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**REGULATORY CHANGES, REPORTING QUALITY AND
AUDIT FEES: THE MODERATING ROLE OF FIRM
CHARACTERISTICS**



SALAU ABDULMALIK O

**DOCTOR OF PHILOSOPHY
UNIVERSITI UTARA MALAYSIA
September 2016**



TUNKU PUTERI INTAN SAFINAZ
SCHOOL OF ACCOUNTANCY
COLLEGE OF BUSINESS
Universiti Utara Malaysia

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(Signature)

Pemeriksa Luar : **Prof. Dr. Mazlina @ Norzila Mat Zain**

Tandatangan
(Signature)

Pemeriksa Dalam : **Prof. Dr. Wan Nordin Wan Hussin**

Tandatangan
(Signature)

Tarikh: **26 September 2016**
(Date)

Nama Pelajar
(Name of Student) : **Salau Abdulmalik Olarinoye**

Tajuk Tesis / Disertasi
(Title of the Thesis / Dissertation) : **Regulatory Changes, Reporting Quality and Audit Fees: The Moderating Role of Firm Characteristics**

Program Pengajian
(Programme of Study) : **Doctor of Philosophy**

Nama Penyelia/Penyelia-penyelia
(Name of Supervisor/Supervisors) : **Prof. Dr. Ayoib Che Ahmad**



Tandatangan

Nama Penyelia/Penyelia-penyelia
(Name of Supervisor/Supervisors) :

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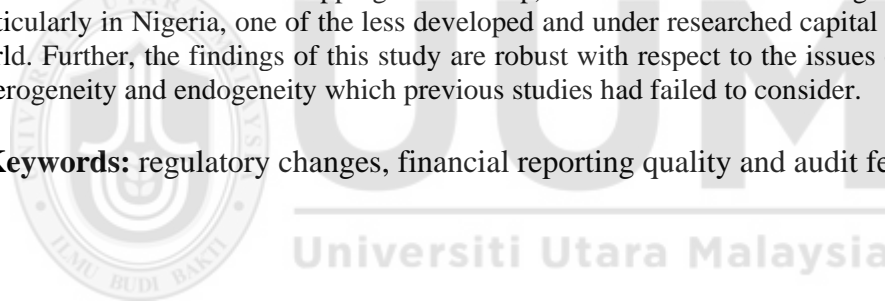
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ABSTRACT

The objective of this study is to investigate the effect of regulatory changes on financial reporting quality and audit fees and to further test whether this effect was moderated by firm characteristics (i.e. abnormal audit fees, political connections and overlapping directorship) in Nigeria. This study utilised the data of 90 companies listed on the Nigerian stock exchange over the periods 2008-2013. Using Generalized Method of Moments (GMM) technique that takes into account the endogeneity nature of financial reporting quality and audit fees model, the results indicated that financial reporting quality improved in the regulatory changes period. However, abnormal audit fees, political connection and overlapping directorship deteriorated the effect. In addition, the study found an increase in the amount paid as audit fees in the regulatory changes periods and this varied with the perceived riskiness of firm characteristics. Specifically, the increase in financial reporting quality in the regulatory changes periods led to a decrease in audit fees while the perceived riskiness of overlapping directorship increased audit fees in the regulatory changes periods. Further, the perceived riskiness of politically connected firms in the regulatory changes periods did not significantly affect audit fees. Accordingly, future regulatory reforms must be cognizant of these factors. Even though there are abundant empirical studies on financial regulatory changes and their effects on financial reporting quality and audit fees, this study provides additional insights into the regulatory change literature by investigating how firms characteristics (abnormal audit fees, political connection and overlapping directorship) moderates the effect of regulatory changes particularly in Nigeria, one of the less developed and under researched capital markets in the world. Further, the findings of this study are robust with respect to the issues of unobserved heterogeneity and endogeneity which previous studies had failed to consider.

Keywords: regulatory changes, financial reporting quality and audit fees, Nigeria



ABSTRAK

Objektif kajian ini adalah untuk meneliti kesan perubahan kawal selia terhadap kualiti laporan kewangan dan yuran audit untuk menguji dengan lebih lanjut sama ada kesan ini disederhanakan oleh ciri-ciri firma (iaitu, yuran audit yang tidak normal, hubungan politik, dan pertindihan pengarah) di Nigeria. Kajian ini menggunakan data 90 syarikat yang tersenarai di Nigerian Stock Exchange dari tahun 2008-2013. Menggunakan teknik *Generalized Method of Moments* (GMM) yang mengambil kira sifat endogen kualiti laporan kewangan dan model yuran audit, keputusan menunjukkan bahawa kualiti laporan kewangan adalah bertambah baik dalam tempoh perubahan pengawalseliaan. Walau bagaimanapun, yuran audit yang tidak normal, hubungan politik, dan pertindihan pengarah menjejaskan kesan tersebut. Juga, kajian ini mendapati peningkatan dalam jumlah yang dibayar sebagai yuran audit dalam tempoh perubahan peraturan dan kesan ini berbeza-beza bergantung kepada risiko ciri-ciri firma yang ditanggung. Secara khususnya, peningkatan kualiti laporan kewangan didalam tempoh perubahan kawal selia membawa kepada penurunan kepada yuran audit manakala risiko pertindihan pengarah meningkatkan yuran audit dalam tempoh tersebut. Selanjutnya, risiko syarikat yang berkait dengan politik dalam tempoh perubahan kawal selia tidak memberi kesan signifikan kepada yuran audit. Oleh itu, pembaharuan pengawalseliaan masa hadapan mesti mengambil kira faktor-faktor ini. Walaupun terdapat penyelidikan yang banyak mengenai perubahan pengawalseliaan kewangan dan kesannya terhadap kualiti laporan kewangan dan yuran audit, kajian ini memberikan pandangan tambahan kepada karya perubahan kawal selia dengan menyiasat bagaimana ciri-ciri firma (yuran audit yang tidak normal, kaitan politik, dan pertindihan pengarah) menyederhanakan kesan perubahan peraturan kawal selia terutamanya di Nigeria, salah satu pasaran modal yang kurang maju dan kurang dikaji di dunia. Di samping itu, hasil kajian ini adalah teguh mengenai isu-isu kepelbagaian dan endogen yang tidak terlihat yang telah gagal diambil kira oleh kajian sebelum ini.

Kata kunci: perubahan peraturan, kualiti laporan kewangan, yuran audit, Nigeria

ACKNOWLEDGEMENT

All praises are due to Allah (SWT) who guarded and guided me towards the successful completion of my Doctor of Philosophy programme. First and foremost, I will like to appreciate my supervisor Prof. Dr. Ayoib Che Ahmad for his various contributions and useful criticisms that led to the successful completion of this thesis. I thank him for making himself available at all times so that I could learn so much from him. Also, I acknowledge the effort of my external reviewer; Prof. Dr. Mazlina@Nor Zila Mat Zain who passed away few weeks after my viva. I appreciate her contribution towards improving the quality of my thesis and I prayed that almighty Allah forgives and bless her with Al-Janah. The insightful comments of my internal reviewer Prof. Dr. Wan Nordin Wan Hussin towards the perfection of the thesis are much more appreciated. Indeed, the two reviewers and my supervisor have taken their time to ensure that all the i's were dotted and t's crossed.. I equally acknowledge the moral, spiritual and financial support received from my parents: Alhaji Razaq Salau and Alhaja Hafusat Fumilayo as well as my stepmother Alhaja Sidiqat Salau. I would also like to thank my siblings, Azeezat, Taofeekat, Rofeekat, Ramat, Naimat, Muhammad, Muiatminah, Yusurah, and Salahudeen, for their endurance and prayers during my sojourn in Malaysia. In addition, I would like to register my appreciation to Ayantola Taofeekat and her siblings, the Al-kadriyah Mubarak family, Dr. Al-hassan's family, Tailiat Ayodele, Moshood Osuolale family, Mall Tajudeen and Mall Shittu, for all their support and prayers during my absence. In addition, I would like to express my appreciation to my colleagues and friends at the Universiti Utara Malaysia most especially Afolabi Lukman for the words of encouragement and advice. To all other well-wishers too numerous to mention due to the limitations of space and time I say a very big thank you and Jazakallahu Khairan. Finally, my sincere gratitude goes to the management of University Utara Malaysia for the Ph.D. scholarship grant, the scholarship grant indeed reduced my financial burden and aided the timely completion of the programme.

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LIST OF ABBREVIATIONS

ANAN	The Association of National Accountants Nigeria
ASC	Accounting Standards Committee
Big 4	The 4 largest audit firms worldwide, Deloitte, KMPG, PricewaterhouseCoopers, and Ernst & Young
Big 5	Until 2002, there were five big accounting firms worldwide. These included Deloitte, KMPG, Ernst & Young and Price Waterhouse. Then Price Waterhouse and Coopers & Lybrand merged to become PricewaterhouseCoopers
Big 8	Before 1987, the top accountancy firms were actually referred to as the Big 8. They were Deloitte Haskins & Sells, Arthur Andersen, Touche Ross, Price Waterhouse, Coopers & Lybrand, Peat Marwick Mitchell, Arthur Young & Co. and Ernst & Whinney
CAMA	Companies and Allied Matters Acts (CAMA 1990), Nigeria
CCG	Combined Code of Corporate Governance, the United Kingdom
CBN	Central Bank of Nigeria
FASB	Financial Accounting Standards Board, the United States
FRC	Financial Reporting Council, the United Kingdom
FRCN	Financial Reporting Council of Nigeria
FSF	Financial Stability Forum
GAAP	Generally Accepted Accounting Principles
GMM	Generalized Method of Moments
ICAN	Institute of Chartered Accountants of Nigeria
ICFR	Internal Control of Financial Reporting, the United States
IFAC	International Federation of Accountants
IFRS	International Financial Reporting Standards
MCCG	Malaysian Code of Corporation Governance
NASB	Nigeria Accounting Standards Board
SEC	Securities and Exchange Commission, the United States
SOX	Sarbanes-Oxley Act, the United States

CHAPTER ONE

INTRODUCTION

1.1 Background

The rapid pace at which capital markets around the globe are integrating has indeed brought about innovative changes to the business environment across the world. These changes have also reinforced the need to overhaul financial reporting regimes in most countries (Leuz 2010; Griffin, Lont & Sun 2009; Poon 2012; Combarros 2000). Unlike before, the consequences of a weak-reporting culture now transcend national borders.

Arguably, the lack of adequate accounting disclosures and corporate governance practices are the main issues that contributed to the financial crisis that disrupted the capital markets of emerging countries in 1997 and 1998 (Greenspan 1999). The East Asian financial crisis that started in Thailand in July 1997 deepened and spread to Indonesia, South Korea, Hong Kong, Malaysia, and the Philippines, among others were in no small measure due to inadequate accounting disclosures and poor corporate governance practices (Arnold 2012). The same factors (i.e., inadequate accounting practises and corporate governance failures) were also the causes of corporate failures in the widely publicised cases of Enron, WorldCom, and Arthur Andersen in 2001 in the United States. Without a doubt, with the globalised nature of capital markets, reliable, transparent, comparable, and consistent financial information are necessary tools to avert another economic crisis.

Corporate collapses and the global financial crisis renewed the interests of both practitioners and academic researchers in issues of financial reporting quality. As a result, reforms directed towards improving financial reporting quality have continued

unabated. Corporate governance and financial reporting standards have been at the centre of the recent international regulatory reform debate. Different countries have initiated regulatory reforms at different periods (Leuz 2010; Okike 2007). Prominent among such reforms were the Corporate Auditing Accountability, Responsibility, and Transparency Act of 2002, otherwise called the Sarbanes-Oxley (SOX) Act in the United States. Similar reforms were undertaken in other jurisdictions as preventive measures, including the restructuring of the Financial Reporting Council (FRC) in the United Kingdom along with the review of the United Kingdom's Combined Code of Corporate Governance (CCG). In emerging markets, South Africa's King Report on Corporate Governance 2002, the Manual of Corporate Governance in Ghana 2002, Nigeria CCG 2003, and the Malaysian CCG 2002 were among such efforts.

One significant reform that has shaped reporting practises over time has been the integration of national regulatory financial systems with "supranational" private sector standard-setting bodies like the International Accounting Standards Board (IASB) and the International Federation of Accountants (IFAC), and governmental bodies like the European Union (Beattie, Fearnley & Hines 2010). One of the first initiatives directed towards reducing the differences in financial reporting standards was first conceived in the late 1950s¹ with an emphasis on the harmonization of regulations. The International Accounting Standard Committee, which was formed in 1973, was the first international standard setting body. The Accounting Standards Committee (ASC) was a group of professional accountancy bodies from ten member states, including Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland, and the United States. This ASC was reorganized into the

¹ The initiative was conceived in response to post-World War II economic integration moves. <http://www.fasb.org/jsp/FASB/Page/SectionPage&cid=1176156304264>

International Accounting Standards Board in 2001 (Leuz 2010). Since that time, the use of international standards has increased. As of 2013, the European Union and more than 100 other countries either require or permit the use of international financial reporting standards issued by the IASB or a local variant of those standards. According to the constitution of IFRS Foundation, the goal of the board is to develop a set of high-quality accounting standards in the public interest that will be understandable and enforceable globally. Most importantly, creating quality, transparent, and comparable financial statements will help investors make informed decisions (IFRS Foundation Constitution, 2013).

Interestingly, the board's efforts have gained international prominence, with the mass transition from the General Accepted Accounting Principle (GAAP) at the individual country level to the IFRS (Yi Lin, Chee Seng & Graeme 2012) at the international level. The global adoption of IFRS marks a paradigm shift in global financial reporting practices (Yi Lin, Chee Seng & Graeme 2012). In order to align with international best practises, many local stock exchanges have made it imperative for companies listed on their floors to draw up financial statements in accordance with the provisions of IFRS under the lead of the International Accounting Standard Board (IASB) (Kim, Liu & Zheng 2013).

January 1, 2005 marked the commencement of IFRS adoption in the European Union; all listed entities had to draw up their consolidated financial reports in accordance with IFRS provisions (Regulation No. 1606/2002). The deregulation of EU capital markets and the need to have uniform account language has encouraged the wide adoption of IFRS in the region. Regulators and standard-setters believe that a uniform set of high-quality accounting standards will enhance the transparency and comparability of

financial reports within the area and thus lower the costs of capital and attract more investors to the area. Notably, as part of its commitment towards the cause of the IASB, the US Securities and Exchange Commission (SEC) permitted non-US companies in 2007 to report applying IFRS instead of the previous reconciliation arrangements (Jeanjean & Stolowy 2008).

In Asia, the 1997-1998 Asian financial crisis necessitated the reform of the financial reporting frameworks in the region. In Arnold's (2012) opinion, the financial irregularities revealed by the crisis and the need to resolve them made it necessary to have a new financial reporting framework. In view of this perceived need, an international organization called the Financial Stability Forum (FSF) was established in 1999. The purpose of the FSF was to restore financial stability and economic development in the region that was tarnished due to the Asian crisis (Arnold 2012). In its efforts, the FSF approved twelve financial standards and codes believing that they would enhance transparency in the financial reporting process in the region. They touted the role of IFRS in solving the global economic crisis partly due to its success in Asia (Jacob & Madu 2009).

Like other continents, African has responded favourably to the idea of uniform accounting standards. According to van Rooyen² (2011), a need existed to deepen African capital markets through the creation of an investment friendly environment. Therefore, it is now crucial for countries within Africa to be part of the global convergence process. In the region, South Africa, in 2005, was the first to adopt IFRS, setting precedence for other countries within the region to follow. The journey towards

² Jeff van Rooyen is a former Vice-Chairman Executive Committee of IOSCO. He delivered his speech on African embraces IFRS <http://www.ifrs.org/News/Features/Documents/AfricaembracesIFRSs.pdf>.

adoption commenced in Nigeria in 2010 with the inauguration of the Committee on Road Map for the adoption of IFRS in Nigeria. Meanwhile, the revision of Code of Corporate Governance (CCG) and the establishment of the Financial Reporting Council of Nigeria (FRCN) in 2011 preceded the adoption of IFRS in Nigeria.

However, the issue of sustaining the benefits of the various regulatory changes while maintaining a balance in compliance costs remains of concern to policy makers and financial statement preparers (Evan Jr & Schwartz 2013). Public analysts, policy makers, and researchers sought to understand market reactions, strength of internal controls and improvements in financial reporting quality as yardsticks for accessing the benefits of new financial regulatory initiatives. Among the most readily observable of the various compliance costs are auditors' fees (DeGeorge, Ferguson & Spear 2013). Regulatory changes in whatever the form add to audit risks and audit efforts, which are the major determinants of audit fees (Yaacob & Che-Ahmad 2012).

Regardless of the additional risks and complexities attached to audit engagements arising from regulatory changes, auditors must reach appropriate judgments (ICAEW 2004). Hence, some skill transformation might be required to keep abreast of the changes on the part of an auditor. For example, the global move from precise to less precise accounting standards requires much professional judgement. Consequently, this change will necessitate the deployment of financial resources for training and retraining to ensure that audit team members are sufficiently equipped in terms of the required skills.

Thus, with the regulatory reforms being carried out in Nigeria, empirically answering the question of whether the various regulatory reforms (considering individual

company reporting incentives) improve the quality of financial reporting is necessary. Most notably, when the question of whether IFRS standards compared to local standards lead to less aggressive reporting remains unanswered (Cohen, Krisnamoorthy, Peytcheva & Wright 2013). In addition, though an increase in audit fees is evident. Nevertheless knowing the percentage of those increases and the particular causes will be interesting. Unlike previous studies (Kim, Liu & Zheng 2012), the current study considers concurrent reforms in corporate governance and enforcement mechanisms before the adoption of IFRS. In essence, this study argues that contemporaneous changes in the reporting environment influence the effectiveness of IFRS adoption in a weak regulatory setting like Nigeria (Ball 2006).

1.2 Problem Statement

Financial reporting quality³ and disclosure practises in Nigeria as revealed in international and local observer reports are weak and below international best practises (Global Competitiveness Report 2013; Nigeria Accounting Standard Board 2010). For example, the 2004 Report on Observance of Standards and Codes (ROSC 2004; 2011) highlighted the insufficiency in the country's financial reporting and auditing framework. According to the report, the code of corporate governance was obsolete and the available accounting standards issued by the defunct Nigerian Accounting Standard Board (NASB) did not cover all disclosure requirements. According to Otunsanya and Lauwo (2010) and Okike (2004), other issues that have contributed to the weak reporting culture in Nigeria include auditor independence impairment,

³ Because the primary objective of auditing is to attest to the quality of financial reports and financial statements is seen as a joint effort of both the manager and the auditor, the term financial reporting quality refers to audit quality in this current study (Antle et al. 2006).

political cronyism and weak enforcement mechanisms. In addition, Adegbite (2014) and Ofo (2010) noted the ineffectiveness of board audit committees.

With respect to the auditor's independence issue in Nigeria, Otunsanya and Lauwo (2010) alleged that the Nigerian auditors charge exorbitant audit fees and provide some non-audit related services that compromise their independence. As a result, auditors find it difficult to resist unhealthy financial reporting practises of management (Bakre 2007). The conflict of interest arising from the dependency on audit fees is cited as one significant cause of the corporate scandals in Nigeria. Notable cases of these scandals are those involving the top-level management of Afribank and Akintola Williams Deloitte in 2006 and the top-level management of Cadbury and Akintola Williams Deloitte in 2006 (Bakre 2007). Another case is the questionable accounting practises engaged in by executive directors of nine banks in 2009 discovered by the Central Bank of Nigeria investigation team after the auditors of the affected banks had issued a satisfactory audit report. Lastly, and more recent, is the mismanagement of the fuel subsidy scheme in 2012 also involving Akintola Williams Deloitte (Akanbi 2012)⁴.

The Institute of Chartered Accountants of Nigeria (ICAN), whose members dominate the audit of listed firms in Nigeria, provides the minimum scale rate for audit fees to check low-balling, but no upper limit exists for the amount of audit fees that can be charged (Okike 2004). Auditors can charge as much as possible and even take up non-audit related services in as much as they feel that their independence is not compromised. The problem of excessive audit fee charges is further compounded by

⁴ Auditors ruffled by subsidy scam, <http://www.thisdaylive.com/articles/auditors-ruffled-by-subsidy-scam/114744/>.

the poor disclosure requirements of the amount received for audit fees and non-audit fees (Abdulmalik & Che-Ahmad 2016). That is because the amount received by external auditors for rendering both services is lumped together as auditor's remuneration in annual reports. Therefore, users of financial statements are unable to distinguish between audit-related fees and non-audit related fees.

The second issue that has been identified is political cronyism. Quite a substantial number of listed companies have individuals on their boards who are close to past or present government officials. According to Ujunwa and Umar (2013), 75% of chairman of Nigerian companies either are retired military personnel or have a close connection with those in government who, at a time, held top and sensitive positions in the government. The presence of capital cronyism presents a case for concern about the quality of accounting information disclosed by firms presumed to have political connections.

According to Gul (2006), capital cronyism influences the reporting incentives of external auditors and of the board of directors. Prior studies on political cronyism (Bushman, Piotroski & Smith 2004) have posited that politically connected firms are associated with poor financial reporting quality. This is linked to the fact that politically connected firms suppress financial information to conceal diversionary practises stemming from political cronies and corruption (Guedhami, Pitman & Saffar, 2014). Reported scandals in Nigerian banks like those involving Society Generale Bank⁵, Trade Bank, Intercontinental Bank, and Oceanic Bank are clear cases of the

⁵ One charge against a former MD of Society Generale Bank was for transactions without collateral and the granting of a large sum of money to the ruling party in Nigeria. <http://saharareporters.com/2008/07/06/how-saraki-others-looted-societe-generale-bank-nigeria-%E2%80%A2-over-n1b-looted>.

distortion of financial figures in favour of political cronies. These institutions often lobby the government to set-up accounts with them and award them lucrative contracts in return for election campaign sponsorships.

The last issue is audit committee ineffectiveness, which stems from the committee structure and composition (Ofo 2010). International standards for best practises require membership of the audit committee to comprise independent directors. However, audit committee composition in Nigeria often comprises three representatives of the shareholders and board of directors respectively. Available empirical evidence reveals that Nigeria has a shortage of experienced independent non-executive directors (Adegbite 2014). The few available independent non-executive directors are members of multiple board committees and thus hold multiple board directorships (otherwise called overlapping directorship). A recent development in corporate governance literature is the consideration of whether common memberships in committees improve the board-monitoring role. Some scholars (see for example, Ferris, Jagannathan & Pritchard 2003; Laux & Laux 2009) argue that overlapping directors improve monitoring because of the knowledge spill over effect; other scholars (Chandar, Chang, & Zheng 2008; Zheng & Cullinan 2010) believe that this practice shrinks the monitoring ability of the board because directors become over engaged.

All of the issues cited above have partly contributed to governance failure in publicly listed companies in Nigeria, and ripples from the various governance failures almost crippled the activities of the Nigerian stock market. Anecdotal evidence shows that the market could not attract quality and sustainable investments because investors had lost their confidence in the market (Amaka 2012; Oteh 2010). According to Oteh (2010), the market became one of the worst performing in the world after it declined from its

peak by 70% in 2008. Available statistics shows that market capitalization and the volume of stock traded on the exchange fell significantly from 2008 to 2012. A summary of the figures in the respective years is shown in Table 1.1 below.

Table 1.1

Total Market Capitalization of and Volume of Trade on the Nigerian Stock Exchange

Year	Market Capitalization (% of GDP)	Stock Traded Turnover Ratio (%)
2008	23.9	29.3
2009	19.7	11.0
2010	13.9	12.5
2011	9.5	9.2
2012	12.2	8.8

Note. Source, *World Bank Statistics, (2014).*

Consequently, the resulting effects of governance failure accentuated the debate on the role of corporate governance and accounting standards in contributing to the efficient functioning of the Nigerian capital market. Recently, the revisions of the code of corporate governance, the establishment of an accounting standard and enforcement body (FRCN) in 2011, and the adoption of IFRS in 2012 were financial regulatory initiatives that embarked on an effort to improve the country's financial reporting climate⁶. However, these reforms only partly addressed auditor independence issues, political cronyism and overlapping directorship that are reflected in the reporting characteristics of companies. Hence, with the issues of auditor's independence, capitalism cronyism and audit committee ineffectiveness arising from overlapping directorship remaining, the question arises as to whether the various regulatory initiatives produced the expected results and justified the costs associated with the

⁶ Note that financial and corporate governance reforms reflected the international institutionalized model with no effort to fuse them with practical realities (Adegbite 2014). Resultantly, this failure has jeopardized the intentions of the reform effort.

reforms. Therefore, in response to Adegbite's (2014) call for testable hypotheses for drivers of sound corporate governance at the firm level, this current study investigates the effects of abnormal audit fees, political connection and overlapping directorships on the relationships among financial reporting quality, audit fees, and regulatory changes.

Despite the widely held belief that regulatory changes influence the quality of financial reports and drive costs, empirical studies examining the relationship between regulatory changes, reporting quality and audit fees have reported mixed results. For example, Aubert and Grudnitski (2012) and Barth, Landsman and Lang (2008) observed improvement in the quality of financial information due to a reduction in the magnitude of discretionary accruals under the IFRS regime. In contrast, Ahmed, Neel and Wang (2013) observed that reporting quality for a firm in a strong enforcement environment did not improve after IFRS adoption due to the inability of the mechanisms to absorb the flexibility effects of IFRS. Atwood et al. (2011), using analyst forecast accuracy, noted that reported earnings under US GAAP are more informative than those reported under IFRS.

Likewise, Cosgrove and Niederjohn (2008) reported that audit fees increased by 51% in the United State subsequent to the issue of the SOX and Hoitash, Hoitash and Bedard (2008) documented that the increment in audit fees varies with the severity in the internal control weakness disclosed by companies using Internal Control for Financial Reporting in the United State. On the contrary, Raghunandan and Rama (2006) observed that audit fees do not vary with material weakness disclosure. A possible explanation for the mixed findings arises from the differences in firm characteristics and country institutional qualities.

For instance, substantial evidence is available pointing out the limited role of accounting standards and that firm characteristics are important (Ball, Robbins & Wu 2003; Burghstahler, Hail & Leuz 2006; Daske & Gebhardt 2006). Ball, Robbins and Wu (2003), Burghstahler, Hail and Leuz (2006), and Daske and Gebhardt (2006) have suggested that the limitations imposed by firm reporting incentives and country-specific institutional qualities should be noted when observing the benefits/costs of regulatory changes. Ball, Robbins and Wu (2003) said that incentives of preparers and auditors influence financial reporting under a set of standards. Accordingly, the interaction between market forces and political forces in each jurisdiction affects financial reporting practices (Ball, Robbins & Wu 2003).

Although, many studies, for example those of Chi, Lisic and Pevzner (2011), Cohen et al. 2013, and Jamal and Tan (2013), are available on regulatory changes. While studies on regulatory changes (see for example, Aubert & Grudnitski 2012; Ahmed, Neel, & Wang 2013) have established variations of the impact of regulatory reforms based on cross-country differences in regulatory frameworks, very few studies like Agoglia, Douppnik and Tsakumis (2011), Jamal and Tan (2010) examined the strength of both internal and external governance mechanisms in curtailing earnings management in the event of regulatory changes and they used experimental approach. To the best of the researcher's knowledge, there are no studies of this nature in Nigeria. Therefore, the present study extends prior studies by examining the variation of regulatory impact at the level of the firm. Subsequently, this study introduced abnormal audit fees, political cronyism, and overlapping directorships as metrics of firm characteristics that cause variations in the impact of regulatory reform (Ball,

Robbins & Wu 2003; Burghstahler, Hail & Leuz 2006; Daske & Gebhardt 2006). Building on Balls (2006) argument, this current study current posits that firm-specific characteristics (abnormal audit fees, politically connected firm and overlapping directorships) could influence the outcome of regulatory changes (i.e., financial reporting quality and audit fees).

Further, an endogeneity problem arising from unobserved heterogeneity, simultaneity, and measurement error could also provide a possible explanation for the mixed findings (Roberts & Whited 2012). A popular view of audit pricing literature is that, if corporate governance mechanisms are sound and protect the best interests of shareholders, the production model of audit suggests that these mechanisms reduce an auditor's risk assessment and the extent of an auditor's efforts (Simunic 1980). Another view suggests that internal corporate governance mechanisms could affect the demand for audit services (Hay et al. 2006). In other words, sound corporate governance may lead to a greater demand for audit services. In this case, the changes in audit fees are not the result of changes in the audit process rather they are the result of the assurance level demanded of the external auditor (Hay et al. 2006). The two perspectives underlying the mechanics of audit production lead to different empirical conclusions.

Many estimation techniques utilized in prior audit pricing literature can be criticised for treating firm governance characteristics as exogenous. However, some studies such as those of Asthana and Boone (2012), Antle et al. (2006) have noted that audit fees, non-audit fees, audit quality and firm governance characteristics are simultaneously determined by unobserved firm-specific features. For instance, Asthana and Boone (2012) believed that changes in reporting quality and audit fees could be derived from

largely unobservable factors such as audit team composition, allocation of work between the year-end and the influence of internal audit assistance, and the quality of client financial reporting reputation.

Likewise, the present study posits that audit fees, audit quality and firm governance characteristics could be simultaneously determined by past and present expected characteristics of a firm. For instance, the decision to either retain the old external auditor or hire a new external auditor is most often influenced by performance. Similarly, the audit experience gained in the audit of a client's financial system in previous years influences an auditor's approach in the current year. In fact, when taking up a new engagement, auditing standards require that the incoming auditor seeks the expert advice of the retiring auditor regarding a client's financial system and associated risks before taking up a new audit.

The evidence of the presence of endogeneity issues in the audit-pricing model (see for example Antle et al. 2006; Hay et al. 2006) suggests that studies ignoring these econometric issues may be difficult to interpret. Endogeneity is an econometric issue, and its presence in model estimation affects casual inferences, that is endogeneity reduces the validity of empirical testing (Gippel, Smith & Zhu 2014). Roberts and Whited (2012) explained, "Endogeneity lead to biased and inconsistent parameter estimates that make reliable inferences virtually impossible" (p. 6.)

Prior papers like that of Antle et al. (2006) employ Two Stage Least Squares regression analysis in a bid to overcome the estimation problem mentioned above and improved on earlier empirical findings in the literature. This present study adopts the Generalized Method of Moments (GMM) instrumental approach to circumvent spurious

correlations and causal relationships in audit fees, audit quality (herein known as financial reporting quality), and corporate governance relationships. The dynamic GMM panel specification that Arrelano and Bond (1991) and Arellano and Bover (1995) developed can solve econometric issues introduced by unobserved heterogeneity, simultaneity, and dynamic endogeneity and produce an unbiased and consistent estimation using a set of valid instruments.

1.3 Motivation and Research Question

The previous state of financial reporting architecture in Nigeria, which provoked financial regulatory reforms in Nigeria and the call for testable hypotheses on drivers of sound corporate governance at firm level in Nigeria by Adegbite (2014), provides the primary motivation for this study. The focus of this study is to investigate the moderating effect abnormal audit fees, political connection and overlapping directorship on the relationship between regulatory changes, financial reporting quality and audit fees. While most studies in this area have emerged from industrialized nations, emerging economies are worth investigating given their growing contributions to the development of world capital markets. Hence, the important investment position that Nigeria occupies in the African region⁷ and its historical antecedents add to the study's motivation. Based on the foregoing, the research questions addressed in this study are:

1. Does regulatory changes affect financial reporting quality?

⁷According to the World Investment Report (2013), Nigeria is the number one investment destination in Africa region. Retrieved from http://unctad.org/en/publicationslibrary/wir2013_en.pdf.

2. Do regulatory changes and its interaction with abnormal audit fees affect financial reporting quality?
3. Do regulatory changes and its interaction with politically connected firms affect financial reporting quality?
4. Do regulatory changes and its interaction with overlapping directorship affect financial reporting quality?
5. Do regulatory changes affect audit fees?
6. Do regulatory changes and its interaction with financial reporting quality affect audit fees?
7. Do regulatory changes and its interaction with politically connected firms affect audit fees?
8. Do regulatory changes and its interaction with overlapping directorship affect audit fees?

1.4 Objectives of the Study

The main objective of this study is to examine the interacting effects of firm-specific characteristics and regulatory changes in the Nigerian audit market. Thus, the specific objectives of this study are to examine whether:

1. To examine whether regulatory changes affect financial reporting quality;

2. To examine whether regulatory changes and its interaction with abnormal audit fees affect financial reporting quality;
3. To examine whether regulatory changes and its interaction with politically connected firms affect financial reporting quality;
4. To examine whether regulatory changes and its interaction with overlapping directorship affect financial reporting quality;
5. To examine whether regulatory changes affects audit fees;
6. To examine whether regulatory changes and its interaction with financial reporting quality affect audit fees;
7. To examine whether regulatory changes and its interaction with politically connected firms affect audit fees; and
8. To examine whether regulatory changes and its interaction with overlapping directorship affect audit fees.

1.5 Significance of the Study

The issue of regulatory reform remains an area of interest to academic researchers, policy makers, and accounting practitioners. This is due to the conflicting empirical evidence available with respect to the various challenges associated with regulatory reforms that seem to impede its efficacy (Balls, Robins, & Wu 2003; DeFond & Francis 2005). In addition, the need to strike a balance between the cost of compliance with new regulations and the postulated benefits is a source of concern for regulators.

As an elixir for curing societal ills, the role of academic research of this nature in shaping society and its various institutions through providing remedial actions for numerous societal problems cannot be overemphasized. Therefore, given the international relevance of financial reporting and the state of Nigerian audit market before the reforms listed above, an academic inquiry of this nature is worthwhile. In line with this argument, the contributions of this study are twofold, namely, contributions to existing literature and to practice.

1.5.1 Significance of the Present Study to Existing Literature

The study intends to extend and contribute to prior studies in several ways. First, Nigeria is among the fastest-growing economies in West African and perhaps the largest economy in the region (African economic outlook 2014). The present discussion presents an analysis based on the uniqueness of the ownership structure in Nigeria corporate entities that is different from hitherto known research emerging from the Anglo-American and other advanced financial systems. Institutional settings vary widely between countries. In some countries corporate governance monitoring and control are sophisticated and advanced. In others, they are not.

This study extends uses data from a historically less-regulated environment. Unlike the United States and other European studies, weak institutions and enforcement mechanisms have characterised the financial reporting environment in Nigeria. For instance, in the event of an audit failure in more regulated systems, auditors might face litigation charges and are often prosecuted accordingly. In Nigeria, the opposite is the case. Little evidence of litigation charges brought upon auditors exists, and the few reported instances end up without adequate penalties accessed upon the liable individuals. This is because corporate governance and developments in the legal

environment are still in the infancy stage, making the work of regulators less pronounced. In the absence of an efficient regulatory enforcement, the independence between an auditor and his/her audit client is not clearly distinguished.

The Nigerian reporting and auditing environment as painted above would seem to be alien in more developed countries like the United States and the United Kingdom with more mature capital markets whose data dominate the literature on the effects of regulatory change. To date and to the best of this researcher's knowledge, no extant literature examines the effects of regulatory changes from an auditing perspective in Nigeria. Similarly, even though the literature on corporate governance and auditing are budding in Nigeria, this literature predominantly focuses on environmental determinants of corporate governance in the country. This current study extends auditing and corporate governance research by providing additional insights on the various happenings in a less-regulated environment.

Second, regulatory changes involving financial reporting anywhere in the world are aimed towards improving the financial reporting framework. Thus, empirically establishing the extent to which the objectives of these reforms have been accomplished and the resultant costs thereof is necessary. One of the most challenging tasks auditors must confront is curtailing aggressive reporting by management (Jamal & Tan 2013; Tsipouridou & Spathis 2012). A pertinent question under consideration in this current study is whether regulatory reforms influence the ability of an auditor to constrain aggressive reporting by management, thereby improving the quality of financial reporting in Nigeria.

Many studies, for example those of Chi, Lisic and Pevzner (2011), Cohen et al. 2013, and Jamal and Tan (2013), are available on regulatory changes. While studies on regulatory charges have only established variations of the impact of regulatory reforms based on cross-country differences in regulatory frameworks, the present study extends prior studies by examining the variation of regulatory impact at the level of the firm. Subsequently, this study introduced abnormal audit fees (a measure of auditor's independence), political cronyism, and overlapping directorships as metrics of firm reporting incentives that cause variations in the impact of regulatory reform (Ball, Robbins & Wu 2003; Burghstahler, Hail & Leuz 2006; Daske & Gebhardt 2006).

Lastly, extant studies on earnings quality and audit fees are plagued with endogeneity problems stemming from unobserved heterogeneity effects, a simultaneity problem and the effect of past performance on current performance (Roberts & Whited 2012). For the econometric issue, this study introduces the estimation techniques of the Generalized Method of Moment (GMM) to make the study's results more robust concerning endogeneity issues. To the best of the author's knowledge, the study will be the first to investigate how firm characteristics the effects of regulatory changes on financial reporting quality and audit fees taking into consideration the likely endogeneity issue that might arise from the effect of past performance on current firm performance.

The GMM estimation approach is more efficient than 2SLS when the problem of heteroscedasticity and serial correlation in the error terms is presence (Arellano-Bond 1991; Wooldridge 2001). Basically, under panel data application, the unobserved heterogeneity correlates with the observed covariate, which is then corrected for using

the fixed effect or within the estimator. The fixed effect estimator assumes that the time varying errors have zero means, constant variance and zero correlation (i.e., exogeneity assumption). The GMM estimation technique that Hansen (1982) introduced is a non-parametric approach used to estimate model parameters with no data distributional assumptions, which is an important assumption under the Two-Stage Least Squares regression analysis.

Arellano and Bover (1995) and Blundell and Bond (1998)⁸ developed a system dynamic model that incorporates simultaneous difference and level equations. Arellano and Bond (1991) proposed two estimators, which are the one-step and the two-step. The weighing matrix used in obtaining the estimates explains the differences between the two estimates; however, the two-step is optimal⁹ (Gyimah-Brempong & Traynor 1999). The dynamic GMM is consistent and efficient in the absence of second order serial correlation between error terms of the first differenced equation.

1.5.2 Practical Significance

Africa is increasingly becoming an investment hub, due to many years of consistent growth of member states (Economic Report on African 2013). Capital markets play an important role in this regard, ensuring efficient allocation of capital and risk among competing needs within the economy. In turn, the quality of financial reports is a critical tool for achieving efficient capital allocation. A high level of information asymmetry will result in severe consequences for market operators. Because of the

⁸ Xtabond2

⁹ GMM is estimated by taking the first-difference of the dependent variable and the independent variables. This cancels out the company fixed effect, and the lagged dependent variable is correlated with the error term. The result is that further lags of the dependent variable and first difference of the exogenous explanatory variable serve as the instrument. Hence, Arellano and Bonds's (1991) one-step estimator with robust standard error is inefficient and marked with a high standard error (Dietz, Neumayer, & De Soysa 2007).

damning economic consequences of poor financial reporting practices to the aggregate economy, policy makers, standard setters, and regulators are more interested than ever before on financial reporting issues (Oteh 2010¹⁰).

Invariably, academic research of this nature will provide further useful evidence to the on-going debate regarding financial reporting consequences of regulatory changes. This study acknowledges the additional responsibility attached to the recent regulatory changes, which will cause change in the quality of financial reports and the costs of audit service. The study provides valid empirical evidence for the Nigerian audit market and its effects on the operations of the capital market, auditors, and auditees (i.e., financial reporting quality and audit fees). Thus, the recommendations of study will be forwarded to the relevant regulatory authorities and professional bodies as a guide towards future regulatory reforms on financial reporting.

The best interests of the parties involved in audit negotiations require that they sign an audit engagement¹¹ contract that will be mutually acceptable. While an auditee needs assurance of receiving appropriate value for the amount paid as fees, auditors are interested in ensuring that audit fees are commensurate with the risk and complexity involved. This study provides an audit price framework in the Nigerian context. The results of the study will be of interest to market participants in gaining an understanding of how those legal reforms have solved the perceived weak reporting structure and the costs arising therefrom.

¹⁰ Oteh is the Director-General of Nigeria Security and Exchange Commission. In her speech, *A Roadmap for Transforming the Nigeria Capital Markets*, increased regulatory oversight and enhanced disclosure, transparency and accountability were among the key recommendations given for reviving the Nigerian capital market.

¹¹ Audit engagement contract herein refers to the scope of audit work and quality that are proportionate to the remuneration of the auditors.

1.6 Scope of Study

The study covers the six-year period from 2008-2013. These include the years before and after various regulatory changes. Financial and non-financial data were hand collected from the annual reports of 90 listed companies. Annual reports used for the study were retrieved from the library of the Nigerian Stock Exchange Commission (NSE). The study analysis focuses on financial reporting quality and audit fees across two main periods: 1) the pre-regulatory change period and 2) the regulatory changes period. The pre-regulatory period extends from 2008 through 2010, and the post-regulatory period extends from 2011 through 2013. Figure 1.1 below shows the different periods analysed.

