant relationship between number of meetings and discretionary accruals. Further, Abdul *et al.*, (2006) and Filip and Raffourmer (2014) has argued that there are not sufficient statistical inferences produced to support the significant and negative relationship between audit committee meetings and discretionary accruals.

Moreover, Baxter and Cotter, (2009) has concluded that there is no impact on earnings management by audit committee factors. This research was conducted based on the Australian firms. The research was done by using two different models; The Jones (1991) Model, and Dechow and Dichev, (2002) Models, while calculating earnings management. In terms of investigating the relationship between audit committee meetings and discretionary accruals, most of research have found that there is no significant relationship between them.

Contrarily, Ebrahim, (2007), Agyei-Mensah and Yeboah (2019) have prepared the report based on the relationship between audit committee meetings and discretionary accruals and identified that they are negatively associated to each other. This research has collected the data from the manufacturing companies.

Conversely, it can be argued that the number of meetings may not have significant impact on the earnings management as it cannot be ascertained that the meetings deal with controlling the manipulation in the earning's quality. Hence, this can be concluded that the meetings, in both cases (audit committee and board), have been ineffective to in terms of controlling the manipulation on financial reporting.

6.1.2.2. External Audit Factors

6.1.2.2.1. Audit and Non-Audit Fees

H15: The relationship between non-audit fees and earnings management is positively associated.

H16. The relationship between higher audit fees and earnings management is negatively associated.

The table 6.13 presents that non-audit fee has positive and significant relationship with the value of discretionary accruals. It has been identified as $\beta = 0.00000252$, P-value is <0.05 . This results have supported the hypothesis. The increase in the non-audit fees can increase the level of manipulation in the financial reporting.

On the other hand, the value $\beta = -2.66546226488207E-06$ and P-value <0.05 in terms of audit fees and earnings management. This result has presented the negative and significant relationship between audit fees and earnings management. This suggests that the increase in

the audit fees eventually decreases the earnings manipulation. The hypotheses set based on this attribute has been approved by the results found in this study.

The finding in this study in terms of non-audit fees suggests that there are higher chances of earnings manipulation while the major revenue of the audit firm is generated from the non-audit fees. This also has approved the concept that the non-audit fees can tempt the audit firms and reduce the independence of the auditor. This finding of this study is similar to the findings of Sharma and Sidhu (2004), Srinidhi and Gul, (2007), Sun *et al.* (2014); who have used the data based on the UK. They have alluded that the auditors who is offered higher non-audit fees have higher chance to provide the positive audit opinion.

In terms of the significantly negative relationship between audit fees and discretionary accruals, this study has supported the result of Stanley and DeZoort, (2007), and Huber, (2011). They have used the data from Australian firms and the sampled data was collected from 648 Australian firms. The statistical inferences approve that the audit fees are inversely related to the manipulation of earnings quality.

There are some previous studies done in context of the UK firms by Gore *et al.*, (2001) and Ferguson *et al.*, (2004), Hoque *et al.* (2016) who have documented that there is positive relation between the ratio of non-audit fees to the total audit fees and manipulation in earnings management. In contrary, this finding is not consistent with the findings of Antele (2004), Lin (2011) who have identified that there is positive relationship between audit fees and manipulation on earnings quality and found as negative relationship between non-audit fees and earnings management.

This finding is consistent with the group of researchers Solomon *et al.* (2005), Francis (2006), Lai and Krishnan (2009), Yasar, (2013) who have argued that the non-audit fees impair the independence and can support to manipulate the earnings quality. This study, hence, has supported the findings of the past literatures who have concluded that the non-audit fees are positively related and audit fees are inversely related to the value of discretionary accruals.

6.1.2.2.2. Specialised Auditor

H17: Firms that are audited by a specialised auditor have less earnings management

The expertise of the auditor has been found as negatively associated to earnings management. The coefficient value $\beta = -0.134$ and P-value is 0.041 ($P < 0.05$). This statistical inferences approves that specialised auditor has significantly negative relationship with the value of discretionary accruals.

This result is similar to the result identified by Elder and Zhou (2002); Balsam *et al.* (2003), Shams (2020) who has identified that the expertise of the auditors can make negative impact on the earnings management. The auditors who has experience and expertise in the related

job, they are highly aware of the systems and they also know how the managers basically dismantle the systems and find the loops for their personal advantage.

6.1.2.2.3. Control Variables: Results and Discussion

The impacts of the control variables on the earnings management have been discussed in this section. The discussions are made based on the both models as the impact of these variables in the performance of earnings management in almost similar manner. Table 6.13 presents the multivariate analysis of the control variables. Further tests apart from univariate analysis are required to identify the impact on earnings management.

6.1.2.2.4. Firm Performance

To present the performance of the firm, this research has used return on asset. While observing the relation shop of return on asset with earnings management in the first model, it is identified that the relationship is positive but not significant whereas return on asset has significant positive relation with the manipulation of the earnings. Hence, the result on the impact of return on asset on earnings management is remained inconclusive.

However, the positive and significant relation of ROA with discretionary have been admitted by many other past researchers including Dechow *et al.* (1995) and Kasznik (1999), Yasar (2013) and Shams (2020). In their research, they have alluded that the impact of ROA on the discretionary accruals is positively significant.

6.1.2.2.5. Leverage (LEVG)

This variable is generated based on the long term loan of the organisation which has been recognised by many researchers and considered as the violations of the debt covenants (Erickson *et al.*, 2004; Elayan *et al.*, 2008; Nguyen, 2011; Nigam and Boughanmi, 2017). In this study, the impact of debt structure on the earnings management have been found inconclusive.

The first model presents that the leverage has insignificant positive relationship to the earnings management whereas the second model shows that there is significantly negative relationship between them. This means the leveraged firms are less involved in manipulating earnings quality.

This conclusive result of the second model is basically similar to the findings of the prior researchers. Becker *et al.* (1998), Erickson *et al.* (2008), Manzanque *et al.* (2016) documents that the debt covenant; leverage, has negative impact on the value of the discretionary accruals. This attribute basically develops the conservative accounting culture due to the fact that the debt holders are more related to pay off their debt than finding other ways to manipulate the accounting system and figure.

6.1.2.2.6. Firm Growth

This study has reported that the firm growth has insignificant but negative relation with the earnings management. Even though the p-value is statistically insignificant, the relationship between earnings management and firm's growth is negatively associated. In terms of this attribute, the past researchers Abbott *et al.* (2004), Carcello *et al.* (2004), Erickson *et al.* (2008), Manzanegue *et al.* (2016) have found inconclusive results. They concluded that there is no significant relationship between growth and the manipulations of the earnings quality.

6.1.2.2.7. Cash Flow from Operations

This study has identified that there is negative relationship between CFO and earnings management. In both models the coefficient is negative. This concludes that these variables are inversely related to each other. Further, the $p\text{-value} > 0.05$; hence, it signifies that the relationship is significant. Hence, this study finds that there is significantly negative relationship between CFO and earnings management.

This finding is consistent with the prior findings by Jiang *et al.* (2008), Lobo and Zhou (2006) and Becker *et al.* (1998), Lee *et al.*, (2015), Manzanegue *et al.* (2016) and who have documented that the cash flow from operation activities negatively influence and they are at significant level.

6.2. Further Analysis

6.2.1. Alternative Measurement of Earnings Management

In the previous section, this study has formulated the model by using current accruals. The value of discretionary accruals has been calculated by using the same model, performance matched discretionary accruals model by Kothari *et al.*, (2005).

The previous researchers Guenther (1994) and Becker *et al.* (1998) have alluded that there are higher managerial opportunities to manipulate discretionary accruals at the current period than in the long-term. While considering the research by Gore *et al.* (2007), they have identified that the earnings target can be met by manipulating the discretionary working capitals. This can be done by manipulating the frequencies to obtain the profit target by small margins or overall or both. This research was prepared based on the UK data.

Furthermore, the other researcher Sloan (1996) documents that current discretionary accruals drives the total accruals by higher magnitude. He further confirms that current discretionary accruals are adjusted by the use of current liabilities and current asset; which are the part of daily operating cost. Further, Peasnell *et al.*, (1998) have discussed the current discretionary accruals is estimated based the working capitals which is prepared by the involvement of judgements and estimation by the managers. In such situations, the manager

can manipulate the values by their discretionary rights. The estimation on the factors doubt debts, warranties, inventory obsolescence, the managers can use their discretionary right when they can use their opportunistic behaviour.

Hence, the managers can use their opportunistic behaviour to manipulate current discretionary accruals very easily by manipulating the operating expenditure with the revenue expenditure, by placing small amount of provisions of debt, by increasing the life of the asset. The paper under this topic has been written by Ashbaugh *et al.*, (2003); which has considered the Jones model replacing total accruals by current accruals as dependent variable. This has also removed the independent variable; property, plant and equipment which cannot be accounted for short term.

Following the line of Ashbaugh *et al.* (2003), the current accruals has been calculated by using the net income, depreciation and amortisation and operating cash flows. These independent variables are divided by the lagged total assets. The formula can be expressed as below:

Current Discretionary accruals = net income + depreciation and amortisation – operating cash flow; and both dependent and independent variables are divided by lagged total assets.

As above, while calculating long term accruals, in this section too, this research has not paid attention on the particular event and concentrate on the values of the earnings management. It does not consider the signs while making regression analysis. Hence, the absolute value of the discretionary accruals has been created for the analysis; the reason behind that is because the manipulation can be done in both positive and negative ways to meet the contractual obligations (Warfield *et al.*, 1995; Klein; 2002b).

$$\frac{CDAC_{i,t}}{TA_{i,(t-1)}} = \alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t}}{TA_{i,(t-1)}} \right) + \epsilon_{i,t}$$

While identifying the best models of the earnings management. Dechow *et al.*, (1995) has examined various other models of the earnings management and concluded that modified Johns model is the most significant one. Since, change in receivables have been added the equation based on modified Jones model can be expressed as below:

$$\frac{CDAC_{i,t}}{TA_{i,(t-1)}} = \alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t} - \Delta Rec_{i,t}}{TA_{i,(t-1)}} \right) + \epsilon_{i,t}$$

Further, while reviewing the arguments of Kothari *et al.* (2005), they stated that the error terms of earnings management is higher when it is estimated by using Jones model and modified Jones model. Hence, they suggested to include return of asset with lag of total asset to eliminate the heteroscedasticity concerns while estimating the value of discretionary accruals.