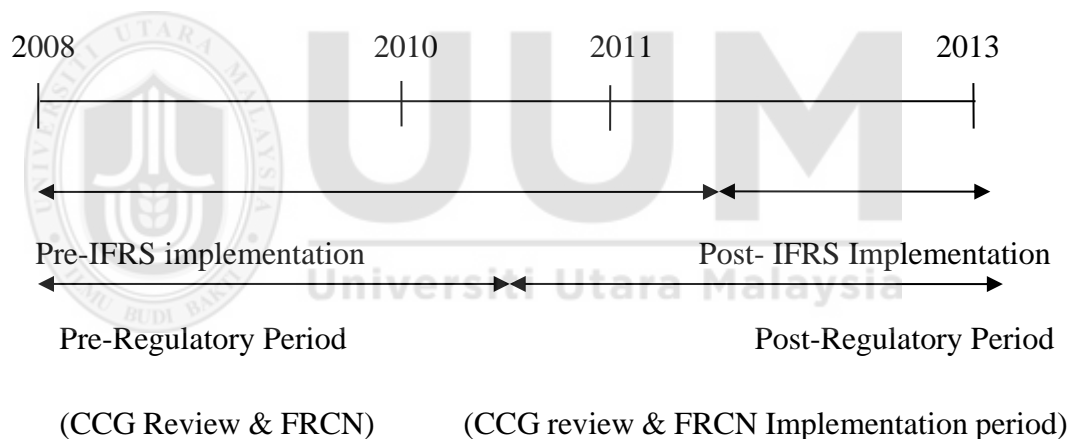


Figure 1.1. The pre- and regulatory changes periods.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses literature related to financial reporting quality (audit quality) and audit fees. As the purpose of any research of this nature is to advance the state of knowledge, a prior understanding and insights into related areas are necessary to produce quality research. Thus, the essence this chapter is enhancing both the researchers' and the readers' understanding of past work and to establish how the current study relates to previous research and extends the boundaries of knowledge.

The first part of the chapter gives an overview of financial reporting and corporate governance initiatives in Nigeria; followed by discussions on significant regulatory changes around the globe that influenced financial reporting process in the Nigerian context. This includes discussion on recent developments on convergence and harmonization of accounting standards as well as those arguments for and against uniform reporting language. The chapter proceeds with a discussion of corporate governance developments across the globe and then narrows down to the Nigerian case. Although, many studies are available in this area, those reviewed here are central to the scope of this study.

Finally, the last section of this chapter addresses the theories that underpin the study. These theories explain the relationship between the identified dependent variables and independent variables in accordance with past studies. This is necessary in order to provide justification for the relationship between and among the variables of interest.

2.2 Overview of Nigeria Financial Reporting and Corporate Governance Initiatives in Nigeria

A close linkage exists between corporate entity collapse and poor financial reporting practices resulting from governance failure. This argument is justified in light of reported cases like Enron, WorldCom, Global Crossing and a host of others too numerous to mention. Combined together, the effects of these scandals have contributed a great deal to the credibility crisis rocking the accounting profession (Beattie, Fearnley & Hines 2013; DeFond & Francis 2005).

Although good corporate governance and disclosure practices do not necessarily guarantee the perpetual existence of companies, they do minimise the occurrence of business collapse arising from deceptive financial reporting resulting from the failure of corporate governance. For this reason, past and on-going legal reforms of corporate governance and financial reporting help to promote sound corporate governance principles. Two prominent reforms that have gained international prominence are the convergence to single financial reporting standards and the detailed prescriptive guidelines contained in the Sarbanes Oxley Act 2002 issued in the wake of Enron saga. Both reforms represent significant regulatory changes in the history of accounting and audit practises around the world. In the subsequent subheadings, the study discusses business and legal environments in Nigeria, and the effects of regulatory changes on financial reporting environment.

2.2.1 Business and Legal Environments in Nigeria

Nigeria is the fourteen largest country in West Africa by square kilometres, and the most populous country in the Africa continent with 177 million people (CIAfactbook

2014). Nigeria's landmass stretches 700 miles from west to east and 650 miles from south to north and has a coastline of about 839 kilometres boarding the Atlantic Ocean. The population comprises more than 200 ethnic-linguistic groups. However, three main ethnic groups (Hausa Yoruba and Igbo) are prominent (National Population Commission of Nigeria 2006). Nigeria has abundant natural resources; prominent among them is the crude oil and is the thirteen largest producer of oil in the world, pumping about 2.4 million barrels daily. Crude oil contributes about 90% of the country's GDP. However, before the discovery of petroleum, agriculture was the major economic activities of most Nigerians.

Since the time Nigeria gained independence from the United Kingdom in 1960, the country has witnessed a series of upheavals in its political system with various coups unseating popularly elected governments. Nigeria has a long history of rule by dictatorship, until recently when a stable democratic elected government was established. British colonisation, along with the various military interruptions witnessed in the country, greatly influenced government policies on corporate ownership, hence on the financial reporting process.

Hitherto, Nigeria business and legal environment mirrored that of the British system. The main legal regulatory framework for Nigeria companies is the Companies and Allied Matters Acts (CAMA 1990). The Companies and Allied Matters Acts predated the country's independence. The Companies Ordinance law introduced in 1922 was the first company law in Nigeria. This was subsequently repealed after independence, and the Companies Act of 1968 was introduced though still a reflection of the United Kingdom's Companies Act of 1948 (Okike 2007). Various socio-political and

economic occurrences subsequently led to the repeal of 1968 companies act by the Companies and Allied Matters Act (CAMA 1990)¹². The new law provided guidelines for the regulation of companies in Nigeria and established the Corporate Affairs Commission¹³. Major provisions on company formation, company structure, and dissolution are contained in the Act. The provisions of the Act as well set the tune for corporate governance practices, most specifically, director's responsibilities, calls for annual general meetings and formation of audit committee. In fact, rules and regulations guiding publication of financial statements are included in the Act and the various disclosures as well as auditing requirements that are contained therein.

Before the advent of NSE code of corporate governance, CAMA 1990 made adequate provisions for good corporate governance practises for board of directors, Chief Executive Officers (CEOs), and statutory auditors of listed companies. Besides the CAMA 1990, the Investment and Securities Act 1999 and Bank and Other Financial Institution Act 1999 (as amended) guide the operations of corporate enterprises. The next section gives an overview of financial reporting and corporate governance initiatives in Nigeria.

2.2.2 Corporate Governance Initiatives in Nigeria

The passage of the SOX Act created global awareness on the importance of good corporate governance practice. Many national government responded to this act by reviewing existing codes or initiating new ones to strengthen the reporting

¹² Before independence, British companies dominate the socio-economic landscape of the country. In the post-colonial era, the need to reduce the strong grip of the colonial master on the country's economy led to the promulgation of the Nigeria Enterprise Promotion Act of 1972 and 1977. The act regulates foreign participation in the economy to around 40% to 60% depending on the industry.

¹³ The Corporate Affairs Commission (CAC) is the body charged with the responsibility of registering companies, corporate bodies and related matters.

environment. In Nigeria, global awareness spurred the development of corporate governance initiatives presumed to improve corporate governance practises. Common knowledge suggests that good corporate governance would curb corruption and unethical business practises that bewitched business norms in the country (Ogbechie, Koufopoulos, & Argyropoulou 2009).

Corporate governance practise in Nigeria is still at the developmental stage with only 40% of the Nigerian listed companies' cognisance of what corporate governance entails (Wilson 2006). Even though corporate governance as a "distinct concept" is of recent origin in Nigeria, regulation, control and governance of public listed companies in Nigeria is articulated in the Companies and Allied Matter Act 1990 (CAMA 1990). Practically speaking, between the periods after independence until the early part of the new millennium, CAMA 1990 produced the code of corporate governance.

Renewed interest in effective corporate governance started in June 2000, when the NSE set up a seventeen member committee led by Atedo Peterside to develop a Code of Best Practises for Corporate Public listed Companies in Nigeria (Nigeria Vision 2020 Program 2009). Among other things, the committee had the mandate to review corporate governance practises in Nigeria, identify weakness contained in the existing system and make recommendations in line with international best practises. Factors that fast tracked the review, apart from global events, included the country's transition to civilian rule in the late 1990s. The civilian government needed to restore lost confidence in the country's economy to spur foreign direct investment. Effective corporate governance was seen as the most viable option to help in this regard.

Some recommendations contained in the code outlined the duties and responsibilities of the board of directors, the composition of the board of directors, the separation of the responsibilities of the CEO and the managing director, and the establishment of board committees, among other recommendations. Key provisions of the Organisation for Economic Corporate and Development (OECD), a worldwide organisation, on principles of corporate governance alongside other global codes provided cues for drawing the code (Oso & Semiu 2012). Whilst the new code preaches sound business practises, compliance with the provisions of the Nigerian SEC codes of corporate governance is voluntary (Wilson 2006). However, the NSE is empowered to monitor and sanction erring listed public companies through withdrawal of registrant certificate and suspension of companies on the trading floor.

The review of the 2003 Code of Corporate Governance in 2008 rendered it obsolete and insufficient in addressing new developments and corporate challenges in the corporate environment. As a result, in subsequent year industry-specific codes of corporate governance emerged. Industry-specific codes included the Code of Corporate Governance for Banks in Nigeria Post-Consolidation (2006 CBN), the Code of Corporate Governance for Licensed Pension 2008 (PENCOM 2008) and the Code of Corporate Governance for National Insurance Commission 2009 (NICOM 2009). Unlike the SEC code of corporate governance, industry-specific codes are mandatory for companies operating in their specific sectors (Wilson 2006).

A revised code of corporate governance came into effect on the 1st of April 2011 and repealed the 2003 code of corporate governance. The new code made significant provisions for the need for a financial expert to be a member of the audit committee, for the presence of at least one independent non-executive director on the board and

for the separation of the position of chairman and managing director. The code also made provisions for the creation of additional board committees like the risk governance committee and the corporate governance committee. The revised code of corporate governance sought to promote corporate transparency and accountability through good corporate governance practices (NSE code 2011).

However, weak enforcement and regulatory mechanisms and inadequate penalty measures to deter listed companies from non-compliance on the part of NSE have always been a major challenge to the successful implementation of any code of corporate governance in Nigeria. Practically speaking, the benefits of non-compliance far outweigh the costs; hence, most publicly listed companies prefer to contravene the provisions (Wilson 2006). Another challenge impeding effective compliance with the Nigerian's SEC code for corporations is the multiplicity of codes of corporate governance and the distinctive provisions of each code. For instance, companies trading on the floor of the Nigeria Stock Exchange and those operating in other regulated sectors face the problem of complying simultaneously with the two codes (Idornigie 2010 as cited in Demaki 2011). The passage of the Financial Reporting Council of Nigeria Act in 2011 was seen as a potential solution for addressing these challenges.

2.2.3 Nigerian Accounting Standards Board (NASB)

The NASB is a private sector initiative¹⁴ established in 1982 as an advisory body for developing, issuing, and constant reviewing of statements of accounting standards in the country. Later in 1992, the body became a government agency under the Federal Ministry of Trade and Tourism. Between its establishment and 2003, accounting

¹⁴ The body is a brainchild of ICAN and was housed in the ICAN secretariat for almost ten years.

standards issued by NASB lacked constitutional backing because the body itself operated in the absence of legal authority. As a result, stakeholders in the accounting industry did not comply diligently with the accounting standards issued by the board. Consequently, variations in the application of accounting standards by publicly listed companies and their auditors existed. Preparers of financial statements, most especially foreign companies listed in Nigeria, generally comply with United Kingdom's GAAP or accounting standards the International Accounting Standard Board (IASB) issues depending on the professional body to which the auditors belong.

NASB received national recognition in the 2003, with the passing into law of an enabling act that guided the operation of the body. The coming into force of the NASB Act in 2003 made compliance with statements of accounting standards issued by the body mandatory. Making compliance with these standards mandatory was necessary to ensure uniformity in the application of accounting standards so that accountants could discharge their functions in accordance with the General Accepted Accounting Principles (GAAP). Accounting standards issued by NASB are the only standards legally recognised under Section 335(1) of CAMA 1990 based on which publicly listed companies should draw financial statements. During its existence, NASB issued thirty accounting standards consistent with IAS (Proshare New 2013¹⁵). The limited number of accounting standards issued by NASB reveals weakness in its institutional capacity (ROSC, 2004; 2011). Recently, the act enabling the NASB was repealed with the passage of the Financial Reporting Council of Nigeria Act No. 6 of 2011 in 2011.

¹⁵ NASB rolls out six new accounting standards, <http://www.proshareng.com/news/3621.html>.

2.2.4 Financial Reporting Council of Nigeria (FRCN)

The Financial Reporting Council of Nigeria Act, 2011 Act No. 6 established the Financial Reporting Council of Nigeria (FRCN) in 2011. The Act repealed the Nigerian Accounting Standard Board (NASB) Act No. 22 of 2003. The FRCN Act recognised the limitations and obsolescence in the existing reporting framework and provisions of the act that had established NASB. Primarily, the FRCN Act created a quasi-governmental body to oversee and ensure the accuracy and reliability of financial statements of publicly listed companies and unified the existing heterogeneous regulatory and professional bodies hitherto responsible for corporate governance and financial reporting regulation in the country.

FRCN operates through its directorate, which oversees accounting standards for private sectors, accounting standards for the public sector, auditing practise standards, actuarial standards, inspection and monitoring, valuation of standards and corporate governance. The enactment of FRCN act also provides for the establishment of ethical standards for all those involved in the financial reporting process and is specifically directed towards achieving the independence, objectivity, and integrity of external auditors. The act also move towards achieving financial reporting transparency; individual professionals involved in the preparation of financial statements of publicly listed companies and government agencies must register with the council.

As set out under Section 23-27 of the FRCN Act, local standards were converged with IFRS, and all public entities were to adopt the new standards. Similarly, the FRCN issued an exposure draft on 15 April 2015 soliciting comments on the draft National Code of Corporate Governance that will contain provisions for all companies

regardless of sector. The comments received so far suggest that the FRCN needs to revise several aspects of the draft NCCG before it can achieve the intended purpose of protecting minority shareholders. Based on comments issued by KPMG Nigeria, the draft NCCG is incomplete due to the absence of a transitional arrangement. In the view of PWC Nigeria, the drafted NCCG suffers from “Regulation Creep” due to so many ambiguous details.

In short, since the inception of FRCN, several measures have been put into motion to improve corporate transparency. However, the commitment of the council itself to enforce its rules and to sanction violators will ultimately determine the extent of compliance in this new regime. The FRCN has taken some steps in this direction. In fulfilment of its statutory role in Section 62 of the FRCN 2011 Act No. 6, the FRCN suspended the Chairman and the Managing Director of Stanbic IBTC bank along with several KPMG officials and presented those officials from vouching for the integrity of any financial statement issued in Nigeria. This sanction arose due to accounting irregularities and improper disclosure the council discovered in the bank’s 2013 and 2014 audited financial statements. In the meantime, a regulatory enforcement impasse has developed between the Central Bank of Nigeria and FRCN regarding the disclosures requirements that led to the sanction imposed on the Director of Stanbic IBTC bank along with the KPMG officials. The CBN berated the actions taken by FRCN claiming that the FRCN had failed to follow due process.

2.2.5 Overview of Audit Services in Nigeria

In Nigeria, accounting professional bodies recognised under the Nigerian law along with the federal government regulate the accounting and auditing professions. Before

1990, the Nigeria audit market was unregulated. During the period, auditors and professional accountant adopted professional codes and standards of the country professional bodies that had inducted them (Okike 2004). For example, in the early days of the accounting profession in Nigeria, being a former British colony, the majority of the accountants practised under the codes of ethics of the Institute of Chartered Accountant England and Whales (ICAEW).

The first indigenous accounting profession body was The Institute of Chartered Accountants of Nigeria (ICAN) that came into being in 1965. ICAN Act mandated that the body conduct professional accounting examinations for those intending to be accountants, issue certificates to those who passed the institute's qualifying exams and give a licence to practice as a public accountant to those who passed. Until 1989, no standards or guidelines were in existence to regulate the audit profession. However, ICAN regulated the affairs of its members through its code of ethics and Professional Practice Monitoring Committee (PPMC) (Okike 2004).

In 1982, ICAN established the NASB, and in 1989 formed the Auditing Standard Committee (NSC). NASB remained under the full control of ICAN until 1992 when NASB became a government agency under the Federal Ministry of Trade and Tourism. In 2003, NASB fell under Section 335 (1) of CAMA, which mandated that financial statements be in accordance with accounting standards the Nigeria Accounting Standards Board issued. Due to various operational challenges, the NASB did little to improve the reporting quality, and, in fact, lacked adequate power to enforce its standards. During its existence, the NASB only issued 30 auditing standards.

ICAN remains the only recognised indigenous professional body whose members are given the responsibility of auditing the financial statements of publicly listed entities in Nigeria. Partly due to the “legitimacy crisis” (Okike 2004), the Association of National Accountants of Nigeria (ANAN) was chartered on 25 August 1993 under Decree 70. Accordingly, Section 335 (1) of CAMA 1990 (as repealed in 2004) replaced the clause giving ICAN the sole right to audit publicly listed companies with the clause stating that members of professional accounting bodies recognised by the law from time to time could audit companies. Even though the law permits members of ANAN and ICAN to audit the accounts of publicly listed companies, members of ICAN dominate the audit of publicly listed firms in Nigeria by virtue of its early existence and contributions towards the accounting and auditing profession in Nigeria.

Due to the operational deficiencies of NASB and the coming into being of FRCN in 2011, accounting, auditing and actuarial, valuation and corporate governance and compliance and monitoring in Nigeria remains the responsibility of FRCN. Presently, one areas of focus for FRCN is the quality of audit service. Public practise accountants and auditors along with key company’s directors and CEOs are to register with the council. Auditors are now required to sign off on their audit work with their FRC numbers along with the name of the firm. Meanwhile, the ruling of the Court of Appeal Lagos delivered on December 9, 2013 in the case of KPMG Professional Service & Guinness Nigeria Plc Vs Mazi O. Unegbu provoked a new SEC directive. Subsequent to the rule, the Nigerian Security and Exchange Commission directed that all documents submitted by an audit firm should carry the personal name and signature of the auditor/partner (Egene 2014). With the new initiative, the Chief Executive Officer of FRC noted that auditors would be more diligent in the discharge of their duties (Egene 2014).

Control in the early days of the Nigeria audit market was solely in the hands of the professional bodies. However, public dissatisfaction became apparent after the collapse of enterprises without warning signs from auditors led to government intervention in from the early 1990s and until the present (See Okike 2004 for further details). Presently, the Big 4 international audit firms of Akintola Williams Deloitte, PwC Nigeria, Ernst & Young, and KPMG, have offices in Nigeria, and they control more than 60% of the Nigerian audit market. This stifles entry into the market, and, as some literature has claimed, the charging of exorbitant prices (Olatunde & Lauwo 2010). While moves are on to ensure more participation of indigenous firms in the Nigerian audit market through joint audits and mergers, nothing much is available to checkmate the rising audit fees. The only provisions available so far are minimum scale rates ICAN has issued.

2.3 Global Adoption of IFRS

Burning vigorously on the front burner of global financial reporting is the rapid abandonment of the rule-based standards for principle-based standards (Jeanjean & Stolowy 2008; Schipper 2003). Issues relating to economic benefits and cost of adoption remain unresolved (Kaya & Pillhofer 2013). So far, more than 128 reporting jurisdictions have permitted the use of IFRS for domestically listed companies, and those jurisdictions that have not permitted its use have shown commitments in some form to the possibility of its adoption in the future (Ball 2006; Deloitte Touche Tohmatsu 2006).

Notable among those is the U.S. Financial Accounting Standard Board (FASB), which has expressed a willingness to explore the possibility of converging the U.S. GAAP and IFRS in the 2002 Norwalk Agreement. The Norway Agreement eliminated

reconciliation requirements for non-U.S. registrants that drew up their financial statements in accordance with IFRS provisions after November 2007 (SEC 2007). Some other significant events in the history of standard convergence is the widespread early adoption of IFRS by all European Union member states and several countries in Asia and Africa. The rapid growth in cross-country investments (Yip & Young 2012) induced by the globalization of international financial markets fuelled the developments in the restructuring of financial reporting architecture across the globe (Leuz 2010).

The institutional political, legal, and economic environment of an individual country help shape its accounting reporting practises (Soderstrom & Sun 2007). The resulting dissimilarities in institutional environments made corporate reporting vary accordingly before the advent of IFRS. That variation is why countries from developing regions are often characterised by inadequate accounting practises, poor financial governance, and lack of transparency and was the result of a lack of strong institutional frameworks (Arnold 2012). Poor financial governance and lack of transparency caused the East Asian financial crisis. In an effort to avoid or attenuate future reoccurrence, the Financial Stability Forum (FSF) made recommendations in 2008 to strengthen financial reporting architecture and bring that architecture in alignment with international best practises (Arnold 2012). This later saw to the endorsement of IFRS as a set of high-quality global accounting standards for some countries in Asia.

Nevertheless, supporting and opposing views exist pertaining to the benefits of global convergence. Proponents of a principle-based system (IFRS) base their arguments on the concept of “professional judgment” (Bova & Pereira 2012; Schipper 2003). Jamal

and Tan (2010) noted that principle-based standards offer fewer implementation guidelines and bright-line tests. By implication, IFRS eliminates the structuring of financial transactions for just for the sake of compliance (Schipper 2003). Rather, IFRS permits the use of a manager's professional judgement to convey information in the best manner reflecting the economic reality that is prevailing in his company (Leuz 2010). Another proclaimed benefit of IFRS adoption is that the system eliminates international differences in accounting language. With the rapid globalization of capital markets, uniform accounting language is seen to promote the comparability of financial reports across jurisdictions (Leuz 2010; Yip & Young 2012). In Yip and Young's (2012) line of argument uniform reporting helps investors easily compare firms with similar fundamentals. Consequently, uniform accounting language is seen as a way to reduce informational externalities arising from non-comparability thus making the cost of capital relatively cheap (Balls 2006).

Despite the widely acclaimed benefits of principle-base standards such as IFRS in terms of transparency, comparability, and financial reporting quality, some scholars have reservations. Ball (2006), Kaya and Pillhofer (2013) and Jeanjean and Stolowy (2008) noted limitations in the extent to which quality accounting standards improve financial reporting quality. According to Leuz (2010), institutional complementarities and institutional fit are important concepts that help explain the variation in reporting regulations across countries. Leuz (2010) believed that financial reporting regulations were just a component of the many interlinked institutional frameworks existing in a country. Therefore, the presence of these complementarities might necessitate adjustment to all the constituent parts and not just the financial regulatory aspect. Failure to do so will erode the perceived benefits of new financial reporting regulations

or even make the quality of financial reporting worse than before. In this regard, a uniform set of accounting standards does not necessarily drive good financial reporting quality.

Atwood et al. (2011), Ball (2006), Kaya and Pillhofer (2013), and Jeanjean and Stolowy (2008) explained quality accounting standards and reporting incentives at both the country and firm levels that drive financial reporting quality. They believe that creating quality financial accounting as touted in IFRS without developing a corresponding change in the incentives of preparers or prevailing realities at the country level might not result in improved financial reporting quality. The facts underlying this assumption are that political and economic institutions remain localized and reporting incentives of firms varies with them. Consequently, Ball (2006) argued that practise and reporting quality are not the same across all reporting jurisdictions. Furtherance, the suggestion was made that the reporting incentives of preparers and auditors rather than the quality of accounting standards such as IFRS drive high-quality reporting.

Other issues raised in the literature include the consequences of vesting standards setting in one body, funding issues, and limited oversight functions of the body (Kaya & Pillhofer 2013). Cohen et al. (2013) and Schipper (2003) also mentioned the issue of reporting discretion that IFRS provides to preparers and auditors in the form of professional judgement and the tendencies of that discretion to lower the quality of financial reporting.

2.4 Sarbanes-Oxley Act (SOX) of 2002

Reforms supposedly aimed at enhancing audit and accounting quality have been ongoing for years (Bettie et al. 2010). Nevertheless, the collapse of Enron in 2001 and

other companies early in the millennium reinforced the need to strengthen financial reporting regulations. The many unprecedented financial irregularities and weaknesses in corporate governance among SEC registrants in the United States triggered the legislative events surrounding the passage of the Sarbanes-Oxley Act (SOX) in 2002. The passage of SOX brought a paradigm shift to the responsibilities of management and extended the scope and nature of the statutory responsibilities of auditors.

SEC registrants and accountants of public reporting entities were the most affected by the various provisions of SOX geared towards improving internal control systems over the financial reporting process. Section 404 of SOX specifically relates to the disclosure and evaluation of internal controls by SEC registrants to drive good financial reporting culture. According to the provisions of the section, management is to assess the adequacy of internal controls on the financial reporting process and report any deficiencies thereof. Aside from the fact that the disclosure and evaluation of internal control encourages firms to set aside resources to maintain that control, this assessment as well gives a warning sign of the potential weaknesses and deficiencies in internal control (SEC 2003).

Similarly, SOX has sought to increase auditor's independence by eliminating any perceived threats to their independence. One measure taken in this regard was the setting up of a quasi-governmental body called the Public Company Accounting Oversight Board (PCAOB). The body monitors external auditors and imposes stiff and consequential penalties on auditors who contravene the law. In addition, the SOX proscribed certain non-audit related services, which statutory auditors for an existing audit client must not render. The act imposes stringent punishment for corporate

malfesance for any auditor who contravenes the law and demands a more comprehensive and timely disclosure of financial information. Statutory auditors are required to attest to client internal control systems.

With the increased oversight role, stiff penalties for fraudulent practices and calls for mediation where conflict of interest arises ensure that investor's rights are protected and trust is restored to the audit profession (Lobo & Zhou 2006; Zhang 2007; Mitchell 2003). Meanwhile, the passage of SOX lead to a series of corporate governance initiatives across the globe, including a the review of UK Combined Code of Corporate Governance (CCG), South Africa's King Report on Corporate Governance 2002, the Manual of Corporate Governance in Ghana 2002, Nigeria CCG 2003, and the Malaysian CCG 2002.

The passage of SOX came under serious criticism. In spite of its many benefits, critics argued that it was "motivated by political expediency," hastily passed, and did not addressed the actual problems that caused breakdowns in the financial reporting process (DeFond & Francis 2005). Others tagged it a "costly regulatory overreaction" whose costs might outweigh the intended benefits (Coates 2007).

Because of the conflicting viewpoints, it is of interest to regulators and academic researchers to gain an understanding of the costs-benefits of SOX passage. Block (2004), Engel, Hayes and Wang (2006), and Zhang (2007) documented a negative capital market reaction to its passage. Their findings suggested that the costs imposed by SOX implementation exceeded its expected benefits. Specifically, Zhang's (2007) empirical finding revealed that investors found the cost of SOX implementation to be

high, which eventually led many publicly listed companies to go private. Zhang's (2007) findings are consistent with those of Block (2004). Hsu (2004) addressed whether the decision of a firm to go private was associated with SOX passage. Engel, Hayes and Wang (2006) contended that publicly listed firm decided to go private when the required compliance costs of SOX exceeded the benefits engendered by SOX. Most especially, Engel, Hayes and Wang (2006) noted that the number of smaller and less liquid firms that went private increased after the passage of SOX. Iliev (2010) documented that the buy and hold returns for fillers of internal control assessment reports was 17% less than those of non-fillers, suggesting that compliance costs of SOX far exceeded its benefits.

2.4.1 The Effect of Regulatory Reform on Financial Reporting Quality/Audit Quality

For purpose of clarity, the study structures the discussion in this section based on the two prominent reforms that shaped reform of financial reporting regulations in Nigeria: 1) SOX and 2) IFRS.

2.4.1.1 The Effect of SOX on Financial Reporting Quality/Audit Quality

A significant amount of academic literature is available that has investigated the effects of the new regulations on the strength of internal controls and financial reporting quality of complying firms (Ge & McVay 2005; Doyle, Ge & McVay 2007; Nagy 2010). Some researchers including Zhang (2007), Beneish, Billings and Hodder (2008), Iliev (2010), and Harmmersley, Myers and Shakespeare (2008) examined market reaction to SOX while Raghunandan and Rama (2006), Hoitash, Hoitash, and

Bedard (2008), Krishnan, Rama and Yinghong (2008), and Hogan and Wilkins (2008) focused on the costs.

Ashbaugh-Skaife, Collins, Kinney and LaFond (2008), Cohen, Dye and Lys (2008), Iliev (2010), and Lobo and Zhou (2006) examined the effects of Section 404 and other aspects of SOX provisions on financial reporting quality. Lobo and Zhou (2006) investigated the effects of SOX and SEC requirements that CEOs and CFOs of firms should certify two measures of conservatism: 1) financial statements on the magnitude earnings management and 2) the coefficients of the firm's stock returns. Results obtained by comparing discretionary accruals across the two periods suggests a decrease in the magnitude of earnings management.

In addition, differences between earnings coefficients for firms with positive stock returns and those with negative stock returns indicated an increase in conservatism in the post-SOX era. Overall, Lobo and Zhou's (2006) results suggest an increase in the quality of financial statements. Iliev (2010) provided additional evidence by using a "quasi experiment" to isolate other contemporaneous events and based on his findings Section 404 increased reported earnings conservatism.

Ashbaugh-Skaife et al. (2008) examined the quality of reported accruals subsequent to the mandatory disclosure of internal control weakness and external auditor attestation thereof. Evidence from their study suggested that firms that disclosed internal control weakness and received unqualified audit opinions after Section 404 was passed demonstrated a decline in the magnitude of absolute discretionary accrual relative to the time the weakness was first disclosed. Their results indicated that the disclosure of

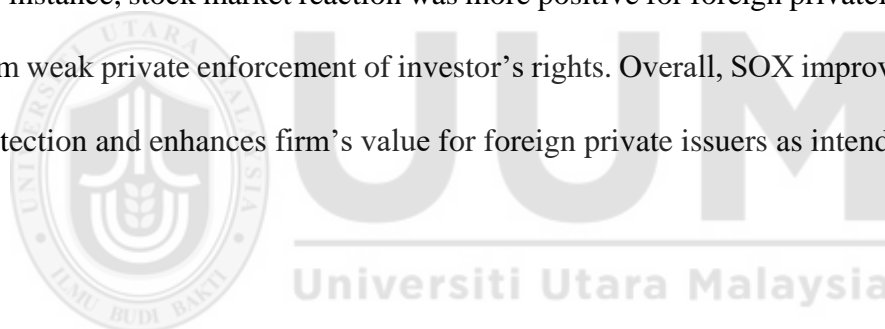
internal control weakness was useful to market participants. Similarly, Cohen, Dey and Lys (2008) also examined the magnitude of discretionary accrual in the post-SOX period using both accrual earnings management and real earnings management. Although consistent with earlier studies, Cohen, Dey and Lys (2008) documented a decrease in accrual earnings management in the post-SOX period; however, real earnings management increased during the period. Cohen et al.'s (2008) results provided more compelling evidence, suggesting a management switch to more costly and not easily detectable earnings management method called real earnings management methods due to SOX.

Using another research design, Krishnan, Su and Zhang (2011) investigated how the prohibition of harmful non-audit services affected an auditor's independence, hence financial reporting quality. Contrasted with previous studies that compared pre- and post-periods, Krishnan et al. (2011) used the decline in non-audit services to identify companies that probably engaged in earnings management behaviour in the pre-SOX period because of the impairment of the auditors' independence. The authors expected that the extent of decline would reflect the level of auditors' independent impairment in the pre-SOX period. Based on this research design, the study documented that the probation of certain kinds of non-audit related services reduced the impairment of auditors' independence. They found a decrease in downward earnings in the post-SOX period when NAS was reduced.

Likewise, the increased monitoring and scrutiny by regulators and audit committees further reduced the magnitude of accrual earnings management in the post-SOX period. Nagy (2010) examined the effect of SOX compliance on the likelihood of a firm issuing a materially misstated financial statement. Using logistic regression, the

results showed a significant and negative relationship between Section 404 compliance and the issuance of a materially misstated financial statement; hence Section 404 improved financial reporting quality.

Some other studies have examined market reaction to the provisions of SOX. The literature on market reaction to SOX provisions has yielded mixed empirical results. Berger, Li and Wong (2005) investigated how firm value and external monitoring activities of foreign private issuers responded to corporate governance and securities laws. Base on the study's findings, the effect of SOX on foreign private issuers varied in accordance with the strength of investor protection in the home country of investors. For instance, stock market reaction was more positive for foreign privately listed firms from weak private enforcement of investor's rights. Overall, SOX improves investor's protection and enhances firm's value for foreign private issuers as intended.



Jain and Rezaee (2006) studied capital market reaction to the series of legislative activities in the period of SOX implementation. The authors found a positive abnormal return in the SOX implementation period and reported that SOX imposed higher costs on non-complying companies. In the same vein, after separating the effects of contemporaneous events, Harmmersley, Myers and Shakespeare (2008) documented that stock market reaction negatively affected disclosure of internal control weakness and material weakness. However, the response varied with the severity exhibited in internal control weakness. Some characteristics related to companies exhibiting internal control weakness identified in the literature include small companies,

financially weak companies and companies experiencing unprecedented a growth rate or undergoing restructuring.

Because SOX provisions affect and auditor's work, other studies investigated its passage on audit quality. DeFond and Lennox (2011) examined how SOX passage and implementation affected the quality of service provided by small audit firms. DeFond and Lennox reported that Public Company Accounting Oversight Board (PCAOB) inspection improved audit quality by indirectly forcing low-quality auditors out of market. According to the authors, compliance with SOX requirements imposes high costs on low-quality auditors in the sense that low-quality auditors are likely to contravene the provisions of the PCAOB and thus be exposed to penalties. Carcello, Hollingsworth and Mastrolia (2011) investigated the effects of PCAOB inspection on audit quality provided by Big 4 auditors proxied by accrual earnings management. The findings from their study revealed that PCAOB inspection improved audit quality by virtue of a reduction in the magnitude of accrual earnings management in the post-SOX period.

In another interesting study, Manry, Mock and Turner (2008) examined the effect of SOX mandatory rotation of audit lead partners and reviewing partners on audit quality as measured by discretionary accruals. The authors documented a significant negative relationship between lead partner tenure and estimated discretionary accrual for a small client with a partner tenure of greater than seven years. Specifically, the author reported that, as the tenure of an audit partner increases, the audit partner become less tolerant of aggressive earnings management by the client. However, the findings were insignificant for a large client. Hence, their study revealed that audit partner rotation might not enhance audit quality but rather it negatively affects audit's quality. In a

more recent study, Asthana and Boone (2012) said that SOX enhanced auditor's independence hence audit quality in the post-SOX period as the magnitude of absolute discretionary accrual and meeting earnings forecast declined during the period.

2.4.2.2 The Effect of IFRS on Financial Reporting Quality

Another regulatory reform that stimulated this researcher's interest was the adoption of IFRS. As discussed in Section 2.3, the main objective of IFRS in countries of adoption is to enhance the quality of reported financial figures by ensuring transparency and adequate disclosure of accounting information, hence limiting aggressive earnings management (IFRS Foundation Constitution 2013). Whether these objectives are achieved in light of the prevailing reporting incentives at the firm level and country levels are questions for empirical research.

Much empirical research (Aubert & Grudnitski 2012; Agoglia, Douppnik & Tsakumis 2011; Barth Konchitchki & Landsman, 2012; Cohen, Krishnamoorthy, Peytcheva & Wright 2013; Chan, Farrell & Lee 2008; Carcello, Hollingsworth & Mastrolia 2011; Dimitropoulos, Asteriou, Kousenidis & Leventis 2013; Florou & Pop 2012; Wu & Zhang 2010; Yi Lin, Chee Seng & Graeme 2012) has been conducted to study the attainment of IFRS objectives. Researchers have conducted empirical investigations in this area based on the effects of IFRS on financial reporting, the capital market effect of IFRS and macro-economic effects of IFRS (Bruggemann, Hitz and Sellhorn 2013). Empirical investigation in relationship to financial reporting effects has examined how the financial statement component was adjusted with respect to standard changes while both capital market and macro-economic effects examined the response of users of

financial statements to the changes. Based on these perspectives, this study reviews the results of previous empirical studies.

Empirical studies on financial reporting effects study the level of noise and extent of bias in reported figures in predicting future cash flow under the IFRS regime (Aubert & Grudnitski 2012; Agoglia, Douppnik & Tsakumis 2011; Cohen, Krisnamoorthy & Wright 2012). Some other studies have examined the value relevance of financial information (Barth, Konchitchki & Landsman 2013; Wu & Zhang 2010; Florou & Pop 2012) and the extent of compliance by firms (Glaum, Schmidt, Street & Vogel 2013; Cascino & Gassen 2012) in the IFRS reporting regime. Most of these studies were conducted using data from the capital markets of developed countries (Chan, Farrell & Lee 2008; Carcello, Hollingsworth & Mastrolia 2011; Dimitropoulos, Asteriou, Kousenidis & Leventis 2013; Yi Lin, Chee Seng & Graeme 2012).

Mostly, these studies have compared accounting figures prepared in accordance with US GAAP or non-US GAAP with those of IFRS (Barth 2008). The ensuing empirical studies have yielded mixed findings due to differences in enforcement mechanisms and reporting incentives (Ball 2006). Thus, financial reporting quality is likely to remain unaffected except in the instance of a simultaneous change in a firm's institutional environment and reporting incentives (Ball 2006; Soderstrom & Sun 2007). Dimitropoulos, Asteriou, Kousenidis and Leventis (2013), Yi Lin, Chee Seng and Graeme (2012), Liu, Yao, Hu and Liu (2011), Zeghal, Chtourou and Sellami (2011), and Barth, Landsman and Lang (2008) all reported that the magnitude of earnings management was reduced under the IFRS regime. Aubert and Grudnitski (2012) also observed a decline in the magnitude of the proxy for earnings manipulation

that was coincidental with the adoption of IFRS, suggesting that a uniform financial reporting regime may have contributed to exposing the use of temporary activities to manipulate earnings.

In contrast, some studies have reported that IFRS did not improve financial reporting quality but rather decreased it (Barth, Landsman & Lang 2008; Christensen, Hail & Leuz 2013; Callao & Jarne 2010; Daske & Gebhardt 2006; Jeanjean & Stolowy 2008). Some of these studies proved that management incentives and the reporting environment matter most (Christensen, Hail & Leuz 2013). Ahmed, Neel and Wang (2013) observed that the financial reporting quality of firms in strong enforcement environments did not improve after IFRS adoption due to the inability of the existing mechanisms to tie in with IFRS reporting.

In another study, Atwood et al. (2011), using analyst forecast accuracy, noted that reported earnings under US GAAP were more informative than reported earnings under IFRS. Some studies examining earnings persistence and the explanatory power of earnings and earnings components have provided evidence to suggest that IFRS does not improve the persistence of earnings and earnings component (Doukakis, 2014). Callao and Jarne (2010), focusing on the effect of IFRS on earnings management, found that discretionary accrual in the period after adoption increased.

Some studies conducted their investigations using an experimental research approach. In separate studies, Agoglia, Douppnik and Tsakumis (2011), Cohen, Dey and Lys (2013) and Jamal and Tan (2010) examined the strength of both internal and external governance mechanisms in curtailing earnings management in the event of regulatory

changes. Consistent with findings obtainable from archival studies, Agoglia et al. (2011) documented that CFOs were less likely to report aggressively in a less precise environment and in the presence of strong audit committee. First, Agoglia et al.'s (2011) findings are consistent with the second-guess hypothesis whereby the thought of being critically evaluated and held responsible for the consequences of an action makes the manager conscious of his reporting decisions. Second, the IFRS reporting regime imposes more litigation risks on managers.

In a follow up study, Cohen, Krishnamoorthy, Peytcheva, and Wright (2013) produced a result consistent with that of Agoglia et al. (2011). By focusing on an auditor's judgment with respect to regulatory changes and the strength of the reporting environment, Cohen et al. (2013) documented an increase in reporting conservatism regardless of the strength of reporting environment. However, in Jamal and Tan's (2010) view, auditors must be principle oriented to achieve the intended purpose.

Another stream of research has documented empirical evidence in relationship to the impact of IFRS on the value relevance of accounting figures. Study of value relevance is necessary because some theorists have claimed that the traditional GAAP blurs the true value of firms (Devalle, Onali & Magarini 2010). Aharony, Barniv and Falk (2010) examined whether changes in accounting standards affected the informativeness of accounting numbers. Consistent with their hypothesis, the authors found that the accounting items examined in their study ha greater relevance in the post-adoption period. Using the extent of differences between local GAAP and IFRS in treating goodwill, research and development expenses (R&D), and asset

revaluation, they documented that a wide difference between IFRS and local standards resulted in more value relevance in accounting figures.

From another perspective, Florou and Pope (2012) investigated the effect of IFRS adoption on institutional investors' demands for equities. Their empirical findings suggested a positive relationship between mandatory IFRS adopters and institutional holdings and this is highly significant for institutional investors that have faith in the objectives of IFRS and countries with strong enforcement and reporting incentive. Meaning that, changes in institutional shareholdings is associated with regulatory changes.

Devalle, Onali and Magarini (2010) introduced the Chow test to measure for a structural break in the coefficient to control for other contemporaneous events. Unlike prior studies, the authors reported that the effect of IFRS on value relevance varied with stock market location. In Germany, Spain and Italy, a decrease in value relevance of accounting information was exhibited. However, they found a decrease in the value relevance of accounting figures in France and the United Kingdom. Armstrong, Barth, Jagolinzer and Riedl (2010) documented negative market reaction for firms operating in code law countries. Leung and Clinch (2014), on the other hand, studied the effect of firm specific reporting incentives proxied by family- controlled ownership. The findings from their study proved that family-controlled firms with poor reporting incentives prior to regulatory changes were unlikely to have high financial reporting quality in the post-regulatory environment.