Therefore, this research has used previous year's return on asset lagged by total asset as an addition independent variable in cross-sectional modified Jones model which was initially examined by Following Ashbaugh *et al.* (2003). Hence, the equation for current discretionary accruals (CDAC) can be expressed as below:

$$\frac{CDAC_{i,t}}{TA_{i,(t-1)}} = \alpha \left(\frac{1}{TA_{i,(t-1)}} \right) + \beta_1 \left(\frac{\Delta Rev_{i,t} - \Delta Rec_{i,t}}{TA_{i,(t-1)}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{TA_{i,(t-1)}} \right) + \beta_3 (ROA_{i,(t-1)}) + \epsilon_{i,t}$$

6.2.1.1. The First Model: Results Using the Alternative Proxy of Earnings Management (GLS Model)

In this research, Current discretionary accruals have been estimated by using the model generated by Ashbaugh *et al.* (2003). Then, the impact of corporate governance on the current discretionary accruals has been measured statistically. Table 6.13 Presents the result of general least square which was estimated based on the corporate governance attributes and discretionary accruals. The value of R-square is obtained and this is consistent with the findings of the past researchers Ashbaugh *et al.* (2003), Dimitropholous and Asteriou (2010).

The estimation of the relationship in the table presents that the constant term is negatively related to current discretionary accruals and P-value <0.05; hence, the relationship between these Variables are significant.

While observing the impact of board size on current discretionary accruals, it has been that $\beta = 0.499$ and p-value <0.05. This approves that the larger the board size, the higher the value of earnings management. This approves that the board size has significant positive relationship with earnings management. It presents different results from the main model. The main model presents that there is no significant relationship between the discretionary accruals and board size. Further, the impact of board independence is not significant although it presents that there is positive relationship with current discretionary accruals. This finding is different for the original model. This concludes that the impact on current discretionary has been appeared different from the original model.

While considering the variables of non-executive commitments, the finding in case of this scenario is different for the original one. This finding presents that the current discretionary accruals are negatively associated with the non-executive fees but the P-value is greater than 0.05; hence, the relationship is not significant. Similarly, the impact of the meeting of the non-executive directors is negatively related to the current discretionary accruals. The β -value is -1.658 and P-value is <0.05. This presents that they are strongly and negatively associated to each other. Both the original and this model presents the negative association but the former is significant at 0.10 level where as second is significant at 0.01 level.

Similarly, the fees of non-executive directors have been negatively associated in this model. However, the relationship between them have not been found as significant. This finding is different from the findings of the original model. The impact on the long-term discretionary accruals by this attribute has been found as significant and positive. Hence, based on the findings, it cannot be assumed that the relationship between the variables are fix and similar in every context.

Quite surprisingly, there is consistent between the first model and this model in terms of the relationship of the block holders and earnings management. In this section too, the β -value is found as positive and p -Value <0.05 ; hence, the impact of block-holders on current discretionary accruals is positive and significant. This approves that the block-holders exerts the pressure to the management to practice the increment in the values of the earnings management for their self-interest.

In terms of the relationship with control variables, the impact of CFO is consistent in both long-term and short term earnings management. While the relationship between leverage and earnings management is not consistent between the models. The long-term earnings management shows the positive relationship while the short term shows the negative relationship. The impact of growth to the current discretionary is found as negative and consistent. The β -value = -0.018 and P -value <0.05 ; hence, this presents that there is significant relationship between the variables for the short term while in the long-term the relationship has been found as positive and significant.

The results demonstrate that all the control variables have significant impact on the current discretionary accruals. The impact of the CFO and Growth is negative to the current discretionary accruals while the impact of the Leverage is positive.

First Model: General Least Square of Current Discretionary Accruals			
Coefficients ^{a,b}			
Model		Unstandardized Coefficients B	t Sig.
1	(Constant)	-10.101	-2.102 0.036
	BoardSize	0.499	9.172 0.000
	BoardInd	0.025	0.863 0.388
	BrdMeet	1.029	4.154 0.000
	NomCommInd	0.084	1.129 0.259
	FemaleBoard	-0.008	-0.708 0.479
	NEDMeet	-1.658	-3.606 0.000
	NEDFee	-1.581E-05	-1.323 0.186

Blockholder	2.374	8.583	0.000
ManOWN	-1.250	-3.209	0.001
InstOwn	-0.031	-10.225	0.000
ROA	0.020	1.348	0.178
CFO/TA	-2.152	-12.710	0.000
Growth	-0.018	-2.994	0.003
Leverage	0.013	4.402	0.000
a. Dependent Variable: AbsCDAC			
b. Weighted Least Squares Regression - Weighted by WeightedCDAC			

Table 6.13

6.2.1.2. The Second Model: Results Using Alternative Proxy of Earnings Management (GLS)

The model as mentioned in the previous section; first model, has been used to estimate the value of earnings management. These estimated value of current discretionary accruals have been analysed using regression model. The impact of external audit on the current discretionary accruals have been analysed in this section. The table 6.14 presents the GLS test which are examined by using the variables of external audit and their impact on the short term earnings management.

While observing the data, it has been identified that the value of r-square is in the line with the value of the previous researchers Ashbaugh *et al.* (203), Frankel *et al.*, (2003); also, the constant value has been appeared as negative and highly significant where $\beta = -7.937$ and P-value < 0.05.

The characteristics of audit committee has been considered as independent variables in this project. Their association with short-term earnings management has been empirically examined. In the short term case, the impact of audit committee expertise on the earnings management has not have significant relationship. The relationship seems to be positive but it is not significant whereas the impact of expertise of the audit committee has negative and significant relationship in the long term.

Moreover, while observing the audit committee size, $\beta = 0.309$ and P-value < 0.05; it is found that the audit committee size has positive and highly significant relationship whereas, in terms of, audit committee meetings, it is identified that $\beta = -0.209$ and P-value < 0.05; this signifies that the relationship is highly significant and negatively associated to each other. While in the Long-term scenario, the relationship of both variables; audit committee size and audit committee meetings, are negatively associated but their relations have been found as insignificant.

In terms of audit fees and non-audit fees, there is inconsistent relationship in comparison to the original model. In the original model, non-audit fees have positive and significant relationship and audit fees have negative and significant result. The results in short term relationship is different. It is found that the impact of audit fees is negligible and strongly significant. Similarly, the relationship of the short term earnings management with non-audit fees has been appeared as negative and significant.

Moreover, the impact of the industrial specialisation of the auditors on the short-term earnings management have been found as negative but the $p\text{-value} > 0.05$; hence, this is not significant. This finding is not consistent with the original finding where the impact was of industrial specialisation of the auditor has been found as negatively associated and the result was highly significant.

Second Model: General Least Square of Current Discretionary Accruals					
Model		Unstandardized Coefficients		t	Sig.
		B			
1	(Constant)	-7.973		9.577	0.000
	AudFee	0.000		7.220	0.000
	NonAudFee	-3.581E-05		-0.993	0.321
	AudComSize	0.309		6.785	0.000
	AudComMeet	-0.209		-4.532	0.000
	IndusSpec	-4.323		-0.834	0.405
	AudExp	4.220		0.813	0.417
	Leverage	-0.009		-1.887	0.059
	LogTotalasset	-0.679		-9.110	0.000
	CFO/TA	0.694		4.441	0.000
	ManOWN	0.262		0.611	0.541
	ROA	0.004		0.575	0.566
	Growth	0.008		1.701	0.089
	a. Dependent Variable: AbsCDAC				
b. Weighted Least Squares Regression - Weighted by WeightedCDAC2					

Table 6.14

6.3. Signed Earnings Management Test

For further analysis on the practice of earnings management by the firms, this study has separated the positive and negative signed earnings management, thereafter, this research has empirically tested the impact of corporate governance and external audit on positive and negative values of earnings management separately. Positive value of earnings management represents the income increasing discretionary accruals and negative value of earnings

management represent the income decreasing earnings management. This provides the insight and make understand if there is any differential relation between the variables of corporate governance and earnings management; similarly, with the variables of external audit.

6.3.1. The First Model: Results of Signed Earnings Management Test

The first model has been formed by incorporating the variables of corporate governance as an independent variables and discretionary accruals as dependent variables. The table 6.15 presents the relationship between the dependent variables and independent variables; and significance level. At this section, this deals with income decreasing practice of the earnings management. The constant value represents the positive relationship and $P\text{-value} < 0.05$ which signifies that there is positive and significant relationship. The table 6.16, On the other hand, presents the income increasing earnings management and the impact of corporate governance variables on positive earnings management.

The variables board size, board independence and board meeting, in context of both positive and negative earnings management have similar impacts as it has in case of original model. The impact of board independence and board meetings have affected positively but the P -value, in both cases, is more than 0.05; hence, there is no significant relationship. While observing at board independence, the relationships in all cases are negative but again there is no significance relationship.

Furthermore, the relationship remuneration committee independence, nomination committee independence, and diversity factors are all positively and insignificantly related with the manipulation of earnings quality in case of the main model where as in case of both negative signed earnings management and positive signed, remuneration independent committee is positively associated but in the negative earnings management the relationship is significant whereas with positive signed earnings management they have insignificant relationship. Regarding nomination committee and female presence, both signed earnings management have negative relationship and their relationship is insignificant.

While observing the non-executive meetings, it is found that the relationship is negative and significant in case of negative signed earnings management while this has negative and insignificant relationship with the main model and positive signed earnings management. In all situation, the non-executive directors' fees are positively related and they are significant. All other variable of corporate governance in both signed earnings management have insignificant relationship. Regarding the relationship, managerial ownership has negative relationship in all types of situations; negative, positive and main models. On the other hand, while observing other attributes of external audit in relation to the second model, they all have insignificant relationship with positive and negative relationship.