Table 2.1

Summary of Studies Investigating the Relationship between Changes in Regulation and Financial Reporting after SOX

Paper	Issue	Hypothesis variable	Sample	Single/Multiple study	Year(s)	Research Design	Main findings
Cohen et al. (2008)	SOX	Pre- and Post-SOX	87,217 firm years observation	United States	1987-2005	Multiple regression	Firms switched from accrual-based to real-based earnings management after the SOX period.
Lobo & Zhou (2006)	SOX	Conservatism in Pre- and post-SOX	14,396 firm years observation	United States	Years?	Multiple regression	Found more to be conservative in the post-SOX adoption period and the magnitude of discretionary accruals was reduced.



Table 2.1 (continued)

Paper	Issue	Hypothesis variable	Sample	Single/Multiple study	Year(s)	Research Design	Main findings
Iliev (2010)	SOX	Audit Fees, Accrual Earnings management and Stock Return	1,499 firms	United States	2003-2004	Regression Discontinuity	Reported that Section 404 of SOX significantly increased cost and reduced discretionary earnings for both foreign and domestic firms.
Cohen et al. (2013)	IFRS	Regulatory strength and auditor judgment	97 external auditors	Country?	2013	Experiment	IFRS improved reporting quality.
Zeghal et al. (2011)	IFRS	Earnings management, internal and external governance mechanism	353 listed companies in France	France	2003-2006	Logistic regression	IFRS reduced earnings management.

2.5 Audit Pricing Literature

The main thrust of Agency Theory is the separation of ownership from management, which makes the agent act in a manner inconsistent with the interests of the principal (Jensen & Meckling 1976). As a result, doubt arises regarding the reliability of the stewardship rendered by the agent. The situation brought about with the separation of ownership from management highlights the need for external verification of financial reports (Watt & Zimmerman 1983). An independent external verification of financial statement by a third party is believed to enhance accountability and restore trust and confidence in the financial reporting process (Fan & Wong 2005). However, the contractual interaction between the auditee and auditors brings into focus other issues revolving around audit pricing. Accordingly, the need to assess the competitiveness of the audit market and the independence of auditors motivates empirical inquiries into audit pricing (Hay, Knechel & Wong 2006; Simunic 1980).

Past research of audit pricing has been buoyed using data from different regulatory and judicial settings; however, evidence from developed nations has dominated the field. Early studies emerged from United States (Simunic 1980; Palmrose 1986; Rubin 1988; Felix, Gramling, & Maletta 2001) and Australia (Carson, Fargher, Simon & Taylor 2004; Craswell, Francis & Taylor 1995; Goodwin-Stewart & Kent 2006). Researchers from other countries like the United Kingdom (Chan, Ezzamel & Gwilliam 1993; Lennox 1999; Mathews & Peels 2003), the Netherlands (Langendijk 1997), Canada (Chung & Lindsay 1988) Norway (Firth 1997), Japan (Fukukawa 2011) Bangladesh (Waresul Karim & Moizer 1996; Ahmed & Goyal 2005), Kuwait (Al-Shammari, Al Yaqoat & Al-Hussaini 2008), Jordan (Matarneh 2012; Naser & Nuseibeh 2008), Malaysia (Johl, Subramaniam & Zain 2012) has adopted the audit

fees model. The majority of these empirical studies on audit pricing have built on Simunic's (1980) audit price model by regressing audit fees against a variety of client attributes, auditor attributes and engagement attributes as explanatory variables (Hay, Knechel & Wong 2006). In the seminal work of Simunic (1980), total assets, number of subsidiaries, type of industry, ratio of foreign sales to total sales, ratio of account receivables to total assets, ratio of inventories to total assets, losses in the past three years and audit opinions were all documented to be drivers of audit fees. Interestingly, such drivers have been found to influence audit fees in the different jurisdictions in which there were used (Hay 2013).

Simunic's (1980) work investigated the level of competition and the determinants of audit fees in the audit market of the United States. Using data from a survey of 397 publicly listed companies in 1997, Simunic (1980) used Ordinary Least Square (OLS) regression and found that the US market for audit service was competitive regardless of market segment, with big audit firms exhibiting economies of scale. Similarly, his study discussed variables associated with variations in audit fees such as: total assets, number of subsidiaries, type of industry, ratio of foreign sales to total assets, ratio of account receivables to total assets, ratio of inventories to total assets, losses in the past 3 years and audit opinions.

For more than two decades now numerous studies have investigated the determinants of audit fees replicating the Simunic audit production model. Many of these studies have used a regression model to investigate the relationship between audit fees and other likely independent variables, which have substantially increased in recent years. However, the drivers revolve around how the efforts and risks associated with an audit

affect auditors pricing decisions. The following sub-sections give an insight into the empirical literature on audit fees classified on basis of the variables used to investigate audit price determinants.

2.5.1 Client Attributes

Commonly researched client attributes when investigating variations in audit fees model are client size, client complexity and client riskiness and more recently how corporate governance regulations and changes to them affect audit pricing.

2.5.1.1 Audit Client Size

Client size is a major explanatory variable that almost all studies include in the audit fees model and a high percentage of audit fees literature has documented that client size affects audit fees positively (Hay, Knechel & Wong 2006). The argument made with respect to this positive relationship is that external auditors need to conduct more substantive compliance tests as client size increase. This leads to more billable hours and increased costs because more audit personnel are required to resolve the potential agency conflict. This argument holds true for all audit firms irrespective of the cost strategies adopted (Fukukawa 2011).

Common proxies for size include total assets, total sales, and number of employees. Almost all studies have empirically proven that these three proxies vary with audit fees (Firth 1997; Chan, Ezzamel & Gwilliam 1993; Swanson 2008). However, most studies use transformed figures of size. According to Chan, Ezzamel and Gwilliam (1993) and Firth (1985), economies of scale in the auditor's production function and the presence of effective internal controls by large auditees in most cases makes the relationship

between audit fees and audit size non-linear. For instance, Banker, Chang, and Cunningham (2003) documented the presence of economies of scale among large public audit firms. As a result, extant studies introduced the square root transformation of size (Elliott & Korpi 1978; Firth 1985; Simunic 1980; Taylor & Baker 1981) or the log of total assets to improve the statistical fit in order to capture this effect (Firth 1997; Pong & Whittington 1994; Taffler & Ramalinggman 1982).

In replications of Simunic's (1980) audit fees model, Carcello, Hermanson, Neal and Riley (2002), Chan, Ezzamel and Gwilliam (1993), Choi, Kim, Kim and Zang (2010), Elliott and Korpi (1978), Firth (1985), Godwin-Stewart and Kent (2006) and Taylor & Baker (1981) used total assets to proxy auditee size. The empirical results indicated that a large auditee requires more effort of an auditor, resulting in a positive relationship. Using the number of employees as a proxy for auditee size, Naser and Nusiebeh (2008) in Jordan and Mitra, Dies and Hossain (2009) in the United States produced findings that were consistent with other earlier studies that found a positive relationship. Likewise, other studies like Simunic (1980) and Taylor and Baker (1981) used firm total sales and concluded that a firm's total sales was an important explanatory variable that affect audit fees.

2.5.1.2 Audit Client Complexity

Auditee complexity is another important variable, which reflects an auditor's effort due to either audit client scope of operations or its balance sheet composition. Chan, Ezzamel, and Gwilliam (1993) explained that, due to variations in reporting and because auditors might require disclosure between subsidiaries and the holding companies, substantive tests were required. Likewise, additional monitoring and

inquiry costs are incurred when related-party transactions, different tax policies, and diversified operations are involved between subsidiaries and the parent company. For instance, inventories and accounts receivable are complex items that are susceptible to management manipulation. Thus, auditors need additional hours and skilled personnel to evaluate a client (Pong & Whittington 1994). Arguably, as an auditor's effort increases due to the complexity involved in an audit task, so also will be the audit fees charged.

Several methods have been used to capture complexity. Commonly employed measures of complexity capturing the scope of client operations include the number of subsidiaries (local and international), the number of business segments, industrial diversification, and industry type. Other studies have proxied complexity using balance sheet items such as the inventory to total assets ratio, the accounts receivable to total assets ratio, and the extent of extraordinary items. Regardless of the proxies employed to measure complexity, previous empirical findings have revealed a significant positive relationship between audit fees and audit complexity. This suggests that audit hours and requirements for expertise increase with the level of complexity.

Chan et al. (1993), Chung and Lindsay (1988), Carson, Fargher, Simon and Taylor (2004); Craswell, Francis and Taylor (1995), Firth (1997), Palmrose (1986), Simunic (1980), Carcello, Hermanson, Neal and Riley (2002) have examined these relationships. Firth (1985) found that the percentage of accounts receivable deflated by total assets increased with audit fees. However, inventory, loss, and the number subsidiaries did not have any significant influence on audit fees. This finding seems

contrary to that Chung and Lindsay (1988) who used Canadian market data and found that the number of subsidiaries and the proportion of company assets located in foreign countries were significant determinants of audit fees. Palmrose (1986) introduced both client and client industry as measures of audit complexity, and his findings revealed that the two variables positively affected audit fees.

However, arguments do exist concerning the exactness of some of these proxies in capturing the effects of complexity. Chan et al. (1993) noted that, because the regulatory exposure of subsidiaries were different, issues that affect audit fees cannot be directly observed. The Herfindahi (1950) Index (HHI) addresses diversification issues. The HHI accounts for the number of firms in a market, as well as concentration, by incorporating the relative size (that is, market share) of all firms in a market. It is calculated by squaring the market shares of all firms in a market and then summing the squares. Even though the proxy differs from that of Simunic's (1980) measure of diversification, both studies produced consistent results.

2.5.1.3 Audit Client Risk

Every audit engagement comes with an uncertain return (Simunic & Stein 1990). In the course of performing various audit tests, some irregularities and misstatements may go undetected due to audit risk. They may be uncovered later after the issuance of an audit report (Simunic & Stein 1990). The consequences of such revelations are that auditors are exposed to litigation risks and, in extreme cases, reputational loss (Simunic & Stein 1990). In addition to audit risk, auditors evaluate client business risks and auditor business risk (Basioudis 2007). Arguably, the extent of client operational risk as foreseen beforehand by auditors is reflected in the audit fees charged.

Auditors may respond to high risk by increasing their efforts or purchasing insurance premium covers (Chan et al. 1993; Jones & Raghunandan 1998). Alternatively, the pre-engagement evaluation of client inherent and control risks might result in the rejection of a client that falls above the audit firm's risk tolerance level (Jones & Raghunandan 1998).

The impact of risk on audit fees has been investigated in many studies. The major audit risk is proxied by the probability of a client's financial condition deteriorating in the near future after the issuance of audit report. Other proxies are used for indicators of firm business risk as well. These include the level of a firm's profitability (Chan et al. 1993; Francis 1984; Naser & Nuseibeh 2007), poor liquidity and solvency status (Francis 1984; Mitra et al. 2009; Godwin-Stewart & Kent 2006), operating losses, and the issuance of modified audit opinions (Simunic 1980). Gul, Chen and Tsui (2003) found a positive relationship between discretionary accrual and audit fees due to the assessed audit risk associated with such firms. It is posited that auditors of client companies exhibiting any of these traits are susceptible to legal risks; for example, the management of such firm are likely to manipulate earnings. Because of the increased risk, auditors need to be more sceptical and detailed in their audit approach, which in turn increases audit fees.

2.5.1.4 Corporate Governance

Incomplete contracts and agency conflicts have resulted in corporate governance issues (Hunt 1995). In order to resolve corporate governance issues, both internal and external corporate governance mechanisms are in place to serve as check and balance managerial behaviour. However, by reason of the various reported financial scandals,

scepticism has developed about the effectiveness of the mechanisms (Hunt 1995). As a result, recent extent studies have incorporated corporate governance variables into the audit fees model. The hypotheses underlying studies in this area hinge on the effectiveness of corporate governance characteristics, which influence an auditor's assessment of overall audit risk and procedures (Carcello, Hermanson, Neal & Riley 2002).

The findings of an auditor's assessment regarding the adequacy of the various internal control systems determines the extent of the reliance to be placed on internal audit function. For instance, some studies contend that an effective audit committee provides a substitute to the external auditor's work, thus reducing audit effort and the overall audit fees. In a counter argument, some studies have suggested that, an effective audit committee could compliment external audit efforts, thus resulting in demand for a high-quality audit to protect their reputational capital (Abott, Parker, Peters & Raghunandan 2003; Collier & Gregory 1996; Goddard & Masters 2000). In cases like this, the board of directors through the audit committee can engage the services of reputable audit firms or industrial specialists. Alternatively, the client demands a greater audit effort from the incumbent auditor (Carcello & Neal 2000). This resultantly affects audit fees charged. Bliss (2011), Boo and Sharma (2008), Carcello, Hermanson, Neal and Riley (2002), Felix, Gramling and Maletta (2001), Stewart and Munro (2007), Stewart and Kent (2006), and Vafeas and Waagelein (2007) all tested the proposition that corporate governance effectiveness would affect audit fees using different proxies for board characteristics and audit committee characteristics. Although empirical findings are conflicting, most of the studies consistently point to a

positive and significant relationship between corporate governance and audit fees (Boo & Sharma 2008).

Carcello, Hermanson, Neal and Riley (2002) studied the effects of different board characteristics on audit pricing. In addition to board independence, their study documented that board diligence and expertise resulted in demands for high-quality external monitoring mechanisms to protect their reputational capital and avoid future legal liability. In a more recent study, Bliss (2011) examined the effect of CEO duality (one person serving as CEO and chairperson) on the association between board independence and audit pricing. The results of the study indicated that financial reporting quality as proxied by audit fees increased with the number of independent directors sitting on the board of directors. However, CEO duality affects the extent of the relationship and previous studies have reported that this situation is detrimental to good governance practices. Furthermore, the study provided evidence, which suggested that audit fees increased with increased board size. This finding reveals that larger boards portend higher risks due to inefficiency and poor firm performance.

Boo and Sharma (2008) used a sample of firms subjected to specific industrial regulations and reported the presence of a substitution effect between internal corporate governance mechanisms and audit fees. By implication, the results suggested that companies under stringent regulatory oversight are more transparent, hence, reducing expensive external monitoring. Likewise, Boo and Sharma (2008) tested the moderating effects of regulatory oversight on the association between multiple directorships and audit fees. They found, that in order to protect their reputational capital, directors serving on different boards demanded more assurance

from auditors. This finding is in line with the findings of Godwin-Stewart and Kent (2006) about the complementariness between corporate governance frameworks.

Some other studies have examined the relationship between audit fees and the audit committee because an audit committee supposedly affects the client-auditor relationship. The function of an audit committee is to mediate between management and external auditors regarding annual reports and audit fees charges (Collier & Gregory 1996). Collier and Gregory (1996) investigated this and concluded that the audit committee was able to discharge its oversight function over both the management and external auditors and this explains the reason for the lower fees observed in their study. In an experimental setting, Stewart and Munro (2007) provided evidence that the existence of an audit committee resolved agency conflicts and improved reporting quality due to the presence of an external auditor and the frequency of meetings. With the additional audit effort require, audit fees are expected to increase with the frequency of an auditor's attendance at such meetings. Stewart and Munro's findings are consistence with Abott, Parker, Peters and Raghunandan (2003) who as well that found audit committee independence and financial expertise was positively related with audit fees.

Vafeas and Waegelein (2007) provided evidence suggesting that audit committee effectiveness (independent, expertise, meetings, and size) positively affected audit fees. Vafeas and Waegelein's findings confirmed the argument that an effective audit committee compliments the work of external auditors. However, the findings contrast with that of Carcello, Hermanson, Neal and Riley (2002) who reported that audit committee characteristics were not associated with audit fees in the presence of a board

committee. However, Godwin-Stewart and Kent (2006) did not find a significant association between audit fees and audit committee independence or expertise.

In another vein, other studies have examined the relationship of internal audits to audit fees. By regulation, when relying on internal controls, auditors can reduce the extent of their substantive tests. However, an auditor will increase the number of substantive tests in situations in which his assessment of client internal controls reveals weakness. Therefore, investigation into this area seeks to understand the extent to which internal audit fees can predict audit fees. The findings of Felix, Grambling and Maletta (2001) and Godwin-Stewart and Kent (2006) suggested that internal audits contribute to the reduction of audit fees and that an auditee can invest more in internal audit procedures to get additional audit fee discounts. The earlier study of O'Keefe, Simunic, and Stein (1994) reported that the extent of an external auditor's reliance on internal controls had no net effect on audit fees for financial clients and industrial firms. The reason for the differences in the findings of these studies lies in the proxy used in measuring internal control. The use of a dichotomous variable in both studies might fail to capture the extent of the contribution of internal controls.

Another variable of interest in audit fees studies is political cronyism. Empirical evidence suggests that political cronyism aggravates agency problems, and, therefore, increases the demand for external auditing (Guedhami, Pittman & Safer 2013). The quality of reported earnings of politically connected firms is low compared to similar non-connected companies (Faccio 2006). The controlling interest in such a firm alters reported earnings to conceal inside dealings with political cronies. Two opposing arguments exist that reflect the pros and cons of political cronyism in companies.

Guedhami, Pitman and Saffer (2014) noted that political cronyism worsened the agency problem. The literature explains that controlling shareholders exploit minority shareholders because the controlling shareholders are privy to certain inside information. Politically connected firms often try to protect their cronies who have received illicit wealth gained by siphoning money from their company by distorting accounting figures. Therefore, financial their reports are not likely to reflect the actual state of affairs in politically connected companies. Politically connected firms engage in related party transactions to divert funds in order to compensate for the costs incurred in establishing such links. These transactions distort the earnings quality of companies. In turn, these distorted earnings subject auditors to increased risk exposure because non-detection of material misstatements can result in severely negative publicity that damages their reputations.

Recent studies of financial reporting and auditing have sought to investigate auditor's responses to political cronyism. Gul (2006) shows that audit fees for firms with political connections were greater than those of non-politically connected firms due to the Asian financial crisis. According to Gul (2006), politically connected firms appear to be at high risk due to their poor performance. However, when connected firms received government bailout funds, the audit fees of connected firms declined. Similarly, Yatim, Kent and Clarkson (2006) discovered that corporate governance practises in Bumiputera companies, most of which were politically favoured, was weak. Therefore, Yatim et al. (2006) found that audit fees charges for Bumiputera firms were very high due to weak corporate governance practises. Aside the above-mentioned agency problems associated with connected firms, empirical evidence has revealed that connected firms outperform their non-connected counterparts in industry.

With their political connections, the board of directors and management of connected firms are able to receive various concessions and policy waivers from the government. In addition, connected firms have better access to capital and receive government intervention during economic crises.

2.5.2 Auditors Attributes

In addition to the above client attributes, extant studies have documented that a number of auditor's attributes significantly affect the contractual relationship between auditors and their clients, which in turn affects audit fees charges (Pong & Whittington 1994; Simunic 1980). For instance, an auditor's brand name and industry-specialization are important market characteristics. Prior research has provided evidence of a price premium with respect to both (Craswell, Francis & Taylor 1995). A substantial amount of empirical evidence is consistent with the assertion that Big 4 auditors render high-quality service (DeAngelo 1981; Memis & Cetenak 2012; Davidson & Neu 1993). The Big 4 auditing firms invest in their reputations as supplier of high-quality audits. This relationship is consistent with the deep pockets hypothesis and the auditor reputation hypothesis (Lennox 1999). Indeed, DeAngelo (1981) argued that big sized auditors have less incentive to behave opportunistically; thus, they engage in product differentiation through high-quality audits.

2.5.2.1 Auditors Size

Results of previous empirical studies on the effect of auditor size on audit fees have been inconsistent. Existing studies argue that Big 4 audit firms charge more due to the high quality ascribed to their work and the cost involved in the event of litigation (Craswell, Francis & Taylor 1995). Also, their dominance in the large market segment

creates a sort of monopoly pricing, which generates economic rent (Palmrose 1986). Conversely, some have argued that large auditing firms have lower costs associated with an audit engagement because they achieve economy of scale in audit production (Pong & Whittington 1994). The reason is due to a large customer database, which permits big sized auditors to spread their risks. Testing this hypothesis, Francis (1984), Francis and Stoke (1986), and Palmrose (1986) documented a positive association between an auditor's brand name and audit fees. The results suggested a competitive market structure with product differentiation in the audit market. However, Palmrose (1986) did not find an industry-specific audit fee premium. Palmrose associated her findings with the confounding effect between brand name reputation and the industry specialization premium. Francis and Stokes (1986) found that product differentiation related to a big sized audit firm is only applicable in the small market segment. Their finding, according to the authors, is consistent with product differentiation by Big 8 firms in a competitive market.

Interestingly, the confounding effect was later restricted in Craswell et al. (1995) by limiting the brand name test to client industries not having specialist auditors. In a sample of 1,484 publicly listed companies in Australia, they found that specialist Big 8 auditors earned a 34% premium over non-specialist Big 8 auditors, and the Big 8 brand name premium over non-Big 8 auditors averaged around 30%. DeFond, Francis, and Wong (2000) provided evidence of an audit fees premium for brand name and industrial specialization using Hong Kong data. However, in the large auditee market segment, Francis and Stokes's (1986) empirical evidence showed that there was no price differentiation in auditee large market segment due to diseconomies of scale for Big 8 audit firms. The finding is consistent with that of Simunic (1980) who reported

that no difference existed between the pricing of big and non-big audit firms in the United States. Gul (1999), however, faulted the findings and justifications of Francis and Stokes and Simunic due to their inconsistency with efficiency and long-run economic equilibrium. In his own findings, Gul reported competition and product differentiation in both the small and large market segments of clients.

Past studies have used dichotomous measures such as Big 4 and non-Big 4 firms to examine financial reporting quality and have documented a positive relationship between financial reporting quality and audit firm size (Niemi 2004; Jong-hag, Kim, Jeong-Bon & Yoonseok 2010; Colbert & Murray 1998). Francis and Yu (2009) found that big audit firms were associated with high financial reporting quality as evinced by less earnings management and the issuance of ongoing concern reports. However, Boone, Khurana & Raman's (2010) findings suggested that, while little actual difference existed in audit quality of Big 4 and second-term firms, a more pronounced difference existed in perceived audit quality.

By implication, first-tier firms are seen as being diligent in preventing opportunistic reporting. These findings are consistent with the notion that Big 4 firms possess more in-house experience, which assists them in detecting fraud. Also big audit firms are financial buoyant enough to acquire audit technology and train personnel to improve competency (Boone, Khurana & Raman 2010). In another line of inquiry, Burnett, Cripe, Martin, and McAllister (2012), Francis and Yu (2009), and Balsman, Krishman and Yang (2003) used industrial specialist auditors as a surrogate for audit quality. Their findings revealed that clients of industry specialist auditors were associated with higher earning quality. An auditor industry specialist is defined by means of the market

share of the auditor or the number of clients for that auditor (Balsman, Krishnan & Yang 2003).

A unique feature of auditor size is that it is a fixed characteristic of an auditor and is mostly adopted by studies as a surrogate for financial reporting quality due to construct validity. However, the measure suffers from measurement errors as it fails to capture variations in financial reporting quality (DeFond & Zhang 2014). Empirical studies have examined variations in audit fees according to auditor size. The audit market is assumed to be competitive and comprising small sized auditees audited by a large number of auditors and large sized auditees serviced by a limited number of auditors (Carson, Fargher, Simon & Taylor 2004).

However, research findings in this area have been inconsistent (Carson et al. 2004). Using data from the United Kingdom and Ireland, Lennox (2002), found evidence of a premium for large sized audit firms. Reynolds and Francis (2000) investigated how client size influenced auditors reporting decisions. They found that the Big 5 auditors did not report more favourably for larger firms. Barton (2005) documented that auditors charged higher audit fees for clients with higher visibility incremental to other determinants of fees. The evidence also suggested that auditors responded to risks driven by press coverage, and, through its monitoring influence, the press also affects financial reporting.

2.5.2.2 Auditor Industrial Expertise

Carson (2009) found that global specialist auditors were associated with audit premiums. This is because industrial specialists are more experienced and have more

knowledge and the ability to perform better compare with non-specialists (Bonner & Lewis 1990). This assertion is consistent with Bedard and Biggs (1991) who reported that auditor's specialists in the manufacturing sector detected errors better than those without experience in the sector. Likewise both Johnson (1999) and Krishnan (2003) concluded that industry-experienced auditors were able to detect fraud and material errors. This suggested that specialist auditors invest more in hiring staff, in training and in updating their audit technologies (Krishnan 2003). Consequently, industry specialization enhances credibility and auditor's effort (Krishnan 2003), which in turn increases audit fees.

2.5.2.3 Non-Audit Services

The third aspect of auditors' attributes that have generated conflicting views regarding its influence on audit fees is the joint provision of audit and non-audit services (Simunic 1984). Some studies, for example, Palmrose (1986) and Simunic (1984) found a positive relationship between fees for audit services and non-audit services. The positive findings provided evidence that the joint provision of audit and non-audit services creates knowledge spillover, which results in greater efficiency. More recent studies such as those of Antle et al. (2006), Ezzamel, Gwilliam and Holland (1996), and Felix et al. (2001) have provided further evidence supporting this hypothesis. Antle et al. (2006) found a spillover from audit services to non-audit services, which at the time was a new result

However, Wang and Hay (2013) argued that the joint provision of both services may impair auditor's independence, due to close ties between both parties, otherwise called the Economic Bonding Theory. The theory is that the fear of fee loss will most likely

restrain auditors from objecting to accounting choices that are opportunistic. In their findings, Wang and Hay (2013) observed that auditors receiving higher audit fees in New Zealand were likely to compromise reporting quality. Using the proportion of non-audit fees to audit fees, Frankel, Johnson and Nelson (2002) documented that the provision of non-audit services tied the auditor financially to the auditee, which, in turn, compromised independence.

2.5.2.4 Auditor's Tenure

Simunic (1980) argued that a longer tenure enhances an auditor's knowledge about client operations and systems. It has been hypothesised that an auditor with a longer tenure will earn a premium (Hoitash & Markelevich 2007). However, findings of studies investigating the relationship between an auditor's tenure and audit fees have been mixed with studies like Simunic (1980), Antle et al. (2006) reporting a non-significant relationship, Felix et al. (2001), Hoitash and Markelevich (2007), and Wang and Iqbal (2009) reported a significant relationship.

2.5.3 Audit Quality

The accounting and auditing fraternity has widely agreed that quality audit adds credibility to financial reporting. Despite its importance, the factors, which inform quality audit and how audit quality is measured, are still subject to different interpretations despite decades of research (DeFond & Zhang 2014; Knechel, Krisman, Pevzner, Shefchik & Velury 2013; Kilgore, Radich & Harrison 2011). As Redmayne (2013) noted, the causes of discrepancies in the definition of financial reporting quality are due to different perceptions and the views taken into consideration when defining audit quality. In the words of Knechel et al. (2013)

financial reporting quality is in the eyes of the beholder. What constitutes financial reporting quality varies with financial informational needs of users. From the perspective of accounting practitioners, financial reporting quality is accessed based on the outcome of the audit (Hussein & MohdHanefah 2013). The International Auditing and Assurance Standards Board (IAASB) classified factors that affect financial reporting quality as inputs, outputs, interactions and contextual factors. Definitions and measurement of financial reporting quality revolve round inputs and outputs.

DeAngelo (1981) defined financial reporting quality as “the market-assed joint probability that a given auditor will *both* (a) a discover breach in the client’s accounting system and (b) report the breach" (p. 186). DeAngelo’s (1981) definition highlighted two important features that drive quality audit, namely, auditor competence and auditor independence. These components are critical parts of the input process.

Even though the definition has been widely cited, the definition has been faulted on the grounds that it is characterised financial reporting quality as a “binary process” (DeFond & Zhang 2014). That is, an audit procedure leads either to audit failure or to audit success. An audit failure is said to occur when an auditor erroneously issues a clean report or is perceived not to be independent.

The going-concern approach is another perspective used in defining audit quality. In Lennox’s (1999) assertion, an audit failure occurs when an auditor’s report does not give an early signal of an impending business failure. Academic researchers have

faulted the binary approach to defining financial reporting quality on a number of grounds. That is because, according to Francis (2011), audit quality is “a continuum ranging from very low quality to very high quality which is in contrast to the binary view of audit quality” (p. 127). Knechel et al. (2013) noted that the binary approach does not incorporate the audit risk model and its perceptions of market participants are wrong.

Several authors have attempted to more adequately define financial reporting quality. Knechel et al. (2013) defined financial reporting quality as a “well-designed audit process by motivated and trained auditors who understand the inherent uncertainty of the audit and appropriately adjust to the unique condition of the client” (p. 407). The International Federation of Accountant (IFAC) sees an audit an expression of independent opinions with respect to the drawing of financial statements in accordance with applicable financial reporting structures. The expectation is that an audit should increase a user’s understanding about the reliability of the audit (Murray 2013). The Basel Committee on Banking Supervision held this same view. In its External Audit Quality and Banking Supervision report issued in 2008, audit quality is

about delivering an appropriate, independent professional opinion on financial statements that is supported by the necessary evidence and objective judgments. To achieve this objective, the auditor must comply not only with audit requirements but also with ethical requirements to ensure integrity, objectivity, professional competence and due care, confidentiality and professional behaviour (p. 2)

2.5.3.1 Determinants of Audit Quality

Financial reporting quality is an “elusive concept” with no consensus on how it is measured (DeFond & Zhang 2014; Davidson & Neu 1993). Past studies have used several proxies to measure financial reporting quality (Knechel & Vanstraelen 2007). DeFond and Zhang (2014) grouped these proxies into output-based and input-based measures. Interestingly, DeFond and Francis (2005) maintained that, despite the shortcomings of all these measures, they remained justifiable and appropriate for measuring audit quality. The next paragraph will review the past empirical research based on DeFond and Zhang’s (2014) the classification of outputs and inputs based measures as surrogates for audit quality.

2.5.3.1.1 Going Concern Opinion

An auditor’s report is a channel of communication between the auditor and the shareholders of an auditee company. The expression of an uncertain going concern opinion by external auditors signals the possibilities of the client company’s inability to operate into the unforeseeable future (Knechel & Vanstraelen 2007). Due to the negative implications of such report (i.e., reductions in share prices and management compensation), auditors can be pressured or threatened with termination of the audit engagement by management that does not want the issuance of such a report (Krishnan 1994; Chow & Rice 1982). According to Ronen (2002), management determines both the engagement and remuneration of an auditor. The fear of losing a portion of his overall audit fees can incentivize an auditor to issue a clean bill of health even when such an issuance is unmerited. Indeed, Chow and Rice (1982) found that firms in the United States switched auditors more frequently after receiving qualified opinions.

Therefore, issuing a going concern opinion despite the prevailing circumstances shows that the fundamental condition of auditor independence has not been breached.

Previous studies have used the dichotomous modified going concern/non-modified going concern as a proxy for the variation in audit quality. DeFond and Lennox (2011) observed going concern as a proxy for financial reporting quality from the perspective of regulatory changes. Knechel and Vanstraelen (2007), Chow and Rice (1982), Krishnan (1994), and Francis and Yu (2009) examined the effect of an auditor's tenure on audit quality. Andrew, Michael and Peter (2008) and Geiger and Raghunandan (2002) looked at the effect of audit firm rotation on audit quality.

Despite the widespread use of going concern as a proxy for audit quality, researchers have highlighted some of its limitations. Jackson, Moldrich and Roebuck (2003) noted that the propensity to issue a going concern opinion was conditioned on the need for such a report. A going concern report is rarely issued, thus samples are mostly drawn from financially challenged companies, and this restricts the general application of findings from this study (DeFond & Zhang 2014).

2.5.3.1.2 Earnings Management/ Earnings Quality

Another output-based measure used as surrogate for financial reporting quality is earnings quality. Academic researchers (Jamal & Tan 2010; Nelson, Elliot & Tarpley 2002) hold the view that a high-quality audit will detect and constrain opportunistic behaviour of management. Accounting standards give room for accounting choice, judgment, and assumptions when preparing a financial report. Therefore, the rationale behind the audit of financial statements is to add credibility by reducing reporting bias

in the financial statement (Boone, Khurama & Raman 2012). However, the validity of this view depends on the researcher's perception of what financial reporting quality is and how earning quality is defined (DeFond & Francis 2005). Burnett, Cripe, Martin and McAllister (2012) found that firms with high financial reporting quality have little incentive to engage in accrual-based earnings management to meet or beat analyst forecasts. In other words, high financial reporting quality constrains earnings management.

Previous studies mostly employ Jones's (1991) discretionary accruals model and Dechow and Dichev's (2002) accruals quality model to measure earnings management (Kaya & Pillhofer 2013; Dimitropoulos, Asteriou, Kousenidis & Leventis 2013). The most famous accrual estimation model is the Jones model (1991). The Jones model has been criticised on the grounds that it suffers from measurement errors due to its assumptions. The Jones model assumes that revenues are non-discretionary. Based on this assumption, Dechow, Sloan and Sweeney (1995) claimed that the model was wrongly specified for earnings management that involved income shifting from future periods. As a result, the adapted Jones model included unexpected changes in account receivables. The adapted Jones model assumes that all credit revenues are discretionary. However, this model was also criticised because not all changes in revenue result from earnings management (Jeter & Shivakumar 1999).

Other accrual earnings management estimation models include the modified Jones model with book-to-market value and cash flow from operations and the modified Jones model with current-year ROA. These models control for firm performance. Prior studies Cohen, Dey and Lys (2008), Dechow, Sloan and Sweeney 1995, and Kothari,

Leone and Wasley (2005) have documented that estimated discretionary accruals are correlated with stock price and firm performance measures.

High levels of the discretionary accruals component signal earnings management practices and low earnings quality. However, aside from the accrual-based methods, managers can also use real earnings management, and this usage has attracted the attention of researchers recently. Chen, Chen, Lobo and Wang (2011) noted that management has resorted to the manipulation of real activities in place of discretionary accruals, which has been rendered unattractive due to high audit quality. Roychowdhury (2006) provided evidence, which showed that managers manipulate price discounts to improve sales, engage in excessive production to reduce costs of production, and reduce discretionary expenditure to improve reported earnings.

Compared to other proxy of audit quality, earnings quality measures are those that are the most in the literature because they capture financial reporting quality, which is the primary reason that an audit is conducted (DeFond & Zhang 2014).

2.5.3.1.3 Other Proxies

Aside the above-discussed proxies, other proxies that fall under the categorization of the output-based method include material misstatements and perception-based measures. A misstatement in the financial report is material if its omission or inclusion affects a user's perceptions. Misstatement is measured by accounting restatements and Accounting and Auditing Enforcement Releases (AAERs) and is a more direct proxy of financial reporting quality (DeFond & Zhang 2014). This is because it captures the inherent risk of an auditor issuing a clean opinion in the presence of a material

misstatement in the audited annual report. Perception-based measures are indirect measures of the quality of an audited report as perceived by users. The literature has addressed this from the perspective of market reaction to earnings response coefficients, audit-related information and the cost of capital (DeFond & Zhang 2014).

2.5.3.1.4 Input Based Measures

Input-based proxies of audit quality indicate the characteristics of the individual audit firm with respect to size, fees, and industrial specialization of audit firm. These measures were discussed under the determinants of audit pricing.

2.6 Empirical Studies on the Effect of Regulatory Changes on Audit Fees

While issues concerning the sustaining benefits of regulatory reform are of concern, issues as well arise on matching the costs associated with the various regulatory changes with the expected benefits (Evan Jr & Schwartz 2013). Following significant changes in accounting regulations, observers have provided evidence suggesting a considerable increase in transition costs (Institute of Chartered Accountants in England and Wales 2011). Of concern is the cost charged by external auditors in the event of regulatory change.

The cost charge is a function of an auditor's expected risk resulting from regulatory changes and the complexity involved (Simunic & Stein 1996). Yaacob and Che-Ahmad (2012) noted the ambiguousness in measurement and recognition attributable to IFRS, which makes the work of auditors more complicated. The complexity arises from the nature of accounting standards, including IFRS and the local GAAP. Under a GAAP regime, accounting rules are precise, and, because of this, an auditor's

exposure to litigation risks is less because written guidelines back up an auditor's judgement (Schipper 2003). The guidelines followed by auditors are tenable evidence in a court of law. However, in a less precise reporting environment, litigation risks of auditors are high. Similarly, accounting changes of this nature impose training costs on an auditor in order to be acquainted with the new rules. Therefore, auditors need to adjust for the increase risks and costs by changing the amount charged as audit fees (Taylor & Simon 1999).

Empirical evidence has confirmed the association between regulatory changes and audit costs. In the context of IFRS adoption, De George, Ferguson and Spear (2013) provided empirical evidence on the costs incurred with respect to audit fees during the transition to IFRS in Australia. The study also surveyed aspects of IFRS reporting requirements as perceived by professional accountants. Their findings showed a 23.7% increase in audit fees in the year of adoption. This result is consistent with the argument that firms with significance IFRS adjustments are charged more than those firms that did not report any significant difference in IFRS adjustments. Small firms in the sample were observed to have witnessed an increase in audit fees of about 30% in the IFRS transition period compared to a 19.8% increase for large firms.

Similarly, using Australian data, Griffin, Lont and Sun (2009) investigated the effects of regulatory changes at the local and international level on audits and non-audits from 2002 to 2006. These changes included the spillover effect of SOX 2002 in the United States, the Corporate Law Economic Reforms Act of 2004 in Australia and the transition to IFFRS in New Zealand effective from 2005. Based on their empirical findings, the researchers concluded that the adoption of IFRS and the stringent

requirements under New Zealand Stock Exchange governance rules in 2004 rather than the spillover effect of SOX contributed greatly to the shift in audit fees during the period, whereas non-audit fees declined during periods examined.

Kim, Liu and Zheng (2012) built an analytical model to investigate the economic consequences of mandatory IFRS adoption in selected countries in the European Union. The wide adoption of principle-based accounting standards in the region was expected to improve financial reporting quality. However, the researchers posited that that this would bring changes in audit tasks and audit complexity. Based on this, they hypothesised that audit fees would increase along with increased audit complexity and would decrease with improved reporting quality. Interestingly, the results of the OLS regression run supported the two prepositions after controlling for other concurrent reforms carried out during the period.

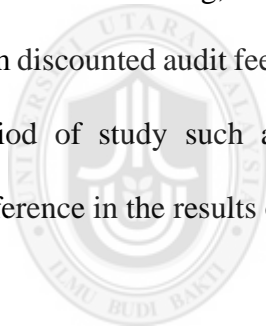
Another regulation that affected the accounting profession greatly across the global was the Sarbanes Oxley Act 2002 (SOX). As mentioned in previous section, the act was created to enhance corporate governance and increase transparency in the financial reporting process. With the extensive requirements of the act, researchers queried whether the costs of compliance would be higher than its intended benefits. Definitely, audit fees remain a direct observable compliance cost, reflecting additional efforts of auditors because of the new act. Hoitash, Hoitash and Bedard (2008), Cosgrove and Niederjohn (2008), Raghunandan and Rama (2006), and Krishnan, Rama and Zhang (2008) provided empirical evidence of the association between internal control weakness disclosure as required under Sections 302 and 404 of SOX and audit pricing.

Most of the studies that have been conducted have revealed adjustments in audit fees due to the additional risks and audit efforts introduced by SOX Act implementation. Cosgrove and Niederjohn (2008) documented a 51% increase in audit fees in the United States while Hoitash, Hoitash and Bedard (2008) reported that audit fee risk adjustment varied with the severity in internal control weakness disclosed by companies using the Internal Control for Financial Reporting (ICFR) in the United States. Specifically, the study found a significant association between audit fees and material weakness. However, using a sample of manufacturing companies using December 31, 2004 for a fiscal year end, Raghunandan and Rama (2006) observed that audit fees do not vary with material weakness disclosure.

In Korea, Jeong, Jung and Lee (2005) investigated the effect of the revised Act of External Audit (AEA) in 1989. The AEA directed the mandatory assignment system for firms susceptible to earnings management and opinion shopping. The study posited that assigned auditors had great bargaining power and would charge more than a self-selected auditor would. The results supported the hypothesis that mandatorily selected auditors led to higher audit fees compared to freely selected auditors. Testing the effect of the new created Malaysian Code of Corporate Governance (MCCG) in 2001 on audit pricing, Abdul Wahab, Zain and James (2011) found a negative relationship between the interaction of the reform period and the MCCG disclosure index. This suggests that the newly introduced code reduced auditor risk perceptions and improved internal control of firms. Compared to other studies on the effect of regulatory change on audit fees, the study used the seemingly unrelated regression method. The method

helps to correct the problem of heteroscedasticity and contemporaneous correlation in each cross section.

From another perspective, some studies have focused on audit fees discounting (lowballing) for the initial audit engagement. Huang, Raghunandan and Rama (2009) examined the effect of regulatory changes on audit pricing, focusing on more audit fees during initial audit engagement. The findings of the study did not find support for auditor lowballing for initial year of engagement in the periods after SOX, rather auditors became more conservative in their client acceptance and pricing decisions. Using a more recent data set, Desir, Casterella and Kokina's (2014) findings contrasted with those of Huang, Raghunandan and Rama (2009). Their results suggest that audit firm discounted audit fees in the initial audit engagement after SOX. Events during the period of study such as the financial downturn might have caused the sudden difference in the results of both authors.



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Table 2.2

Summary of Studies Investigating Regulatory Changes and Audit Fees after SOX

Paper	Issue	Hypothesis variable	Sample	Single/Multiple study	Years	Research Design	Main findings
Kim et al., (2012)	IFRS	Audit complexity and financial reporting quality	2,860 firm years observation for treatment group and 9,052 firm years observation for control group.	Cross country (EU and OECD countries)	2004-2008	Difference –in- Difference approach	Observed increase in audit fees because of IFRS complexity. Decrease in audit fees because of improved reporting quality.
Griffin et al., (2009)	IFRS & SOX	Governance reform	653 firm year observations.	Australia	2002-2007 fiscal year end	Pooled cross sectional regression model	Increase in audit fees due to local regulatory changes and not international regulation. Reported a decrease in non-audit fees.
DeGeorge et al., (2013)	IFRS	IFRS adoption year	4,535 firm years observation.	Australia	2002-2006	Pooled regression	Increase in audit fees due to IFRS adoption.
Jeong et al., (2005)	Review of Act of External Audit 1989	Assigned auditor	2,025 firm years observation.	Korean Stock Exchange	1999-2002	Pooled Regression	Higher audit fees for mandatory selected auditor compared to self-selected auditors.

Table 2.2 (Continued)

Paper	Issue	Hypothesis variable	Sample	Single/Multiple study	Years	Research Design	Main findings
Hoitash et al., (2008)	SOX 404 and 302	ICFR problem Significant deficiency and Material weakness	2,501 firm years observation of accelerated filers.	United States	2004-2005	Multiple Regression analysis	Audit fees are positively associated with ICFR problems. In addition, the fees increase is adjusted in accordance with the severity of the weakness.
Yaacob & Che Ahmad (2012)	IFRS	Dummy Variable to represent IFRS adoption	3,050 firm years observation.	Malaysia	2004-2008	Panel Regression model	Increase in audit fees
Hoitash & Markelevich (2007)	SOX	Expected Audit fees, Unexpected audit fees and SOX	13,860 firm years observation.	United States	2002-2003	Multivariate Analysis	SOX passage has a mitigating effect on accrual management.
Abdul Wahab, Zain, & James (2011)	2001 Malaysian Code of Corporate Governance (MCCG) Reform	CG Disclosure Index, Reforms and Interacting variable between Reform and C	379 non-financial firms.	Single	1999-2000	Seemingly Unrelated Regression	MCCG has a positive relationship with audit fees. Reform has a positive relationship with audit fees. The interaction of both variables reveals a negative relationship with AF.

Table 2.2 (Continued)

Paper	Issue	Hypothesis variable	Sample	Single/Multiple study	Years	Research Design	Main findings
Gosh & Pawlewicz (2009)	SOX	Pre- and Post-SOX	23,273 firm years observation.	United States	2000-2005	Multivariate Analysis	74% increase in audit fees in the post-SOX period and a decline in non-audit fees. Small audit firms continue with fees discounting in the post-SOX period.
Evans Jr. & Schwartz (2013)	Section 404(b) SOX	Pre- and Post-SOX	36,365 firm years observation.	United States	2000-2010	Panel Methods	The cost of complying with Section 404(b) of SOX is huge. The cost is disproportionately higher for small clients.



2.7 Gaps in Past Studies

Several studies starting from the seminal work of Simunic (1980) established that client riskiness and client complexity were important factors that affected audit fees regardless of the regulatory or institutional settings. Accordingly, research on audit pricing until now has taken into account factors that are likely to increase client complexity and riskiness. One factor that has attracted researcher's attention of late is the effect of regulatory changes across the globe on audit pricing and financial reporting quality (De George, Ferguson & Spear 2013; Griffin, Lont & Sun 2009; Kim, Liu & Zheng 2012; Yaacob & Che-Ahmad 2012).

Previous studies have pointed out that stringent regulatory rules are corrective actions supposedly embarked upon to strengthen reporting environment. Consequently, audit work becomes more complex and too risky. De George, Ferguson and Spear (2013), Griffin, Lont and Sun (2009) and Yaacob and Che-Ahmad (2012) considered the overall effects of regulatory changes on an audit. The specific factor of complexity or increased risk associated with these regulatory changes was not considered. Though Kim, Liu and Zheng (2012) and Mitra, Deis and Hossain (2009) investigated the specific factors later, firm-specific reporting incentives as well as the issue of endogeneity between the measures of risk associated with regulatory changes and audit fees were not considered in their studies.

Ball, Robbins and Wu (2003), Burghstahler, Hail and Leuz (2006), and Daske and Gebhardt (2006) asserted that firm-level reporting incentives caused variations in the effect of regulatory changes. Prior studies, with the exception of Leung and Clinch

(2014), considered the effect of these regulatory changes using family-controlled companies in Hong Kong. Other studies focussed on institutional differences on the cross-country level (Daske & Gebhardt 2006). Accordingly, this current study will focus on overlapping board directorships and politically connected firms, which prior studies have highlighted as being associated with severe agency problems as a proxy for firms reporting incentives and investigating the interaction of overlapping directorships with regulatory changes in Nigeria to how they affect audit fees and financial reporting quality. To the best of the researcher's knowledge, no empirical evidence is available that has investigated the effects of overlapping directorships on audit pricing in Nigeria.

In addition, limited studies have tested the joint determinants of financial reporting quality as an explanatory variable in the audit fees model or audit fees as an explanatory variable in the financial reporting quality model. Studies, for instance those of Kim, Liu and Zheng (2012) and Mitra, Deis and Hossain (2009) that included these explanatory variables in either the audit fees or financial reporting models treated both as exogenous. Treating these explanatory variables as exogenous might make the coefficient and standard error suffer from simultaneous equation bias. Empirical studies like Antle et al.¹⁶ (2006) suggested that treating audit fees, non-audit fees, and financial reporting quality as endogenous variables was appropriate.

In estimating the effect of regulatory changes on the audit market, the present study treats both variables as endogenous by using the dynamic panel data (GMM estimation

¹⁶ Antle et al. (2006) employed a simultaneous regression model in their methodology. However, Drakos and Bekiris (2010), noted that simultaneous equations do not necessarily solve the endogeneity problem arising because, in principal, this is a problem of missing variables but it primarily deals with simultaneous causation problems. Thus, exploring the benefits of panel methods is appropriate.

method). Thus, the present study takes into consideration the various gaps in past studies highlighted in the discussion above.

2.8 Underpinning Theories

Prior studies have outlined different theories to explain the relationship between the independent variables and dependent variables used in audit fees model. Despite decades of research on audit pricing, multiple different theories have been used to explain the relationship between the independent variable and dependent variables introduced in audit fees model. In the words of Palmrose (1986), “I know of no theory which specifies the determinants of audit fees” (p. 99). Regardless of this, the following theories, namely, Agency Theory, Economic Bonding Theory and Brand Name Theory guide the current study’s hypotheses.

2.8.1 Agency Theory and Audit Market

Agency Theory is the oldest theory in accounting explaining the contractual relationship between agent and principal arising from separation of ownership from control (Watt & Zimmerman 1983). The theory stressed the significance of monitoring the performance of the firm (Watt & Zimmerman 1983). Because agents possess more information than the owners do by virtue of their daily involvement in the firm, information asymmetry is created (Jensen & Meckling 1976). As a result, managers have the incentive to pursue self-interest goals to the detriment of the shareholders’ interests (Watts & Zimmerman 1983).

For instance, managers could alter reported accounting figures through excessive discretionary write offs with the intent to change the compensation structure or

contractual relationships of the firm such as debt covenants, tax obligations and credit suppliers. These actions introduce bias into reported figures. Intuitively, the contract between principal and agent could cause severe agency problems. The resulting agency problems, in turn, would lead, to agency costs that include monitoring costs, bonding costs and the residual losses. Audit fees take a significant proportion of monitoring costs (Adam 1994). Agency Theory posits that the more the information asymmetry between the principal and agent the higher the monitoring costs.

Agency Theory proposed several mechanisms to minimize information asymmetry and maintain sanity in the financial reporting process (Jensen & Meckling 1976). These mechanisms included the oversight functions of the board of directors via its various committees and attestation services provided by an independent auditor. According to Jensen and Meckling (1976), because shareholders are constrained from getting involved in the daily affairs of a company, independent verification of the stewardship rendered by the management is necessary.

Thus, external auditing provides an important mechanism for shareholders to monitor the actions of managers. External auditors have the responsibility of providing a certain level of assurance that a firm's resources are being managed in a consistent manner with shareholders' interests. Moreover, stewardship audits employ contractual standards and fiduciary obligations to resolve agency problems and therefore better reflect a firm's economic reality (Watts & Zimmerman 1983). Practically speaking, then, auditing is one of the approaches available to reduce help problems (Jensen & Meckling 1976; Watts & Zimmerman 1983).

The literature on audit fees (Chan et al. 1993; Nikkinen & Sahlstrom 2004; Schwartz & Menon 1985; Simunic 1980) asserts that the risk of an audit engagement is a function of the severity the agency problem. Francis and Wilson (1988) provided empirical evidence showing a positive relationship between agency costs and the demand for a high-quality audit. Parkash and Venable (1993) tested auditee non-audit service purchase behaviour consistent with Agency Theory. They argued that an auditee has the incentive to reduce the purchase of non-audit services due to the additional costs imposed when the objectivity in an audit diminishes. Their study revealed that expected agency costs determined the variation in demands for non-audit services.

Schwartz and Menon (1995) posited that firms in distress might consider switching from a small audit firm to big firm as a means of reducing agency costs. Agency cost is reduced because big audit firms provide investors and other stakeholders with the impression that management is efficiently operating the firm. Using data that cut across seven different countries, Nikkinen and Sahlstrom (2004) tested whether Agency Theory explained the audit fees model and found empirical evidence suggesting that agency helped explained audit pricing behaviour.

2.8.2 Theory of Process Accountability

Although the Theory of Accountability Process emerged from psychology literature, accounting researchers (Emby & Gibbins 1987; Gibbins & Emby 1984; Kennedy 1993; Johnson & Kaplan 1991) have applied the theory to test decision making in an audit setting. Tetlock (1983) explained process accountability, as the expectation of having to justify to others the decision process on employees, regardless of the

outcome. According to Johnson and Kaplan (1991) when such expectation arises, those who are responsible for a specified decision are more thorough and vigilant in information processing. That is because, the pressure of being held accountable encourages subjects to consider carefully the alternatives and employ more analytical techniques (Kennedy 1993).

The process of accountability is an important decision tool in an auditor's decision operating environment. Accountability is the watchword of auditors (Gibbins & Emby 1984; Emby & Gibbins 1988). Therefore, an auditor's decisions are reached with a preconceived mind-set of being second guessed by others and being able to make appropriate justifications for their reporting decisions (Kaplan & Johnson 1991). Accordingly, Kennedy (1993) asserted that process accountability promoted cognitive effort. Therefore, process accountability enhances performance and improves judgement consistency and consensus. Consistent with this argument, Emby and Gibbins (1988) observed that process accountability improved an auditor's evaluation of a situation, which in turn led to good judgement. Johnson and Kaplan's (1991) findings are consistent with those of Emby and Gibbins (1988). Specifically, Peecher, Solomon, and Trotman (2013) found that process accountability improved audit quality.

Interestingly, researchers have adopted the Process Accountability Theory to explain auditor's judgment in a principled-based regime (Agoglia et al. 2011; Cohen, Krishnamoorthy, Peytcheva & Wright 2013; Jamal & Tan 2010). Most specifically, the various studies adopting this theory have sought to understand whether the sense

of being held accountable influences a preparer's decision to report more or less aggressively.

2.8.3 Economic Bonding Theory

Antle and Nalebuff (1991) and Gibbins, Salterio and Webb (2001) have examined financial statements produced from a joint negotiation between the management and an auditor from the perspective that both parties must agree on the various estimates and accounting principles adopted in drawing up the financial statement. Although the auditor has the final prerogative to determine the negotiated outcome, the extent of influence an auditor displays is determined by his independence (Jamal & Tan 2010). In line with the Economic Bonding Theory, the impairment of an auditor's independence negatively affects the quality of a financial statement (Antle et al. 2006). Non-audit service engagement and excessive fees from audit-related services can weaken the negotiation strength of an auditor (Antle et al. 2006). This is because auditors feel threatened by possible future revenue loss when a client chooses to disengage from their services.

Prior empirical studies have employed different indicators to measure the extent of an auditor's economic bond and financial reporting quality. Antle et al. (2006), Ashbaugh, LaFond and Mayhew (2003) and Frankel, Johnson, and Nelson (2002) have established a link between audit fees and any perceived link with the impairment of an auditor's independence. The findings of Ashbaugh, LaFond and Mayhew (2003) and Frankel, Johnson and Nelson (2002) suggest that audit fees, most especially non-audit fees, increase economic bonds, thus an auditor's independence is compromised.

2.8.4 Insurance Theory

The Insurance Theory extends the role of auditors beyond the mere expression of an audit opinion to include the provision of a form of insurance to cover financial statement (Wallace 1980). The literature has identified information value and option value as major attributes of audit pricing. For instance, the informational role of an audit requires an assurance of the quality of financial information (Peursem & Hauriasi 1999), thus reducing investor's risk. Investors demand audited financial statements to guide their investment decisions. Therefore, in the event of an audit failure, the Insurance Theory contends that investors will seek to enforce a claim over the auditor to the extent of the loss suffered in a proven case of noncompliance with auditing standards or financial reporting procedures of auditing standards (Dye 1993). Thus, auditors provide some level of assurance that the financial statement is free from material misstatements (Menon & Williams 1994).

On the other hand, the management might want to limit its exposure to liability (Schwartz & Menon 1985). Schwartz and Menon (1985) documented that the management of a financial distressed firm purposely switched to a big audit firm to get additional insurance against claimants in the event of bankruptcy. However, this leads to professional liability exposure for an auditor, which is reflected in higher audit fees as a result of expected liability (Willenborg 1999). Using a mathematical model, Dye (1993) studied audit fee pricing based on the value of the audit and concluded that an audit provides information that also constitutes an option on an auditor's wealth in the case in which an audit is determined to be substandard. Willenborg (1999), using a sample of IPO firms, studied both the information signalling role and the insurance signalling role and found that the insurance signalling role was particularly strong.

The Insurance Theory is deeply rooted in audit studies, and the theory has been shown to influence the pricing of an audit service. Consistent with the Insurance Theory, when litigation risks are high, auditors increase audit fees due to the resulting professional liability exposure. Interestingly, the Deep Pocket hypothesis explains that large audit firms charge more for their services because of the need for an insurance premium, and studies have shown that they are more exposed to litigation risks.

2.8.5 Product Differentiation/ Brand Name Theory

It is widely held that the incentive to provide high quality audit varies among audit firms. The Quality Differentiated Theory and the Brand Name Theory explain why variation exists in the quality of audit services that auditors provide (Francis & Wilson 1988). Klein and Laffler's (1981) Brand Name Theory posited that firms operating in a competitive market build brand names by investing in their reputations as suppliers of high-quality services. As a result, audit firms perceived to provide high-quality audits receive quasi rent by a charging price above the minimum average cost of producing a high-quality audit (Klein & Laffler 1981). Thus, the threat of future loss of this quasi rent/future business incentivises brand name firms to render high-quality services.

Today, in auditing, the term brand name is associated with the Big 4 audit firms. According to DeAngelo (1981), this type of firm has client specific-quasi rents, which serve as collateral, or a bond that guarantees an auditor's independence and its ability to supply a high-quality audit. The reputational effect of branded Big 4 audit firms prevents them from acting opportunistically. In fact, the belief is widespread that such

firms provide assurance beyond statutory requirements, and empirical studies have provided evidence suggesting that the Big 4 audit firm are able to charge a fee premium due to product differentiation (Francis 1984; Francis & Stokes 1986; Simunic 1980). A huge investment in modern audit technology and training by Big 4 firms are major reasons for the resounding quality of their performance.

2.9 Summary

The first part of this chapter gives an overview of the business and legal environments in Nigeria and how global financial regulatory changes impacted corporate governance regulations in Nigeria. Nigeria is a multiracial society that has experienced various forms of political instability and not until recently has the country witnessed political stability. All the events happening in the political realm and internal regulations in addition to external regulatory influences such as SOX and the adoption of IFRS have affected the ownership structure of public companies.

The second part of this chapter reviewed the relevant literature on the effect of regulatory changes on financial reporting quality. Empirical findings from this literature are inconsistent and vary from one regulatory regime to another. Most importantly, the legal and political environments of a particular country have played significant roles in determining the success of a new regulatory framework imported from a foreign land. In a continuation of the study of the effects of regulatory changes, the current study discussed the literature related to audit pricing. This included a review of the various determinants of audit fees ranging from client- specific factors and to those associated with the attributes of auditors. The study also reviewed the literature on the relationship of audit fees with regulatory changes. Almost all the

literature has documented that audit fees were increased due to new regulatory requirements. However, the extent of these changes has varied from country to country.

Overall, the literature on both audit fees and financial reporting quality suggests that new regulations tightened the regulatory environment due to complex legal requirements. All things being equal, the literature suggests that more stringent requirements should improve financial reporting quality and increase audit fees. Leung and Clinch (2014) considered the effect of these regulatory changes using family-controlled companies in Hong Kong. Other studies focussed on the institutional differences on a cross-country level (Daske & Gebhardt 2006).

This current study exploits the gap in literature to hypothesize that reporting incentives at the firm level moderate the effect of regulatory changes at the individual country level on financial reporting quality and audit fees. This study uses the Agency Theory along with Economic Bond Theory and the Auditor Product-Differentiation Theory as identified in prior studies to explain the relationship between the variables of choice. The next chapter presents the theoretical framework and related hypotheses that were developed based on prior studies.

CHAPTER THREE

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

3.1 Introduction

In Chapter Two, the related literature on financial reporting quality and audit pricing was reviewed and gaps in the literature were identified. The present chapter gives theoretical support for the stated objectives and the basis upon which the study's hypotheses are developed. This chapter begins with a discussion of the theoretical framework in Section 3.2. Section 3.3 includes a discussion of the theoretical and empirical evidence that guides the development of hypotheses, which are included in that section.

The theoretical framework for the financial reporting quality model and audit fees model has its basis in the Agency Theory, the Insurance Hypothesis, Auditor Economic Bond, Product Differentiation Theory, and the Theory of Process Accountability. The Agency Theory is widely used in corporate governance and auditing-related studies.

3.2 Theoretical Framework

Figure 3.1 below illustrates the theoretical framework of the potential effects of firm characteristics on the relationship between regulatory changes and the quality of financial reporting quality in Nigeria.

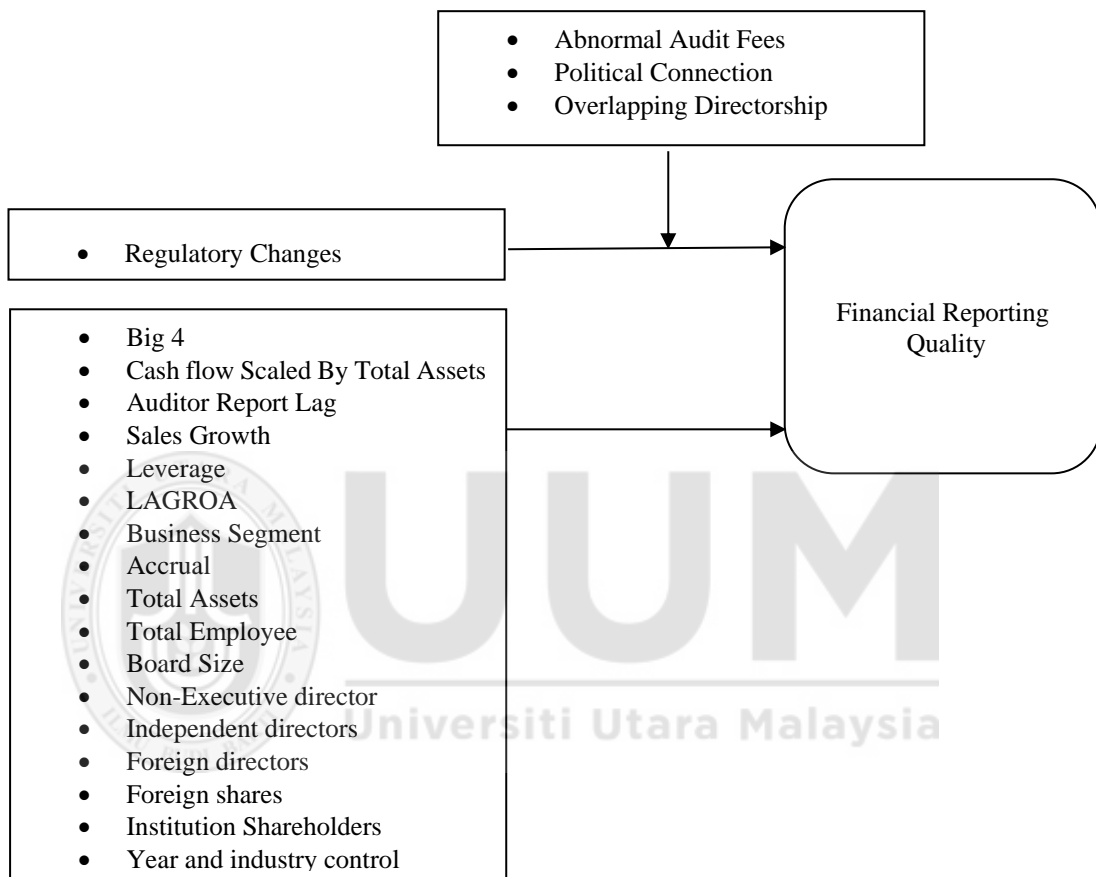


Figure 3.1. Theoretical Framework of the Effect of Abnormal Audit Fees, Political Connection and Overlapping Directorship on the Relationship between Regulatory Changes and Financial Reporting Quality in Nigeria.

Figure 3.2 below posits the relationship of the effects of firm specific characteristics on the relationship between regulatory changes and audit fees in the post-regulatory environment in Nigeria.

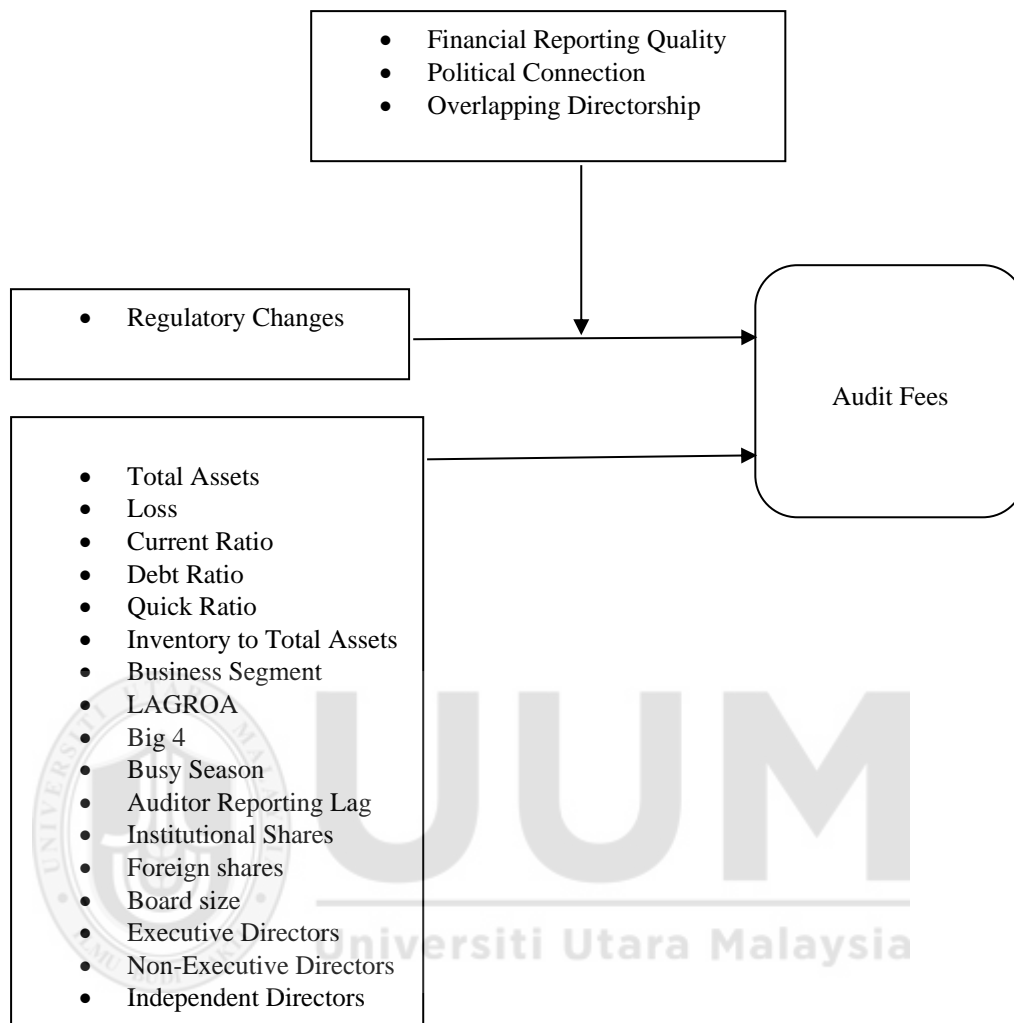


Figure 3.2. Theoretical Framework on the Effect of Financial Reporting Quality, Political Connection and Overlapping Directorship on the Relationship between Regulatory Changes and Audit Fees in Nigeria.

3.3 Hypotheses Development

3.3.1 The Effect of Regulatory Changes on Financial Reporting Quality (RQ 1)

Events¹⁷ in the last few years, which raised concerns about the effectiveness of financial reporting process, resulted in new regulatory initiatives designed to address

¹⁷ Auditing professionals as well as regulators came under intense pressure to restore public trust in auditing and governance due to a series of corporate collapses and reported accounting scandals like Society Generale Bank and Trade Bank in 2008.

these issues. Generally, financial reporting- and auditing-related regulatory enforcement guides preparers and auditors' judgments in drawing financial statements. Because the essence of any regulatory change is to improve the quality of a financial statement, this current study postulates that the reporting incentives of preparers and auditors will most likely change after regulatory reform resulting in the improved quality of reporting. This assertion is consistent with DeFond and Lennox (2011) who opined that auditors have an incentive to adopt audit measures that are of better quality in the presence of regulatory pressure to avoid penalties.

For instance, preparers and auditors can use accounting bright-lines contained in a rule-based reporting regime to structure transactions (Schipper 2003). Then, later use these rules as justifications to avoid potential criticism for aggressive reporting (Benston, Bromwich & Wagenhofer 2006). However, in the absence of bright-lines, preparers and auditors are concerned with the burden of explaining their reporting choices to the regulators. Such is the case with IFRS because IFRS involves using professional discretion and judgements on accounting measurement choices and estimates. Therefore, justifying aggressive financial reporting becomes difficult. In other words, the risks of being second-guessed for aggressive reporting by regulators and the resulting litigation costs shape preparers incentives not to engage in aggressive reporting (Agoglia, Douppnik & Tsakumis 2011).

A few studies using an experimental design have explored preparers and auditors incentives in light of regulatory changes (Agoglia, Douppnik & Tsakumis 2011; Cohen et al. 2013; Jamal & Tan 2010). Cohen et al. (2013) examined the monitoring behaviour of auditors under accounting standard types and the strength of external

regulatory regimes. They employed an experimental setting involving 97 auditors and their choice of lease classifications using two different regulatory regimes. They reported that, with respect to the strength of the regulatory regime, auditors were more likely to constrain aggressive reporting under a principle-based regime than under a rule-based based regime. This conclusion supported the findings of Agoglia, Douppnik and Tsakumis (2011), who studied how the strength of internal enforcement mechanisms constrained the aggressive reporting of preparers under principle-based and rule-based standards. They found that CFOs were less likely to report aggressively under a less precise (more principles-based) standard than under a more precise (more rules-based) standard.

Agoglia, Douppnik and Tsakumis (2011) posited that a financial statement preparer would be less likely to engage in aggressive reporting using a less precise standard. Consistent with expectations, they found that financial statement preparers were less likely to report aggressively when applying IFRS. In another vein, Jamal and Tan (2010) tested whether auditor-reporting orientation influenced the reporting decisions of financial managers in principle-based and rule-based regimes. Overall, their findings revealed that a shift in auditors' reporting orientation toward principles enhances reporting quality in a principle-based regime.

Empirical findings from Dimitropoulos, Asteriou, Kousenidis and Leventis (2013), Yi Lin, Chee Seng and Graeme (2012), and Barth, Landsman and Lang (2008) provide further support. Dimitropoulos et al. (2013) reported that IFRS improves earnings quality. In another study, Chambers and Payne (2011) reported that the passage of SOX, which led to greater scrutiny of auditors and publicly listed companies, enhanced

auditor's independence and the quality of reported earnings. Nelson, Elliot and Tarpley (2002) reported that IFRS prevented the manipulation of financial results through transaction structuring. Extrapolating from the points discussed above, this current study expects that the risk of being second-guessed for aggressive reporting and the resulting penalties due to regulatory change will cause preparers and auditors to adopt procedures that improve reporting quality.

As suggested in the Process Accountability Theory, cognitive effort and attention to detail are exercised in producing financial statements. Preparers and auditors are more likely to agree on accounting choices that best reflect the true financial state of a firm. In Nigeria, the framework of FRCN, which added to the regulation of corporate reporting in Nigeria, meant that the organization could take consequential actions through its directorate on errant auditors and their clients. This oversight will incentivize them to improve on the quality of financial statements. Similarly, the adoption of IFRS could as well lead to high-quality reporting (Agoglia, Douppnik & Tsakumis 2011). Based on this reasoning, the study current postulates the following hypothesis:

H1: Regulatory changes will positively affect financial reporting quality.

3.3.2 The Effect of Regulatory Changes and its Interaction with Abnormal Audit Fees on Financial Reporting Quality (RQ 2)

The nexus of contracts between manager, equity holders, and creditors creates information asymmetries. The agent takes undue advantage of the other parties (principal) often exploiting the information gap created by the nexus. However, bonding mechanisms such as attaching a manager's compensation to his/her

performance are often in place to alleviate this problem (Armstrong, Guay & Weber 2010). Unfortunately, this arrangement can have negative consequences as well. Because managers have the discretion to apply accounting rules and standards, the rules may be aggressively applied and transactions may be structured to meet targets (Nelson, Elliot & Tarpley 2002). For instance, a huge discretionary write-off can alter the compensation plan of managers at a particular point in time (Nelson, Elliot & Tarpley 2002; Leuz 2010).

In order to reduce aggressive reporting, Agency Theory suggests using an external auditor to verify a financial statement (Jensen & Meckling 1976). Auditors have the statutory responsibility to prevent aggressive financial reporting by ensuring the appropriate application of accounting standards (Cohen et al. 2013; Nelson, Elliot & Tarpley 2002). In addition, auditors are required to exercise due care, professional scepticism and maintain a high level of independence in their dealings. The absence of these features could lead to a moral hazard that would compromise the quality of a financial statement.

Other factors can lead to compromised financial statements as well. One factor that could lead an auditor to compromise reporting quality is the amount of remuneration, which is the summation of audit related fees and non-audit related fees. Another is client-auditor social interaction. As Francis (2006) observed, client-auditor social interaction could lead to unconscious reporting bias. Hoitash, Markelevich and Barragato (2007) argued that the amount received by auditors could lead to auditors' intentional tolerance of a client's aggressive reporting. This happens most especially when such fees are a large portion of the audit firm's annual income. The fear of losing

a lucrative audit engagement might cause an auditor to succumb to client pressure and thus to issue low-quality financial reports (Antle et al. 2006; Choi, Kim & Zang 2010). Moreover, the benefits of retaining such a client might exceed the litigation and reputational costs in the event of an audit failure (Choi, Kim & Zang 2010).

Early empirical studies (e.g., Frankel, Johnson & Nelson 2002, Ashbaugh, LaFond & Mayhew 2003) tested for a linear association between abnormally high audit fees and audit quality. Frankel, Johnson and Nelson (2002) reported a negative association between the magnitude of discretionary accrual and percentile of audit fees, suggesting that non-audit fees did not impair independence. Meanwhile, Ashbaugh, LaFond and Mayhew (2003), and Chung and Kallapur (2003) reported an insignificant relationship. However, Krishnan, Sami and Zhang (2005) observed a decline in earnings response coefficients as the ratio of non-audit fees to the earnings response coefficient increased. Hoitash, Markelevich and Barragato (2007) found a positive association between abnormal audit fees and restatement, accounting fraud, and SEC comment letters. Mitra, Deis and Hossain (2009) found that both normal and abnormal audit fees increased earnings quality from 2000 to 2003, which implies that the auditor's independence was preserved.

Recent studies, however, submitted that the relationship between audit quality and audit fees is non-linear and that the association depends on the sign of the abnormal audit fees (Choi, Kim & Zang 2010). Consistent with this view, Choi, Kim and Zang (2010) documented a positive association between absolute discretionary accruals and positive abnormal audit fees and no relationship with negative audit fees. In another interesting study, Asthana and Boone (2012) used both bargaining power and

economic view to explain further the relationship between abnormal audits fees (still conditioned on sign) and audit quality.

They also found that clients paying abnormally high audit fees exhibited a higher magnitude of discretionary accrual and will possibly meet or beat EPS suggesting that abnormally high audit fees lower financial reporting quality. However, contrary to Choi et al.'s (2010) findings, Asthana and Boone (2012) reported that absolute discretionary accrual and the probability of meeting or beating earnings forecasts increased with negative abnormal audit fees. This finding suggests that negative abnormal audit fees were due to the strong bargaining power of a client that undermines the ability of the auditor to conduct a high-quality audit. Using a sample of firms whose managers had an incentive to use discretionary accrual, Eshleman, and Guo (2014) noted that auditors for clients with negative audit fees tolerated earnings management from their client.

In a regulatory reform setting such as that which is the focus of the current study, Asthana and Boone (2012) and Mitra, Deis, and Hossain (2009) reported that the effect of the auditor-client economic bond on reporting quality was reduced in post-SOX thus enhancing the independence of the auditor. This current study would as well expect that the effect of auditor-client economic bond on financial reporting quality should attenuate in the post-regulatory period. However, because the new regulation was not geared towards strengthening auditor's independence, the study does not expect the relationship to reverse.

This is because the issue of non-disclosure of non-audit fees persists and rejection of non-audit services is at the discretion of the auditor. A client retains the ability to

pressure an auditor to tolerate questionable accounting practices. By not strengthening the independence of the auditor, the risk of a potential economic bond between auditor and client goes unchecked. Earlier on, Otunsanya and Lauwo (2010) had linked most corporate scandals in Nigeria to the excessive fees Nigerian auditors received. Noting that a collapse of a business occurred after an audit report was issued without any glimpse suggesting a threat to the company's existence indicates that auditor's independence has been compromised and financial quality battered. This current study argues that corporate reporting regulatory reforms done in isolation with respect to other pertinent issues will yield an ineffective result (Ball 2006). In line with the preceding conjecture, the study posits that:

H2: The interaction of regulatory changes with abnormal audit fees will negatively affect financial reporting quality.

3.3.3 The Effect of Regulatory Changes and its Interaction with Politically Connected on Financial Reporting Quality (RQ 3)

Political patronage is widely acknowledged as a factor affecting firm performance. As matter of fact in corruption-ridden countries (Faccio 2006), the degree of a firm's political patronage has a strong link with the profitability and the value of the firm (Fisman 2001). Politically linked firms gain a competitive advantage, which arises from preferential treatments received from government. These preferential treatments include the ability to circumvent bureaucratic constraints, access to low-cost capital, tax waivers as well as monopoly control of an industry (Faccio 2006). Moreover, from their rent-seeking behavior, the politically connected receive government-funded projects with low risks but very high returns.

Further, several empirical studies have shown how the share prices of politically connected firms react to political news. Fisman (2001) studied the return on shares of politically connected firms in Indonesia during President Suharto's last days in office. He found that the return on shares for politically connected firms was lower than for non-connected firms. In another context, Faccio (2006) examined the market reaction to news of officers or controlling shareholders entering into politics and the boards that politicians had just joined. Their findings add further empirical support to Fisman (2001). First, the study found a significant increase in the corporate value for firms whose officers or controlling shareholders were just joining politics. Second, the stock price of firms increased, either when officers or controlling shareholders were elected as prime minister or when large controlling shareholders entered politics. Johnson and Milton (2003) studied events in the aftermath of the Asian crisis in 1997, observing that connected firms experienced a decline in their share value. However, with the introduction of capital controls in 1998, connected firms witnessed an increase in stock prices.

Despite the performance advantage of connected firm, their rent-seeking behavior worsened the agency problem (Guedhami, Pittman & Saffar 2014). That is because the controlling insiders are eager to reap benefits far exceeding the costs of their rent-seeking activities. As a result, financial information is suppressed. The literature on the role of the political economy in financial reporting provides compelling evidence to support this assertion. In a cross-country analysis, Chaney, Faccio and Parsley (2006) reported that the earnings quality of politically connected firms was poor due to the incentives of controlling insiders to gain from their rent-seeking activities at the expense of outsiders. The controlling insiders have the incentive to reap benefits that

far exceed the cost of their rent-seeking activities. In the process, the controlling shareholders manipulate financial figures. Moreover, because politicians offer protection to connected firms, the management of connected firms is less concerned with the quality of their earnings.

In another study, Bushman, Piotroski and Smith (2004) investigated the degree of corporate transparency of government-owned enterprises and politically linked companies. Their study reached the conclusion that a negative association existed between state-owned enterprises and corporate transparency. Their findings suggest that, in the process of concealing their rent-seeking activities, state-owned enterprises reduce their disclosures. Using Indonesian data, Leuz and Oberholzer-Gee (2006) documented that, due to obscurity in the financial statements of connected firms and the need to comply with regulations of foreign markets, connected firms were less likely to raise funds in international financial markets. Guedhami, Pitman, and Saffar (2014) extended the literature on political connection by examining its effect on choice of auditors. They provided empirical evidence supporting the argument that, when controlling insiders in connected firms want to signal to outside investors their commitment to high-level transparency and the absence of rent-seeking activities, they engage the services of a Big 4 audit firm, suggesting that connected firms are associated with high-quality report.

Apparently, the majority of the empirical findings point to the fact that politically connected firms are associated with poor reporting quality. One question that this current study aims to answer is whether regulatory reforms attenuate the negative effect of political connection on financial reporting quality. Three prominent

regulatory reforms (i.e., the new code of corporate governance, establishment of FRCN and the adoption of IFRS) greeted the period between 2011 and 2012 in Nigeria. These reforms sought to improve corporate governance and enhance the quality of financial report. However, past literature (Ball 2006) has suggested that financial reporting incentives vary at the country and firm level. Because of these variations, the effect of regulatory reform might not be the same across all industries. At the firm level, the level of managerial discretion exercised by preparers and an auditor's acceptance of such control influences the quality of financial reports. Because politically connected firms have unique agency problems, which lead to poor reporting cultures, this study posits that:

H3: The interaction of regulatory changes with politically connected firms will negatively affect financial reporting quality.

3.3.4 The Effect of Regulatory Changes and its Interaction with Overlapping Directorships on Financial Reporting Quality (RQ 4)

The board of directors has diverse functions, especially in this new era of regulatory reforms that have added to their responsibilities. Therefore, codes of corporate governance make provisions for the delegation of board functions to various sub-committees to strengthen governance (Laux & Laux 2009; Liao & Hsu 2013). Two prominent subcommittees of a board with conflicting goals are the audit committee and the compensation committee. Due to the sensitivity of this relationship, codes of corporate governance emphasize their mutual independence. The audit committee oversees the financial reporting process while the compensation committee adjusts a director's compensation package that is aligned with that directors' specific

performance. However, the shortage of independent directors has led to a situation in which members of one committee also sit on other committees in a firm creating the situation of overlapping directors. In recent times, overlapping director membership has been subject of policy debate.

Conflicting theoretical arguments exist on the impact of multiple committee memberships with respect to audit and compensation committees. On the one hand, because of the conflicting objectives of the two committees, the recommendation is often made that the two committees be completely independent and have different individuals (Liao & Hsu 2012). Failure to create this separation will lead to suboptimal decisions being taken by both committees (Laux & Laux 2009). The 2003 Higgs Report forbade vesting compensation and audit committee responsibilities with the same individuals because to do so leads to a concentration of power. Moreover, multiple committee membership adds to the duties of directors and extends their commitments, and thus could have adverse effects on their monitoring roles (Mendez, Pathan, & Garcia 2015). For example, Ferris, Jagannathan and Pritchard (2003) opined that common committee membership shrunk the time that a director would have for monitoring duty.

On the other hand, in a contrary argument, some believe that common committee membership leads to better coordination between the two committees. The argument is that because the functions of both committees overlap, a knowledge spill over effect brought about by common membership will result in goal congruence between the two committees (Chandar, Chang & Zheng 2008; Zheng & Cullinan 2010). Liao and Hsu (2012) believed that the alignment of the objectives of the two committees would

enable audit committee members to design monitoring strategies consistent with a manager's reporting incentives. For example, the two committees can easily agree on compensation package that does not encourage earnings manipulation and will be commensurate with individual board member performance.

Laux and Laux (2009) provided compelling empirical evidence, which suggested that multiple committee memberships in their model reduced CEO incentives to manipulate earnings by providing a higher base pay and lower incentives. According to them, this leads to time saving and is cost effective with respect to the personnel costs associated with the committee structure. Hoitash and Hoitash (2009) and Zheng and Cullinan (2010) provided further empirical support that overlapping committee membership led to a high proportion of non-incentive based compensation packages for board of directors. The knowledge spillover effect explains the findings of the two studies.