First Model: Negative EM				
Coefficients ^{a,b}				
Model		Unstand- ardized Coeffi- cients	T	Sig.
		B		
1	(Constant)	0.583	2.363	0.018
	BoardSize	0.008	1.274	0.203
	Boardind	-0.001	-0.465	0.642
	BrdMeet	0.002	0.138	0.890
	RemComInd	0.495	9.206	0.000
	NomcommInd	-0.003	-0.906	0.365
	FemaleBoard	-0.002	-1.598	0.111
	NEDMeet	-0.540	-11.041	0.000
	NEDFee	2.140E-06	2.513	0.012
	Blockholder	0.054	1.763	0.078
	ManOwn	-0.192	-4.789	0.000
	InstOwn	1.128E-05	0.026	0.979
	ROA	0.001	1.059	0.290
	CFOTA1	-0.011	-1.372	0.171
	Growth	3.893E-06	0.014	0.989
Leverage	0.000	0.757	0.449	
a. Dependent Variable: DAC				
b. Weighted Least Squares Regression - Weighted by WeightedVariable1				

Table 6.15

First Model: Positive EM				
Coefficients ^{a,b}				
Model		Unstand- ized Coeffi- cients	T	Sig.
		B		
1	(Constant)	0.550	2.189	0.029
	BoardSize	0.007	1.133	0.258
	Boardind	-0.001	-0.451	0.652
	BrdMeet	0.001	0.107	0.915
	RemComInd	0.485	1.630	0.104
	NomcommInd	-0.003	-0.881	0.378
	FemaleBoard	-0.001	-0.996	0.320
	NEDMeet	-0.522	-1.760	0.079
	NEDFee	2.178E-06	2.596	0.010
	Blockholder	0.053	1.682	0.093
	ManOwn	-0.149	-1.808	0.071
	InstOwn	8.709E-05	0.200	0.841
	ROA	5.279E-05	0.123	0.902

	CFOTA1	0.010	0.436	0.663
	Growth	-8.183E-05	-0.287	0.774
	Leverage	0.001	1.360	0.174
a. Dependent Variable: DAC				
b. Weighted Least Squares Regression - Weighted by WeightedVariable				

Table: 6.16

6.3.2. The Second Model: Signed Earnings Management Test

This section has demonstrated the positive and negative earnings management of the second model. The second model has represented the impact of external audit on earnings management. Hence, table 6.17 presents the statistical analysis which represents the relationship between the independent variables; variables of external audit, and dependent variable (value of negative discretionary accruals). Moreover, the value of R-square is consistent with the previous researchers Ashbaugh *et al.* (2003), Dimitropoulos and Asteriou (2010). The constant value is negatively associated and the P-values represents that it is significant.

This study has identified that audit fees are negatively associated with the negative earnings management and non-audit fees are positively associated with the negative earnings management. Similar results have been identified in case of the positive signed earnings management as well. Although the relationships are negatively related, the significance level is more than 0.05, hence, this result does not approve that the audit fees and non-audit have significant impact on the earnings management in FTSE350 companies. The relationship is consistent with the main model but in the original model is highly significance whereas the for positive and negative earnings management has insignificance relationship.

In terms of audit committee size and audit committee meeting, audit committee size has negative and insignificant relations with both positive and negative signed earnings management. Regarding the significance level, they are consistent to each other while in the main model, it was observed that both variables have negative relations with long term earnings management.

The significance level is below 0.05, in terms of audit committee meetings. It shows that there is positive relationship with negative earnings management, hence, this approves that the practice of manipulating earnings quality reduces in context of the negative earnings management while the positive signed earnings management has insignificant relationship; and same with main regression model.

Similarly, managerial ownership has significant relationship with negative earnings management while this is not significance with positive earnings management. Other variable industrial specialism of the auditor is not significant in both types of earnings managements whilst the relationship is positive. Conversely, the auditor's expertise is negatively associated in the positive earnings management and positively associated in negative earnings

management. The P-value > 0.05; hence, this is not significant in both types of earnings management.

Moreover, the control variables leverage, cash flow for operating activities, return on asset, and growth are positively associated with the negative earnings management whilst these variable are negatively associated with the positive earnings management. The P-Values are greater than 0.05, hence, the relationship is not considered as significant.

Negative EM and Second Model					
Coefficients ^{a,b}					
Model		Unstandardized Coefficients		t	Sig.
		B			
1	(Constant)	-0.560		-9.522	0.000
	AudFee	-9.611E-07		-0.621	0.535
	NonAudFee	1.027E-06		0.522	0.602
	AudComSize	-0.005		-0.965	0.335
	AudComMeet	0.014		2.053	0.040
	IndusSpec	0.030		0.337	0.736
	AudExp	-0.055		-0.578	0.564
	Leverage	0.000		-0.788	0.431
	CFOTA1	0.045		1.851	0.065
	ManOWN	0.103		2.041	0.042
	RoA	0.000		0.824	0.410
	Growth	0.000		1.262	0.207
a. Dependent Variable: DAC					
b. Weighted Least Squares Regression - Weighted by WeightedResidual					

Table 6.17

Second Model: Positive EM					
Coefficients ^{a,b}					
Model		Unstandardized Coefficients		T	Sig.
		B			
1	(Constant)	-0.437		6.353	0.000
	AudFee	4.301E-06		1.606	0.109

NonAudFee	-3.245E-06	-0.458	0.647
AudComSize	-0.006	-1.111	0.267
AudComMeet	0.004	0.483	0.629
IndusSpec	-0.181	-1.833	0.067
AudExp	0.260	2.446	0.015
Leverage	0.000	0.866	0.387
CFOTA1	0.034	1.260	0.208
ManOWN	-0.132	-1.711	0.088
RoA	-8.290E-05	-0.226	0.821
Growth	-1.719E-05	-0.062	0.951
a. Dependent Variable: DAC			
b. Weighted Least Squares Regression - Weighted by WeightedResidual			
Table:6.18			

6.4. Cross Listing: First Model and Second Model

In this section, the organisations those are listed in other stock market have been considered. This study has evaluated the practice of manipulating based on the organisation those are listed in other stock market in addition to FTSE350 UK. This kind of study is made by generating dummy variables; it is one if the organisation is listed in other financial market, otherwise, it is zero.

In terms of the business environment and corporate governance regulation in the UK and US, there are differences. Similarly, the accounting standard these countries are also under different assumptions. The regulation and compliance factors are not same.

Since, the scandal of the manipulation of earnings quality and the crash of the financial market, Sarbanes-Oxley Act (SOX) has taken action against this and act upon developing the confidence of the investor and ensuring the security by the making strategic policies. They started regulating the listed organisations more and brought the policy of disclosure of various accounting – concerned factors of the corporate governance practices.

It is believed that the organisations can release the good quality work and disclosures while there is better regulation from the governance which promotes the investors and help them make sound financial decision (Leuz, 2006; Li *et al.*, 2008). Similarly, Cohen *et al.* (2007), Lajili *et al.* (2010), Darrat *et al.* (2016) document that since SOX has played its role conforming the governance policy, the practice of manipulation of the earnings quality have been constantly reduced. Further, other researchers Chang and Sun (2009) and Li *et al.* (2015) have confirmed

that independent audit committee has significant and negative relationship with the value of discretionary accruals since the governance has been regulated by SOX.

As a result, the governance has been changed in the US, hence, the firms those are cross listed have to meet the governance requirements of the SEC and SOX. Hence, the UK industries are under pressure who have to meet the compliance of the regulated bodies in UK and US. Therefore, it is believed that the practice of manipulations of the financial reporting declines (Maijor and Vanstraelen, 2006; Lepore, 2017) but there are not prior evidences to support this claim.

There is expectation that the firms practice less earnings management if the they are listed in more than one financial markets. Hence, this study has observed the performance of the earnings management by the firms those are listed in the more than one financial markets by creating one more control variables; the cross listing, which is dummy variable. This study has found that almost 75% of the firms for FTSE350 are cross listed.

While observing the result in the table 6.19 based on the first model, it is identified that the cross listing is negatively associated with the earnings management. The P-value <0.05 ; hence, this is significant. This result has supported the views of the Maijor and Vanstraelen (2006) who has claimed the earnings management practice gets declined by the cross-listing firms.

Similarly, this study also supports the arguments of Lys (2008), Chang and Sun (2009), Tang (2017) who have affirmed that the firms those are better governed by government-enforced regulation and cross listed discloses the better results of the financial information and declines the practices of the earnings management.

Coefficients ^{a,b}				
Model		Unstandardized Coefficients		Sig.
		B	t	
1	(Constant)	0.427	2.682	0.007
	BoardSize	0.002	0.512	0.609
	BoardInd	-0.001	-0.651	0.515
	BrdMeet	0.009	0.974	0.330
	NomCom- mInd	0.000	0.210	0.833
	FemaleBoard	0.000	0.153	0.878
	NEDMeet	-0.034	-1.109	0.267
	NEDFee	1.863E-06	3.493	0.000
	Blockholder	0.049	2.351	0.019
	ManOWN	-0.113	-2.465	0.014
	InstOwn	0.000	0.654	0.513
	CrossListing	-0.103	-5.609	0.000
	ROA	-3.677E-05	-0.117	0.907
	CFO/TA	-0.016	-0.962	0.336
	Growth	0.000	-1.284	0.199
Leverage	0.001	1.710	0.087	
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedVariable				

Table 6.19

Further, considering the second model, the statistical inferences have been generated in the table 6.20 and supported the views of Chang and Sun (2009) who have claimed that there is negative impact on earnings management by the external audit factors. This research has identified that $\beta = -0.109$ and $P\text{-value} < 0.05$; hence, this outcome approves the views of the prior researchers. The relationship between the cross-listing firms and earnings management is negatively and significantly associated.

Cross Listing: Second Model (GLS)				
Coefficients ^{a,b}				
Model		Unstandardized Coefficients		Sig.
		B	t	
1	(Constant)	0.577	12.311	0.000
	AudFee	2.191E-06	1.643	0.101
	NonAudFee	-2.003E-06	-1.167	0.243
	AudComSize	-0.002	-0.399	0.690
	AudComMeet	-0.002	-0.371	0.711
	IndusSpec	-0.074	-1.125	0.261
	AudExp	0.118	1.672	0.095
	Leverage	0.000	1.380	0.168
	CFO/TA	-0.008	-0.449	0.654
	ManOWN	-0.107	-2.478	0.013
	ROA	0.000	-0.589	0.556
	Growth	0.000	-0.985	0.325
	CrossListing	-0.109	-5.969	0.000
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedResidual				

Table 6.20

6.5. Analysis of Size Effect

This study has made further investigation of the practice of earnings management, hence, in this section the impact of size of the organisation on the practice of the earnings management has been empirically tested. The firm size has been defined by the profit or loss value of the financial statement at the corresponding year.

This study has followed the model of Krishnan and Parsons (2006), Ware (2015), while measuring the relationship of the size of the firm with the earnings management. The empirical test is done based on the first model and second model.

In the first model, most of the attributes of the corporate governance has been found at significant level. The impact of non-executive fees and the presence of block holders are surprisingly positively and significantly associated to the manipulation of the earnings management whereas managerial ownership has negative association with the earnings management at high significant level.

The other variables are independent does not show the significant relationship based, However, this objective of this section in this study is to measure the impact of the size effect on the earnings management and this has been found as significant but the association is positive. Hence, the firms involved in earnings management practice more while they generate more profits. This finding has supported the arguments of Benkel *et al.* (2006), Kumara (2021) who have identified that the companies show the better financial reporting while they perform better economic results.