Consistent with the various theoretical assertions, the empirical evidence of the effect of overlapping directors on financial reporting has produced mixed findings. The settings and various proxies adopted by previous studies might have contributed to the mixed findings. Chandar, Chang and Zheng (2008) investigated audit committee monitoring effectiveness when their work overlapped with that of the compensation committee for firms in the United States. They found that firms with common committee memberships produced high-quality financial reports. Their argument was that, when an audit committee member has a sufficient understanding of the CEO compensation structure by virtue of membership on the compensation committee, the knowledge enables him to design a monitoring strategy that will mitigate management

tendencies to opportunistically manage earnings. However, the beneficial effects subsist to extent that such does not create a free rider problem. Wan-Hussin and Bamahros (2012) provide empirical evidence consistent with Chandar et al. (2008) using Malaysian data. Their findings also suggested that common committee membership lowered earnings management, thus, improving financial reporting quality.

Similarly, Mendez, Pathan and Garcia (2015), using Australia data, reported that overlapping directorships were beneficial to monitoring effectiveness, most especially in firms in which director's positions are not that time demanding. Recently, Habib, Bhuiyan and Uddin (2016), investigated the effect of overlapping directorship on financial reporting quality using Australia data. They found that companies that are listed on the Australian Stock Exchange that have common committee membership have better financial reporting quality compared to those companies that do not have. However, the improvement in financial reporting quality experienced by firms with common committee membership is adversely affected by the equity holding of directors with common committee membership.

On the other hand, some studies such as that of Liao and Hsu (2012) reported a negative effect of common committee membership on audit committee monitoring. Liao and Hsu (2012) examined the effects of multiple committee membership on corporate governance effectiveness. They documented that common committee membership was prevalent in companies with weak corporate governance, lack of financial resources, and low demand for synergy between the two committees. Further, they reported that firms with common committee memberships had poor earnings

quality and were sensitive to pay-for-performance. Their findings suggested that common committee membership had adverse effects on corporate governance effectiveness. Chang, Luo and Sun (2011) documented findings consistent with the view that common committee membership does not improve financial reporting quality. Likewise, Van der Zahn, Mitchell and Tower (2005) using Singaporean data found that common committee memberships did not constrain earnings management and those firms with different individuals on their key sub-committees were better at constraining earnings management.

In Nigeria, where the shortage of independent directors is critical and the performance of audit committees is abysmal (Adegbite 2014), audit committee members who also sit on compensation committees are likely to compromise their independence and provide weak monitoring over the financial reporting process (Higgs 2003). The extent to which regulatory reform is able to curb this ineffectiveness is of interest to this current study, most especially, when compelling evidence exists that the beneficial effects of common committee members decline at some point (Wan-Hussin & Bamahros 2012). In furtherance to the above theoretical and empirical support, the present study posits that:

H4: The interaction of overlapping directorship with regulatory changes will negatively affect financial reporting quality.

3.3.5 The Effect of Regulatory Changes on Audit Fees (RQ 5)

Every audit engagement is associated with an uncertain level of risk of return (Simunic & Stein 1996). Hence, before embarking on any audit engagement, auditors try to

evaluate the risks associated with that engagement by referring to several client risk indicators. This assessment enables an auditor to ascertain the level of audit risk and the extent of verification needed by the auditor during the engagement (Pratt & Stein 1994). Accordingly, the traditional audit fees model that Simunic (1980) developed incorporates an expected cost component representing the level of audit risk and the expected audit effort. Consistent with the Simunic model (1980), auditors consider client complexity, client riskiness, and client size to arrive at audit fee charges. Several studies such as those of Che-Ahmad and Houghton (1996) and Gul and Lynn (2002) have provided evidence that these three client characteristics have a positive relationship with audit fees across regulatory regimes.

Therefore, consistent with the audit fees model, audit risk represents the cost of material misstatement, which is the likelihood of a client applying the wrong accounting principles and the detection risk that explains the probability of an auditor failing to discover and report misstatements in a client's financial statement (Kim, Liu, & Zheng 2012). The more complex the client's business and operating environment, the greater the auditor's detection risks for failing to discover and report misstatements that, in turn, will increase litigation risks.

However, the detection risk decreases with auditor's effort. The assessment of these factors by an auditor influences the overall audit plan. Hence, auditors will strive to minimize total audit costs. Thus, any changes in the client-reporting environment resulting from financial and corporate regulatory reforms will increase an auditor's detection risks as well as effort (Yaacob & Che-Ahmad 2012). Consequently, these result in an increase in audit fees. For example, Griffin, Lont, and Sun (2009) observed

a sharp increase in audit fees in 2001-2002 due to the passage of SOX both in the United States and Australia.

Regulatory reform comes at a cost to an auditor. Auditors will put in more effort to reduce the possibility of detection risk and future litigation costs (Ghosh & Pawlewicz, 2009). In addition, new regulations at times require that auditors undergo training or upgrade their information technology systems (De George, Ferguson & Spear, 2013). For instance, the departure from a rules-based accounting system to a principle-based system increases an auditor's risk exposure (Schipper 2003). Unlike before when detailed guidelines existed to protect auditors from litigation charges in situations in which guidelines were duly complied with, principle-based accounting standards provide fewer implementation guidelines.

Therefore, auditors rely on professional judgement and discretion, which makes them more susceptible to litigation charges. Schipper (2003) mentioned that the lack of detailed implementation guidelines would increase auditors' costs of dealing with regulatory enforcement agencies. In addition, auditors will have to pass through a skill transformation process for the new regime (Audit & Assurance Faculty 2004). In another instance, regulatory reform such as SOX creates additional oversight responsibilities for the auditing profession and imposes stiff penalties on an auditor (Ghosh & Pawlewicz 2009). This as well serves as another plausible reason why regulatory reforms drive audit fees up.

The impacts of any new corporate governance and accounting regulations on audit pricing have been of interest to academic researchers (Cameran & Perotti 2014;

Redmayne & Laswad 2013). Cameran and Perotti (2014) examined the regulatory effect of IFRS adoption in the Italian banking industry. Their result revealed a 19.29% increase in audit fees due to financial derivatives held for hedging purposes. Redmayne and Laswad (2013) as well found an increase in audit fees for the first year of IFRS adoption in New Zealand's public sector. Several other studies from different regulatory settings and examining different regulatory reform have observed that audit fees significantly increased in the post-regulatory period (Griffin, Lont & Sun 2009; Ghosh & Pawlewicz 2009; Kim, Liu & Zheng 2012; Vieru & Schadewitz 2010). The increase in auditor's responsibilities due to compliance and uncertain litigation risks explained the increases in audit fees in the majority of the studies.

From the discussion above, the current study expects that audit fees will be higher in the regulatory changes period due to an increase in agency costs. Therefore, the study posits that:

H5: Regulatory changes will lead to increased audit fees.

3.3.6 The Effect of Regulatory Changes and its Interaction with Financial Reporting Quality on Audit Fees (RQ 6)

At the inception of an audit engagement, the auditor ascertains the susceptibility of client financial reporting to misstatements and other risk indicators based on the decision of which audit strategy to adopt, and the pricing of the engagement is reached accordingly. Audit fees are adjusted in response to the client risk level (Charles, Glover & Sharp 2010). In accordance with the audit risk model, an auditor should assess a client's inherent risks, control for risk, and employ risk detection. Both inherent risk

and control for risk increase the probability of misstatements in a client's financial reporting. A high magnitude of both should lead to a lower acceptance of detection risk by the auditor. Intuitively, an auditor responds by increasing the substantive tests and audit evidence to be gathered, hence reducing detection risks but achieving this reduction at increased costs.

Simunic (1980) audit production function noted that a client deemed to be risky paid higher audit fees to compensate for additional efforts of the auditor and the expected costs of risks. Such included litigation risks and risks of reputational damage for poor quality audit services, which are common losses that auditors price into their billing. Several studies (e.g., Charles, Glover, & Sharp 2008; Lyon & Maher 2005; Seetharaman, Gul, & Lynn 2002) have provided empirical evidence on client risk drivers and auditor's responses them through audit pricing.

Seetharaman, Gul and Lynn (2002) studied how the cross listing of firms from the United Kingdom in the United States affected auditors pricing decisions. They found that firms trading in a more litigious environment like the United States paid more in audit fees than those firms that cross-listed in a less litigious environment. Lyon and Maher (2003) studied the effect of client business risk in relationship to bribing foreign government officials by businesses based in the United States. They reported a significant relationship between the payment of a bribe to foreign government officials and increased audit fees.

Bedard and Johnstone (2004), Charles, Glover and Sharp (2008), and Kim, Liu and Zheng (2012) investigated the association between financial reporting risk using

earnings management and audit fees as proxies. These studies provided evidence suggesting that auditors evaluated the risks associated with earnings management and incorporated those into their planning and pricing decisions. Bedard and Johnstone (2004) documented that auditors responded to a high magnitude of client earning manipulation risks and corporate governance risks by increasing auditing hours and planned billing rates. Charles, Glover and Sharp (2008) investigated the association between financial reporting risks and audit fees in the period surrounding the passage of SOX. They reported that the significant positive relationship between financial reporting risks and audit fees strengthened in the wake of SOX passage. According to the auditors, the increased responsiveness of audit fees reflected the increase in business and litigation risks brought about by the passage of SOX. In another regulatory change-related study, Kim, Liu and Zheng (2012) found that, due to the adoption of IFRS, audit fees decreased because of the improvement in the quality of financial reporting.

The number of significant regulatory changes that have occurred in the Nigerian financial reporting environment will surely affect the auditing profession. Although this current study did not attempt to link the effect to any specific regulatory event that had occurred due to complexity of the auditing environment, the various regulatory changes discussed in Section 2.2 and the empirical evidence shown above predict that audit fees will be adjusted in response to changes in the client risk environment. For instance, this current study expects that the creation of FRCN in 2011 and the adoption of IFRS in 2013 should improve the quality of client financial reporting. This improvement should reduce financial reporting quality risks that auditors risk exposure. Consistent with the audit fees model Simunic (1980) developed, the study

expects to find evidence that audit fees are associated with financial reporting risks. Consistent with the above theoretical and empirical justifications, this study posits that:

H6: The interaction of regulatory changes with financial reporting quality will positively affect audit fees.

3.3.7 The Effect of Regulatory Changes and Its Interaction with Politically Connected Firms on Audit Fees (RQ 7)

Studies on the impact of political economy have been enlarged in recent times to cover all the facets of the financial reporting process, starting with the literature that investigates the linkage between political cronyism and firm performance to those that have impacts the quality of financial reporting. More recently, auditing literature has begun to understand the linkage between political connection and the pricing behaviour of auditors. The underlying theoretical assumption is that political connection is associated with financial misstatement and the high probability of business failure (Chaney, Faccio & Parsley 2006; Gul 2006). Business failure, in turn, imposes great litigation and reputational risks on external auditors. In line with the audit risk model and audit fees model, auditors respond to greater control and inherent risks by lowering detection risks. Consequently, more audit effort is expended, which translates into increased audit fees.

Gul (2006) examined auditors pricing behavior in politically connected firms during and after the Asian financial crisis. Gul's findings revealed that, before government intervention through capital controls, politically connected firms ranked high in their risk profiles and, as a result, paid more in audit fees. However, with government

intervention, the audit risk of connected firms dropped and audit fees were realigned accordingly. In another study, Bliss, Gul and Majid (2011) investigated whether political connection attenuated the relationship between the independent audit committee and demands for a high-quality audit. According to their findings, political connection weakens the association between the independence of the audit committee and the demand for high quality. This is because of the high-agency costs and rent-seeking activities of connected firms. Abdul Wahab, Zain and Rahman (2015) provided further empirical support to Gul's (2006) study. The finding of Abdul Wahab et al. (2015) also suggested that auditors perceived politically connected firms to be riskier, which, in turn, led to high audit fees.

Because the general view is that politically connected firms do not practice transparent reporting (Bushman, Piotroski & Smith 2004) leading to a poor quality of financial reporting, the current study further tests whether the regulatory reforms changed the auditor's perceptions of the riskiness of connected firms. As the various theoretical arguments and empirical evidence suggest, the study expects the auditor's perceptions of connected firms will remain in the post-regulatory period. First among the reasons for this is that the various reforms add to the risk exposure of the auditor. Therefore, the auditor will want to attenuate the risk by carrying out more substantive and control tests in connected firms to ameliorate the risk associated with those firms. In furtherance of this argument, the study posits that:

H7: The interaction of regulatory changes with politically connected firms will positively affect audit fees.

3.3.8 The Effect of Regulatory Changes and its Interaction with Overlapping Directorships on Audit Fees (RQ 8)

Due to events in the recent past, the functions of boards of directors have expanded beyond the traditionally recognised ones. Their functions now go beyond mere endorsement of managerial actions to active monitoring and risk tasking. Anything less than meeting market expectations attracts severe penalties in terms of litigation and reputational loss for the board of directors. For the effective discharge of its duties, the various codes have recommended delegating various functions of the full board to sub-committees (Wan-Hussin & Bamahros 2012). Prominent among these sub-committees and, of concern to this study, are the nomination, audit, and compensation committees.

A number of studies have investigated how the structures of these sub-committees have affected corporate governance (Pincus et al. 1989; Vafeas 2000). In addition, studies have sought an understanding of how a director's membership on the board of company A affects his performance on a committee of company B. Generally, such multiple memberships are believed to limit the managerial monitoring function because such directors become over-occupied. In addition, studies have placed an emphasis on the effectiveness of the committees and sagacity of committee members. Moreover, some of these studies have noted that committee effectiveness is contingent on the percentage of independent members (Abbott, Parker & Peters 2006; Carcello & Neal 2000). Generally, extant studies found that improving the coordination of audit and compensation committees could help improve the quality of financial reporting (Chandar et al. 2010; Zheng & Cullinan 2010).

Recently, issues have emerged about the impacts on board functions of a director's dual membership (overlapping directorship) on board committees within the same company (Laux & Laux 2009; Hoitash & Hoitash 2009; Zheng & Cullinan 2010). The argument supporting overlapping directors uses the Knowledge Spillover Theory. The logic is that knowledge gained from the compensation committee could be transferred to the audit committee resulting in the congruence of board goals. According to Chandar et al. (2010) and Zheng and Cullinan (2010), the knowledge spill over effect will improve financial reporting quality. Other studies such as those of Hermanson et al. (2012) have observed that overlapping directorship reduced potential committee conflicts that might arise from inconsistent objectives of audit committee and compensation committee¹⁸. Judging from the knowledge spillover effect perspective, the auditor's perceptions of client risk of material misstatement would be low, and therefore, auditors are more reliant on client internal control and an audit requires reduced effort, which translates to lower audit fees.

In the countervailing argument, some authors have argued that overlapping directors dampen board effectiveness (Liao & Hsu 2012). This strand of literature documents that overlapping membership places additional work and time pressure on directors and makes them over-committed (Fich & Shivdasani 2006). Consequently, the monitoring efficiency of the board of directors is negatively affected. For instance, Fich and Shivdasani (2006) reported that firms with over-committed directors are linked to weak corporate governance and poor performance. Recently, Mendez, Pathan, and Garcia (2015) reported that directors who are too busy negatively affect

¹⁸ Conflicts arise when the compensation committee favors performance-based remuneration, which could trigger earnings manipulation for an incentive package that reduces such and which is more preferable to the audit committee.

the monitoring capacity of the board and its committees. In line with this reasoning, weak internal board monitoring increases the auditor's detection risks. Accordingly, the auditor is led to conduct substantive tests and gather more evidence, which will lead to increased audit fees. Specifically, Karim, Robin and Suh (2016), observed that committee overlapping is associated with weak governance because the monitoring effort of the audit committee is ineffective.

The discussion so far points out the benefits and costs associated with overlapping memberships of board members on various committees in a firm. Empirical evidence emerging from Nigeria has shown that the board audit committee often lacks the required independence to diligently carry out their oversight function of the financial reporting process. According to Adegbite (2014), "the relationship between board audit committee members and managements of companies have long been too cordial" (p. 23). As a result, executive directors have an overbearing influence on the audit committee. Dual committee membership might further exacerbate the ineffectiveness of the audit committee as it concentrates power in the hands of a few directors. Consequently, overlapping memberships portend a high risk for external auditors. Even though regulatory change might strengthen audit committee independence, the preconceived notion about their riskiness might persist. This is because the regulatory reforms already impose additional risk on the auditor. Therefore, they will take precautions most especially in a principle-based regime wherein the chances of being second-guessed are high. Based on the preceding theoretical and empirical arguments, this study posits that:

H8: The interaction of overlapping directorships and regulatory changes will positively affect audit fees.

3.4 Summary

In summary, based on the theoretical framework presented in Section 3.2, eight hypotheses were developed. Each hypothesis is directed towards answering the research questions and objectives raised in Chapter One. Table 3.1 below summarizes the linkage between the stated hypothesis, objectives, and research questions.



Table 3.1

Links between Research Questions, Objectives, and Hypotheses

S/N	Research Question	Objective	Hypothesis
1	Does regulatory changes affect financial reporting quality?	To examine whether regulatory changes affect financial reporting quality.	H1: Regulatory change will positively affect financial reporting quality.
2	Do regulatory changes and its interaction with abnormal audit fees affect financial reporting quality?	To examine whether regulatory changes and its interaction with abnormal audit fees affect financial reporting quality.	H2: The interaction of regulatory changes with abnormal audit fees will negatively affect financial reporting quality.
3	Do regulatory changes and its interaction with politically connected firms affect financial reporting quality?	To examine whether regulatory changes and its interaction with politically connected firms affect financial reporting quality.	H3: The interaction of regulatory changes with politically connected firms will negatively affect financial reporting quality.
4	Do regulatory changes and its interaction with overlapping directorship affect financial reporting quality?	To examine whether regulatory changes and its interaction with overlapping directorship affect financial reporting quality.	H4: The interaction of overlapping directorships with regulatory changes will negatively affect financial reporting quality.
5	Do regulatory changes affect audit fees?	To examine whether regulatory changes affects audit fees.	H5: Regulatory changes will lead to increased audit fees.
6	Do regulatory changes and its interaction with financial reporting quality affect audit fees?	To examine whether regulatory changes and its interaction with financial reporting quality affect audit fees.	H6: The interaction of regulatory changes with financial reporting quality will positively affect audit fees.
7	Do regulatory changes and its interaction with politically connected firms affect audit fees?	To examine whether regulatory changes and its interaction with politically connected firms affect audit fees.	H7: The interaction of regulatory changes with politically connected firms will positively affect audit fees.

Table 3.1 (continued)

S/N	Research Question	Objective	Hypothesis
8	Do regulatory changes and its interaction with overlapping directorship affect audit fees?	To examine whether regulatory changes and its interaction with overlapping directorship affect audit fees	H8: The interaction of overlapping directorships and regulatory changes will positively affect audit fees.



CHAPTER FOUR

RESEARCH METHOD

4.1 Introduction

This chapter discusses the research approach used to achieve the study's objectives and develop models to test the various hypotheses developed in Section 3.3. In order to accomplish the research objectives and test the study's hypotheses four-regression models were developed in Section 4.2. Six years of panel data are used to ascertain the effects of regulatory changes on financial reporting quality and audit fees. The first regression models tests Hypotheses 1 while the second model tests the interacting effects of abnormal audit fees, political connected firms and overlapping directorship on financial reporting quality. These are Hypotheses 2, 3 and 4. The third model tests Hypothesis 5 while the fourth model tests Hypotheses 6, 7 and 8. Section 4.3 describes the variables used in the regression model and their measurement. Section 4.4 discusses the population and sample selection procedures. Finally, Section 4.5 presents the methods of data analysis.

4.2 Research Model and Measurement

4.2.1 Financial Reporting Quality Model

Consistent with prior research (e.g., Ashbaugh, LaFond & Mayhew 2003; Choi, Kim & Zang 2010; Eshleman & Guo 2014) the current study estimates the following multivariate panel data regression models to test the hypotheses on the effect of regulatory changes on financial reporting quality.

$$\begin{aligned}
FRQ_{it} = & \alpha_{it} + \beta_1 FRQ_{t-1} + \beta_2 POST_{it} + \beta_3 ABNRAF_{it} + \beta_4 POLI_{it} + \beta_5 OVERLAP_{it} + \beta_6 BIG4_{it} \\
& + \beta_7 CFFO2TA_{it} + \beta_8 RLAG_{it} + \beta_9 SALES_{it} + \beta_{10} LEVERAGE_{it} + \beta_{11} LAGROA_{it} \\
& + \beta_{12} BUSISEG_{it} + \beta_{13} ACCRUALTA_{it} + \beta_{14} LOGTA_{it} + \beta_{15} TEMPLOY_{it} \\
& + \beta_{16} BSIZE_{it} + \beta_{17} NONEXC_{-it} + \beta_{18} INDP_{-it} + \beta_{19} FDIR_{it} + \beta_{20} FSHR_{it} \\
& + \beta_{21} INSTITSHR_{it} + \beta_{22} YEAREFFECT_{it} + \beta_{23} INDUSTRYEFFECT_{it} \\
& + \mu_{RQ} \dots \dots \dots \text{Model 1}
\end{aligned}$$

The next model, Model 2, tests the interacting effect of firm-specific reporting characteristics and is an extension of Model 1.

$$\begin{aligned}
FRQ_{it} = & \alpha_{it} + \beta_1 FRQ_{t-1} + \beta_2 POST_{it} + \beta_3 POSTABNAF_{it} + \beta_4 POSTPOLI_{it} + \beta_5 POSTOVERLAP_{it} \\
& + \beta_6 ABNRAF_{it} + \beta_7 POLI_{it} + \beta_8 OVERLAP_{it} + \beta_9 BIG4_{it} + \beta_{10} CFFO2TA_{it} \\
& + \beta_{11} RLAG_{it} + \beta_{12} SALES_{it} + \beta_{13} LEVERAGE_{it} + \beta_{14} LAGROA_{it} + \beta_{15} BUSISEG_{it} \\
& + \beta_{16} ACCRUALTA_{it} + \beta_{17} LOGTA_{it} + \beta_{18} TEMPLOY_{it} + \beta_{19} BSIZE_{it} \\
& + \beta_{20} NONEXC_{-it} + \beta_{21} INDP_{-it} + \beta_{22} FDIR_{it} + \beta_{23} FSHR_{it} + \beta_{24} INSTITSHR_{it} \\
& + \beta_{25} YEAREFFECT_{it} + \beta_{26} INDUSTRYEFFECT_{it} \\
& + \mu_{RQ} \dots \dots \dots \text{Model 2}
\end{aligned}$$

Where:

Subscript it represents panel data notation; i = cross-sectional units, t = period from 2008 to 2013.

Table 4.1

Explanation of Variables

Variable	Description
A	An intercept term, a constant
B	A regression slope coefficient
Dependent Variable	
FRQ	FRQ represent audit quality, which is the absolute discretionary accruals, calculated using Kothari, Leone, and Wasley's (2005) cross-sectional modified Jones model with ROA estimated by year and industry.
FRQ _{t-1}	FRQ _{t-1} is a lagged dependent variable. The lag dependent variable is added to account for any dynamic endogeneity present in the relationship.
Hypothesis variables	
POST	Post is a dichotomous variable with a value of 1 for the regulatory changes period 2011-2013 and 0 if otherwise. (H1)
POSTABNAF	POSTABNAF is an interacting variable. POST*ABNRAF is used to capture the incremental abnormal fees increase for post regulatory changes. (H2)
POSTPOLI	POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for post regulatory changes. (H3)
POSTOVERLAP	POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for post regulatory changes. (H4)
ABNRAF	ABNRAF is a continuous variable that captures the abnormal portion of total audit fees paid to auditor.
POLI	POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise.

Table 4.1 (continued)

Variable	Description
OVERLAP	OVERLAP is an indicator variable with a value of 1 if a board member serves on the both the audit committee and the compensation committee simultaneously and 0 if otherwise.
BIG4	BIG4 is a measure of firm's auditor coded 1 if the client is audited by a BIG 4 firm and 0 if otherwise.
CFFO2TA	CFFO2TA is cash flow from operations divided by total assets.
RLAG	RLAG is the length of time between a company's financial year-end and the date of auditor's report.
SALESG	SALESG is calculated as the change in sales revenue.
LEVERAGE	LEVERAGE is measured as total debt to total equity.
LAGROA	LAGROA measures the lag of return on assets measuring client performance.
BUSISEG	BUSISEG is the number of business segments.
ACCRUALTA	ACCRUAL is calculated as net income less operating cash flow scaled by total assets.
LOGTA	LOGTA represents the log of total assets.
TEMPLOY	TEMPLOY is the total number of employees a company has.
BFSIZE	BFSIZE is the total number of directors serving on the board of directors of a company.

Table 4.1 (continued)

Variable	Description
NONEXC_	NONEXC_ is the total number of non-executive directors divided by total number of directors.
INDP_	INDP_ is the total number of independent non-executive directors divided by the total number of directors.
FDIR	FDIR is the total number of foreign directors on the board divided by the total number of directors.
FSHR	FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors.
INSTITSHR	INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors.
YEAREFFECT	Control for year effect
INDUSTRYEFFECT	Control for industry effect
μ_{RO}	Error term

4.2.2 Audit Fees Model

Consistent with Simunic (1980) as modified by Kim, Liu & Zheng (2012), the current study develops the following multivariate panel data regression model to test the hypothesis on the effect of regulatory change on audit fees.

$$\begin{aligned}
 \text{LOGAF}_{it} = & \alpha_{it} + \beta_1 \text{LOGAF}_{t-1} + \beta_2 \text{POST}_{it} + \beta_3 \text{FRQ}_{it} + \beta_4 \text{POLI} + \beta_5 \text{OVERLAP}_{it} + \beta_6 \text{LOGTA}_{it} \\
 & + \beta_7 \text{LOSS}_{it} + \beta_8 \text{CRATIO}_{it} + \beta_9 \text{DR}_{it} + \beta_{10} \text{QUICK}_{it} + \beta_{11} \text{INVT2TA}_{it} \\
 & + \beta_{12} \text{BUSISEG}_{it} + \beta_{13} \text{LAGROA}_{it} + \beta_{14} \text{BIG4}_{it} + \beta_{15} \text{BUSY}_{it} + \beta_{16} \text{RLAG}_{it} \\
 & + \beta_{17} \text{INSTITSHR}_{it} + \beta_{18} \text{FSHR}_{it} + \beta_{19} \text{BSIZE}_{it} + \beta_{20} \text{EXC}_{-it} + \beta_{21} \text{NONEXC}_{-it} \\
 & + \beta_{22} \text{INDP}_{-it} + \beta_{23} \text{YEAREFFECT}_{it} \\
 & + \beta_{24} \text{INDUSTRYEFFECT}_{it} + \mu_{AF} \dots \dots \dots \text{Model 3}
 \end{aligned}$$

Next, Model 4 tests the interacting effect of a firm's specific reporting characteristics and is an extension of Model 3.

$$\begin{aligned}
 \text{LOGAF}_{it} = & \alpha_{it} + \beta_1 \text{LOGAF}_{t-1} + \beta_2 \text{POST}_{it} + \beta_3 \text{POSTFRQ}_{it} + \beta_4 \text{POSTPOLI}_{it} + \beta_5 \text{POSTOVERLAP}_{it} \\
 & + \beta_6 \text{FRQ}_{it} + \beta_7 \text{POLI} + \beta_8 \text{OVERLAP}_{it} + \beta_9 \text{LOGTA}_{it} + \beta_{10} \text{LOSS}_{it} + \beta_{11} \text{CRATIO}_{it} \\
 & + \beta_{12} \text{DR}_{it} + \beta_{13} \text{QUICK}_{it} + \beta_{14} \text{INVT2TA}_{it} + \beta_{15} \text{BUSSEG}_{it} + \beta_{16} \text{LAGROA}_{it} \\
 & + \beta_{17} \text{BIG4}_{it} + \beta_{18} \text{BUSY}_{it} + \beta_{19} \text{RLAG}_{it} + \beta_{20} \text{INSTITISHR}_{it} + \beta_{21} \text{FSHR}_{it} \\
 & + \beta_{22} \text{BSIZE}_{it} + \beta_{23} \text{EXC}_{-it} + \beta_{24} \text{NONEXC}_{-it} + \beta_{25} \text{INDP}_{-it} + \beta_{26} \text{YEAREFFECT}_{it} \\
 & + \beta_{27} \text{INDUSTRYEFFECT}_{it} + \mu_{AF} \dots \dots \dots \text{Model 4}
 \end{aligned}$$

Where:

Subscript it represents panel data notation; i = cross-sectional units, t = period from 2008 to 2013

Table 4.2

Specification for Model 4

Variable	Description
A	An intercept term, a constant
B	A regression slope coefficient
Dependent Variable LOGAF	LOGAF represents natural logarithms of audit fees (Naira).
LOGAF _(t-1)	Lag of the dependent variable. The lag dependent variable is added to account for any dynamic endogeneity present in the relationship.
Hypothesis Variable POST	Post is a dichotomous variable with a value of 1 for the regulatory changes periods 2011-2013 and 0 if otherwise. (H5)

Table 4.2 (continued)

Variable	Description
POSTPOLI	POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for regulatory changes. (7)
POSTFRQ	POSTFRQ is an interacting variable (POST*FRQ) used to capture the effect of financial reporting quality for regulatory changes.
POSTOVERLAP	POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for regulatory changes. (8)
Control Variable	
FRQ	FRQ is absolute discretionary accrual.
POLI	POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise.
OVERLAP	OVERLAP is an indicator variable with a value of 1 if a board member serves on both the audit committee and compensation committees simultaneously and 0 if otherwise.
LOGTA	LOGTA represents a log of total assets.
LOSS	LOSS takes a value of 1 when a firm reports a net loss and 0 if otherwise.
CRATIO	CRATIO represents current assets divided by current liabilities.
DR	DR represents the ratio of long-term debt to closing total assets.
QUICK	QUICK is the ratio of current asset less inventory divide current liabilities.
INVT2TA	INVT2TA represents inventory to total assets.
BUSISEG	BUSSEG is the number of business segments.
LAGROA	LAGROA measures the lag of return on assets measuring client performance.

Table 4.2 (continued)

Variable	Description
BIG4	BIG4 is a measure of a firm's auditor coded 1 if the client is audited by a Big 4 firm and 0 if otherwise.
BUSY	BUSY is an indicator variable equal to 1 for a firm with a December year-end and 0 if otherwise.
RLAG	RLAG represents the number of days taken from account year-end to the date of the auditor's report.
INSTITSHR	INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors.
FSHR	FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors.
BSIZE	BSIZE is the total number of directors serving on the board of directors of a company.
EXC_	EXC_ is the total number of non-executive directors divided by board size.
NONEXC_	NONEXC_ is the total number of non-executive directors divided by board size.
INDP_	INDP_ is the total number of independent non-executive directors divided by the total number of directors.
YEAREFFECT	Control for year effect
INDUSTRYEFFECT	Control for industry effect
μ_{RQ}	Error term

4.3 Measurement of Variables

4.3.1 Dependent Variables

Due to the nature of this study, two dependent variables are tested. The dependent variables are as discussed below.

4.3.1.1 Financial reporting quality

The dependent variable in the financial reporting quality model is audit quality. Following prior empirical studies (Ashbaugh, LaFond & Mayhew 2003; Choi, Kim & Zang 2010; Eshleman & Guo 2014), financial reporting quality is measured by accrual earnings management. The incentives to engage in aggressive earnings management vary according to a manager's motives. Often, financial statements are window dressed to mislead users of financial statements or to meet the expected outcomes of contractual relationships tied to performance (Chen, Tang, Jiang, & Lin 2010).

Regardless of the specific motive, earnings management introduces some level of bias in financial reporting (Mitra, Deis & Hossain 2009). A common proxy used to capture this opportunistic behaviour of management is discretionary accruals earnings management (Tsipouridou & Spathis 2012). The extant literature argues that financial reporting quality is high when the magnitude of discretionary accrual is low.

For the purposes of this study, the absolute¹⁹ value of discretionary accrual instead of signed accrual is used. Absolute discretionary accrual is estimated using Kothari, Leone and Wasley's (2005) cross-sectional modified Jones model with ROA²⁰ as adopted and modified by Ashbaugh, LaFond and Mayhew (2003) and Mitra, Deis and Hossain (2009). The reasons for using the cross-sectional²¹ modified Jones model is

¹⁹, According to Francis et al., (1999), Chung & Kallapur (2003), and Larcker and Richardson (2004), absolute value of discretionary accrual is suitable when no specific motivation exists for using either income-increasing or income-decreasing accrual earnings management.

²⁰ This is necessary because of firms with extreme performance and the implication of obtaining a biased estimate for discretionary accruals in the presence of such firms in the sampled companies.

²¹ A cross-sectional model enables researchers to detect earnings management beyond the average unconditional earnings management found in a specific industry (Jeter & Shivakumar 1999).

that the model is effective when examining changes in economic conditions that affect total accruals across different industries (DeFond & Jiambavlo 1994; Kasznik 1999; Cohen & Zarowin 2010). Overall, the study controls industry-wide changes in economic conditions that affect total accruals. Accordingly, a well-specified model and a powerful test are achieved (Kothari, Leone & Wasley 2005).

The following cross-sectional regression model for each industry and year for the sampled companies is use in estimating discretionary accrual.

$$\frac{TA}{Asset_{t-1}} = \partial_1 \frac{1}{Asset_{t-1}} + \partial_2 \frac{\Delta REV}{Asset_{t-1}} + \partial_3 \frac{PPE}{Assets_{t-1}} + \partial ROA_{t-1} + \epsilon_{it} \quad \text{Equation.....5}$$

Where: TA equal to total accruals scaled by assets. Total accruals equal net income before extraordinary plus depreciation and amortization items minus cash flows from operations scaled by total asset (Ashbaugh, LaFond and Mayhew, 2003). Like the prior empirical studies of Cohen and Zarowin (2010), Ashbaugh, LaFond and Mayhew (2003), and Mitra, Deis and Hossain (2009), the current study uses operating cash flow to estimate accrual measures. The benefit of using operating cash flow is that it captures all forms of accrual manipulations be they current accruals or non-current accruals (Cohen and Zarowin 2010).

Asset_{t-1} is the lagged value of total assets for firms. The reason for scaling some of the variables is to control for heteroscedasticity. ΔREV is changes in revenue, i.e., sales, scaled by lagged total assets. ROA_{t-1} is the lagged return on assets measured by earnings before an extraordinary as pointed out by Ashbaugh, LaFond, and Mayhew (2003). Including lagged ROA helps to vary the association between firm performance

and accruals across industries. PPE is the gross value of property, plant, and equipment. Consistent with prior studies, the coefficient estimates obtained from equation 5 serve as the discretionary accrual.

4.3.1.2 Audit Fees

The dependent variable in the audit fees model is the audit fee (LOGAF). Audit fees are the monetary incentives received by external auditors for audit-related services rendered. For the purposes of this study, the audit fee is the Naira value of the fees paid by publicly listed companies to their external auditor in Nigeria. In Nigeria, the statutes require that the amount paid to auditors be disclosed under notes to the account in the annual report of listed companies. Consistent with other extant studies, for example, Chan, Ezzamel and Gwilliam (1993) and Firth (1985), the current study uses the log transformation of audit fees. One reason for the log transformation of audit fees is to address the non-normal distribution of audit fees and remove outliers. In addition, the non-linear relationship between auditee size and audit fees requires that log transformation of audit fee should be used.

4.3.2 Independent Variables

4.3.2.1 Post-Regulatory Period

The post-regulatory period variable (POST) is set to 1 for periods that fall between the years 2011, 2012, and 2013 and 0 if otherwise. The various regulatory changes started with the review of the code of corporate governance in 2011. The provisions of the new code of corporate governance are more comprehensive when compared to the 2003 code of corporate governance. In addition, 2011 marks the establishment of the

Financial Reporting Council of Nigeria (FRCN) followed by the convergence of local accounting standards with the provisions of IFRS in 2012.

4.3.2.2 Abnormal Audit Fees

Consistent with Blankley, Hurtt and MacGregor (2012) abnormal audit fees are estimated as the residual from the below clustered robust regression²² after controlling for industry and year effect. Log of audit fees (LOGAF) is regressed on variables controlling for risk, auditor's effort and industry following Blankley, Hurtt and MacGregor (2012), Choi, Kim and Zang (2010) and Eshleman and Guo (2014) respectively.

$$\text{LOGAF}_{it} = \alpha_i + \beta_1 \text{LOGTA}_{it} + \beta_2 \text{DR}_{it} + \beta_3 \text{TEMPLOY}_{it} + \beta_4 \text{QUICK}_{it} + \beta_5 \text{INVT2TA}_{it} + \beta_6 \text{RECTA}_{it} + \beta_7 \text{ROA}_{it} + \beta_8 \text{BUSY}_{it} + \beta_9 \text{LEVERAGE}_{it} + \beta_{10} \text{BUSISEG}_{it} + \beta_{11} \text{BIG4}_{it} + \beta_{12} \text{SALESG}_{it} + \beta_{13} \text{RLAG}_{it} + \beta_{14} \text{CFFO2TA}_{it} + \beta_{15} \text{INDCON}_{it} + \beta_{16} \text{YRCONTROL}_{it} + \mu_{it} + \varepsilon_{it} \dots \dots \dots \text{Equation 8}$$

Where:

Subscript it represents panel data notation; i = cross-sectional units, t = period from 2008-2013.

²² This study controlled for within-firm correlation of residuals and heteroscedasticity using the robust cluster techniques that Petersen (2009) suggested.

Table 4.3
Specification of equation 8

Variable		Description
	α	An intercept term, a constant
	β	A regression slope coefficient
Dependent Variable		
LOGAF		LOGAF represents natural logarithms of audit fees.
LOGTA		LOGTA represents the log of total assets.
DR		DR represents the ratio of long-term debt to closing total assets.
TEMPLOY		TEMPLOY measures the total number of employees that an organisation has.
QUICK		QUICK is the ratio of current assets less inventory divided by current liabilities.
INVT2TA		INVT2TA represents inventory to total assets.
RECTA		RECTA represents the total receivables to total assets.
ROA		ROA is the ratio of net profit after tax divided by total assets.
BUSY		BUSY is an indicator variable equal to 1 for a firm with a December year-end, and 0 if otherwise.
LEVERAGE		LEVERAGE is total debt scaled by total equity.
BUSISEG		BUSISEG is the number of business segments plus 1.
BIG4		BIG4 is a measure of firm's auditor coded 1 if a client is audited by a BIG 4 firm and 0 if otherwise.
SALESG		SALESG measures sales growth.
RLAG		RLAG represents the number of days taken from account year-end to the date of the auditor's report.
CFFO2TA		CFFO2TA is cash flow from operating activities scaled by total assets.
YEAR EFFECT		Control for year effect
INDUSTRY EFFECT		Control for industry effect
$\mu_{i,t}$		Error term.

4.3.2.3 Interaction Term

Previous research on regulatory changes concentrated on the direct effects of regulatory change on financial reporting quality. Ball (2006) theorised that the outcome of regulatory change (herein financial reporting quality and audit fees) is contingent on firm-specific financial reporting incentives. Building on Ball (2006) argument, this current study develops and tests some moderating variables. This study created the interacted variables by first multiplying each of the moderating variables by the regulatory changes variable.

However, because this approach might lead to multicollinearity between the original term and the moderated variables (Darlington 1990 as cited in Azman-Saini, Baharumshah & Law 2010), the present study alleviates the problem of multicollinearity following the approach of Azman-Saini, Baharumshah and Law (2010). In line with their approach, the study orthogonalized the interaction term. This means that the interacted variables were regressed on the moderator variables and the residuals from the regression now represent the interaction term. Following this approach, this study created the POSTABNAF, POSTPOLI, POSTOVERLAP, and POSTABDDAC variables.

4.3.2.4 Politically Connected Firms

In Nigeria, available evidence suggests that retired Army Generals, ex-ministers, close relations of past leaders or those who have close contact with the government comprise

a substantial percentage of the chairs of the boards of directors of publicly listed companies (Ujunwa, Salami & Umar 2013).

Accordingly, to measure politically connected firms, the study defined politically connected companies as those companies having at least one of its largest shareholders or member of its board of directors closely related to high-ranking military officers (i.e., head of state) or President, member of parliament, or a key executive cabinet member in either a past or present regime. Similarly, through the annual reports, the study identified a number of board members and major shareholders who are politically linked through being a recipient of national merit award²³ supposedly given to deserving Nigerian citizens. The study's definition of a politically connected firm is partly consistent with those that Boubakri, Cosset and Saffar (2008), Faccio (2006) and Gul (2006) have given. The variable was set to 1 if the firm was one of those identified as being connected and 0 if otherwise.

4.3.2.5 Overlapping Directors

For measuring overlap, the study defined an overlapping director as a board member who served simultaneously on both the audit committee and compensation committee. Consistent with Hoitash and Hoitash (2009), board members who served on both committees were first identified; then an indicator variable was equal to 1 if the board member served on both committees and 0 if otherwise.

²³ The national merit award has received much criticism from political observers on the grounds that the award is often used as a reward for political associates, cronies, and sycophants (Gabriel 2014).

4.3.3 Control Variables

Prior studies included variables in both the financial reporting quality model and audit fees model to control for cross-sectional variations in firm characteristics. These control variables have significant explanatory power and provide a robust estimate irrespective of country, sector, or year. Hence, omission of these variables from the model would result in model misspecification, which might lead to incorrect inferences (Bartov, Gul & Tsui 2000). In order to identify the control variables, this study refers to prior studies. Therefore, similar to prior studies, this current study controls for both client and audit firm characteristics.

With respect to client size, commonly used proxies include total assets, total sales, and number of employees (Chan, Ezzamel & Gwilliam 1993; Firth 1997). For the purpose of this study, total assets is used as a proxy for client size. Total assets are the sum of non-current assets and current assets disclosed in the balance sheet. This figure was retrieved from the Consolidated Balance Sheet (CBS) of the annual reports. In line with past studies (Chan, Ezzamel & Gwilliam 1993; Francis 1985; Simunic 1980), the current study uses the log transformation of total assets to take care of the curvilinear relationship between the dependent variables and asset fees (Chung & Lindsay 1988).

Prior studies of the financial reporting model argue that large firms have stable operations (Dechow & Dichev 2002) and strong internal controls (Richardson et al. 2002; Blankley, Hurtt & MacGregor 2012) and thus have a low level of discretionary accruals. On the other hand, prior studies of audit fees have documented that client

size and audit fees are positively related (Francis 1984; Francis & Stoke 1986; Palmrose 1986).

The current study also controlled for client complexity. For the financial reporting quality model, previous studies have linked clients with a complex operational structure with a high level of information asymmetry (Wan-Hussain & Bamahros 2012). A high information asymmetry provides incentives for managers to engage in earnings management. The number of business segments (BUSSEG) measures the extent of client complexity in the financial reporting model. Under the audit fees model, client complexity measures include the ratio of inventories to total assets, the number of business segment, and Return on Assets. The inventories figure were as disclosed in the annual reports in the current asset section under the consolidated balance sheet (Simunic 1980). The numbers of business segments operated by the client company are disclosed in the notes to the accounts. Finally, the ratio of Return on Assets, which is net profit after tax scaled by total assets, was computed based on the relevant figures drawn from the annual reports. The study anticipates a positive relationship between client complexity and audit fees.

Similarly, the variables used in controlling client's risk are loss in the current year (LOSS), current ratio (CRATIO) and debt ratio (DR). A company's income statement was examined and a client with a loss in the income statement was coded 1 if there was a loss and 0 if there was no loss. The current ratio was calculated as the proportion of current assets divided by current liabilities (Francis 1984). Debt ratio is the ratio of total assets to total liabilities (Taylor & Simon 1999). Previous studies have

documented that risky firms are more likely to engage in earnings management (Wan-Hussain & Bamahros 2012). Likewise, auditors charge risky firms more than non-risky firms, and this charge serves as a risk premium in the event of future litigation.

Further, the current study controls for firm performance in the financial reporting model, and prior studies have suggested that discretionary accrual is positively correlated with firm performance (Kothari 2005). Accordingly, the study includes cash flow from operating activities (CFFTO2TA), accrual (ACCRUAL), and sales growth (SALESG). Previous researchers such as Frankel et al. (2002) and Chung, and Kallapur (2003) have found a negative association between discretionary accruals and CFFTO2TA. Ashbaugh et al. (2003) and Asthana and Boone (2012) documented that SALESG is positively related to discretionary accrual, suggesting that firms experiencing growth in sales are more likely to engage in discretionary accrual. Consistent with Choi, Kim and Zang (2010) accrual is included to control for variations in the reversal of accrual over time, and it should have a positive coefficient.

In addition, the study controls for auditor-related attributes, which include auditor size (BIG4), accounting year-end (BUSY) and reporting lag (RLAG). Prior studies observed that big international audit firms receive fee premiums due to product-differentiated audits (De-Angelo, 1986; Craswell, Francis & Taylor 1995; Francis 1984; Francis & Stoke 1986; Simunic & Stein 1996; Palmrose 1986). Because of perceived high quality, Big 4 audit firms charge high audit fees as a sign of the high financial reporting quality they render to clients. To capture the Big 4 effect resulting from product differentiation, an auditee takes the value of 1 if it engaged the service

of a Big 4 firm and 0 if otherwise. In the financial reporting model, the level of accrual earnings management should decrease for firms using a Big 4 audit firm (Ashbaugh et al. 2003; Asthana & Boone 2012). Audit fees should increase for firms using a Big 4 audit firm due to product differentiation (Simunic 1980; Yaacob & Che-Ahmad 2012). BUSY represents companies with December as their fiscal year-end and indicates the peak season (Chan et al. 1993; Che-Ahmed 2011). This is an indicator variable, which is 1 for firms with a December year-end and 0 if otherwise. The RLAG variable captures the number of days taken between accounting year-end and the date of the auditor's report (Che-Ahmed 2011).

Finally, ownership structure and corporate governance variables are included as control variables. These corporate governance variables are local institutional ownership, foreign institutional ownership, board size, number of executive directors, number of non-executive non-independent directors, and number of independent directors. Generally, this study retrieved corporate governance data based on the information disclosed in the corporate governance section of the annual report. Local institutional ownership is the percentage of shares held by local institutional investors while foreign institutional investors represent the percentage of shares held by foreign institutional investors. Board size captures the number of directors sitting on board in a financial year. Non-independent directors are the number of independent non-executive directors divided by the total number of directors (Carcello et al. 2002).

4.4 Population and Research Data

4.4.1 Population

In any empirical study, the identification of the study's population remains the first priority of the researcher. Shekaran and Bougie (2009) refer to population as all conceivable elements within the geographical boundary of a researcher's interest at a particular point in time. The population of interest for this study includes all companies listed on the main board of the Nigerian Stock Exchange. However, banks and other financial institutions were excluded from this study because of the uniqueness in their reporting structure as well as other stringent regulations to which they are often subjected. Figures obtained from the Nigerian Stock Exchange website and the World Bank show that 181 companies in 2013, 192 companies in 2012, 196 companies in 2011, 215 companies in 2010, and 214 companies in 2009 were listed on the Nigerian stock exchange. (See Table 4.4 below.)

Table 4.4
Number of Listed Companies on the Nigerian Stock Exchange

Year	Number of Listed Companies
2009	214
2010	215
2011	196
2012	192
2013	181
2014	181

Note: Source, World Bank Statistics²⁴ and the Nigerian Stock Exchange Website²⁵

The choice of publicly listed companies as unit of analysis is informed by the fact that these companies are statutorily required to file a copy of their annual reports with the

²⁴ World Bank indicator: <http://data.worldbank.org/indicator/CM.MKT.LDOM.NO>.

²⁵ Nigerian Stock Exchange: <http://www.nse.com.ng/Regulation/ForIssuers/Pages/Listed-Companies.aspx>.

Nigerian Stock Exchange. As a result, the annual reports of publicly listed companies are publicly available, and all information needed for the purpose of this study could be retrieved without duress. In addition, the regulatory changes being investigated only concerned the publicly listed companies.

4.4.2 Sample Selection

Scheaffer, Mendenhall and Ott (2006) defined a sample as a collection of sampling elements drawn from a frame. A sample is a subset of all elements that make up an entire population. However, for a valid statistical generalization and conclusion, the sample must fully represent all the units contained in the population (Sekaran & Bougie 2010). Hence, to draw a valid sample representation, the study obtained the names of all publicly listed companies as at the time of data collection in 2014 from the Nigerian Stock Exchange website²⁶. The names form the study's sampling frame. In all, one hundred and eighty-one companies were listed on the Nigerian Stock Exchange at the time of data collection.

However, from the outset, the study excluded 56 financial companies due to their financial reporting characteristics and the additional regulations imposed on companies operating in this sector. In addition, estimating discretionary accruals for firm in this sector is quite difficult (DeFond & Subramanyam 1998). The exclusion of a firm in financial sector category is consistent with the practice of prior studies (Blankley, Hurtt & MacGregor 2012; Hossain & Mohd Hanefah 2013; Mitra, Deis & Hossain 2009). Likewise, due to the requirements of the financial reporting proxy

²⁶ The Nigerian Stock Exchange, listed companies (2014). Retrieved from <http://www.nse.com.ng/Issuers-section/listed-securities/listed-companies>.

adopted in this study, all listed companies operating in sectors with less than ten companies were excluded. Therefore, the study excluded five companies operating in the agricultural sectors, and the study merged companies operating in the different sectors but with similar operating characteristics to complete the required number of companies. The study also excluded thirty companies with missing annual reports along with those that switched auditors during the study's sample period to avoid issues regarding lowballing and auditor responses to different financial reporting choices (Blankley, Hurtt & MacGregor 2012). (See Table 4.5 below.)

Table 4.5

Sample Selection Table

Sample	Number of companies
Initial sample of firms with sectors reported by (NSE) for the year 2014	181
Less: firms operating in the financial sector	56
Less: firms in agriculture sector	5
Less: firms with missing annual reports	30
Final sample	90

4.5 Data Analysis

The research models express the relationship between the independent variable(s) and the dependent variable(s) using a linear regression model that is presented in an equation form. Functionally, a regression line that best fits the data is obtained through the regression model. That is, the line that minimizes the sum of squares error between Y_t and the predicted \hat{Y}_t . This line connects the mean value of the dependent variable corresponding to the known value of the explanatory variable.

The most commonly used method to obtain a line of best fits is the Ordinary Least Square (OLS) estimator. Five basic assumptions guide OLS estimation; these are: 1) the linearity assumption, 2) the exogeneity assumption, 3) the homoscedasticity and non-autocorrelation assumption, 4) the fixed value of X in the repeated sampling assumption, and 5) the multicollinearity assumption (Gujarati, 2006). Because the study's data is panel in nature, the issue of heterogeneity is pertinent, and this issue violates the one assumption of OLS. The presence of a heterogeneity problem makes an OLS estimator not the best, linear, and unbiased estimator for this current study.

Accordingly, the panel-data regression method becomes more appropriate (Asteriou & Hall 2007). Therefore, this study exploits the nature of its data to estimate the panel regression method in order to test the relationship among and between the identified variables. Some benefits of the panel data regression model are that it controls for individual heterogeneity, data are more informative and more variable, have less correlation among variables, more degrees of freedom, and are more efficiency (Baltagi 2005). Other benefits of panel data as Baltagi (2005) noted are that panel data are more efficient in studying the dynamic of changes and have a better ability to identify and measure effects that are not easily detectable in pure cross-sectional or pure time-series data.

In addition, panel data tests more complicated behavioural models compared to pure cross-sectional or pure time-series data. Finally, panel data regression reduces or eliminates bias due to aggregation over firms and individuals. According to Asteriou

and Hall (2007), the pooling effect assumption makes it possible to obtain a good estimate in panel data and the omitted variables, which may result in biased estimates in a single regression. Therefore, this study employed both the static and the dynamic panel estimation methods.

4.5.1 Static Panel Data Estimations Model

Three main regression models exist under static panel data econometric analysis. These are 1) the pooled model, 2) the fixed effects (FE) model and 3) the random effects (RE) model. The main difference between the three models lies in the treatment of the individual effect (Gujarati, 2006). The individual effect is observed, and it captures heterogeneity among individuals. The pooled effect model ignores the individual effect, thus it treats all observations as homogenous and assumes that the error term is identical and independently distributed. In the FE model, the individual is time invariant and assumed under the intercept. Thus, u_i correlates with other regressors. On the other hand, the RE model assumes that the individual effect is independent of the regressors and that the intercept and slopes of the regressors are constant across individuals. Therefore, the individual effect is always included in the composite error term.

4.5.2 Pooled Effects vs. RE/FE

The first decision of panel regression model is to determine whether either the pool regression model or the FE/RE model is appropriate for estimation purposes. In order to determine the appropriate model, this study used F-test for FE and the Lagrange Multiplier Test that Breusch and Pagan (1980) introduced to choose between the pool effect model and the RE/FE model. The Lagrange multiplier observes the presence of

unobserved effect in the effect models. The decision criterion is that, when the calculated value is greater than the critical value, the null hypothesis is rejected. In which case, the FE/RE model is more appropriate.

4.5.3 FE Model vs. RE Model

In a situation in which the pool effect model is inappropriate, then a decision needs to be made on the choice between the RE and the FE models. In order to know the appropriate model, a need exists to test whether the individual effect correlates with the independent variables. Hausman's (1978) specification test observes the difference between random effects and fixed effects estimates. According to the null hypothesis, the error terms does not correlate with the explanatory variables. The rejection of the null hypothesis means that the FE model is appropriate.

4.5.4 Diagnostic Test of Panel Data Analysis

Despite the acclaimed benefits of panel data, the method is also subject to its own problems. Therefore, to avoid spurious results, a diagnostic test must be performed to check for the absence of the entire likely experimental problem. The two basic tests are the heteroscedasticity test and the autocorrelation test.

4.5.4.1 Heteroscedasticity

Heterogeneity is an important issue in panel data. Many ways exist to check for the presence of heteroscedasticity, and rules are present guiding its detection (Gujarati, 2006). The various methods include the Park test, the Glejser test, Spearman's rank correlation test, the Goldfeld-Quandt test, the Breusch-Pagan-Godfrey test and the

White general heteroscedasticity test. The choice of which test to use depends on the statistical package employed for analysis. Because this study will run a panel data analysis using Stata Statistical software, the modified Wald test for groupwise heteroscedasticity is more appropriate (Greene, 2003). In the presence of a heteroscedasticity issue, a corrective action using the White heteroscedasticity-corrected standard errors, otherwise called robust standard error, will be employed (Pong & Whittington 1994; Gujarati & Porter 2009).

4.5.4.2 Autocorrelation

Another issue peculiar to panel data analysis is the issue of the correlation between the disturbance term and the observation in time and space (Gujarati & Porter 2009). The presence of autocorrelation will result in consistent but inefficient estimates of the regression coefficients and biased standard error. The method that is available for detecting autocorrelation is the Wooldridge test for autocorrelation. This test involves ascertaining the significance of the null hypothesis showing that no idiosyncratic error of the linear panel data model is present. A significant F-value signifies the presence of autocorrelation. An autocorrelation error can be corrected using a random effect model; meanwhile, because the current study is a short panel, the issue of autocorrelation might not constitute a threat (Gujarati & Porter 2009).

4.5.4.4 Multicollinearity

In a panel data model, the data multicollinearity problem is not a serious threat as the model itself is capable of reducing its effect (Baltagi 2005). However, a common practise is to check to ensure that the regressors are not highly correlated. The

consequence of high correlation between two regressors is that this correlation causes bias variance leading to unreliable estimates (Gujarati & Porter 2009). Common diagnostic tests employed to test for the presence of multicollinearity are the Variance Inflation factor (VIF) and the Correlation Matrix.

4.5.5 Endogeneity Issue

In the financial reporting quality (herein referred to as financial reporting quality) and audit fees models, the dependent variable financial reporting quality is also an independent variable in the audit fee model and vice versa (Antle et al. 2006). There are two basic issues. First is the basic econometric issue that is called the simultaneity problem and it introduces bias into the error term because the study proxy for financial reporting quality and audit fees are simultaneously determined and thus not exogenous. Second, the two models potentially could suffer from unobserved heterogeneity.

For instance, Asthana and Boone (2012) noted several other factors could possibly explain the variation in financial reporting quality and audit fees but could not be investigated due to data limitations. These factors include: audit team composition, audit work allocation between the interim and year-end audits, the influence of internal audit assistance, the quality of the financial reporting system and individual audit firm production. Last, extant studies on corporate governance have also noted the possibility of the current value of governance variables to be a function of a firm's past performance and ignoring this relationship could also have consequences for statistical inferences (Wintoki, Linck & Netter 2012). Wintoki, Linck and Netter (2012) posited that a static model (i.e., FE and RE models) could address the issue of unobserved

heterogeneity; however, these models do so under a strong exogeneity assumption ignoring the possibilities of past performance influencing the company's current performance. Accordingly, this current study will proceed further after running the static effect models (FE and RE) to estimate a dynamic panel model, the General Method of Moments (GMM), to control for unobservable heterogeneity, simultaneity and the likely influence of past performance on a firm's current performance as Wintoki, Linck and Netter (2012) suggested.

4.6.1 GMM Estimator

The standard error that GMM estimation produces is robust to autocorrelation and heteroscedasticity of unknown form. Basically, under panel data application, the unobserved heterogeneity correlates with the observed covariate, which is then corrected for using the fixed effect or within the estimator. The fixed effect estimator assumes that the time varying errors have zero means, constant variance and zero correlation (i.e., exogeneity assumption). In the case of a failure to meet the exogeneity assumption due to the presence of heteroscedasticity and autocorrelation, the GMM can produce a more efficient result than the fixed effect (Wooldridge, 2001).

The GMM estimation technique Hansen (1982) introduced is a non-parametric approach used to estimate model parameters with no data distributional assumptions, which is an important assumption under the Two-Stage Least Squares regression analysis. Arellano and Bover (1995) and Blundell and Bond (1998)²⁷ developed a system dynamic model that incorporates simultaneous difference and level equations.

²⁷ Xtabond2

Under some conditions, this system of equations produces an efficient estimator even when compared with GMM because the differenced and lagged variables remove the unobservable effect and are orthogonal to the error terms. Arellano and Bond (1991) proposed two estimators, which are the one-step and the two-step. The weighing matrix used in obtaining the estimates explains the differences between the two estimates; however, the two-step is optimal²⁸ (Gyimah-Brempong & Traynor 1999). The dynamic GMM is consistent and efficient in the absence of second order serial correlation between error terms of the first differenced equation.

4.6.2 GMM Specification Tests

4.6.2.1 Endogeneity Test

Before proceeding with GMM, checking for the presence of endogeneity in the regressors is imperative, otherwise the GMM parameters estimates will be inefficient. In this study, the Durbin-Wu-Hausman (DWH) test for endogeneity was used to assess the necessity of using the dynamic GMM model in both the financial reporting quality model and the audit fees model. The DWH test compares the estimated parameters of the OLS and GMM and calculates the difference between the coefficients of the two techniques. In the absence of endogeneity, the two techniques will produce estimates that are similar. The null hypothesis states that the variables are exogenous.

²⁸ GMM is estimated by taking the first-difference of the dependent variable and the independent variables. This cancels out the company fixed effect, and the lagged dependent variable is correlated with the error term. The result is that further lags of the dependent variable and first difference of the exogenous explanatory variable serve as the instrument. Hence, Arellano and Bonds's (1991) one-step estimator with robust standard error is inefficient and marked with a high standard error (Dietz, Neumayer, & De Soysa, 2007).

4.6.2.2 Testing the Validity of the Instruments

Two conditions are required for an instrument to be valid. The two conditions are these. First, it must be significantly correlated with the endogenous variable, and it is tested under first stage regression of the endogenous variable on the instrument. According to Hahn and Hausman (2002), if the first condition is weakly satisfied the GMM coefficient estimate might be biased. Second, it must be orthogonal to the error process; this condition is tested in the GMM.

For the first condition, the partial R^2 that Shea (1997) developed and the F-statistic for the goodness of fit are employed. The partial R^2 measures the degree of variance between the endogenous variables based on the variation in the instruments. The fulfilment of the second condition is tested using the Hansen/Sargan test of over-identifying restrictions that examine the null hypothesis so that orthogonality conditions are correctly specified. Another specification test in relationship to the error term is the Arellano and Bond (1991) test for autocorrelation in error terms. After taking considering the unobservable firm fixed-effects, any residual autocorrelation in the errors will violate the second condition for some of the instruments.

4.7 Summary

This chapter discusses the overall research approach adopted to accomplish the research objectives. Consistent with prior studies both the financial reporting model and audit fees model were developed to test all the hypotheses variables. Measurement of each variable and the expected directions were duly discussed, which was followed by a discussion on the sample selection criteria. To establish a relationship between

the dependent variables and the independent variables, the panel data technique was adopted, specifically these were the static fixed effect and the dynamic GMM, which were used to alleviate endogeneity problem. The next chapter discusses the study's findings.



CHAPTER FIVE

DATA ANALYSIS

5.1 Introduction

This chapter presents the study's empirical results. The first part of the chapter presents the descriptive statistics and the univariate analysis of the variables employed in the study's regression analysis. Next, the second part presents the Pearson correlation matrix for the variables used in the study's regression analysis. The third part presents the results of the various diagnostic tests of panel data analysis. The fourth part reports the validity test results from the static and dynamic panel regression results according to the hypotheses outlined in Chapter Three. The final part of the chapter provides additional analyses and the sensitivity analysis.

5.2 Industry Classification

The final sample comprised 90 firms having the necessary data for analysis over the 6-year period (2008-2013) resulting into 409 observations (unbalanced panel). As shown in Table 5.1 below, the majority of the sampled companies were from the consumer sector (30.81%), followed by the service sector (26.65%), conglomerates (15.89%) industrial goods (15.89%) and natural resources (26.65%).

Table 5.1

Industry Classification

Distribution of sample firms by industry	Number	Percent
Consumer	126	30.81
Services	109	26.65
Conglomerate	65	15.89
Industrial goods	65	15.89
Natural Resources	44	10.76
Total number of observations	409	100.00

5.3 Descriptive Statistics

Table 5.2 below presents the descriptive statistics for all the variables used in the financial reporting quality model and audit fees model. Panel A of Table 5.2 provides the univariate analysis of the dependent variables showing the magnitude and level of change in financial reporting quality proxies and audit fees. Panel B of Table 5.2 presents the mean, minimum, maximum and standard deviation of the independent variables of the two models.

5.3.1 Dependent Variables

The Financial Reporting Quality (FRQ) for the full sample period averaged about 10.26. FRQ exhibited an increase from 2.9083 in the pre-regulatory changes period to 16.8203 in the post-regulatory changes period. The t-test revealed a significant difference in the mean FRQ between the pre-regulatory changes period and the post-regulatory changes period (t-value -2.4452). The mean value is consistent with previous studies like Krishnan (2003) that reported a mean value of 0.08 for absolute discretionary accruals for non-specialist audit and Becker, DeFond, Jiambalvo and Subramanyam (1998) that reported a mean value as high as 0.129 in their studies.

Likewise, the magnitude and level of changes in audit fees (AF) in the pre-regulatory changes period and the post-regulatory changes period were significant (t-value -2.5975). On average, audit fees increased from 13,941.84 Naira in the pre-regulatory changes period to 21,208.46 Naira in the post-regulatory changes period, an increment

of about 52% $(21,208.46 - 13,941.84)/13,941.84$. The increase provided directional support for Hypothesis 3. Abnormal audit fees (ABNRAF) increased from -0.0526 in the pre-regulatory changes period to 0.0449 in the post-regulatory changes period; this represented a slight increase of 0.019%.

5.3.2 Explanatory Variables

Panel B Table 5.2 gives the descriptive statistics of the explanatory variables used in the study. In sum, 52.81% of the firm-year observations were from the regulatory changes period sample, and 47.19% were from the pre-regulatory period sample. The percentage of politically connected firm (POLI) was 60.64% while the percentage of firms having an audit committee member overlap in the remuneration/compensation committee was 39.25%.

5.3.3 Control Variables

The average total assets (TA) of the companies in the sample was N27, 400 billion (\$144,687,265 at \$1 = 199.05). The average turnover was larger than in Adelopo (2011), which reported a mean turnover of N19 Billion. The average ratio of current assets to current liabilities (CRATIO) was 1.77 times (3.92 times the standard deviation) with a minimum of 0.00 times and a maximum of 74.65 times. For the ratio of inventory to total assets, the mean variable was 0.18 times and the standard deviation was 0.15 times. On average, the inventory to total assets (INVT2TA) was 0.17 with a standard deviation of 0.16 and ranged from 0 to 1.5.

The mean ratio of receivables to total assets (RECTA) was 0.15 with a standard deviation of 0.16 ranging from 0 to 0.93%. The mean ratio of return on assets (ROA) was 0.05, the standard deviation was 0.28, and the range was from a -1.72 minimum to a 3.41 maximum. The mean of leverage was 1.12, standard deviation was 1.39 and it ranged from a -0.36 minimum to a 15.94 maximum. The average number of business segments (BUSSEG) was 2.87 with a minimum of 1 and a maximum of 7. Sales growth had a mean of 0.01 with a minimum value of -1.21 and a maximum value of 0.75. The mean reported lag (RLAG) was 119 days with a standard deviation of 25 days. The length of audit period ranged from a minimum of 36 days to a maximum of 369 days. The mean cash flow from operating activities scaled by total (CFFO2TA) was 1.73 while the standard deviation was 22.94 and the range was a 0.5 minimum and a 348.89 maximum.

For ownership structure proxies, the average local institutional shareholding (INSTITSHR) was 46.43% with a standard deviation of 27.92 and a minimum value of 0% and a maximum of 98%. With respect to foreign institution share ownership, the mean value was 23.86%, and the standard deviation was 29.65. The average board size (BSIZE) was 8.48; the standard deviation was 2.27 with a minimum number of four directors and maximum of twenty directors. The number of foreign directors (FDIR_) ranged from zero to eight. On average, 2.33% of the directors were executive (EXC_), 5.74% were non-executive directors (NONEXC_) and 0.35% were independent directors (IND_). The mean of DR is 0.15 with an average profitability (ROA) value of 0.05.

On the average, 68.46% of the firm-year observations had an accounting year-end of 31st December (BUSY). On average, Big 4 audit firms audited 66.99% of the observations, while the remaining 33.01% were non-Big 4 audit firms. The result shows that the Big 4 audit firms dominated the Nigerian audit market. About 60.64% of the firm observations were politically connected, and the remaining 39.36% were not politically connected. 39.25% of the companies in the study's observations had directors who were members of both the audit committee and the remuneration committee. Lastly, 15% percent of the companies in the study's observation recorded loss.

Table 5.2

Descriptive Statistics of the Regression Variables for the Financial Reporting Quality Model and Audit Fees Model

Panel A: Univariate Analysis of the Dependent Variable from 2008 to 2013

FRQ	Pre	Post	Full Sample	t-statistic
Mean	2.91	16.82	10.26	-2.45
Standard deviation	19.09	76.95	57.79	
AF(Naira)	Pre	Post	Full Sample	t-statistic
Mean	13941.84	21208.46	17780.48	-2.60
Standard deviation	20094.47	33791.92	28373.14	
ABNRAF	Pre	Post	Full Sample	t-statistic
Mean	-0.05	0.04	3.63	-3.35
Standard deviation	0.30	0.27	0.29	

Note: Pre stands for the pre-regulatory period and post stands for the post-regulatory periods.

Panel B: Descriptive Statistics for the Period from 2008 to 2013

Continuous variable	Mean	Standard Deviation	Minimum	Maximum	Percentage (%)
TA(Naira)	27,400,000	61,900,000	68,953	843,000,000	
TEMPLOY	53.70	157	3	1454	
CRATIO	1.77	3.92	0.00	74.65	
INVT2TA	0.18	0.16	0	1.56	
RECTA	0.14	0.15	0	0.93	
ACCRUAL	-10,66,844	11,900,000	-105,000,000	22,400,000	
DR	0.15	0.16	0	1.12	
ROA	0.05	0.28	-1.72	3.41	
LEVERAGE	1.12	1.39	-0.36	15.95	
BUSISEG	2.87	1.65	1	7	
SALESG	0.00	0.12	-1.21	0.75	
RLAG	119.04	64.19	36	369	
CFFO2TA	1.73	22.94	-0.58	349	
INSTITSHR	46.43	27.92	0	98	
FSHR	23.86	29.65	0	91	

Table 5.2 (continued)

Continuous variable	Mean	Standard Deviation	Minimum	Maximum	Percentage (%)
BFSIZE	8.38	2.27	4	20	
FDIR (n)	1.71	1.89	0	8	
QUICK	1.32	3.91	-2.00	74.32	
EXC_(n)	2.33	1.43	0	9	
INDP_(n)	0.35	1.23	0	10	
NONEXC_(n)	5.74	2.13	0	13	
Dichotomous					
BUSY					68.46
BIG4					66.99
POST					52.81
POLI					60.64
OVERLAP					39.25
LOSS					15.00

Note: TA (Naira) in the naira value of total asset; TEMPLOY is the total number of employees a company has; CRATIO represents current assets divided by current liabilities; INVT2TA represents inventory to total assets; RECTA is total receivable to total assets; ACCRUAL is calculated as net income less operating cash flow scaled by total assets; DR represents the ratio of long-term debt to closing total assets; ROA IS net income divided by total assets; LEVERAGE is measured as total debt to total equity; BUSISEG is the number of business segments; SALESG is calculated as the change in sales revenue; RLAG is the length of time between a company's financial year-end and the date of auditor's report; CFFO2TA is cash flow from operations divided by total assets; INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors; FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors; BFSIZE is the total number of directors serving on the board of directors of a company; FDIR(n) is the total number of foreign directors on the board; QUICK is the ratio of current asset less inventory divide current liabilities; INDP_(n) is the number of independent directors on board, NONEXC_(n) is the number of non-executive non-independent directors on board, and EXC_(n) number of executive directors on board; BUSY is an indicator variable equal to 1 for a firm with a December year-end and 0 if otherwise; BIG4 is a measure of firm's auditor coded 1 if the client is audited by a BIG 4 firm and 0 if otherwise; POST is a dichotomous variable with a value of 1 for the regulatory changes period 2011-2013 and 0 POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise; OVERLAP is an indicator variable with a value of 1 if a board member serves on the both the audit committee and the compensation committee simultaneously and 0 if otherwise; ; LOSS takes a value of 1 when a firm reports a net loss and 0 if otherwise.

5.4 Analysis of Pearson Correlation Matrix

Table 5.3 below presents the Pearson correlation matrix for the research variables included in the financial reporting quality model. The correlation matrix examines the

bivariate correlation among independent, control and interacting variables. The post-regulatory period variable (POST) had a small correlation with a positive relationship with FRQ ($r = 0.14$, $p < 0.01$) and OVERLAP ($r = 0.26$, $p < 0.01$). The correlation between FRQ and these variables indicated that they move in the same direction. Abnormal audit fees (ABNRAF) was statistically significant with POLI ($r = 0.20$, $p < 0.01$), LOGTA ($r = 0.87$, $p < 0.01$) and BIG4 ($r = 0.68$, $p < 0.01$). Firm size LOGTA had a significant correlation with BIG4 ($r = 0.35$, $p < 0.01$). This suggests that big size companies are more likely going to engage one of the Big 4 auditors and have less cash flow from operations compared with small size companies. Overall, the explanatory and control variables revealed a weak correlation with FRQ.

As shown in Table 5.4 below, a positive correlation existed between audit fees and POST ($r = 0.1233$, $p < 0.01$); ABDAC ($r = 0.068$, $p > 0.10$); OVERLAP ($r = 0.2081$, $p < 0.01$) and POLI ($r = 0.1855$, $p < 0.01$). This shows a positive relationship between the audit fees and these variables. A significant relationship existed between audit fees and the total assets (TA) measure of size; the relationship was positive and the correlation was high ($r = 0.7444$, $p < 0.01$). The high correlation between audit fees and turnover indicates that large total assets were associated with higher audit fees, which is consistent with prior studies like Firth (1985) and Chan et al. (1993). The number of business segments variable shows a weak positive correlation ($r = 0.2570$, $p < 0.01$) with audit fees. The variables used in the audit fees model were not highly correlated, thus multicollinearity was not a serious threat to the multivariate results.

Table 5.3

Correlation Coefficient of the Financial Reporting Quality Model and Independent Variables

	FRQ	POLI	OVERLAP	ABNRAF	POSTPOL	POSTOVERLAP	POSTABNAF
FRQ	1.00						
POLI	0.05	1.00					
OVERLAP	***0.12	*0.12	1.00				
ABNRAF	0.07	***0.21	0.14	1.00			
POSTPOL	***0.19	***0.55	***0.21	***0.13	1.00		
POSTOVERLAP	0.12	-0.02	-0.00	-0.02	***0.52	1.00	
POSTABNAF	0.03	-0.00	0.06	0.06	0.06	0.07	1.00
POST	***0.14	0.00	***0.26	0.03	***0.65	***0.85	***0.11
LOGTA	**0.09	***0.33	***0.16	***0.87	***0.24	0.01	*0.12
TEMPLOY	**0.09	***0.12	0.08	0.02	-0.08	0.01	-0.01
BIG4	-0.03	-0.03	0.02	***0.68	-0.05	-0.02	0.04
SALESG	0.03	0.05	0.03	***0.20	0.02	-0.03	0.06
LEVERAGE	0.02	0.07	0.03	***0.15	0.00	0.01	0.04
ACCRUALTA	0.08	-0.03	0.05	***0.15	-0.08	***0.11	***0.17
LAGROA	0.04	0.09	-0.05	0.01	-0.03	**0.10	-0.01
BUSISEG	0.01	***0.13	***0.17	***0.27	0.08	-0.05	-0.03
CFFO2TA	***0.10	**0.09	-0.06	***0.22	-0.05	*0.10	-0.01
RLAG	***0.14	**0.10	***0.12	-0.08	***0.19	***0.21	-0.03
INSTITSHR	0.05	0.01	***0.12	***0.25	0.04	***0.12	0.06
FDIR	***0.11	0.06	***0.10	***0.39	0.02	0.03	0.01
BSIZE	***0.11	***0.26	**0.09	***0.21	0.06	***0.12	***0.15
INDP_	0.02	-0.06	0.06	*0.14	***0.10	***0.17	***0.11
NONEXC_	-0.03	0.12	***0.19	***0.23	0.02	-0.06	-0.08
FSHR	**0.09	-0.14***	-0.04	***0.37	-0.05	0.07	0.01

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** = $p \leq 0.01$

Table 5.3 (continued)

	POST	LOGTA	TEMPLOY	BIG4	SALESG	LEVERAGE	ACCRUALTA
POST	1.00						
LOGTA	*0.09	1.00					
TEMPLOY	0.01	-0.02	1.00				
BIG4	-0.05	***0.35	0.08	1.00			
SALESG	-0.03	***0.22	0.02	0.04	1.00		
LEVERAGE	-0.01	-0.07	-0.01	-0.06	0.03	1.00	
ACCRUALTA	-0.08	*0.17	0.03	*0.11	0.03	0.03	1.00
LAGROA	***-0.12	0.08	-0.06	0.02	** -0.09	0.06	-0.02
BUSISEG	0.02	*0.10	*0.12	*0.08	0.04	-0.04	0.05
CFFO2TA	0.07	*-0.13	0.00	***-0.09	0.01	0.03	0.03
RLAG	***-0.24	*-0.15	-0.01	-0.00	-0.07	-0.07	-0.00
INSTITSHR	**0.09	***0.28	** -0.09	**0.09	0.08	***-0.17	*0.10
FDIR	-0.01	***0.44	** -0.09	***0.16	*0.13	***-0.16	0.07
BSIZE	** -0.08	***0.35	*-0.12	-0.03	0.03	0.01	0.08
INDP_	***0.18	***0.14	0.01	*0.12	0.00	-0.05	0.01
NONEXC_	-0.07	***-0.26	-0.03	** -0.09	-0.05	0.07	*-0.10
FSHR	0.06	***0.35	** -0.09	***0.22	***0.08	***-0.15	0.06

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** $p \leq 0.01$

Table 5.3 (continued)

	LAGROA	BUSISEG	CFFO2TA	RLAG	INSTITSHR	FDIR	BSIZE	INDP_	NONEXC_	FSHR
LAGROA	1.00									
BUSISEG	***-0.11	1.00								
CFFO2TA	-0.00	-0.08	1.00							
RLAG	***-0.20	0.02	** -0.09	1.00						
INSTITSHR	0.03	-0.08	-0.05	0.04	1.00					
FDIR	-0.00	** -0.09	-0.06	***-0.13	***0.49	1.00				
BSIZE	***0.12	0.03	** -0.09	***-0.09	0.08	*0.25	1.00			
INDP_	**0.10	-0.01	-0.02	***-0.13	0.03	***0.17	***0.14	1.00		
NONEXC_	-0.01	-0.01	0.05	-0.00	-0.02	-0.08	***-0.10	*-0.52	1.00	
FSHR	0.06	-0.04	-0.06	*-0.14	*0.46	*0.63	0.03	*0.14	*-0.16	1.00

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** = $p \leq 0.01$. FRQ is the absolute discretionary accruals, calculated using Kothari, Leone, and Wasley's (2005) cross-sectional modified Jones model with ROA estimated by year and industry; POST is a dichotomous variable with a value of 1 for the regulatory changes period 2011-2013 and 0 if otherwise; POSTABNAF is an interacting variable. POST*ABNRAF is used to capture the incremental abnormal fees increase for post regulatory changes; POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for post regulatory changes; POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for post regulatory changes; ABNRAF is a continuous variable that captures the abnormal portion of total audit fees paid to auditor; POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise; OVERLAP is an indicator variable with a value of 1 if a board member serves on the both the audit committee and the compensation committee simultaneously and 0 if otherwise; BIG4 is a measure of firm's auditor coded 1 if the client is audited by a BIG 4 firm and 0 if otherwise; CFFO2TA is cash flow from operations divided by total assets; RLAG is the length of time between a company's financial year-end and the date of auditor's report; SALESQ is calculated as the change in sales revenue; LEVERAGE is measured as total debt to total equity; LAGROA measures the lag of return on assets measuring client performance; BUSISEG is the number of business segments; ACCRUAL is calculated as net income less operating cash flow scaled by total assets; LOGTA represents the log of total assets; EMPLOY is the total number of employees a company has; BSIZE is the total number of directors serving on the board of directors of a company; NONEXC_ is the total number of non-executive directors divided by total number of directors; INDP_ is the total number of independent non-executive directors divided by the total number of directors; FDIR is the total number of foreign directors on the board divided by the total number of directors; FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors; INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors.

Table 5.4

Correlation Coefficient of the Audit Fees Model and Independent Variables

	1	2	3	4	5	6	7	8	9	10
1 LOGAF	1.00									
2 POSTFRQ	***0.09	1.00								
3 POSTPOLI	**0.10	***0.63	1.00							
4 POSTOVERLAP	0.07	***0.83	***0.56	1.00						
5 POST	***0.12	***0.98	***0.63	***0.85	1.00					
6 FRQ	0.07	***0.11	-0.01	***0.12	***0.14	1.00				
7 POLI	***0.19	-0.02	-0.00	-0.01	0.00	0.05	1.00			
8 OVERLAP	***0.21	***0.26	***0.16	-0.00	***0.26	***0.12	*0.08	1.00		
9 LOGTA	***0.74	0.07	0.06	0.01	**0.09	**0.09	***0.33	***0.16	1.00	
10 BIG4	***0.56	-0.06	-0.03	-0.02	-0.05	-0.03	-0.03	0.02	*0.35	1.00
11 LOSS	-0.04	-0.03	-0.03	-0.04	-0.04	0.05	-0.06	0.00	**0.14	0.02
12 CRATIO	0.00	0.03	0.05	0.02	0.01	-0.05	0.07	0.07	0.06	0.01
13 QUICK	-0.01	0.04	-0.01	0.06	0.03	-0.04	0.07	-0.02	0.01	-0.08
14 DR	-0.03	-0.05	0.00	-0.05	-0.05	-0.04	0.04	-0.04	-0.02	-0.07
15 INVREC_TA	**0.13	-0.05	-0.03	-0.02	-0.05	-0.03	***0.16	-0.02	***0.16	-0.01
16 BUSSEG	***0.26	0.01	0.02	-0.05	0.03	-0.02	***0.11	***0.22	***0.14	0.07
17 ROA	0.05	-0.07	-0.05	-0.03	-0.06	0.03	0.06	-0.01	***0.10	0.05
18 BUSY	*0.08	-0.01	0.02	-0.02	-0.01	*0.08	0.02	**0.09	0.02	*0.08
19 RLAG	*0.08	***0.22	*0.17	*0.21	*0.24	*0.17	-0.08	***0.11	***0.18	0.02
20 INSTITSHR	***0.24	0.08	*0.10	*0.12	*0.09	0.05	0.01	*0.12	*0.28	*0.09
21 FSHR	***0.34	0.05	0.06	0.07	0.06	**0.09	**0.14	-0.04	***0.35	***0.22
22 BSIZE	***0.30	***0.10	-0.01	***0.11	-0.08	**0.09	***0.23	**0.09	*0.31	-0.03
23 EXC_	***0.19	-0.03	0.01	-0.03	-0.02	**0.09	***0.18	***0.23	***0.20	***0.13
24 NONEXC_	***0.23	-0.07	-0.04	-0.06	-0.07	-0.03	***0.12	***0.19	***0.26	*0.09
25 INDP_	***0.17	***0.18	**0.09	***0.17	***0.18	0.02	-0.06	0.06	***0.14	***0.11

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** = $p \leq 0.01$

Table 5.4 (continued)

	11	12	13	14	15	16	17	18	19	20
11 LOSS	1.00									
12 CRATIO	**0.10	1.00								
13 QUICK	0.06	***0.43	1.00							
14 DR	-0.02	-0.02	-0.01	1.00						
15 INVREC_TA	-0.07	***0.16	-0.02	0.00	1.00					
16 BUSSEG	0.07	0.06	0.00	0.08	0.05	1.00				
17 ROA	0.02	*0.13	-0.06	-0.01	0.03	0.00	1.00			
18 BUSY	-0.03	0.07	0.06	0.04	**0.09	0.07	0.02	1.00		
19 RLAG	***0.20	-0.06	***0.13	-0.03	-0.01	*0.12	***-0.10	**0.09	1.00	
20 INSTITSHR	0.01	-0.01	-0.03	0.03	-0.07	-0.02	**0.09	0.07	0.02	1.00
21 FSHR	***-0.11	0.05	-0.06	0.06	0.08	-0.05	***0.13	-0.01	***-0.17	***0.46
22 BSIZE	-0.02	0.00	-0.08	-0.03	-0.01	0.05	0.06	-0.03	-0.08	0.08
23 EXC_	0.04	0.04	-0.08	0.00	*0.12	0.06	0.00	*-0.17	-0.06	0.02
24 NONEXC_	0.02	***-0.12	***-0.20	0.01	**0.09	-0.03	-0.01	***0.19	0.05	-0.02
25 INDP_	-0.06	-0.01	-0.04	-0.01	0.06	-0.02	0.05	-0.16*	*-0.14	0.03

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** $p \leq 0.01$

Table 5.4 (continued)

	21	22	23	24	25
21 FSHR	1.00				
22 BSIZE	0.03	1.00			
23 EXC_	***0.16	0.05	1.00		
24 NONEXC_	***-0.16	*-0.10	*-0.66	1.00	
25 INDP_	***0.14	*0.12	0.04	*-0.52	1.00

Note: * = $p \leq 0.10$, ** = $p \leq 0.05$, and *** $p \leq 0.01$. LOGAF represents natural logarithms of audit fees (Naira); LOGAF(t-1) Lag of the dependent variable. The lag dependent variable is added to account for any dynamic endogeneity present in the relationship; POST is a dichotomous variable with a value of 1 for the regulatory changes periods 2011-2013 and 0 if otherwise; POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for regulatory changes. (7); POSTFRQ is an interacting variable (POST*FRQ) used to capture the effect of financial reporting quality for regulatory changes; POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for regulatory changes; FRQ is absolute discretionary accrual; POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise; OVERLAP is an indicator variable with a value of 1 if a board member serves on both the audit committee and compensation committees simultaneously and 0 if otherwise; LOGTA represents a log of total assets; LOSS takes a value of 1 when a firm reports a net loss and 0 if otherwise; CRATIO represents current assets divided by current liabilities; DR represents the ratio of long-term debt to closing total assets; QUICK is the ratio of current asset less inventory divide current liabilities; INVT2TA

represents inventory to total assets; BUSSEG is the number of business segments; ROA IS net income divided by total assets; BIG4 is a measure of a firm's auditor coded 1 if the client is audited by a Big 4 firm and 0 if otherwise; BUSY is an indicator variable equal to 1 for a firm with a December year-end and 0 if otherwise; RLAG represents the number of days taken from account year-end to the date of the auditor's report; INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors; FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors; BSIZE is the total number of directors serving on the board of directors of a company; EXC_ is the total number of non-executive directors divided by board size; NONEXC_ is the total number of non-executive directors divided by board size; INDP_ is the total number of independent non-executive directors divided by the total number of directors.