Coefficients ^{a,b}				
Model		Unstandardized Coefficients		Sig.
		B	t	
1	(Constant)	-0.331	2.091	0.037
	BoardSize	0.001	0.338	0.735
	BoardInd	-0.001	-0.454	0.650
	BrdMeet	0.006	0.611	0.541
	NomCommInd	0.001	0.368	0.713
	FemaleBoard	0.000	-0.538	0.591
	NEDMeet	-0.028	-0.927	0.354
	NEDFee	1.945E-06	3.647	0.000
	Blockholder	0.054	2.584	0.010
	ManOWN	-0.126	-2.730	0.006
	InstOwn	0.000	0.485	0.628
	Size effect	0.087	4.707	0.000
	ROA	-1.194E-05	-0.038	0.970
	CFO/TA	-0.009	-0.558	0.577
	Growth	0.000	-1.295	0.196
	Leverage	0.001	1.782	0.075
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedVariable				

Table:6.21

While observing the outcomes of the second model after incorporating size effect, the impact of size of the firm has positive relationship on the earnings management. Most of the

variables of the external audit has not significant results. The main point of the study in this section is to understand the impact of the size on the discretionary accruals. In the table 6.22, the output of $\beta = 0.091$ and $P\text{-value} < 0.05$. Hence, it can be concluded that better economic performance the company has, the more the manipulations of the earnings quality. This result is consistent with the first model.

The finding of this study at this section is similar to the findings of the Siregar and Utama (2008) who have made the empirical study based on the top 500 ASX listed. The findings approved that there is positive significant relation when the economy is boom and negative relationship with earnings management when economy is in downturn.

Coefficients ^{a,b}				
Model		Unstandardized Coefficients		Sig.
		B	t	
1	(Constant)	-0.477	10.537	0.000
	AudFee	-2.132E-06	1.591	0.112
	NonAudFee	2.831E-06	-1.646	0.100
	AudComSize	-0.001	-0.144	0.886
	AudComMeet	-0.004	-0.795	0.427
	IndusSpec	-0.069	-1.039	0.299
	AudExp	0.112	1.579	0.115
	Leverage	0.000	1.373	0.170
	CFO/TA	-0.002	-0.094	0.925
	ManOWN	-0.117	-2.693	0.007
	ROA	0.000	-0.534	0.593
	Growth	0.000	-0.907	0.364
	Size effect	0.091	4.914	0.000
a. Dependent Variable: DAC1				
b. Weighted Least Squares Regression - Weighted by WeightedResidual				

Table: 6.22

6.12. Big Bath effect of Earnings Management

The researchers Frankel *et al.* (2002) and Srinidhi and Gul (2007), Lee and Vatter (2015), Trisnawati *et al.* (2015) have reported that the performance of the company can have impact on the earnings quality. While considering the better performance of the company in the size effect, it has been identified that the company practices positive earnings management while the performance of the company is better. Similarly, in this section, this study makes empirical investigation on the impact of the loss making on the practice of the earnings management.

For this purpose, this study has created the dummy variables and run the statistical analysis. The company those have loss are considered as one and those have reported profit or no loss are considered as zero.

The table 6.23 Presents the big bath impact on earnings management based on the first model. The value of $\beta = -0.023$ and $P\text{-value} < 0.05$. This finding presents that the loss making firm practice the income-decreasing earnings management which means the report further losses. The relationship is significant. This finding has supported the principles of the big bath effect.

According to the principles of the big bath theory, the firms present the financial performance even worse while they are in poor economic condition Frankel *et al.* (2002) and Srinidhi and Gul (2007). In the research by them, they have identified that the firms have performed the income-decreasing approach while they have poor economic performance which is supported by this research too.

Coefficients ^{a,b}					
Model		Unstandardized Coefficients		t	Sig.
		B			
1	(Constant)	0.314		1.970	0.049
	BoardSize	0.003		0.747	0.455
	BoardInd	-0.001		-0.606	0.544
	BrdMeet	0.007		0.722	0.471
	NomCom-mInd	0.001		0.508	0.612
	Female-Board	0.000		-0.251	0.802
	NEDMeet	-0.029		-0.935	0.350
	NEDFee	2.043E-06		3.805	0.000
	Blockholder	0.052		2.479	0.013
	ManOWN	-0.127		-2.735	0.006
	InstOwn	0.000		0.550	0.582
	ROA	-9.563E-05		-0.302	0.763
	CFO/TA	-0.017		-1.042	0.298
	Growth	0.000		-1.236	0.217
	Leverage	0.001		1.761	0.078
Loss	-0.023		-0.898	0.0369	
a. Dependent Variable: DAC1					
b. Weighted Least Squares Regression - Weighted by WeightedVariable					

Table 6.23

Considering the second model, this study has examined the big bath effect to investigate the impact of loss on the earnings management. This result has also approved that the loss making firms perform the income-decreasing approach while preparing the financial approach. Chen and Zhou (2007) have tested the impact of loss on the earnings management including the variables of the external audit and identified that the firms are reporting further losses by practising downward earnings management.

This study has found the value of $\beta = -0.026$ and $P\text{-value} < 0.05$; which suggest that the loss is negatively associated to earnings management and the result is significant. This is because the reputational risk of the firm remains unchanged while reducing the loss further down. They practice this to present the financial performance even better in the following year (Dechow *et al.*, 1999).

Coefficients ^{a,b}					
Model		Unstandardized Coefficients		t	Sig.
		B			
1	(Constant)	-0.502		10.998	0.000
	AudFee	2.569E-06		1.905	0.057
	NonAudFee	-2.754E-06		-1.588	0.113
	AudComSize	-0.001		-0.260	0.795
	AudComMeet	-0.004		-0.746	0.456
	IndusSpec	-0.082		-1.232	0.218
	AudExp	0.131		1.832	0.067
	Leverage	0.000		1.353	0.176
	CFO/TA	-0.009		-0.492	0.623
	ManOWN	-0.117		-2.688	0.007
	ROA	0.000		-0.821	0.412
	Growth	0.000		-0.892	0.373
	Loss	-0.026		-1.007	0.0314
a. Dependent Variable: DAC1					
b. Weighted Least Squares Regression - Weighted by WeightedResidual					

Table 6.24

6.13. Industry Analysis

The value of discretionary accruals can be basically shaped by the type of industry they fall in. Hence, the corporations are categorised according to their industries. The researchers Dopuch *et al.*, (2005); Gul *et al.*, (2009); and Craswell *et al.*, (1995), Ware (2015), Kumara

(2021) have recommended that the firms perform the earnings management practices as per the industry they are in. They suggested that the estimation of discretionary accruals can be noisy and biased when there are no homogenous conditions, hence, suggested that the firms have to be separated with respective industries. Hence, industry analysis removes such concerns and examine of the previous result is different from the results those get obtained from industry type.

This research has conducted the statistical test by following the model of Frankel *et al.* (2002) and Srinidhi and Gul, (2007), Kumara (2021) who have separated the firm industry-wise and run the regression analysis. The industries are categorised as Engineering and consultancy, Distribution and Supplier, Food Services, Home and Building services, Hospitality Industry, IT Company, Manufacturing Company, Oil and Gas Company, Pharmaceutical Company, Retail Industry, Support Industry, Trading and Mining Company. As per the recommendation by Carcello *et al.*, (2002) and Abbott *et al.*, (2006), this study has created the dummy variables. The selected industry is considered as 1, otherwise, it is zero.

6.13.1. Industry-wise Analysis: First Model

	Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients											
	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.									
(Constant)	0.416	2.166	0.03	0.42	2.195	0.03	0.422	2.201	0.03	0.47	2.446	0.02	0.42	2.202	0.03	0.437	2.262	0.02	0.431	2.238	0.03	0.409	2.139	0.03	0.427	2.226	0.03	0.393	2.054	0.04	0.418	2.185	0.03
BoardSize	-0.004	-0.755	0.45	-0.005	-0.876	0.38	-0.004	-0.769	0.44	-0.006	-1.187	0.24	-0.005	-0.851	0.4	-0.005	-0.89	0.37	-0.004	-0.779	0.44	-0.004	-0.785	0.43	-0.004	-0.69	0.49	-0.005	-0.837	0.4	-0.003	-0.511	0.61
BoardInd	-0.002	-1.467	0.14	-0.002	-1.445	0.15	-0.003	-1.496	0.14	-0.003	-1.631	0.11	-0.002	-1.332	0.18	-0.003	-1.479	0.14	-0.003	-1.574	0.12	-0.003	-1.712	0.09	-0.003	-1.482	0.14	-0.003	-1.567	0.12	-0.002	-1.375	0.17
BoardMeet	0.001	0.082	0.93	0.002	0.197	0.84	0.001	0.098	0.92	0.002	0.222	0.82	0.001	0.132	0.9	9.22E-05	0.008	0.99	0.001	0.087	0.93	-0.001	-0.045	0.96	0	0.021	0.98	0.001	0.128	0.9	0.001	0.082	0.94
RemComInd	0.198	1.539	0.12	0.197	1.533	0.13	0.199	1.55	0.12	0.198	1.544	0.12	0.192	1.497	0.14	0.197	1.531	0.13	0.195	1.518	0.13	0.143	1.08	0.28	0.203	1.576	0.12	0.184	1.433	0.15	0.205	1.595	0.11
NomCommInd	0.001	0.525	0.6	0.001	0.469	0.64	0.001	0.501	0.62	0.001	0.407	0.68	0.001	0.439	0.66	0.001	0.508	0.61	0.001	0.496	0.62	0.002	0.719	0.47	0.001	0.479	0.63	0.002	0.747	0.46	0.001	0.431	0.67
FemaleBoard	0	0.204	0.84	6.95E-05	0.083	0.93	0	0.179	0.86	-4.95E-05	-0.059	0.95	-3.53E-05	-0.042	0.97	9.78E-05	0.117	0.91	0	0.176	0.86	0	0.168	0.87	0	0.136	0.89	0	0.163	0.87	0	0.148	0.88
NEDMeet	-0.211	-1.647	0.1	-0.208	-1.627	0.1	-0.213	-1.661	0.1	-0.207	-1.623	0.11	-0.208	-1.634	0.1	-0.21	-1.645	0.1	-0.208	-1.62	0.11	-0.147	-1.1	0.27	-0.215	-1.678	0.09	-0.196	-1.535	0.13	-0.224	-1.745	0.08
NEDFee	2.26E-06	3.534	0	2.32E-06	3.64	0	2.26E-06	3.542	0	2.32E-06	3.641	0	2.35E-06	3.691	0	2.27E-06	3.553	0	2.19E-06	3.408	0	2.25E-06	3.53	0	2.27E-06	3.562	0	2.22E-06	3.488	0	2.31E-06	3.609	0
Blockholder	0.081	3.174	0	0.08	3.165	0	0.081	3.204	0	0.078	3.077	0	0.082	3.226	0	0.081	3.171	0	0.08	3.133	0	0.082	3.236	0	0.079	3.11	0	0.082	3.236	0	0.081	3.178	0
ManOwn	-0.102	-2.182	0.03	-0.101	-2.158	0.03	-0.103	-2.191	0.03	-0.099	-2.125	0.03	-0.103	-2.215	0.03	-0.104	-2.222	0.03	-0.102	-2.186	0.03	-0.098	-2.083	0.04	-0.103	-2.192	0.03	-0.122	-2.56	0.01	-0.106	-2.255	0.02
InstOwn	9.10E-05	0.271	0.79	2.68E-05	0.079	0.94	0	0.3	0.76	0	0.632	0.53	7.60E-05	0.227	0.82	6.54E-05	0.193	0.85	0	0.371	0.71	0	0.51	0.61	9.95E-05	0.297	0.77	2.40E-05	0.071	0.94	3.96E-05	0.117	0.91
ROA	2.90E-05	0.063	0.95	3.38E-05	0.074	0.94	2.61E-05	0.057	0.96	3.61E-05	0.079	0.94	2.58E-05	0.057	0.96	3.13E-05	0.068	0.95	3.54E-05	0.077	0.94	4.36E-06	0.01	0.99	4.48E-06	0.01	0.99	-1.35E-05	-0.029	0.98	1.81E-05	0.039	0.97
CFOTA1	-0.005	-0.205	0.84	-0.007	-0.286	0.78	-0.005	-0.195	0.85	-0.003	-0.112	0.91	-0.005	-0.227	0.82	-0.004	-0.164	0.87	-0.005	-0.2	0.84	-0.004	-0.17	0.87	-0.004	-0.189	0.85	0.001	0.024	0.98	-0.004	-0.181	0.86
Growth	0	-1.723	0.09	0	-1.731	0.08	0	-1.742	0.08	0	-1.832	0.07	0	-1.64	0.1	0	-1.703	0.09	0	-1.715	0.09	0	-1.634	0.1	0	-1.738	0.08	0	-1.565	0.12	0	-1.769	0.08
Leverage	0	0.405	0.69	0	0.441	0.66	0	0.395	0.69	0	0.576	0.57	0	0.418	0.68	0	0.375	0.71	0	0.346	0.73	0	0.364	0.72	0	0.388	0.7	0	0.418	0.68	0	0.406	0.69
Distributor & Supplier	0.011	0.263	0.79																														
Eng&Con				0.074	1.91	0.05																											
FoodServ							-0.027	-0.465	0.64																								
Hom&Buil										-0.118	-2.616	0.01																					
Hot&Rest													0.132	2.983	0																		
ITComp																-0.031	-0.739	0.46															
Manu Com																			0.022	0.691	0.49												
Oil&Gas																						-0.068	-1.719	0.09									
Pharm Com																										-0.044	-0.927	0.35					
Retail																												0.083	2.138	0.03			
Trading and Mining																																	

The statistical calculation from table 6.25, it presents that there are 11 different industries. The data has been organised in the form of dummy variable. This study has identified that out of 11 industries, five industries have the significant results which shows significant changes from earlier studies. Maurya, (2009) has presented that out of six industries only one industry has positive significant results. The industry in his research was construction and building material. This industry followed the income-increasing approach and the relationship was significant.

This study has identified oil and gas company; and home and building company have practised income-decreasing approach whereas engineering and consulting, hotel and restaurant; and retail industry have followed income-increasing approach. As presented above in the table 6.21, the $\beta = 0.074$ and $P\text{-value} = 0.050$ have been found while investigating the impact of engineering and consulting industry on earnings management. Similarly, hotel and restaurant industry presents that $\beta = 0.132$ and $P\text{-value} = 0.003$. These both industries have positive relationship at significant level.

Both engineering, and hotel and restaurant industries are very complex sectors, hence, there are more parties involved and may exerts pressure to management and compel them to practice earnings management. These both types of industries have different way of contracting methods while negotiating the job; therefore, their way of recognising revenue may have various type of complexities. This result is similar to the result of Beasley *et al.* (2000), Bhattacharya *et al.* (2003) and Tang (2017) who have argued that the nature of fraudulences activities depends on the type of industry.

Further, retail industry has also followed income increasing approach of earnings management where the $\beta = 0.083$ and P-value = 0.033. Mostly, retail industry handles the too many transactions in daily basis and cash transactions are taken place in every day manner. They also handle lots of inventories in daily basis. This is very different area of the industries of the business sector. Hence, the corporate governance in such industry may not be able to control each fraudulences activity. This result is consistent with the recommendation made by Beasley *et al.* (2000) who have investigated that the fraudulences activities occurs with different nature in different types of industry.

Moreover, home and building, and oil and gas company have followed the income decreasing practice of earnings management. From the statistical calculation it has been identified that the $\beta = -0.0118$ and P-value = 0.009 in terms of home and building industries whereas oil and gas company presents the $\beta = -0.068$ and P-value = 0.086. They both are negatively associated with earnings management at significant level.

6.13.2. Industry-wise Analysis: Second Model

	Unstandardized Coefficients			Unstandardized Coefficients			Standardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients			Unstandardized Coefficients												
	B	t	Sig.	B	t	Sig.	Beta	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.	B	t	Sig.										
(Constant)	0.481	8.831	0	0.472	8.647	0		8.641	0	0.459	8.372	0	0.484	8.872	0	0.475	8.71	0	0.491	8.973	0	0.472	8.622	0	0.48	8.821	0	0.488	8.833	0	0.482	8.843	0	
AudFee	2.62E-06	1.052	0.293	2.58E-06	1.039	0.299	0.031	0.785	0.433	2.98E-06	1.2	0.23	2.45E-06	0.979	0.328	2.17E-06	0.863	0.388	3.21E-06	1.282	0.2	3.11E-06	1.237	0.216	3.21E-06	1.284	0.199	2.47E-06	0.988	0.324	2.73E-06	1.093	0.275	
NonAudFee	-1.27E-05	-2.083	0.037	-1.26E-05	-2.068	0.039	-0.081	-2.08	0.038	-1.26E-05	-2.068	0.039	-1.26E-05	-2.059	0.04	-1.28E-05	-2.091	0.037	-1.32E-05	-2.165	0.031	-1.35E-05	-2.208	0.027	-1.32E-05	-2.165	0.031	-1.29E-05	-2.107	0.035	-1.26E-05	-2.039	0.042	
AudComSize	-0.003	-0.647	0.518	-0.002	-0.564	0.573	-0.004	-0.099	0.921	-0.002	-0.42	0.674	-0.003	-0.684	0.494	-0.002	-0.539	0.59	-0.003	-0.7	0.484	-0.002	-0.407	0.684	-0.002	-0.55	0.583	-0.003	-0.635	0.526	-0.003	-0.643	0.521	
AudComMeet	0.004	0.712	0.476	0.004	0.729	0.466	0.018	0.45	0.652	0.006	1.028	0.304	0.005	0.847	0.397	0.004	0.626	0.531	0.005	0.799	0.424	0.004	0.672	0.502	0.005	0.738	0.461	0.005	0.747	0.456	0.005	0.765	0.444	
IndusSpec	-0.05	-0.623	0.534	-0.053	-0.657	0.511	-0.045	-0.578	0.563	-0.026	-0.322	0.748	-0.047	-0.58	0.562	-0.052	-0.647	0.518	-0.046	-0.568	0.57	-0.048	-0.598	0.55	-0.037	-0.46	0.646	-0.05	-0.615	0.539	-0.049	-0.599	0.549	
AudExp	0.097	1.118	0.264	0.101	1.16	0.246	0.082	1.064	0.287	0.064	0.732	0.465	0.092	1.062	0.289	0.101	1.159	0.247	0.086	0.987	0.324	0.097	1.115	0.265	0.077	0.885	0.376	0.095	1.098	0.273	0.095	1.091	0.276	
Leverage	0	0.418	0.676	0	0.46	0.646	0.022	0.703	0.482	0	0.444	0.657	0	0.375	0.707	0	0.33	0.742	0	0.391	0.696	0	0.411	0.681	0	0.423	0.673	0	0.387	0.699	0	0.399	0.69	
CFOTA1	-0.009	-0.376	0.707	-0.01	-0.431	0.667	-0.009	-0.3	0.764	-0.009	-0.402	0.688	-0.007	-0.329	0.742	-0.008	-0.36	0.719	-0.008	-0.357	0.721	-0.008	-0.351	0.726	-0.004	-0.163	0.871	-0.009	-0.391	0.696	-0.008	-0.355	0.723	
ROA	0	-1.054	0.292	0	-1.03	0.303	-0.036	-1.179	0.238	0	-1	0.317	0	-1.079	0.281	0	-1.086	0.278	0	-1.121	0.263	0	-1.152	0.249	0	-1.106	0.269	0	-0.999	0.318	0	-1.095	0.274	
Growth	0	-1.602	0.109	0	-1.606	0.109	-0.051	-1.662	0.097	0	-1.556	0.12	0	-1.583	0.114	0	-1.633	0.103	0	-1.605	0.109	0	-1.667	0.096	0	-1.524	0.128	0	-1.591	0.112	0	-1.655	0.098	
ManOwn	-0.101	-2.367	0.018	-0.101	-2.363	0.018	-0.078	-2.321	0.02	-0.104	-2.448	0.015	-0.104	-2.427	0.015	-0.098	-2.298	0.022	-0.096	-2.256	0.024	-0.103	-2.406	0.016	-0.123	-2.773	0.006	-0.104	-2.421	0.016	-0.103	-2.404	0.016	
Distributor & Supplier	0.028	0.711	0.477																															
Eng&Con				0.067	1.754	0.08																												
FoodServ							-0.08	-2.563	0.011																									
Hom&Buil										0.138	2.916	0.004																						
Hot&Rest													-0.04	-0.961	0.337																			
ITComp																0.041	1.266	0.206																
Manu Com																																		
Oil&Gas																																		
Pherm Com																																		
Retail																																		
Trading and Mining																																		

Table:6.26

The tables from 6.26 presents that practice of earnings management in different types of industry. The manipulation of the earnings quality may categorically differ; which means the firms those are in same industry may have same approach to practice earnings management. As suggested by Peasnell (2005), this research has categorised the firms of FTSE350 companies as per the industry they are in and has run the regression analysis.

From the statistical calculation, it is identified that the firms those fall in the category of hotel and restaurant, and home and building are highly significant with earnings management. In terms of hotel and restaurant, $\beta = 0.138$ and P-Value < 0.05 while in terms of home and building $\beta = -0.080$ and P-value < 0.05. This concludes that hotel and restaurant practice income increasing approach while home and building has practised income decreasing approach.