5.5 Diagnostic Test Results

Like other estimation methods, this study diagnosed for the presence of a number of econometric issues associated with panel data. As noted in Chapter 4, panel data model assumes that the disturbance terms have homoscedastic variances and constant serial correlations through random individual effects (Baltagi 2005). Section 5.5.1 below presents a discussion of the results of the panel diagnostic tests on the residuals of the panel regression model²⁹.

5.5.1 Heteroscedasticity Results

The assumption in this current study is that the disturbance terms of the variables should be constant across the panel. According to Baltagi (2005), panel data assumes that the regression disturbances are homoscedastic with the same variance across time and individuals. The Wald test for groupwise heteroscedasticity that tests for the presence of heteroscedasticity for residuals of random effect regression was performed on the both the financial reporting quality and audit fees models. The financial reporting quality model without interaction and with interaction resulted in $X^2 = 2.3e+32$ and $X^2 = 6.9e+33$ respectively, both were significant at the 0.01 level. The null hypothesis states homoscedasticity (or constant variance), and the results indicate the presence of heteroscedasticity.

²⁹ Normality test was not conducted because under panel data analysis normality and linearity are not a major concerns because the standard least squares assumption is not applicable in panel data (Gujarati & Porter, 2004) and most of the study's continuous variables will be transformed (Turpen, 1990).

For the audit fees model, the same modified Wald test for groupwise heteroscedasticity in the residual of a fixed effect regression model was conducted on both the without interaction model and with interaction model. The audit fees model both without interaction and with interaction resulted in $X^2 = 1.2e+31$ and $X^2 = 1.0e+31$ respectively, and both were significant at the 0.01 level. Thus, the results indicated the presence of heteroscedasticity.

5.5.2 Autocorrelation Results

In addition, the study uses the Lagran Multiplier test for serial correlation in STATA using the xtserial command for autocorrelation in panel data. The null hypothesis assumes no first order serial correlation. For the financial reporting quality model, the test of autocorrelation resulted in $F(1, 53) = 19.932$ and for the interacting model $F(1, 53) = 38.367$. Both models were significant at the 0.000 significant levels. Based on the results, this study rejects the null hypothesis of no correlation between error terms. The result suggests the presence of first order autocorrelation in the financial reporting quality model. The autocorrelation result for audit fees model was $F(1, 54) = 146.986$ and $F(1, 54) = 150.495$ for the two models. The two models are both significant at the 0.0000 level.

The null hypothesis of no correlation between error terms is accepted indicating that no first order correlation exists in the audit fees models.

5.5.3 Multicollinearity Results

Although multicollinearity is not a serious threat for panel data (Baltagi 2005), nevertheless, to further examine the nature of the study's panel data analysis, the correlation coefficient between independent variables was computed. Tables 5.3 and 5.4 present the results of the tests of multicollinearity between the variables. Coakes and Ong (2011) and Hair et al. (2010) suggested that multicollinearity exists between variables when the correlation between variables is more than 0.7. Gujarati and Porter (2009) provided a threshold more than 0.80 as a sign of serious correlation. Overall, the variables of this study fall within the acceptable range, and thus multicollinearity does not constitute a serious threat.

To further test for the presence of multicollinearity among variables, the Variance Inflation Factor (VIF) test was conducted. The figures as displayed in Appendices 1A and 1B show that multicollinearity was not a serious threat because the VIF did not exceed 10, which falls below the threshold of 10 suggested in Kennedy (1992) as, cited in Eshleman and Guo (2014). Moreover, multicollinearity is not a serious issue under panel methodology as panel methodology serves as a remedial method for multicollinearity (Baltagi 2005; Gujarati & Portal 2009).

5.5.4 Testing for Endogeneity in the Regressors

A major contribution of this study is the application of the dynamic GMM estimation technique to the financial reporting quality model and audit fees model as this

technique eliminates biases that dynamic endogeneity, simultaneity and unobservable heterogeneity introduce. The test for endogeneity is important because if the right-hand variables are exogenous, then pooled OLS will more appropriate as it produce unbiased and efficient results. By implication, GMM can only be applied when unobserved heterogeneity, simultaneity and dynamic endogeneity are actually proven to be present. Because the estimates from pooled OLS and the fixed effects panel will be biased, it is therefore important to ascertain the presence of endogeneity in the audit fees and financial reporting relationship using the Durbin-Wu-Hausman test for endogeneity before applying the dynamic GMM specification.

The results of the tests for the two models are presented in Table 5.5 below. The null hypothesis of exogeneity in the financial reporting quality and audit fees model is strongly rejected at 1 percent for the two models. The implication of this result is that regression fitted on model assuming exogeneity in the regressors will be severely biased.

Table 5.5

The Durbin-Wu-Hausman Test for Endogeneity of Regressors

H₀: Regressors are exogenous		
	Financial Reporting Quality model	Audit fees
DHW Test statistic	***17.17589	***8.41330
P-value	0.00003	0.03820

Note: ** and *** denote significance at the 5 and 1 percent levels respectively and thus lead to the rejection of H₀.

5.6 Inferential Statistics and Measurements of Relationships

In order to examine the research questions, eight hypotheses were tested using multiple regressions in order to use inferential statistic. Hypotheses 1 and 3 test the direct relationship between regulatory changes and the dependent variables (financial reporting quality and audit fees respectively). Hypotheses 2, 4, 5, 6, 7 and 8 test the interacting effect of firm-specific reporting characteristics. The research hypotheses tested are presented below:

H1: Regulatory changes will positively affect financial reporting quality.

H2: The interaction of regulatory changes with abnormal audit fees will negatively affect financial reporting quality.

H3: The interaction of regulatory changes with politically connected firms will negatively affect financial reporting quality.

H4: The interaction of overlapping directorships with regulatory changes will negatively affect financial reporting quality.

H5: Regulatory changes will lead to increased audit fees.

H6: The interaction of regulatory changes with financial reporting quality will positively affect audit fees.

H7: The interaction of regulatory changes with politically connected firms will positively affect audit fees.

H8: The interaction of overlapping directorships and regulatory changes will positively affect audit fees.

5.7 Estimation of Abnormal Audit Fees

One variable of interest is abnormal audit fees. According to Eshleman and Guo (2014), abnormal audit fees are audit fees not explained by the size, complexity, or risk of the client. The first stage in the study's panel multivariate analysis was to generate the residuals representing abnormal audit fees from audit fee model. Table 5.6 below reports the regression results of the audit fees model used in predicting the abnormal audit fees.

As shown in Table 5.6, the explanatory power of the model is about 68.3%, suggesting that the audit fees model determinants explained a significant portion of the variation in audit fees. The explanatory power of the study's audit fees determinant was below the 72% Ashbaugh et al. (2003) reported and slightly above the 67.9% reported that Mitra et al. (2009) reported. All the coefficients of the variables used in this current study for audit fees determinants in equation 8, except for sales changes (SALESG), busy season (BUSY) and (RLAG) reporting lag, were highly significant. Arguably, the results displayed in Table 5.6 are reliable in estimating the abnormal audit fees model.

Table 5.6
Estimation of Abnormal Audit fees

Variable	Robust Std. Err.	t-stat.
INTERCEPT	1.417	***9.60
LOGTA	0.347	***9.61
DR	-0.001	***-2.82
TEMPLOY	0.000	***0.008
QUICK	0.003	**1.81
INVT2TA	-0.228	***-2.06
RECTA	-0.415	***-4.29
ROA	-0.113	**1.75
BUSY	0.022	0.68
LEVERAGE	-0.017	**1.96
BUSISEG	0.038	***2.72
BIG4	0.318	***7.48
SALESG	0.000	1.11
RLAG	-0.001	-0.02
CFFO2TA	-0.002	***6.90
Year and Industry controls included	Yes	Yes
R ²	68.3%	
N	382	

Notes: * = significant at 10%, ** = significant at 5%, and *** = significant at 1%. All variables are as described in Table 4.2. DR represents the ratio of long-term debt to closing total assets; TEMPLOY measures the total number of employees that an organisation has; QUICK is the ratio of current assets less inventory divided by current liabilities; INVT2TA represents inventory to total assets; RECTA represents the total receivables to total assets; ROA is the ratio of net profit after tax divided by total assets; BUSY is an indicator variable equal to 1 for a firm with a December year-end, and 0 if otherwise; LEVERAGE is total debt scaled by total equity; BUSSEG is the number of business segments plus 1; BIG4 is a measure of firm's auditor coded 1 if a client is audited by a BIG 4 firm and 0 if otherwise; SALESG measures sales growth; RLAG represents the number of days taken from account year-end to the date of the auditor's report; CFFO2TA is cash flow from operating activities scaled by total assets.

5.8 Panel Regression Results for Financial Reporting and Audit Fees Model

In line with the explanations given in Chapter 3, Section 4.3, static panel data and the dynamic panel data estimation techniques were used to estimate the financial reporting quality model and the audit fees model. Consistent with the static model assumption, which states that an individual effect is presence and correlated with one or more regressors, the Breusch-Pagan Lagrange Multiplier test was used to determine the presence of the unobserved effect.

For the financial reporting model, both the without interaction model and the interaction model tests of Breusch-Pagan Lagrange Multiplier failed to reject the null hypothesis and the conclusion that individual heterogeneity was present, thus the random effect was appropriate. Likewise, the audit fees model for both the without interaction model and for interaction model tests of the Breusch-Pagan Lagrange Multiplier rejected the null hypothesis and the conclusion that random effect is present is appropriate.

Because the unobserved effect is present, the next step was to run the Hausman specification test (Hausman 1978) to check whether the errors (ui) were correlated with the regressors. The null hypothesis stated that they are not. The Hausman specification test for the financial reporting quality model (interaction and without interaction) indicated that the fixed effect model was appropriate, as the null hypothesis was rejected (see Appendices 4A and 4B). Similarly, the Hausman specification test for the audit fees model (interaction and without interaction) indicated that the fixed effect was appropriate suggesting the rejection of the null hypothesis. (See Appendices 4C and 4D.)

5.8.1 Model Estimation Results for Financial Reporting Quality

All the t-values were robust for heteroscedasticity. The R^2 for Model 1 (static panel) was 0.23%. The results indicate that the variation in the financial reporting quality proxy by Absolute Discretionary Accrual (ABDAC) was explained by the independent

variables. The low R^2 s are consistent with those of past studies. Choi, Kim and Zang (2010) and Asthana and Boone (2012) reported 0.148 and 0.20 respectively.

As suggested earlier, this study controlled for endogeneity issue using the GMM estimation technique. The GMM technique mitigates the biases of the static panel. The current study reports the results of two-specification test in Table 5.7, the AR2 second order correlation, and Hansen/Sagan J-statistic test of the over-identifying restriction. The AR2 test for the two models yields a p-value of 0.70 and 0.73 respectively. Thus, the study cannot reject the null hypothesis of no second order correlation. The null hypothesis for second order correlation states that no second order correlation exists. The Arellano Bond test statistic for the two models indicated that no autocorrelation exists in the errors of the two GMM models.

The Hansen/Sargan J-statistic displayed in Table 5.7 for the two models reveals a p-value of 0.213 and 0.063. The null hypothesis for the Hansen/Sargan J statistic states that the instrument used in the model was valid. Therefore, the results indicated that the moment condition is correctly specified at the 5% level of significance for the GMM model.

Based on the above discussion, the study examined the results from estimating the relationship between financial reporting quality, the main effect variables, the moderating variables and all the control variables that were introduced in the model.

This study estimates the fixed effects model and the system GMM. Table 5.7 below reports the significant effect of Hypotheses 1, 2, 3, and 4 as restated herein H1: Regulatory changes will positively affect financial reporting quality. H2: The interaction of regulatory changes with abnormal audit fees will negatively affect financial reporting quality. H3: The interaction of regulatory changes with politically connected firms will negatively affect financial reporting quality and H4: The interaction of overlapping directorships with regulatory changes will negatively affect financial reporting quality.

Note that the difference in the results of the two model specifications (GMM and fixed effect model) as presented in Table 5.7 arises from how individual estimation techniques account for the endogeneity issue. The fixed effects panel model accounts for any endogeneity introduced by unobserved heterogeneity across firms and assumes that all the regressors are fully exogenous. Therefore, the effect of dynamic endogeneity and simultaneity were not considered. However, for the GMM model specification, the parameter estimates are more efficient under the conditions stated in Section 4.1.2 above as they address all the sources of endogeneity that might affect the financial reporting model. For the purposes of this study, the main findings are interpreted based on the estimates of the second stage GMM; the results of the first estimates are available in Appendix x.

Results for H1

Both the static fixed effect model and the dynamic panel estimate in Model 1 suggest a negative relationship between the regulatory changes effects (POST) on Financial Reporting Quality (FRQ). The coefficient for the regulatory changes periods was significant and negative -1.116 ($t = -1.35$) using the static model and had a weak but significant negative relationship -0.53216 ($t = -1.23$) using the dynamic panel data that included the lag of FRQ. The significance of lagged FRQ could be noticed in the increment in the magnitude of the estimated coefficients on the regulatory changes variable when the dynamic panel estimation technique was employed. Thus, the result suggests that the various regulatory changes have significantly reduced the magnitude of absolute discretionary accrual and hence improve financial reporting quality. This finding supported Hypothesis 1.

Results for H2

The coefficient on POSTABNAF was negative but insignificant -0.3799 ($t = -0.31$) using the static FE but was significant and positive in the dynamic panel that included the lagged FRQ (2.6421, $t = 2.06$) in Model 2. This result supported H2. Again, the difference in the magnitude of the estimated coefficients on the regulatory changes abnormal audit fees variable was present when the dynamic panel estimates were later employed. This signals the potential presence of an endogeneity issue that arises from the relationship between abnormal audit fees and the earning management proxy of financial reporting quality. The result suggests that the management of absolute

discretionary accrual did not reduce during the regulatory changes periods due to abnormal audit fees being paid by the client. This result indicates that the issue of impairment of the auditor's independence remains in the post-regulatory period and dampens financial reporting quality.

Results for H3

Both the static fixed effect model and the dynamic panel estimate in Model 2 suggest a positive relationship between regulatory changes effect interactions with politically connected firms (POSTPOLI) on FRQ. The coefficient for POSTPOLI was significant and positive 1.7403 ($t = 2.73$) using the static FE and was significant and positive 2.79485 ($t = -4.18$) using dynamic panel data that included the lag of FRQ. The significance of lagged FRQ could be noticed in the increment in the magnitude of the estimated coefficients of the POSTPOLI variable when the dynamic panel estimation technique was employed. Thus, the result suggests that the various regulatory changes did not lead to a reduction in the magnitude of absolute discretionary in accrual for politically connected firms in post-regulatory period. Hence, no improvement in the financial reporting quality of politically connected firms existed; this finding supported Hypothesis 5.

Results for H4

Both the static fixed effect model and the dynamic panel estimate in Model 2 suggest a positive relationship between the regulatory changes effect interaction and

overlapping directorship (POSTOVERLAP) on Financial Reporting Quality (FRQ). The coefficient on POSTOVERLAP was significant and positive 1.3521 ($t = 1.82$) using the static model and was significant and positive 1.8702 ($t = -2.78$) using dynamic panel data that included the lag of FRQ. The significance of the lagged ABDAC could be noticed in the decrease in the magnitude of the estimated coefficients on the POSTPOLI variable when the dynamic panel estimation technique was employed. Thus, the results suggest that the various regulatory changes did not lead to a reduction in the magnitude of absolute discretionary accrual for firm with directors whose functions overlapped in the post-regulatory period. Hence, no improvement in financial reporting quality of politically connected firms was seen; this finding supported Hypothesis 5.

Results for Control Variables

Fifteen control variables were included in the financial reporting quality model, which represented the financial attribute of the companies and corporate governance attribute that are associated with financial reporting quality. As expected, the control variable to measure auditor size, BIG4, significantly influenced FRQ in both the fixed effect model and the dynamic panel model. The coefficient for BIG4 was significant and negative -1.5742 ($t = -2.34$) using static FE and was significant and positive -1.9180 ($t = -7.74$). The coefficient for CFFO2TA was significant and negative -0.0064 ($t = -1.81$) using static FE and was positive and significant -0.0058 ($t = -1.68$) in the dynamic panel model. Likewise the coefficient of RLAG was positive but insignificant

(0.0047, $t = 1.21$) in the FE model; however, it turned negative and significant (-0.0027, $t = -3.68$) when the dynamic panel technique was employed.

The coefficient for sales growth (SALESG) was negative and insignificant in the static model (-2.918, $t = -1.00$); however, it became significant and positive in the dynamic model (16.1568, $t = 6.59$). Likewise, the coefficient for LEVERAGE was significant and positive in both static model (0.2340, $t = 2.51$) and dynamic panel model (0.30225, $t = 3.60$). While the coefficient of LAGROA also was positive and insignificant in the static FE model (0.2197, $t = 0.63$) and the coefficient became significant and positive in the dynamic panel model (0.4698, $t = 1.78$). The coefficient for the business segment (BUSISEG) was negative and significantly affected FRQ (-0.2501, $t = -1.24$) in the static model; however, it became insignificant in the dynamic panel model.

In addition, the coefficient of LOGTA was positive in both the static FE (1.3913, $t = .21$) and dynamic panel model (2.6814, $t = 2.27$), although the coefficient was only significant in the dynamic model. The coefficient of ACCRUALTA was positive and not significant in the static model FE (0.0005, $t = 0.06$) and significant and positive in the dynamic panel model (0.0172, $t = 7.62$).

Six control variables represent the corporate governance attributes of the listed companies. Board size (BSIZE), which is measured by the number of directors on the board, was found to have a significant and positive relationship with FRQ in the static

model; however, it turned insignificant in the dynamic model. The coefficient of the proportion of non-executive directors scaled by board size (NONEXC_) was significant and negative in the FE model (-0.5286, $t = -2.42$) and significant and positive in the dynamic effect model (0.2917, $t = 1.92$). Likewise, the proportion of independent directors scaled by board size was negative and insignificant in the FE model (-0.0075, $t = -0.05$) and significant and positive in the dynamic effect model (0.2468, $t = .37$). The proportion of foreign directors on the board scaled by board size (FDIR) was significant and positive (0.4877, $t = 2.14$) in the FE model; however FDIR was significant and negative (-0.1739, $t = -1.30$) in the dynamic model. The association between FRQ and percentage of institutional foreign share (FSHR) was insignificant (-0.0066, $t = -0.35$) in the static model and was also insignificant (-0.0016, $t = -0.14$) in the dynamic model. The percentage of local institutional shares (INSTITSHR) had an insignificant relationship with FRQ in both models.

Table 5.7
Financial Reporting Quality Regression Model

Variable	Model 1		Model 2	
	Static panel FE	Dynamic panel	Static panel RE	Dynamic Panel
L1.FRQ		0.14 (5.05***)		0.35 (7.41***)
POST	-1.11 (-1.35**)	-0.53 (-1.23*)	-3.58 (-3.33***)	-2.34 (-3.31***)
POSTABNAF			-0.38 (-0.31)	2.64 (2.06***)
POSTPOLI			1.70 (2.73***)	2.79 (4.18***)
POSTOVERLAP			1.35 (1.82***)	1.87 (2.78***)
ABNRAF	-11.80 (-1.63**)	-15.31 (-4.71***)	-5.31 (-1.01)	-8.07 (-0.87)
POLI	2.31 (3.06***)	1.45 (2.33***)	-0.26 (-0.40)	-0.41 (-0.80)
OVERLAP	0.60 (1.45**)	0.32 (1.39**)	0.82 (2.27***)	1.60 (5.32***)
BIG4	-1.57 (-2.34***)	-1.92 (-7.74***)	-0.74 (-1.43**)	-2.80 (-7.51***)
CFFO2TA	-0.01 (-1.81**)	0.01 (1.68***)	0.01 (2.30***)	0.01 (3.46***)
RLAG	0.00 -1.21	0.00 (-3.68***)	0.00 -0.20	0.00 (1.77***)
SALESG	-2.95 (-1.00)	16.16 (6.59***)	-0.88 (-0.54)	11.01 (3.83***)
LEVERAGE	0.23 (2.51***)	0.30 (3.60***)	0.04 -0.40	0.13 (2.73***)

Table 5.7 (continued)

Variable	Model 1		Model 2	
	Static panel FE	Dynamic Panel	Static panel RE	Dynamic Panel
LAGROA	0.22 -0.63	0.47 (1.78***)	0.20 -0.73	1.21 (4.96***)
BUSSEG	-0.25 (-1.24*)	-0.10 (-1.10)	-0.03 (-0.25)	0.09 -0.82
ACCRUAL_TA	0.00 -0.06	0.02 (7.62***)	0.01 (2.86***)	-0.02 (-0.87)
LOGTA	1.39 -1.21	0.83 (2.27***)	0.16 -0.39	1.52 (6.36***)
TEMPLOY	-0.02 (-1.82***)	-0.01 (-1.56**)	0.00 (-3.14***)	0.00 (-0.37)
BSIZE	0.29 (1.37**)	-0.17 (-1.06)	0.13 -1.08	-0.09 (-1.14)
NONEXC_	-0.53 (-2.42***)	0.29 (1.92***)	-2.24 (-1.95***)	1.45 (1.67***)
IND_	-0.01 (-0.05)	0.25 (2.37***)	-1.04 (-1.14)	-1.25 (-1.37**)
FDIR	0.49 (2.14***)	-0.17 (-1.30***)	0.15 -0.90	0.31 (2.70***)
FSHR	-0.01 (-0.35)	0.00 (-0.14)	0.00 -0.32	0.00 -0.08
INSTITSHR	0.01 -0.83	-0.01 (-0.95)	0.00 (-0.26)	0.02 (-2.73***)
Intercept	-9.98 (-1.19)	-3.45 (-1.06)	1.08 -0.34	-8.81 (-4.70)

Table 5.7 (continued)

Variable	Model 1		Model 2	
	Static panel	Dynamic Panel	Static panel	Dynamic Panel
	FE		RE	
Year & Industry Effect	Yes		Yes	Yes
Mean VIF	1.50			
R ²	0.23		0.17	
Diff in R ²				
Significant F	0.00		0.00	
Hausman test	0.01		0.26	
AR1		0.01		0.01
AR2		0.70		0.73
Hansen J		0.05		1.00
Number	409	211	409	211

Notes: * p < .05, ** p < .01, and *** p < .001 indicate significance levels using a one-tailed test. Figures in parenthesis are the t-statistics. Number = number of observations. FRQ represent audit quality, which is the absolute discretionary accruals, calculated using Kothari, Leone, and Wasley's (2005) cross-sectional modified Jones model with ROA estimated by year and industry; FRQt-1 is a lagged dependent variable. The lag dependent variable is added to account for any dynamic endogeneity present in the relationship; POST is a dichotomous variable with a value of 1 for the regulatory changes period 2011-2013 and 0 if otherwise; POSTABNAF is an interacting variable. POST*ABNRAF is used to capture the incremental abnormal fees increase for post regulatory changes; POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for post regulatory changes; POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for post regulatory changes; ABNRAF is a continuous variable that captures the abnormal portion of total audit fees paid to auditor; POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise; OVERLAP is an indicator variable with a value of 1 if a board member serves on the both the audit committee and the compensation committee simultaneously and 0 if otherwise; BIG4 is a measure of firm's auditor coded 1 if the client is audited by a BIG 4 firm and 0 if otherwise; CFFO2TA is cash flow from operations divided by total assets; RLAG is the length of time between a company's financial year-end and the date of auditor's report; SALESG is calculated as the change in sales revenue; LEVERAGE is measured as total debt to total equity; LAGROA measures the lag of return on assets measuring client performance; BUSISEG is the number of business segments; ACCRUAL is calculated as net income less operating cash flow scaled by total assets; LOGTA represents the log of total assets; TEMPLOY is the total number of employees a company has; BSIZE is the total number of directors serving on the board of directors of a company; NONEXC_ is the total number of non-executive directors divided by total number of directors; INDP_ is the total number of independent non-executive directors divided by the total number of directors; FDIR is the total number of foreign directors on the board divided by the total number of directors; FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors; INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors.

5.8.2 Model Estimation Results for Audit Fees

Similar to the financial reporting quality model, this study posits that the cost of regulatory changes varies with a firm's reporting characteristics. Consistent with this

preposition a set of moderating hypotheses were developed and tested with respect to the impact of auditor's client reporting incentive on the cost associated with regulatory changes. The independent variable, moderators, and control variables serve as the main predictors of audit fees (see Model 4 of Table 5.8). Table 5.8 below contains the result of the main effect model using both static and dynamic panel model.

In the second model, the interacted variables were introduced into the main effect model. Darlington (1990) as cited in Saini, Baharumshah and Law (2010) suggested this procedure, which was followed in order to alleviate the problem of multicollinearity. The interaction term was orthogonalized as the interacted variables were regressed on the moderator variables and the residuals from the regression were used to represent the interaction term. The estimation result of the interacted model using both static and dynamic estimation techniques are displayed in columns six and seven of Table 5.8. The interaction term captures the incremental increase in mean audit fees in the post-regulatory period for politically connected firms and those firms whose directors served on more than one board committee.

All the t-values are robust for heteroscedasticity. The R^2 for Model 1 (static panel) was 0.89% while for Model 2 the R^2 increased to 90%. The R^2 indicates that the independent variables explained the variation in audit fees. The result of the R^2 obtained was higher compared with some of the literature on regulatory change. De George et al. (2013) reported 83.3% in Australia, Griffin et al. (2009) 74.1% in New

Zealand and Kim et al. (2012) 85% in Europe. The results also show a significant F statistic (0.000) for both models. This also confirms the fact that the independent variable reliably predicts the dependent variable.

Next, the study controlled for the endogeneity problem by employing the GMM estimation method (dynamic panel). The advantage of dynamic panel over the static panel is that it mitigates the biases in static panel. The results of the two specifications, AR2 second order correlation and the Hansen J test of over-identifying restriction, are reported in Table 5.8. The AR2 test for the two-models yielded p-values of 0.097 and 0.761 respectively; therefore, the null hypothesis cannot be rejected as the null hypothesis for second order (AR2) states that no second order correlation is present. With respect to the Hansen J test, the null hypothesis states that the instruments used in the study were valid. Because the Hansen J test for the two models had p-values of 0.136 and 0.983 respectively, the study concluded that the null hypothesis could not be rejected.

Table 5.8 reports the significant effect of the hypotheses variables on audit fees using both the static panel and GMM (dynamic panel). The hypotheses developed in Chapter Four restated here: H5: Regulatory changes will lead to increased audit fees, H6: The interaction of regulatory changes with financial reporting quality will positively affect audit fees, H7: The interaction of regulatory changes with politically connected firms

will positively affect audit fees, H8: The interaction of overlapping directorships and regulatory changes will positively affect audit fees.

Results for H5

The findings of this study show that POST regulatory changes variable was significant at the 1% level of significance in the static model and significant at the 10% level in the dynamic model, thus Hypothesis 5 is supported. The results indicated that the various regulatory changes embarked upon increased the amount of audit fees by 8.6%³⁰ under the static model; however, when the effect of past performance was considered and the endogeneity issue controlled for in the dynamic panel the percentage increase was just 2%.

Results for H6

Both the static effect estimates and the dynamic effect estimates in Model 2 suggest a negative relationship between regulatory changes effect interactions with FRQ (POSTFRQ) on audit fees. The coefficient on POSTFRQ was negative but not significant -0.05897 ($t = -1.17$) using the static effect model; however, it was significant and negative -0.1389 ($t = -2.12$) using the dynamic model that utilized the

³⁰ The magnitude of audit fees change was calculated using the conversion formula that Simon and Francis (1988, p. 263) and Gujarati (1994, pp. 525-526) proposed. The formula is $1-1/e^x$ where e is equal to 2.718.

lagged value of audit fees. The result indicated a decrease in audit fees in the regulatory changes periods due to the low risk assessment of client financial reporting risks. Hence, the finding supported Hypothesis 6.

Results for H7

The coefficient of POSTPOLI was not significant in either model at -0.0137 (t-value, 0.25) in static model and 0.0306 (t-value, 0.76) in the dynamic model. The results indicated no significant difference in the perceived risk assessment by auditors of politically connected firms in the regulatory changes periods.

Results for H8

The finding of this study showed that the POSTOVERLAP variable was positive and significant in both the static and dynamic panel models. The coefficient of POSTOVERLAP was significant and at 0.1001 ($t = 1.32$) using the static effect model and was significant and positive at 0.1675 ($t = 3.01$) using the dynamic model that utilizing the lagged value of audit fees. The findings of the study supported Hypothesis 8 and implied that firms having directors with multiple committee memberships were charged more in the post-regulatory period. This result suggested differences in auditor's risk preference in accordance with client reporting incentives.

Results for Control Variables

There were 17 control variables for the audit fees model, and these control variables represented client size, risks, complexity, and other variables that previous studies have empirically proven to be associated with audit fees. The results for Model 1, which is the main effect model, were used to interpret the control variables³¹. As expected, the natural log of total asset (LOGTA) proxy for client size significantly influenced audit fees. The variable had a significant and positive relationship with audit pricing at the 1% level of significance in the two estimation methods (static and dynamic panels). This result is interpreted to mean that big sized companies pay higher audit fees.

Likewise, the results for the risk component of the audit pricing model proxy by current year loss (LOSS), current ratio (CRATIO), debt ratio (DR) and client's liquidity (QUICK) are reported. Loss was positive but not significant in the static model while it was significant and positive in the dynamic effect model at the 1% level of significance. CRATIO was significant and positive in the static model at the 5% level of significance and at the 1% level in the dynamic effect model. Debt ratio (DR) was negative and insignificant in the static model; however, its coefficient turned positive and significant at the 1% level in the dynamic effect model. The coefficient of QUICK was positive and significant at 5% in the static effect model and 1% in the

³¹ According to Tarling (2009) "the main effects ... are needed to estimate predicted values" (p. 36). By implication, the inclusion of other variables in the interaction should not be given much consideration whether they are significant or not.

dynamic effect model. Overall, the results suggest that the higher the risk is, the higher are the audit fees auditors charge.

The third element of audit pricing was complexity measured by the ratio of inventories to total assets (INVT2TA), number of business segments (BUSSEG) and the lagged ratio of earnings before interest and tax to assets (LAGROA). While the ratio of inventory and receivable to total assets and the number of business segments were not significant in the static model, both variables were positive and significant at 1% in the dynamic model. With respect to ROA, the coefficient was negative although not significant in the static model; however, it was significant at 1% in the dynamic effect model. Thus, the results showed that as the level of complexity increased, the price of the audit increased as well.

Another control variable introduced was related to auditor characteristics. Financial reporting quality as measured by Big 4 firms (BIG4) was significant and positive at the 1% level of significance ($p = 0000$). The coefficient of the BUSY, the measure of accounting year-end, was not significant. The coefficient of RLAG, the number of days taken to audit a client's account, was negative but insignificant in the static model and was also negative but significant at the 1% in the dynamic effect model.

The results for five corporate governance related variables are thus. The coefficient for percentage of institutional ownership (INSTITSHR) was insignificant in the two

models. The percentage of foreign institutional ownership (FSHR) was negative but only significant in the dynamic effect model (-0.00253, $t = -1.70$). Board size (BSIZE) had a significant and positive relationship with audit fees for the two models at 1%. The proportion of executive directors on a board (EXC_) was negative and significant in the static model (-0.3549, $t = 1.49$) while it was positive and significant (0.8298, $t = 2.02$) in the dynamic effect model. The proportion of non-executive directors on a board (NONEXC_) was negative and significant in the static model (-0.5179, $t = -2.19$) while it was positive and significant in the dynamic effect model (0.8298, $t = 1.69$). The proportion of independent directors on a board (INDP_) was significant and positive in the static model (0.0731, $t = -1.26$) while it was significant and positive in the dynamic effect model (0.7131, $t = 1.41$).

Table 5.8
Audit Fees Regression Model

Variable	Model 3		Model 4	
	Static panel	Dynamic Panel	Static panel	Dynamic Panel
	FE		FE	
LAGAF L1.		0.33 (6.79***)		0.68 (14.53***)
POST	0.09 (3.74***)	0.02 (1.11*)	-0.05 (-0.66)	-0.01 (-0.08)
POSTFRQ			-0.06 (-1.17)	-0.14 (-2.12***)
POSTPOLI			-0.01 (-0.25)	0.03 (-0.76)

Variable	Model 3		Model 4	
	Static Panel	Dynamic Panel	Static Panel	Dynamic Panel
POSTOVERLAP	FE 0.10 (1.32*)		FE 0.10 (1.32*)	0.1675 (3.01***)
FRQ	0.00 (1.30*)	0.00 (2.88***)	-0.01 (-1.82***)	0.01 (2.97**)
POLI	-0.06 (-1.27*)	-0.07 (-1.33*)	-0.05 (-1.12)	-0.04 (-0.74)
OVERLAP	0.04 (1.28*)	-0.02 (-0.70)	0.05 (1.42**)	0.01 -0.30
LOGTA	0.29 (1.98***)	0.27 (7.64***)	0.23 (1.59**)	0.14 (2.98***)
LOSS	0.03 -0.57	0.19 (7.25***)	0.03 -0.67	0.09 (2.99***)
CRATIO	0.03 (1.53**)	0.04 (2.30***)	0.03 (1.33**)	-0.0060 -0.40
DR	0.00 (-0.14)	0.23 (2.97***)	4.61 -0.01	0.11 (1.48**)
QUICK	0.01 (1.65**)	0.02 (3.22***)	-0.02 (-2.19***)	0.01 (2.45***)
NVREC_TA	0.04 -0.62	0.09 (3.43***)	0.00 -0.01	0.09 (1.27*)
BUSSEG	0.02 -0.47	0.14 (3.43***)	0.01 -0.25	0.12 (2.59***)
ROA	-0.08 (-1.05)	-0.19 (-2.00***)	-0.04 (-0.59)	-0.16 (-2.13***)
BIG4	0.18 (2.02***)	0.36 (6.61***)	0.16 (1.86***)	0.06 -1.13
BUSY	0.06 -0.61	-0.02 -0.45	0.06 -0.67	0.00 (-0.00)

Table 5.8 (continued)

Variable	Model 3		Model 4	
	Static Panel FE	Dynamic Panel	Static Panel FE	Dynamic Panel
RLAG	-0.03 (-0.78)	-0.05 (-2.12***)	-0.03 (-0.83)	-0.05 (-0.83)
INSTITSHR	0.00 (-0.25)	0.00 -0.74	0.00 (-0.35)	0.00 (2.77***)
FSHR	0.00 (-0.30)	0.00 (-1.70***)	0.00 (-0.42)	0.00 -0.24
BSIZE	0.00 (2.49***)	0.00 (4.72***)	0.00 (2.44***)	0.00 (2.05***)
EXC_	-0.35 (-1.49**)	0.83 (2.02***)	-0.28 (-1.09)	0.18 -0.85
NONEXC_	0.52 (-2.19***)	0.76 (1.69***)	-0.42 (-1.79***)	0.35 (1.64**)
INDP_	0.07 (1.26*)	0.71 (1.41**)	0.08 (2.04***)	0.04 -0.19
Intercept	2.27 (2.85***)	-0.23 (-0.48)	2.63 (3.55***)	-0.28 (-0.69)
Year & industry effect	Yes	Yes	Yes	Yes
Adjusted R ²	0.89		0.90	
Significant F	0.00		0.00	
Hausman test	0.00		0.00	
AR1		0.03		0.04
AR2		0.10		0.76
Hansen J		0.14		0.98
Number	409	244	409	244

Note: * p < .05, ** p < .01, and *** p < .001 indicates significance levels using a one-tailed test. Figures in parenthesis are the t-statistics. Number = number of observations. LOGAF represents natural logarithms of audit fees (Naira); LOGAF(t-1) Lag of the dependent variable. The lag dependent variable is added to account for any dynamic endogeneity present in the relationship; POST is a dichotomous variable with a value of 1 for the regulatory changes periods 2011-2013 and 0 if otherwise; POSTPOLI is an interacting variable (POST*POLI) used to capture the effect of politically connected firms for regulatory changes. (7); POSTFRQ is an interacting variable (POST*FRQ) used to capture the effect of financial reporting quality for regulatory changes; POSTOVERLAP is an interacting variable (POST* OVERLAP) used to capture the effect of a board member serving on two audit committees for regulatory changes; FRQ is absolute discretionary accrual; POLI is a dichotomous variable with a value of 1 for firms that are politically connected and 0 if otherwise; OVERLAP is an indicator variable with a value of 1 if a board member serves on both the audit committee and compensation committees simultaneously and 0 if otherwise; LOGTA represents a log of total assets; LOSS takes a value of 1 when a firm reports a net loss and 0 if otherwise; CRATIO represents current assets divided by current liabilities; DR represents the ratio of long-

term debt to closing total assets; QUICK is the ratio of current asset less inventory divide current liabilities; INVT2TA represents inventory to total assets; BUSSEG is the number of business segments; ROA IS net income divided by total assets; BIG4 is a measure of a firm's auditor coded 1 if the client is audited by a Big 4 firm and 0 if otherwise; BUSY is an indicator variable equal to 1 for a firm with a December year-end and 0 if otherwise; RLAG represents the number of days taken from account year-end to the date of the auditor's report; INSTITSHR is the percentage of a firm's outstanding shares held by local institutional investors; FSHR is the percentage of a firm's outstanding shares held by foreign institutional investors; BSIZE is the total number of directors serving on the board of directors of a company; EXC_ is the total number of non-executive directors divided by board size; NONEXC_ is the total number of non-executive directors divided by board size; INDP_ is the total number of independent non-executive directors divided by the total number of directors.

5.9 Additional Analysis for Financial Reporting Quality Model

A number of sensitivity analyses were performed to examine the robustness of the findings. First, the regression in Table 5.6 was re-estimated by replacing hypothesis variable POSTABNAF with POSTPABNRAF_ and POSTNABNRAF_ consistent with Asthana and Boone (2012) and Eshleman and Guo (2014). Asthana and Boone (2012), Choi, Kim and Zang (2010), and Eshleman and Guo (2014) reported that abnormal audit fees and financial reporting quality (i.e., herein known as financial reporting quality) had an asymmetric nonlinear relationship. Because of the non-linear relationship, additional variables were created conditioned on the signs of abnormal audit fees (Choi, Kim & Zang 2010).

Table 5.9 reports the results of the financial reporting regression model³². The coefficient for POSTPABNRAF_ was significant 100.3658 ($t = 1.74$), suggesting that

³² All variables are as defined in Table 4.2 with the exception of PABNRAF, NABNRAF, POSTPABNRAF_, and POSTNABNRAF_. PABNRAF is equal to one if abnormal audit fees estimated from equation (8) if abnormal audit fees are positive and 0 if otherwise and NABNRAF is the value of abnormal audit fees estimated from equation (8) set to one if abnormal audit fees are negative and zero if otherwise. POSTPABNRAF_ and POSTNABNRAF_ are interacting variables created using the same procedure discussed in Section 5.7.1.

auditors receiving abnormally high audit fees were likely to tolerate earnings management from clients. The coefficient of POSTNABNRAF_ was insignificant (-1.7918, $t = -0.73$), indicating that the effect of abnormal audit fees on absolute discretionary accrual was insignificant for firms with negative abnormal audit fees.