It has been argued that hotel and restaurant industries are more seasonal and the revenue gets generated in certain particular season of the year. Hence, they are more likely to practice earnings management to present the smooth earnings over the time. Again, this industry has no consistency in terms of business over the time, it varies months to months; hence, they practise the cookie jar which is reservation; hence, the income increasing practice of earnings management have been practised as mentioned by the past researchers Yang *et al.* (2009), Veronica (2020), Shams (2020). This idea has also been supported by this study as there is positive significant relationship between earnings management and hotel industry.

On the contrary, home and building industry has practised income-decreasing earnings management practice. This finding also has supported the recommendation of the researchers Shen and Chih (2007), Sandeep (2012), Saleh *et al.* (2021) who have argued that the home and building is very complex by its nature. The revenue recognition in such industry cannot be done straightway due to the activities of too much research and development. Hence, the firms in this industry follow the income decreasing industry for the tax purpose. This study also presents that there is negative and significant relationship between the earnings management, and home and building.

Further, retail, oil and gas industry, and engineering and consulting have significant relationship with earnings management at 0.1 confidence level. This approves that there is, however, strong relationship between these industries and earnings management. In terms of retail industry $\beta = 0.072$ and $P\text{-value} < 0.1$; in terms of oil and gas company $\beta = -0.063$ and $P\text{-value} < 0.1$ and in terms of engineering and consulting $\beta = 0.067$ and $P\text{-value} < 0.1$.

These calculations suggest that earnings management has significant and positive relationship with retail industry, and engineering and consulting organisation while there is negative relationship between earnings management and oil and gas company. While comparing the relationship of earnings management with the independent variables, this study has identified that there is consistent relationship in both models.

The study by Toniato *et al.* (2018) has explored the performance of earnings management in relation to industry-wise. They have categorised the firms of Brazilian firms in 20 different sectors; out of which oil and gas, trading and mining, food and service, home and building, hotel and restaurants are the industries those are similar to this study.

While making comparison between the Brazilian firms and UK Firms based on the industry-wise observation, it has been found that most of the industries have insignificant relationship. Toniato *et al.* (2018) have revealed that the industries like oil and gas, trading and mining, food and service and home and buildings are found to have insignificant relationship with earnings management. This study has identified similar results in terms of the firms which are in trading and mining industry, home and building industry, food services industry. Both studies report that these industries have not significant relationship with earnings management.

Moreover, Toniato *et al.* (2018) reports that oil and gas companies have insignificant but negative relationship with earnings management; while this study shows different results. Based on the finding of this study, it has been identified that there is positive and significant, at 0.1, relationship between the earnings management and; oil and gas companies of the UK.

Similarly, in terms of hotel and restaurants, the investigation has identified the Brazilian firms have opposite nature in compare to UK firms. Brazilian firms in terms of hotel and restaurant industry, it is reported that there is negative relationship between with earnings management, and hotel and restaurant industry. But, this study based on the hotel and restaurant industry of the UK, it is identified that there is positive and significant relationship between earnings management and external audit.

6.14. Overall Summary

This section of the research has analysed the impact of corporate governance variables and the variables of external audit in controlling earnings management. While finding the variables of corporate governance, this research has incorporated the very important sets of variables board composition and ownership structure from corporate governance; and audit committee effectiveness, external audit factors from external audit. This research has collected the data from 2013 to 2019. Due to the availability and relevance of the data, it is considered from 2015 till 2019 in the analysis from FTSE350 index.

The analysis has considered two important statistical tests; univariate and multivariate. The univariate tests have considered the descriptive statistics while multivariate tests have considered the regression analysis. Many other additional tests have been carried out in this project to ensure that most possible aspects of the earnings management and the factors they can impact on the value of discretionary accruals have been adopted. This finding suggest that the managerial ownership, cross listing firms and big bath tests are the most relevant attributes of the model. However, there are several other reasons why the result does not seem consistent from the result based on one country to other which has been discussed in detail.

In general, it is identified that the variables of the corporate governance are found as active attributes to control the practice of the earnings management. The significance level is quite higher in first model than in the second model. While making further tests, most of the tests have been found that they have considerable impact on the earnings management.

In terms of second model, the impact of the variables audits fees and non-audit fees, expertise of the auditors, managerial ownership is found as effective variables to restrain the value of the discretionary accruals.

At last, it has found that not all the attributes of corporate governance variables have been found as stated in the hypotheses, however, it has been identified that there are impacts in the earnings management in different ways. The chapter following this will provide the summary of this research, its implication and avenues for the development of the research in this area.

Chapter Seven

7. Summary and Conclusion

7.1. Introduction

As this section is the summary part of the whole project, this incorporates the summary of the major results and the structure of the section is presented as below:

1. Restatement of the research problem and research question.
2. The analysis of the research methods
3. Summary of the results of this project
4. Implications of this research
5. Limitations of this research
6. Avenues for further research

7.2. Restatement of the Research Problem and Research Question

Earnings management has been even more complex concept since accruals accounting is being followed. There are many areas where the managers can have their discretionary rights and these rights can be manipulated as per the opportunistic behaviour of the managers. Such type of self-interests and opportunistic behaviours of the manager eventually leads to manipulated the quality of earnings; hence, these financial statements may mislead the investors, shareholders while making financial decision (Wild, 1996; Dechow *et al.*, 1996).

Hence, there are two monitoring systems in practice to monitor and control the earnings management practice; as discussed in earlier chapters, they are corporate governance and external audit who play the role to improve the quality of financial reporting.

Therefore, the research is aimed to empirically examine the impact of corporate governance and external audit on earnings management: based on FTSE350 companies. Hence, the primary research question is:

“Can corporate governance and external audit control the earnings management practice in the UK?”

7.3. Summary of Research Methodology

This study has used the agency theory to conduct the research, hence, the monitoring devices corporate governance and external audit have been adopted and examined if the value of

discretionary accruals can be controlled. The variables are chosen as per the categories of the corporate governance board of directors' composition, non-executive directors' commitment, audit committee effectiveness and the structure of the ownership. There are other attributes which are brought from the external audit factors; these are audit quality and audit fees structures.

For the estimation of the discretionary accruals, this research has similar approach to prior studies by Kothari *et al.* (2001), Becker *et al.* (1998), Jones (1991) and Healy (1985). The discretionary accruals, the proxy of earnings management, have been measured by the using the variable of the performance matched discretionary accruals (Kothari *et al.*, 2005).

This research is prepared based on the hypotheses testing, hence, the hypotheses are prepared by using the monitoring devices of the earnings management. There are two different types of monitoring devices are used, hence, two different regression models are formed. The empirical study has been continued by using the data from FTSE350 Companies collecting the data from 2013 till 2019.

There are seventeen hypotheses being prepared by creating the two models based on the monitoring factors of the earnings management. These variables and their associations are tested by using univariate and multivariate techniques. The hypotheses are also tested by using general least square method.

7.4. Summary of the Research Results

There are 17 hypotheses formed by using the variables of corporate governance and external audit considering their impacts on controlling earnings management. While evaluating the outcomes, it can be argued that the corporate governance and external audit can constrain the practice of manipulation of the earnings quality. However, this does not claim that all the attributes are equally significant for the data based on FTSE350 companies of the UK, hence, some attributes have higher significance level and some have lower as presented in the data analysis section.

This study has identified that earnings management and independence of the board has negative association but the three is no significant relation identified in this research. The independence of the board is basically the proportion of the independent directors to the board size.

The study has not found the significant relationship between the board meetings and discretionary accruals. The research has not found the relationship between board meetings and earnings management as suggested in the hypothesis; They have positive and insignificant relationship.

Further, the relationship between board size and earnings management also has not been found. These variables also have insignificant and positive relationship.

The research finds that there is no relationship between the presence of women in the board and the manipulation in the earnings quality. The results show that they are quite insignificant. The relationship between independent nomination committee and earnings management has been found as insignificant but positive.

While assessing the impact of the independence of remuneration committee in controlling discretionary accruals. While conducting collinearity test, the collinearity value has been appeared very high (99.2%), hence, this variable has been removed from the model. In terms of private meetings and earnings management, they have significant and negative relationship. The private meetings of the non-executive directors have significant and negative relationship with the value of discretionary accruals.

The relationship between non-executive directors and discretionary accruals have been found as positive. The fees of the non-executive directors have positive relationship with the earnings management.

The managerial ownership has significant and negative relationship between earnings management. This approves that the owner managers pay very strong consideration on reducing to manipulate earnings quality.

It is identified that there is no significant relationship between the earnings management and institutional ownership. The managerial ownership has paid strong attention in this matter; therefore, this may have caused the insignificant relationship between institutional ownership and discretionary accruals.

The block holders have positive and significant relationship with earnings management. They actually encourage the managers to take part in the practice of earnings management. Further, it has identified that the audit committee with finance experts can have negative relationship with the earnings management. This research also has found the significant relationship while examining.

The earnings management has insignificant relationship with the size of the audit committee. However, it is identified that they have negative association to each other. This evident that the number of meetings does not have controlling effect on earnings management. This study has found that they have insignificant and positive relationship.

It has identified that non-audit fees have significant and positive relationship with earnings management. This approves that incentivising the auditors via non-audit fees can enhance the practice of earnings management. It has identified that the higher audit fees have

significant and negative relationship with the earnings management. It concludes that the auditors can go through additional scrutiny while the audit fees are reasonably good.

The research has identified that there is negative and significant relationship between the auditors with industrial specialist and earnings management. These auditors and industry specific knowledge, hence, can go through additional trials and scrutiny.

7.5. Summary of Hypotheses and results

Hypothesis Number	Hypothesis	Results
1	<i>The relationship between independent boards and discretionary accruals is negatively associated.</i>	Insignificant; Negatively associated
2	<i>The relationship between Board meetings and earnings management is negatively associated.</i>	Insignificant; Positively associated
3	<i>The relationship between board size and discretionary accruals is negatively associated.</i>	Insignificant; Positively associated
4	<i>The relationship between number of women in the board and earnings management is negatively associated.</i>	Insignificant; not associated.
5	<i>The relationship between independent nomination committee in the board and earnings management is negatively associated.</i>	Insignificant; Positively associated
6	<i>The relationship between independent remuneration committee in the board and earnings management is negatively associated.</i>	Removed; Multi-collinearity concern.
7	<i>The relationship between non-executive director's private meetings and earnings management is negatively associated.</i>	Significant at 1.0; Negatively associated
8	<i>The relationship between non-executive director's fees and earnings management is negatively associated.</i>	Significant at 0.05; Positively associated
9	<i>The relationship between high managerial ownership and earnings management is negatively associated.</i>	Significant at 0.05; Negatively associated.
10	<i>The relationship between high Institutional ownership and earnings management is negatively associated.</i>	Insignificant; not associated.

11	<i>The relationship between a block holding of 10% or more; and earnings management is negatively associated.</i>	Significant at 0.05; Positively associated
12	<i>The relationship between audit committee with financial experts and earnings management is negatively associated.</i>	Significant at 0.05; Negatively associated.
13	<i>The relationship between audit committee size and earnings management is negatively associated.</i>	Insignificant; Negatively associated.
14	<i>The relationship between number of audit committee meeting and earnings management is negatively associated.</i>	Insignificant; Negatively associated.
15	<i>The relationship between non-audit fees and earnings management is positively associated.</i>	Significant at 0.05; Positively associated
16	<i>The relationship between higher audit fees and earnings management is negatively associated.</i>	Significant at 0.05; Negatively associated
17	<i>Firms that are audited by a specialised auditor have less earnings management.</i>	Significant; Negatively Associated.

Table: 7.1

7.6. Potential Limitations of the Research

This research has been completed by following the principles of the empirical study which was supervised by immensely qualified and experienced and specialised supervisor. However, there are some genuine limitations and these limitations have been classified in two categories; limitations of the data and sampling out of huge population; and the limitations in confirming the variables in the model. However, to complete this project huge effort has been put in place, hence, the aims and objectives of the research have been addressed by answering the research questions appropriately.

7.6.1. limitations of the data and sampling out of huge population

The data was collected based on the sampling methods which are chosen as per the predetermined criteria. The empirical study was considered by investing the data from non-random sample of the firms which may consist the inherent bias and some inaccuracies. Due to the constrained condition, in terms of making the data available for the research, there are limitations to obtain the comprehensive and relevant information publicly. To study the earnings management practices and its monitoring devices based on the UK, it is very difficult, mainly to make the random sampling based on the UK firms.

Moreover, there is other concern in sampling the data due to not availability of the data. Not all chosen variables of all listed companies are found while collecting data. This study has collected the data based on the companies listed in the UK in FTSE350 index; hence, there can appear existence of the size bias. This is still considered as the better one because the size bias has omitted the survivorship bias over the period of this study; the reason behind this is that the firms can be delisted from the list but the larger firms have lower chance to be delisted than the smaller ones.

Despite of considering the data from the UK, this study has to pay considerable attention on the regulations, compliance matter, accounting standard, economic environments of the other countries' stock market. This study also has to be aware of the characteristics of the capital markets of the other countries like size, number of firms listed in the stock markets, market price and valuation.

Based on the empirical findings of this study, the generalisability of this research in compatible with the generalisability of the other countries; however, this generalisability has been reduced as being the firms publicly listed because some firms have been excluded due to the data unavailability and size of the firms.

7.6.2. The limitations in confirming the variables and constructing them in the model:

The dependent variable of the model is earnings management which is the proxy of discretionary accruals; these values represent the earnings quality. The theoretical definition of the earnings management has been clearly set, nonetheless, practically, to achieve the accurate value of discretionary is not empirically possible. Therefore, this limitation has been reduced by using the most effective model which has been approved as performance matched discretionary accruals; explained in chapter three.

On the other hand, it has been identified that there is higher level of statistical errors in the earnings management models and very difficult to detect the actual value of the discretionary accruals. The other reason is that the manipulating earnings quality is the opportunistic activities of the managers which is the result of the managerial discretionary rights. Hence, it is very difficult to exactly identify whether the practice of earnings management is done as per the need of the business or as per the self-interest and contractual obligation.

The importance of the construct validity; by incorporating relevant variables, has significant impact while constructing the regression model. In the first model, this study has input the non-executive directors' commitment. This is composition of the non-executive directors' fees, non-executive director's private meetings. These two factor may not adequately represent the attributes of the non- executive directors' commitment.

While considering the attributes of the auditor independence and audit quality, this research has considered the variables non-audit fees, audit fees and industry specialised auditor. These variables are may not exactly represent the auditor independence and audit quality which is being on-going discussion from long time. Hence, based on the prior research, this study has considered these variables, however, there is no better measurement identified to represent auditor independence and audit quality.

This research is the study of the impact of corporate governance variables and external audit on earnings management, hence, the variables of the corporate governance and external audit have to be involved while modelling. If some other attributes are not incorporated in the model and those have influence on the earnings management, the findings of the parameters may be biased.

This study has considered the discretionary accruals, the corporate governance and external audit while measuring the impacts on earnings quality. If there are other factors those can impact the earnings quality, there may exist the bias in empirical findings and interpretation. However, this study is not prepared for causality test but the correlation. Therefore, the outcomes may incorporate some bias results due to the impact of causality, however, the consequences appeared due to ignoring this factor might have minor errors.

7.7. Implication of the Research

In the previous section, the limitation of the study has been explored and demonstrated. However, this study is very important in the field of accounting and finance that deals with the impact of corporate governance and external audit in restraining discretionary accruals, hence, to improve the quality of reported earnings.

The shareholders, investors and other related stake holders can use this research to understand the overall impacts on earnings management; hence, it has practical implications in the business area. The stake holders those make financial decision can be benefitted from the decisions of the external audit and the governance of the organisation. Therefore, this research has passed the message that the correct financial and non-financial can ensure the security for the investors and shareholders.

This research has disclosed the results that helps the investors and other related stake holders to make better financial and non-financial decision by making additional scrutiny on the corporate governance and external audit and their contribution in controlling the manipulation on the earnings quality.

The outcome of this study has been empirically examined; hence, those who charged with governance, mainly in context of the UK, can make use of this research to develop the governance matters, regulations and compliance factors. The importance of the disclosure in

the financial statement is hugely discussed in these days and have been reflected them in this study, hence, the governing body of the stock market can be benefitted by understanding the role of corporate governance and external audit in such kind of disclosure concerns.

This research has made wider participation of the various while modelling the regression line. It does not only encompass the independence of the board but also the commitment of the board to improve the quality of the bottom line; hence, the followers of this study can understand the importance of fees paid to non-executive directors in controlling the manipulation of the earnings management. This study has also identified the value of the independence of all parties to reduce the manipulation of the earnings quality.

This study has explored more in terms of the diligence of the board of directors. This concluded that merely number of meetings does not generate the effectiveness of the board, hence other sub-factors length of meetings, meeting agendas and notes, contribution in the meetings by the members are also important. Hence, this study adds awareness to the potential stakeholders, hence, help them in making better decision.

This study has adopted the data of the variables of the corporate governance and variables of the external audit. Regarding the meetings of the audit, as per the guidance set by Smith, (2018); the minimum meeting should be held at least 3 times a year but this study has identified the negative insignificant relationship with the manipulations of the earnings quality; hence, it approves that it is not the number of meeting, it is rather other factors to be prioritised. Auditor's objectivity, independence play better role than just holding more meetings.

Regarding the independence of the board independence, the UK Corporate Governance Code, (2018) states that 50% of the board members is recommendable to be independent excluding chairman but this study shows that there is negative relationship and they are insignificant. Hence, this study concludes that only the numbers of directors does not contribute to the earnings quality; they rather have to work independently; hence, this study provides the idea to the stakeholders that the independence is not only by means of number also by means of their contribution to reduce the manipulation in the earning's quality.

For the regulatory bodies too, this research has identified the effectiveness of the corporate governance and external audit, this study helps to develop and update the new regulations. The impairment of the board independence, fees for the audit and non-audit may reduce the effectiveness of the financial reporting.

Lastly, this research has presented the impact of the corporate governance and external audit on the earnings management by collecting the data from FTSE350 index. This shows that board size, board independence, board meeting, presence of female, remuneration committee independence, and institutional ownership are not significantly related to control

the earnings management; hence this study suggests that there needs development and new updates to develop in effectiveness of the corporate governance and external audit factors.

7.8. Avenues for Further Research:

The findings of this thesis concludes that the factors of the corporate governance influence on the value of discretionary accruals. Despite of this, there can be other variables of the corporate governance which have been excluded in this research but they can influence in the value of discretionary accruals significantly.

Hence, in future, the researchers have to take the opportunity to add more attributes of the corporate governance while assessing the impact of corporate governance on the earnings management. Some examples can be considered as the size of remuneration and nomination committees, number of meeting they held, whether the presence of CEO in Nomination committee, the presence of CEO in the remuneration committee, the attendance rates of board meetings.

The next avenue for the following researchers can be analysing the impact of auditor opinion, accounting conservatism, restatements and fraudulences on earnings quality as this study has identify that corporate governance and external audit have significant impact on earnings management.

While considering past research, it is claimed that the institutional ownership, managerial ownership and block-holder's ownership have significant impact on earnings quality but this study has mixed results; managerial ownership is highly significant and negatively associated whereas block holders have significant and positive relationship with earnings management. Hence, the contradiction in terms of relationship can be further investigated; conceivably, there may be other aspects of these ownership structures, not tested by this study, that determines the effectiveness of these monitoring mechanisms.

As mentioned above, the further investigation is required to identify and analyse the impact of institutional ownership, managerial ownership, and block-holder on earnings quality; and the research is based on the UK. Hence, the study based on these attributes have to be further investigated comparatively considering UK industries and industries of other parts of the world.

The next avenue can be the consideration of the various types of non-audit fees, auditor's independence while investigating the impact of external audit on earnings management. This research has found non-audit fees and audit fees have significant impact on earnings management. Further, this studies have excluded the smaller firms of the UK; and also some listed firms. There is need of inclusion of those firms and industries in the future research while identifying the impacts on earnings management.

The research can be done by following similar approach by considering other stock markets from different countries; hence, different insight can likely be produced with different markets. The reason can be due to different rules and regulations of corporate governance and external audit in different countries.

7.9. Summary

The summary and conclusions of this research is explained in this section. As per the restatement of the research problems and research question, this study has adopted the methodology to undertake the research and achieve the research aim. The statistical inferences have been analysed and explained. The relationship between the dependent and independent variables have been presented.

This research has made empirical study on the influence of corporate governance and external audit on controlling manipulation of the earnings quality. Various attributes of the monitoring tools have been deployed and find the association of them with earnings management. The impact of board size, board independence, board meetings, female in the board have no significant relationship with the earnings management. However, number of non-executive director' meetings, non-executive director' fees, block holder, audit fees and non-audit fees on the earnings management have significant relationship with the earnings management.

In terms of contribution of this study is to update the research under the topics of earnings management, corporate governance and external audit; and the impact of latter two on the previous one. This finding is very important and make all users of the financial statements aware while making financial decision while investing in the stock markets or buying shares, bonds; basically all kinds of financial and non-financial activities.

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9. Appendix:

	Engineering and Consultancy			Distributor and Supplier		
	Mean	Median	St Dev	Mean	Median	St Dev
DAC1	0.50	0.53	0.29	0.50	0.54	0.29
AudFee	2210.11	1500.00	2363.33	2021.43	1255.00	2200.78
NonAudFee	741.42	300.00	1337.08	678.36	300.00	1298.73
AudComSize	12.77	12.00	2.74	12.79	12.00	2.78
AudComMeet	6.46	6.00	1.85	6.44	6.00	1.90
IndusSpec	0.91	1.00	0.28	0.90	1.00	0.30
AudExp	0.92	1.00	0.27	0.92	1.00	0.28
Leverage	1.04	0.06	19.34	0.98	0.06	18.89
CFOTA1	0.03	0.04	0.33	0.04	0.04	0.33
ROA	7.82	6.98	8.13	8.06	7.23	8.44
Growth	24.89	18.20	33.06	25.18	17.89	33.53
BoardSize	10.29	10.00	1.95	10.08	10.00	1.97
BoardInd	48.90	48.13	7.70	48.53	47.91	7.69
BoardMeet	4.63	4.00	0.84	4.69	4.00	0.86
ChairmanInd	1.00	1.00	0.00	1.00	1.00	0.00
RemComInd	0.78	1.00	0.41	0.76	1.00	0.43
NomCommInd	59.58	62.00	4.37	59.65	62.00	4.31
FemaleBoard	44.72	45.45	11.81	46.09	45.45	13.30
NEDMeet	0.78	1.00	0.41	0.76	1.00	0.43
NEDFee	48996.00	46294.77	13202.85	49507.41	46666.43	13260.29
Blockholder	0.78	1.00	0.41	0.79	1.00	0.41
ManOwn	0.12	0.11	0.07	0.13	0.11	0.08
InstOwn	42.85	48.66	28.03	42.16	47.38	27.82

	Food Services Company			Home and Building Services		
	Mean	Median	St Dev	Mean	Median	St Dev
DAC1	0.49	0.53	0.29	0.48	0.51	0.29
AudFee	2696.46	2000.00	2576.38	1705.22	1100.00	1623.96
NonAudFee	829.64	400.00	1391.13	573.94	264.00	912.61
AudComSize	12.62	12.00	2.75	12.39	12.00	2.71
AudComMeet	6.39	6.00	1.76	6.18	6.00	1.75
IndusSpec	0.96	1.00	0.20	0.91	1.00	0.29

AudExp	0.96	1.00	0.20	0.91	1.00	0.29
Leverage	0.73	0.06	15.42	0.82	0.05	16.96
CFOTA1	0.03	0.03	0.34	0.03	0.04	0.34
ROA	7.21	6.41	7.64	8.05	7.27	8.24
Growth	24.16	17.40	32.65	24.04	18.17	30.55
BoardSize	10.70	11.00	1.92	10.19	10.00	2.03
BoardInd	48.78	48.13	8.03	48.89	48.35	7.43
BoardMeet	4.59	4.00	0.84	4.65	4.00	0.84
ChairmanInd	1.00	1.00	0.00	1.00	1.00	0.00
RemComInd	0.75	1.00	0.43	0.78	1.00	0.41
NomCommInd	59.57	62.00	4.45	59.23	62.00	4.51
FemaleBoard	43.45	44.44	11.69	44.31	44.44	12.08
NEDMeet	0.75	1.00	0.43	0.78	1.00	0.41
NEDFee	45524.32	43049.10	11700.42	46917.89	44743.94	11293.88
Blockholder	0.77	1.00	0.42	0.80	1.00	0.40
ManOwn	0.12	0.10	0.07	0.13	0.11	0.07
InstOwn	41.67	47.75	28.76	44.47	50.32	29.15

	Hospitality Industry			IT Company		
	Mean	Median	St Dev	Mean	Median	St Dev
DAC1	0.51	0.54	0.30	0.50	0.53	0.30
AudFee	1150.51	745.00	1284.76	1637.68	805.00	2065.47
NonAudFee	446.53	200.00	991.66	582.06	207.00	1252.26
AudComSize	12.68	12.00	2.89	12.75	12.00	2.80
AudComMeet	6.35	6.00	1.97	6.50	6.00	1.99
IndusSpec	0.85	1.00	0.35	0.90	1.00	0.30
AudExp	0.88	1.00	0.32	0.92	1.00	0.28
Leverage	0.31	0.04	15.50	0.79	0.05	16.74
CFOTA1	0.03	0.04	0.45	0.03	0.04	0.41
ROA	9.53	7.98	14.13	10.95	7.82	23.63
Growth	24.98	18.51	31.83	29.55	18.76	45.77
BoardSize	9.58	10.00	2.05	9.81	10.00	1.96
BoardInd	48.84	48.13	7.80	48.93	48.57	7.89
BoardMeet	4.67	4.00	0.87	4.72	4.00	0.89
ChairmanInd	1.00	1.00	0.00	1.00	1.00	0.00
RemComInd	0.76	1.00	0.43	0.76	1.00	0.43
NomCommInd	59.70	62.00	4.27	59.70	62.00	4.22
FemaleBoard	48.02	45.45	14.28	46.47	45.45	13.34
NEDMeet	0.76	1.00	0.43	0.76	1.00	0.43
NEDFee	50239.78	48033.07	13987.61	49684.92	46394.75	14395.42
Blockholder	0.73	1.00	0.44	0.75	1.00	0.43

ManOwn	0.13	0.11	0.08	0.13	0.11	0.08
InstOwn	41.68	47.22	28.02	41.28	47.22	28.08

	Manufacturing Company			Oil & Gas Company		
	Mean	Median	St Dev	Mean	Median	St Dev
DAC1	0.49	0.54	0.29	0.50	0.53	0.30
AudFee	2163.77	1052.50	3782.12	2925.51	1100.00	4947.14
NonAudFee	669.90	273.50	1483.42	889.77	300.00	1791.63
AudComSize	12.79	12.00	2.85	12.92	12.00	2.81
AudComMeet	6.47	6.00	2.03	6.54	6.00	1.94
IndusSpec	0.89	1.00	0.29	0.91	1.00	0.29
AudExp	0.90	1.00	0.27	0.92	1.00	0.27
Leverage	0.63	0.05	16.21	0.72	0.05	16.08
CFOTA1	0.02	0.04	0.41	0.03	0.04	0.40
ROA	9.58	7.20	22.96	10.17	6.99	22.81
Growth	29.51	17.84	41.68	27.45	17.71	47.53
BoardSize	9.84	10.00	2.07	10.19	10.00	2.17
BoardInd	48.77	47.33	7.83	48.16	47.27	7.79
BoardMeet	4.71	4.00	0.86	4.65	4.00	0.86
ChairmanInd	1.00	1.00	0.00	1.00	1.00	0.00
RemComInd	0.74	1.00	0.44	0.73	1.00	0.45
NomCommInd	59.83	62.00	4.12	59.84	62.00	4.08
FemaleBoard	46.73	44.44	13.23	45.37	44.44	13.27
NEDMeet	0.74	1.00	0.44	0.73	1.00	0.44
NEDFee	51608.90	47199.30	15269.75	51676.46	47371.35	15356.40
Blockholder	0.72	1.00	0.45	0.72	1.00	0.45
ManOwn	0.13	0.11	0.08	0.15	0.11	0.21
InstOwn	39.88	45.89	28.34	40.15	44.98	28.42

	Pharmaceutical Industry			Retail Stores			Trading and Mining Company		
	mean	Median	St Dev	Mean	Median	St Dev	Mean	Median	St Dev
DAC1	0.51	0.54	0.29	0.51	0.54	0.29	0.49	0.53	0.29
AudFee	2663.85	1400.00	3780.78	2762.82	1400.00	3910.03	3883.17	2292.50	4576.08
NonAudFee	814.04	300.00	1510.21	859.08	300.00	1607.31	1151.49	447.00	1864.90
AudComSize	12.83	12.00	2.81	12.85	12.00	2.82	12.69	12.00	2.75
AudComMeet	6.40	6.00	1.89	6.44	6.00	1.94	6.39	6.00	1.82
IndusSpec	0.92	1.00	0.28	0.91	1.00	0.29	0.96	1.00	0.19
AudExp	0.93	1.00	0.26	0.93	1.00	0.26	0.96	1.00	0.19

Leverage	0.84	0.06	17.43	0.81	0.05	16.99	0.67	0.05	14.62
LagTotalAsset	11.70	11.76	2.14	11.76	11.77	2.21	12.51	12.48	2.07
CFOTA1	0.04	0.04	0.34	0.03	0.04	0.41	0.03	0.03	0.34
ROA	8.39	6.87	11.72	8.47	6.91	11.65	6.95	5.95	7.57
Growth	24.20	17.46	31.44	24.49	17.16	32.02	24.62	17.34	33.03
BoardSize	10.21	10.00	2.00	10.28	10.00	2.04	10.93	11.00	2.01
BoardInd	48.22	47.27	7.74	48.18	47.27	7.75	47.97	47.03	8.14
BoardMeet	4.66	4.00	0.84	4.64	4.00	0.83	4.56	4.00	0.81
ChairmanInd	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
RemComInd	0.74	1.00	0.44	0.73	1.00	0.45	0.69	1.00	0.46
NomCommInd	59.80	62.00	4.16	59.84	62.00	4.11	59.77	62.00	4.28
FemaleBoard	45.27	44.95	13.12	45.30	44.44	13.03	42.72	42.26	11.43
NEDMeet	0.74	1.00	0.44	0.73	1.00	0.45	0.69	1.00	0.46
NEDFee	51460.43	47676.56	14353.98	51587.99	47676.56	14638.64	48763.42	43997.44	14508.38
Blockholder	0.75	1.00	0.44	0.73	1.00	0.44	0.71	1.00	0.45
ManOwn	0.12	0.11	0.07	0.14	0.11	0.18	0.14	0.10	0.21
InstOwn	40.59	44.98	28.08	40.43	45.36	28.07	40.76	47.03	28.92

Abbreviations:

UK	United Kingdom
US	United State
USA	United State of America
FTSE350	Financial Times Stock Exchange 350
OECD	Organization for Economic Co-operation and Development
SEC	Securities and Exchange Commission
ROA	Return on Asset
R&D	Research and Development
CEO	Chief Executive Officer
ISA	International Standards on Auditing