Table 5.9
Financial Reporting Quality Regression Model

Variable	GMM
	Step two
ABDACL1	0.69 (4.20***)
POST	-48.64 (-2.00**)
POSTPABNRAF_	100.37 (1.74***)
POSTNABNRAF_	-1.79 (-0.73)
POSTPOLI	3.85

Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$ indicate significance levels using a one-tailed test. Figures in parenthesis are the t -statistics. POSTPABNRAF_ and POSTNABNRAF_ are interacting variables created using the same procedure discussed in Section 5.7.1.

Roychowdhury (2006) found evidence that managers employ real earnings management to manipulate earnings to avoid reporting losses. Moreover, empirical evidence exists that manager's switch between accrual and real earnings management when their ability to engage in accrual earnings management new regulatory initiatives constrains them (Cohen, Dey, & Lys, 2008). Accordingly, to have a complete picture of earnings management in the post-regulatory period after regulatory changes, the

financial reporting quality model using real earnings management must be re-examined.

The commonly used model as evidenced in prior studies (Cohen, Dey & Lys 2008; Cohen & Zarowin 2010; Roychowdhury 2006) to measure real earnings management activities includes the discretionary expensed-based model, sales-based model and production-based model. For the purposes of this study, two real earnings management activities were considered: 1) sales' based manipulation and 2) reduction in discretionary expenses manipulation. Production-based manipulation is excluded due to the small number of manufacturing companies in the sample. As Roychowdhury (2006) pointed out, manufacturing industries fully employ overproduction as an earnings management strategy.

Discretionary expenses manipulation is divided into Research and Development (R&D) expenses, advertising expenses, and general and distribution expenses. Earnings manipulation through a reduction in discretionary expenses in the current period leads to an increase in reported earnings in the same period. Cohen and Zarowin (2010) asserted that, when such expenses are paid for in cash, a reduction in any of these expenses would increase cash flow during that period. Following Roychowdhury (2006), the normal level of cash flow from operation was arrived at in this study using the below cross-sectional regression for each industry and year for the sampled companies.

$$\frac{CFO_t}{Asset_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{Asset_{t-1}} + \beta_1 \frac{Sales_{it}}{Asset_{t-1}} + \beta_2 \frac{\Delta Sales_{it}}{Assets_{t-1}} + \varepsilon_{it}$$

Where; CFO_{it} is flow from operations for firm i at period t . The abnormal CFO for sampled companies is calculated as actual CFO minus the normal level of CFO using the coefficient parameter from equation 8. Normal level of discretionary accrual is obtained as follows:

The normal level of discretionary expenses is expressed as a linear function of sales consistent with Roychowdhury (2006):

$$\frac{DISC_t}{Asset_{t-1}} = \alpha_0 + \alpha_1 \frac{1}{Asset_{t-1}} + \beta_1 \frac{Sales_{t-1}}{Asset_{t-1}} + \varepsilon_{it}$$

Table 5.10 below reports the results where R_CFO is equal to the level of abnormal cash flow from operation, and R_DISX is equal to the level of abnormal discretionary expenses. The findings as reported in Table 5.10 reveal that the results of the hypotheses remained unchanged. Overall, the results suggest that the level of real earnings management decreased in the post-regulatory period consistent with the decline reported on the level of accrual earnings management in the main results.

Table 5.10

Financial Reporting Quality Regression Model (Real Earnings Management)

Variable	R_CFO	R_DISX
	GMM	GMM
	Step two	Step two
R_CFO/R_DISX	0.32	0.25
L1.	(10.65***)	(9.41***)
POST	-2.04 (-2.94***)	-2.01 (-2.10***)
POSTABNAF	1.26 (2.33***)	3.25 (4.00***)
POSTPOLI	1.49 (3.04***)	1.38 (2.54***)
POSTOVERLAP	0.99 (1.47**)	2.67 (3.67***)
Control variables included	Yes	Yes
Intercept	0.2132 (0.11)	7.74 (3.20***)
Year and Industry Effect	Yes	Yes
AR1	0.03	0.01
AR2	0.15	0.97
Hansen J	0.80	0.85
Number	211	211

Notes: ABDAC was replaced with R_CFO and R_DISX respectively to proxy for real earnings management as Roychowdhury (2006) defined. All independent variables are as defined in Table 4.2. p < .05, ** p < .01, and *** p < .001 indicates significance levels using a one-tailed test. Figures in parenthesis are the t-statistics. Number = number of observations.

Next, according to the Product Differentiation Theory, the quality of audit service provided by an audit firm varies. The literature generally argues that Big 4 audit firms render higher quality audit service compared to non-Big 4 audit firms because Big 4

firms have a greater advantage with respect to in-house experience and expertise in the audit procedures of listed companies. Accordingly, the majority of extant studies examine audit quality variation among the two market segments (i.e., Big 4 and non-Big 4 audit firms).

As a further additional test, and based on the fact that most reported accounting scandals often involve auditors in the Big 4 market segment, this study examines whether a variation in earnings management tolerance existed among the auditors, hence in the quality of reported figures. From the results presented in Table 5.11, the coefficient of the Big 4 audit firms (Ernst Young, Akintola Williams Deloitte, PWC and KPMG) was negative while the coefficient sign for the local audit firm was positive, thus supporting the product differentiation theory. However, variations exist in the coefficients of the Big 4 audit firms, which indicate a difference in the level of earnings management tolerance of firms in this market segment. For instance, the coefficient sign for Ernst Young (EY) was -0.23, Akintola Williams Deloitte was -0.48, PWC was -2.70 and KPMG was -4.05. The implication is that the level of earnings management tolerance was very low for PWC and KPMG suggesting that clients of these two audit firms were more likely to produce higher quality reported figures compared to those of Ernst Young and Akintola Williams Deloitte.

Lastly, previous studies have raised concerns that the estimation results of financial reporting model are sensitive to the audit fees model specification. As much as the available data permitted, the results were replicated using abnormal audit fees derived

from the alternative audit fees model. Interestingly, the results of hypothesis variables remained unaffected.

Table 5.11

Financial Reporting Quality Based on the Big 4 Audit Market Segment

	GMM MODEL 1	GMM MODEL 2	GMM MODEL 3	GMM MODEL 4	GMM MODEL 5	GMM MODEL 6
ABDAC	0.14 (4.53***)	0.14 (4.50***)	0.14 (4.62***)	0.14 (4.62***)	0.10 (3.36***)	0.14 (5.05***)
L1. POST	-0.38 (-0.92)	-0.22 (-0.44)	-0.08 (-0.17)	-0.08 (-0.17)	0.10 -0.21	-0.53 (-1.23*)
BIG4	-	-	-	-	-	-
EY	0.78 (-2.73)	-	-	-	-	-
AKINTOLA WILLIAMS DELOITTE	-	-0.48 (-2.05***)	-	-	-	-
PWC	-	-	-2.70 (-8.6***)	-	-	-
KPMG	-	-	-	-	-4.05 (-3.20***)	-
LOCAL	-	-	-	-	-	1.92 (7.74***)
Control variables included	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	-3.87 (-1.04)	-4.65 (-1.08)	-5.86 (-1.22)	-5.86 (-1.22)	-7.12 (-1.58***)	-5.37 (-1.61***)
Year and Industry Effect	Yes	Yes	Yes	Yes	Yes	Yes
AR1	0.01	0.01	0.01	0.01	0.02	0.01
AR2	0.87	0.93	0.99	0.99	0.84	0.70
Hansen J Number	0.97 211	0.98 211	0.86 211	0.86 211	1.00 211	0.94 211

Notes: * p < .05, ** p < .01, and *** p < .001 indicate significance levels using a one-tailed test. Figures in parenthesis are the t-statistics. Number = number of observations.

5.10 Additional Analysis for Audit Fees Model

To further test the potential effects of regulatory change on audit fees, the study included an indicator variable for the year immediately before regulatory change, the year of regulatory change, and each of the subsequent years. Modelling the specific years gives the opportunity to assess how regulatory events that changed the audit environment correspond with individual year. In Model 2 of audit fees, consistent with Griffin, Lont and Sun (2009), the POSTREG variable was replaced with YR2010 (the year prior to regulatory change), YR2011 (review of code of corporate governance and establishment of FRCN year), YR2012 (IFRS implementation year and post-CG and FRCN year), and YR2013 (post-regulatory period).

Table 5.11

Audit Fees Regression Model

Variable	GMM Step two
L1. LAGAF	0.80 (13.15***)
YR2010	0.04 (2.39***)
YR2011	0.08 (1.63**)
YR2012	0.13 (2.42***)
YR2013	0.07 (1.42**)
Control variables included	Yes
Intercept	-0.78 (-2.34***)

Table 5.11 (continued)

Variable	GMM Step two
Industry Effect	Yes
AR1	0.051
AR2	0.532
Hansen j	0.876
Number	211

Notes: * $p < .05$, ** $p < .01$, and *** $p < .001$ indicate significance levels using a one-tailed test. Figures in parenthesis are the t-statistics. Number = number of observations.

Table 5.11 above documents the results. The audit fees model reflects a positive and significant coefficient for YR2010, YR2011, YR2012, and YR2013, indicating a significant increase in audit fees. The coefficient for YR2011 (0.076) indicates that audit fees were significantly higher in the prior year. Audit fees increased from 4.3% in YR2010 to 7.4% in YR2011. Likewise, the coefficient estimates for YR2012 (0.129) indicated an increase in audit fees, increasing from 7.4% in 2011 to 12.1% in 2012. The coefficient estimates for YR2013 (0.072) indicated a decrease in audit fees, declining from 12.1% in 2012 to 7% in 2013. This result suggested that the observed increase in audit fees in the regulatory change period was reversed. The decrease might be attributable to the effect of effect and possible economies of scale by the audit firm.

CHAPTER SIX

DISCUSSION OF RESULTS AND CONCLUSION

6.1 Introduction

This chapter recapitulates discussions in the previous chapters. The chapter begins with an overview of the research objectives, the hypotheses development, the method adopted in meeting the research objectives and the results of the study's empirical analysis. The chapter then gives a detailed discussion of the results and the contributions of the present study. The last section outlines the study's limitations and makes suggestions for future research that would extend the body of knowledge in financial reporting quality and audit pricing literature.

6.2 Overview of the Study

The recent comprehensive financial regulatory reform in Nigeria³³ occasioned by weaknesses in previous financial reporting regime redefined Nigeria's financial reporting architecture. The essence of the reform was to enhance accounting transparency and promote sound financial reporting quality. However, issues arise about the about limitations imposed by international regulatory reform approaches that did not consider formal local institutions settings, most especially, firm characteristic in a weak institutional context (i.e. abnormal audit fees, political connection and overlapping directorships). Arguably, the benefits and costs of such regulatory reform

³³ These were the review of Nigerian Code of Corporate Governance, the establishment of a financial reporting council and the adoption of International Financial Reporting Standards.

will likely vary in accordance with each institutional setting and an individual firm's financial reporting incentives (Ball 2006). This is because regulatory reforms in less-developed economy like Nigeria imitate those of developed nations.

The differences in financial reporting incentives at the firm level motivated the objective of this study. Mainly, the study sought to examine how financial reporting incentives at the firm level affected financial reporting quality and audit fees in Nigeria in the new regulatory regime. The main objective was divided into eight specific objectives, which were to examine: 1) To examine whether regulatory changes affect financial reporting quality; 2) To examine whether regulatory changes and its interaction with abnormal audit fees affect financial reporting quality; 3) To examine whether regulatory changes and its interaction with politically connected firms affect financial reporting quality; 4) To examine whether regulatory changes and its interaction with overlapping directorship affect financial reporting quality; 5) To examine whether regulatory changes affects audit fees; 6) To examine whether regulatory changes and its interaction with financial reporting quality affect audit fees; 7) To examine whether regulatory changes and its interaction with politically connected firms affect audit fees; and 8) To examine whether regulatory changes and its interaction with overlapping directorship affect audit fees.

Past studies have documented that regulatory reform affects financial reporting quality and audit fees. For instance, studies have documented that Sarbanes Oxley Act 2002 (SOX) had an effect on the accounting profession (Berger, Li & Wong 2005; Block

2004; Engel, Hayes & Wang 2006; Jain & Rezaee 2006). Other studies also have provided evidence that the recent global transition to IFRS has affected the accounting profession (Ahmed, Neel & Wang 2013; Atwood et al. 2011; Dimitropoulos et al. 2013; Yi Lin, Chee Seng & Graeme 2012; Liu, Yao, Hu & Liu 2011; Kim, Liu & Zheng 2012; Griffin, Lont & Sun 2009; De George, Ferguson & Spear 2013). For this reason, Hypothesis 1 and Hypothesis 5 tested the proposition that regulatory changes improved financial reporting quality and increased audit fees. Based on the conjecture that the effect of the regulatory change would likely vary with a firm's financial reporting incentives, the remaining six hypotheses tested whether abnormally high audit fees, politically connected firms and firms with overlapping directorships exhibited behaviour different from other firms in the post-regulatory period in the financial reporting quality model and the audit fees model.

The explanatory variables used in this study were selected based on prior literature for financial reporting quality and audit fees. Two models were adapted and modified. These were the financial reporting quality model of Ashbaugh, LaFond and Mayhew (2003), Antle et al. (2006) and the audit fees model of Simunic and Stein (1996) as modified in Kim, Liu and Zheng (2012). Fifteen and seventeen control variables were used for the financial reporting quality model and the audit fees model respectively. Both financial data and non-financial data were hand collected from the annual reports of companies listed on the Nigerian Stock Exchange. The annual reports were obtained from the library of the Nigerian Stock Exchange, and the final sample comprised 409

observations for the six-year period from 2008 to 2013. The panel data analytical technique was then employed using Stata 11.2 statistical software. The analysis involved both the static and dynamic panel models. Both the pre- and post-estimation tests confirmed the appropriateness of the techniques employed for the financial reporting model and audit fees model as displayed in table 6.1 below.

*Table 6.1
Summary of Model Selection*

Static Model	Pool OLS	Fix Effect	Random Effect	Diagnostic Test
FRQ Model	Not appropriate	Appropriate	Not appropriate	Endogeneity= YES Heteroscedasticity=YES
AF Model	Not appropriate	Appropriate	Not appropriate	Endogeneity= YES Heteroscedasticity=YES

6.3 Discussion of results

6.3.1 Overview of Results

Table 6.2 below presents the summary of results of the study's hypotheses and as indicated in the table seven hypotheses are supported. First, Hypothesis 1 was supported suggesting an increase in financial reporting quality in the post-regulatory period. Second, Hypothesis 2 was supported, indicating that payment of abnormal audit fees deteriorate the beneficial effects of the various regulatory changes. Third, Hypothesis 5 showed a negative association between political connections and financial reporting quality, thus supporting Hypothesis 3. Fourth, Hypothesis 4 was

also supported, which shows that overlapping directorship deteriorate the beneficial effect of regulatory changes. Fifth, Hypothesis revealed a positive relationship between the regulatory change period and audit fees; hence, Hypothesis 3 was supported. Sixth, the results for Hypothesis 4 revealed that audit fees were reduced with the magnitude of discretionary accrual in the post-regulatory period; hence, the hypothesis was supported. Seventh, Hypothesis 6 was not supported, which indicated that the pricing behaviour of auditors toward the riskiness of politically connected firms in the post-regulatory did not change. Lastly, Hypothesis 8, which posited a positive association between the effect of overlapping directorships and audit fees due to regulatory change, was supported.

Table 6.2

Summary of Panel Regression Results

Objective	Hypothesis	p-value	Sign	Result
1	H1	$p < 0.10$	+	Supported
2	H2	$p < 0.01$	-	Supported
3	H3	$p < 0.01$	-	Supported
4	H4	$p < 0.01$	-	Supported
5	H5	$p < 0.01$	-	Supported
6	H6	$p < 0.01$	+	Supported
7	H7	$p > 0.10$	-	Not supported
8	H8	$p < 0.01$	+	Supported

6.3.2 The Effect of Regulatory Change on Financial Reporting Quality

(Hypothesis 1)

Hypothesis 1 predicted a significant improvement in financial reporting quality after the various regulatory reforms that the Nigerian government embarked upon. The

regression results supported Hypothesis 1 that the regulatory changes periods would have a significant effect on financial reporting quality. The coefficient for the regulatory changes periods was significant negative relationship -0.53216 ($t = -1.23$) using the dynamic panel data that included the lag of FRQ. The results suggest that the various regulatory changes significantly improved the financial reporting quality after the regulatory changes.

The result support the process accountability theory that was discussed in section 2.8.2. According to the theory of process accountability, the expectation of being held accountable encourages subjects to consider carefully the alternatives and employ more analytical techniques (Kennedy 1993). Therefore, an auditor's decisions are reached with a preconceived mind-set of being second guessed by others and being able to make appropriate justifications for their reporting decisions (Kaplan & Johnson 1991).

Kennedy (1993) asserted that process accountability promoted cognitive effort. Therefore, process accountability enhances performance and improves judgement consistency and consensus. Consistent with this argument, Emby and Gibbins (1988) observed that process accountability improved an auditor's evaluation of a situation, which in turn led to good judgement. Johnson and Kaplan's (1991) findings are consistent with those of Emby and Gibbins (1988). Specifically, Peecher, Solomon and Trotman (2013) found that process accountability improved audit quality.

Similarly, the result for Hypothesis 1 is consistent with several previous studies that investigated the impact of regulatory changes on financial reporting quality for example, Aubert & Grudnitski 2012, Agoglia, Douppnik & Tsakumis 2011, Barth Konchitchki & Landsman 2013, Cohen, Krisnamoorthy & Wright 2012; Ge & McVay 2005, Doyle et al. 2007, Bedard 2006, and Nagy 2010). Many studies have investigated the impacts of the passage of SOX in the United States. Cohen, Dey, and Lys (2008) investigated the prevalence of accrual-based earnings management in the period after the passage of SOX. The regression results for eighteen years revealed that accrual earnings management was reduced in the post-SOX period.

Krishnan, Lixin, and Yinqi (2011) also reported that the prohibition of non-audit services improved the quality of financial reports. Further, Lobo and Zhou (2006) found that SOX increased the conservativeness of earnings-related statements. In the context of IFRS adoption, the results of previous studies revealed the positive effect of IFRS. Aubert and Grudnitski (2012) and Daske and Gebhart (2006) documented that IFRS adoption improved accounting quality.

The results of this current study taken together with evidence from prior studies confirm that financial reforms improve financial reporting quality. Most often, regulatory reforms linked to corporate governance extend to management responsibilities and the scope and nature of audit procedures. Increased oversight and stiff penalties for violators are as well common features of regulatory reforms

associated with corporate governance (Lobo & Zhou 2006; Zhang 2007; Mitchell 2003). The argument has been made that principle-based regimes such as IFRS generally limit transaction structuring (Schipper 2003) because they have few implementation guidelines and few bright lines (Jamal & Tan 2010). Leuz (2010) contended that the use of professional judgement enables managers to convey economic information in the best possible way (Leuz 2010). The following discussion explains the reasons behind the improvement in financial reporting quality brought that regulatory reforms brought about.

6.3.3 The Effect of Regulatory Changes and its Interaction with Abnormal Audit Fees on Financial Reporting Quality (Hypothesis 2)

Hypothesis 2 predicted that abnormal audit fees would negatively affect financial reporting quality in the regulatory changes periods. The dynamic panel model results (i.e. 2.6421, $t = 2.06$) support Hypothesis H2, which indicates that abnormal audit fees would have a significant negative effect on financial reporting quality in the regulatory changes periods. In line with the economic bonding theory, the result suggest that the impairment of an auditor's independence through abnormal audit fees negatively affects the quality of a financial statement (Antle et al. 2006). According to Antle et al. (2006) excessive fees from audit-related services can weaken the negotiation strength of an auditor because auditors feel threatened by possible future revenue loss when a client chooses to disengage from their services.

Thus, the results of this study support prior studies concerning the effect of abnormal audit fee in the regulatory changes periods as discussed in Chapter Three, which included Asthana and Boone's (2012) study. In their study, Asthana and Boone (2012) examined the relationship between financial reporting quality and abnormal audit fees change following the passage of SOX. Their initial finding suggested that the management of absolute discretionary accrual would be reduced in post-SOX. However, the effects were not completely offset because of SOX, which is consistent with the Economic Bonding Theory. However, Asthana and Boone's findings contradicted Mitra, Deis and Hossain's (2009) study, which revealed that unexpected audit fees were associated with an increase in earnings quality in the post-SOX consistent with the Auditor's Effort Theory. The difference in impact on earning management in Mitra, Deis and Hossain's (2009) study was due to the earnings management proxy because they used signed discretionary accrual.

The reason for the weak reporting quality is consistent with the theoretical preposition that abnormal audit fees, even in the presence of the quality of accounting standards and codes of corporate governance, if not adequately addressed will lead to the impairment of the auditor's independence and lower the quality of financial reports. Burghstahler, Hail and Leuz (2006), Ball (2006), and Jeanjean and Stolowy (2008) opined that, in the absence of concurrent reforms on other issues affecting financial reporting quality, the adoption of IFRS would only lead to more aggressive earnings management.

6.3.4 The Effect of Regulatory Changes and its Interaction with Politically Connected on Financial Reporting Quality (Hypothesis 3)

Hypothesis 3 predicted a significant negative relationship between the interaction of politically connected firm with regulatory changes and financial reporting quality. The coefficient for POSTPOLI was significant and positive 2.79485 ($t = -4.18$) using dynamic panel data that included the lag of FRQ. The results support the hypothesis that a politically connected firm would have reduced financial reporting quality in the regulatory changes periods. The present study went further to test whether the reporting incentives of politically connected firms changed in the post-regulatory period. Based on the findings, the incentives of connected firms negatively affected financial reporting quality. The result is consistent with earlier theoretical postulation and empirical studies that examined the financial reporting incentives of politically connected firms.

It is theoretically argued that politically connected firms exhibit high agency problem as evidenced in lower quality of accounting earnings reported by politically connected firms (Guedhami, Pittman & Saffar, 2014). This is because of their rent seeking behaviour of the controlling insiders. According to Chaney, Faccio and Parsley (2006) the controlling insiders have the incentive to reap benefits that far exceed the cost of their rent-seeking activities. In the process, the controlling shareholders manipulate

financial figures. Moreover, because politicians offer protection to connected firms, the management of connected firms is less concerned with the quality of their earnings.

In addition, the results of this current study lend support to past theoretical postulations (Ball 2006), which suggested that the variation in financial reporting incentives across countries and that firm-level factors challenge the efforts of any new regulatory initiative aimed at improving financial reporting quality. The result of this study is in line with the cross-country findings of Jeanjean and Stolowy (2008) who reported that IFRS adoption did not deter earnings pervasiveness. Rather management reporting incentives and national institutional factors are essential in shaping a firm's financial reporting characteristics. Similarly, Soderstrom and Sun (2007) noted that financial reporting quality is a function of a firm's overall institutional setting comprising the legal and political systems of that firm's country.

6.3.5 The Effect of Regulatory Changes and its Interaction with Overlapping

Directorships on Financial Reporting Quality (Hypothesis 4)

Hypothesis 4 predicted a significant negative relationship between the interaction of overlapping directorships with regulatory changes and financial reporting quality. The coefficient on POSTOVERLAP was significant and positive 1.8702 ($t = -2.78$) using dynamic panel data that included the lag of FRQ. The result supports the hypothesis and suggests that firms whose board members serve simultaneously on both the

compensation committee and audit committee exhibit poor financial reporting quality in the regulatory changes periods.

The results of this study lend support to the theoretical view that, when members serve simultaneously on two board committees with conflicting interests, committee independence and objectivity in decision making are compromised and this heighten agency cost (Laux & Laux 2009). Ferris, Jagannathan and Pritchard (2003) asserted that directors holding common memberships have less time for any of the committees, thus shrinking their ability to meet their responsibilities. As a result, the monitoring effectiveness of an independent director with common memberships is negatively affected.

Liao and Hsu (2012) examined the factors associated with the presence of same director serving on both the audit committee and compensation committees and the effect of such memberships on corporate effectiveness. Findings from their study linked firms with weak corporate governance and firms that lacked financial and committee resources to having common board membership. As a result, such firms have poor earnings quality. The findings resonate with the argument that variation in financial reporting incentives across countries exist and that firm-level factors challenge the efforts of any new regulatory initiatives aimed at improving financial reporting quality.

6.3.6 The Effect of Regulatory Changes on Audit fees (Hypothesis 5)

Hypothesis 5 predicted a positive relationship between audit fees and the regulatory changes periods. The coefficient of POST regulatory changes is (0.02, $t = 1.11$). The regression results supported Hypothesis 5 that the regulatory changes periods would have a significant effect on audit fees. Consistent with the audit fee model as explained by the agency theory the result indicated that the various regulatory changes upon which the Nigerian government embarked significantly increased the amount paid as audit fees in the regulatory changes periods.

In line with the traditional audit fees model developed by Simunic (1980), auditors incorporate an expected cost component representing the level of audit risk and the expected audit effort in their pricing decision. Thus, any changes in the client-reporting environment resulting from financial and corporate regulatory reforms will increase an auditor's detection risks as well as effort that will consequently result in an increase in audit fees (Yaacob & Che-Ahmad 2012). This is because regulatory reform comes at a cost to an auditor. Auditors will put in more effort to reduce the possibility of detection risk and future litigation costs (Ghosh & Pawlewicz 2009).

The current study's result aligns with several previous studies that examined the effect of regulatory changes on audit fees such as Kim, Liu and Zheng (2012), George, Ferguson, and Spear (2013), Griffin, Lont and Sun (2009) and Yaacob and Che-Ahmad (2012). For instance, some studies that investigated the effect of IFRS adoption

found a significant increase in audit fees due to IFRS adoption. DeGeorge, Ferguson and Spear (2013) reported a 23.7% mean increase in audit fees in the year; while small firms were much more affected in the transition period with a mean increase of 30% compared to a mean increase of 19.8% for large firms. Kim, Liu and Zhang (2012) went further to investigate the channel through which IFRS adoption affected audit fees for selected countries in Europe. Their findings revealed that audit fees increased with the complexity brought about by IFRS adoption and decreased with improvements brought by IFRS adoption. Using Australian data, Griffin, David and Sun (2009) reported a decline in non-audit related fees and an increase in audit-related fees due to stringent rules imposed by the New Zealand Stock Exchange's governance rules in 2004 and the subsequent adoption of IFRS.

The findings of the current study are as well consistent with other studies that have investigated the effects of new corporate governance initiatives. In the United States, many studies have examined the impact of the passage of SOX in 2002. Ghosh and Pawlewicz (2009) reported an increase in audit fees as high as 74% in the compliance period of SOX, and Consgrrove and Niederjohn (2008) reported audit fee increases of 51% in first year of compliance. In another context, Jeong et al. (2005) investigated the impact of the revised Act on External Audit of Stock Companies in Korea in 1989 and reported an increase in audit fees as a result.

On the overall, regulatory studies have provided evidence of an increase in audit fees arising from complicated rules in new reporting regimes and stringent monitoring. For example, Yaacob and Che-Ahmad (2012) noted the impact of ambiguousness in measurement and recognition attributable to IFRS. In addition, Schipper (2003) observed that are more auditors are exposed to litigation in a less precise reporting environment. As a result, auditors undergo extra burdens to train personnel, perform additional audit procedures or even seek expert opinions. The sum of all the costs results in the increased audit fees reported in most studies.

6.3.7 The Effect of Regulatory Changes and its Interaction with Financial Reporting Quality on Audit Fees (Hypothesis 6)

The study predicted a significant negative relationship between the effect of regulatory changes and its interaction with financial reporting quality on audit fees. The coefficient on POSTFRQ was significant and negative -0.1389 ($t = -2.12$) using the dynamic model that utilized the lagged value of audit fees. The result supports the hypothesis that financial reporting quality would decrease audit fees due to regulatory changes.

Previous studies such as that of Kim, Liu and Zheng (2012) supported the finding that improvement in financial reporting quality would decrease audit fees. The result of this current study is consistent with the view that audit fees decrease with the improved quality of financial reporting (Kim, Liu & Zheng, 2012). That reduction is probably

due to the reduced likelihood of financial misstatements that lower auditors' risks, which, in turn, leads to reduced audit fees. As the study's Hypothesis 1 suggests, the various regulatory changes would improve the quality of financial reports, which by implication would lead to a reduction in auditing risks as suggested in Hypothesis 6. Some widely touted benefits of a principle-based regime are that it offers few bright lines (Jamal & Tan 2010), limits transaction structuring (Schipper 2003) and permits more accountability through the use of professional judgement (Leuz 2010). Thus, this regime limits opportunistic management reporting discretion in arriving at accounting figures; hence, limiting misstatements (Barth et al. 2008).

6.3.8 The Effect of Regulatory Changes and Its Interaction with Politically Connected Firms on Audit Fees (Hypothesis 7)

Hypothesis 7 predicted a positive relationship between politically connected firms and regulatory audit fees due to regulatory changes. The regression results (0.0306, t-value, -0.76) revealed an insignificant association between the interactions of regulatory changes with politically connected firms on audit fees. Thus, the results indicate that politically connected firms did not significantly affect audit fees in the post-regulatory period. The insignificant negative relationship between politically connected firms and audit fees in the regulatory changes periods could present a case for audit fees lowballing for politically connected firms in Nigeria. This is could be possibly so because of the strong benefits that politically connected firms receive from

government which create an incentive for auditors of connected firm to lowball in consideration for future lucrative audit engagement referrals.

6.3.9 The Effect of Regulatory Changes and its Interaction with Overlapping Directorships on Audit Fees (Hypothesis 8)

Hypothesis 8 predicted a positive association between the effect of regulatory changes and its interaction with overlapping directorships on audit fees. The coefficient of POSTOVERLAP was significant and positive at 0.1675 ($t = 3.01$) using the dynamic model that utilized the lagged value of audit fees. The regression results had a significant and positive coefficient; thus, the result supported the hypothesis and suggested that overlapping directorships significantly increase audit pricing in the regulatory changes periods.

The results of this study support the theoretical view that overlapping directorships weaken a director's monitoring ability because directors are overloaded with work and are also subject to severe time pressure. As a result, financial reporting quality is adversely affected. The literature that has examined firms with busy directors have reported that such firms have weak corporate governance and have poor operating performance (Fich & Shivdasani 2006). In the empirical evidence that Mendez, Pathan, and Garcia (2015) reported, firms with busy directors have CEOs with high remuneration pay and experience low CEO pay-performance with CEO turnover-performance sensitivities. All these are detrimental to the monitoring ability of the

board and its committees. On the overall, the structure of such firms portends high financial reporting risks.

The high financial reporting risks associated with overlapping directorships justifies the increase in audit pricing experienced by such firms in the post-regulatory period. Moreover, the Insurance Hypothesis posits that auditors charge a risk premium in an uncertain audit risk environment to cover potential future litigation costs in case of any litigation claims. Thus, the insurance is necessitated due to the inherent risks associated with firms that have overlapping directorships (Fich & Shivdasani 2006; Mendez, Pathan & Garcia 2015), which have weak corporate governance and poor operating performance. As a result, an auditor will charge a sufficient audit fee premium to offset potential claims resulting from audit failure. The above argument shows that auditors consider the risk nature of firms with overlapping directorships.

6.3.10 Control Variables for the Financial Reporting Quality Model

The results of the dynamic effect regression model (GMM) indicate a significant relationship between financial reporting quality (i.e., absolute discretionary accrual) and twelve of the 15 control variables (excluding time invariant variables³⁴). As expected, the coefficient of Big 4 auditors are negatively associated with FRQ (-1.9180 $t = -7.74$). The significant result implies that Big 4 audit firms provide high-quality

³⁴ The time constant variables are industry and year effect.

audit services in order to guard against audit failure and its negative consequences on their brand names in the capital market (DeAngelo 1981; Francis & Krishnan 1999). This finding is consistent with several other previous studies. For example, those of Ashbaugh, LaFond, and Mayhew (2003) and Mitra, Deis and Hossain (2009) that documented that high-quality auditors constrain accrual-based earnings management.

Next, all the variables used for the measurement of firm specific operating characteristics significantly explain FRQ. These variables include cash flow from operating activities (CFFO2TA), sales growth (SALESG), debt effect (LEVERAGE), previous year return on assets (LAGROA), and business segments (BUSISEG), absolute value of total accrual scaled by total assets (ACCRUAL_TA), total assets (LOGTA), and number of total employees (TEMPLOY). CFFO2TA (-0.0058, $t = -1.68$), SALESG (16.1568, $t = 6.59$), LEVERAGE (0.30225, $t = 3.60$), LAGROA (0.4698, $t = 1.78$), and ACCRUAL_TA (0.0172, $t = 7.62$) have a positive and significant relationship with FRQ as indicated in the parenthesis following the names of each variables.

This finding is consistent with prior studies such as those of Eshleman and Guo (2014), Mitra, Deis, and Hossain (2009) and Asthana and Boone (2012). The result indicates that firms with poor performance are likely to engage in earnings manipulation and this manipulation reduces earnings quality (Doyle et al. 2007). Likewise, highly levered companies are associated with lower quality earnings. Because highly levered

companies will likely violate their debt covenants, they engage in earnings manipulation in order not to violate those debt covenants (Dechow, Ge, & Schrand 2010). LOGTA (2.6814, $t = 2.27$), is positively associated with absolute discretionary accrual, suggesting that big companies manage earnings. This finding is in contrast to previous studies. However, this finding can be justified based on the accounting methods used and the sample setting (Dechow, Ge, & Schrand 2010). Ball and Foster (1982) as documented in Dechow, Ge, & Schrand (2010) reported that size might have a positive relationship with earnings quality, which is attributable to “the fixed costs associated with maintaining internal control procedures over financial reporting,” (p. 380).

Lastly, for the corporate governance attributes, only the coefficient of NONEXC (0.2917, $t = 1.92$), INDP_ (-0.0075, $t = -0.05$), and FDIR (-0.1739, $t = -1.30$) were significant determinants of FRQ in the dynamic panel model. First, the proportion of non-executive directors (NONEXC) had a positive impact on FRQ, and this finding indicates that non-executive directors are ineffective in their monitoring functions. This finding supports the contention that the social ties between directors and the firm dampen the monitoring effectiveness of non-executive directors as this leads to a conflict of interest with shareholders (Hsu & Wu 2013).

Second, the proportion of independent directors (INDP_) on a board has a positive impact on absolute discretionary accruals. This finding is consistent with Osma and

Noguer (2007) and Abdullah and Nasira (2004) who documented that independent directors are ineffective in constraining earnings management. In that study's context, a contributory factor to the positive relationship was the strong dominance of the board activities by the chairperson. Anecdotal evidence has it that in Nigeria most chairmen of companies had once served as the company's CEO (Adegbite 2014).

Meanwhile, in some cases the CEOs also have a substantial share interest in the company. Hence, CEOs dominance often overrides the monitoring efficiency of the independent directors as in most cases the controlling shareholders recommend the appointment of the independent directors. However, in this current study, foreign independent directors (FDIR) negatively and significantly affected earnings management. This result is consistent with recent evidence suggesting that foreign directors have better incentives to monitor, as their appointment is not likely to be influenced locally. Likewise, due to their exposure to foreign markets, independent foreign directors have increased monitoring mechanisms skills.

6.3.11 Control Variables for the Audit Fees Model

The results of the dynamic effect regression model (GMM) indicate a significant relationship between audit fees and fifteen of the seventeen control variables (excluding time invariant variables³⁵). Total assets (LOGTA) was highly significant in

³⁵ The time constant variables are industry and year effect.

at the 1 percent level of significance with a coefficient value of 0.14 (2.98). The result indicates that audit fees increase in proportion to client size as measured by LOGTA. That is, the larger the client company, the more audit fees the auditor charges. The result of this current research is consistent with several other studies like De George, Ferguson and Spear (2013), Griffin, Lont and Sun (2009); Gul and Tsui (2001), Kim, Liu and Zheng (2012), Naser and Nusiebeh (2008), and Yaacob and Che-Ahmad (2012) that used the natural log of total assets. These studies show that auditor's carryout substantive compliance tests as client size increases.

Again, all the variables used as risk measurement were significant in explaining audit fees. These variables included current year loss (LOSS), current ratio (CRATIO), and debt ratio (DR) and quick ratio (QUICK). The coefficient of Loss was significant and positive in the dynamic effect model at the 1% level of significance. The coefficient of CRATIO was positive at the 1% level of significance in the dynamic effect model. DR coefficient is positive and significant at the 1% level in the dynamic effect model while the coefficient of QUICK was positive and significant at 1% in the dynamic effect model.

The positive relationship between audit fees and risk variables signifies that client riskiness, as identified in previous literature, is an important factor in the current study that influences audit-pricing decisions. This aligns with the theoretical argument that the riskier the operations of a client the higher the potential litigation losses from an

audit failure (Matthews & Peel, 2003). Therefore, an auditor adds an insurance premium to his charges to cover possible future litigation claims. In addition to this, auditors respond to client risk by increasing audit effort or purchasing insurance premium covers (Chan et al. 1993; Jones & Raghunandan 1998). Alternatively, the pre-engagement evaluation of a client's inherent and control risks could result in the rejection of a client that falls above the audit firm's risk tolerance level (Jones & Raghunandan 1998).

The next factor is client complexity measured by the sum of inventory scaled by total assets (INVT2TA) and number of client business segments (BUSISEG). The two measures have a significant relationship with audit fees and the coefficient signs (i.e. 0.09, $t=3.43$; 0.14, $t= 3.43$ respectively) are consistent with prior studies suggesting that companies having complex operating structures pay higher audit fees. Inventories and account receivables are complex items that management can easily manipulate and therefore very difficult to audit (Matthews & Peel 2003). Thus, auditors need additional hours and skilled personnel to evaluate a client (Pong & Whittington 1994). The result of this current study aligned with many other studies like those of Francis and Stokes (1986) and Kim, Liu and Zheng (2012). This finding suggests that audit hours and expertise requirements increase with the level of complexity, which in turn leads to higher audit fees.

The study as well controlled for auditor-related factors and, as expected, the result showed that Big 4 firms (BIG4) was significant and positive at the 1% level of significance ($p = 0000$). The result indicates that Big 4 auditors charge higher prices than their counterparts do. Prior studies have revealed that the extra charges indicate audit fees premiums, which reflect brand name reputational concerns (Moizer et al. 2004), product differentiation (DeAngelo 1981), and audit staff skill and experience (Chan et al. 1993). The current study also reported the relationship between corporate year-end and the time lag taken between year-end and audit report.

The relationship was not significant, although previous studies such as Che-Ahmed and Houghton (1996) and Ezzamel et al. (1996) reported that both variables were significant determinants of audit fees. In contrast, however, and consistent with the findings of the present study, Naser and Nuseibeh (2007) found both variables to be insignificant. Two reasons help explain the insignificant relationship. First is the instance in which an audit firm contracts out an audit engagement to another firm with a less busy schedule to reduce work pressure. Second, the substantial audit work done during an interim audit will reduce the audit tasks for the final audit stage. This reduces audit workload during the peak period; hence, the number of days taken does not affect the audit fees.

With respect to corporate governance attributes, only local institutional share ownership (INSTITSHR) was insignificant in determining audit fees. Foreign

institutional ownership (FSHR) had a negative significant (-0.00253 , $t = -1.70$) impact on audit fees. The result suggests monitoring effectiveness of foreign institutional shareholders. Previous studies have demonstrated that concentrated shareholders improve corporate governance through the ability of these owners to remove non-performing managers (Kaplan & Minton, 1994) and to obtain information on managers' performance (Berle & Means 1932). Accordingly, their effectiveness could lead to a reduction in auditing procedures, hence to a reduction in audit fees. The results of this current study are consistent with those that Mitra, Hossain and Dies (2007), Khan, Hossain, and Siddiqui (2011), and Zaman, Hudaib and Haniffa (2011) documented with respect to concentrated ownership

The next discussion is on factors related to the board characteristic. Board size (BSIZE) had a significant and positive relationship with audit fees at 1% in this current study, suggesting that auditors assess the control environment of firms with a large board seen as being weak. Therefore, this weakness requires the auditor to perform more extensive audit procedures. The finding is consistent with that of Yatim, Kent and Clarkson (2006). The proportion of executive directors on a board (EXC_) was positive and significant (0.8298 , $t = 2.02$) in the dynamic effect model suggesting that auditors charge more as the proportion of executive directors' increases. Similarly, the proportion of non-executive directors on a board (NONEXC_) was positive and significant in the dynamic effect model (0.8298 , $t = 1.69$) while the proportion of

independent directors on a board (INDP_) was significant and positive in the dynamic effect model (0.7131, $t = 1.41$).

The result is consistent with Carcello et al. (2002), O'Sullivan (2000), and Godwin-Stewart and Kent (2006). According to O'Sullivan (2000), when a board is free from management influence, external auditors can freely discuss issues that arise during their audit. Likewise, an independent board values quality more than cost; therefore they are more likely to demand more from auditors, and this will increase the amount charged as audit fees.

6.4 Comparison of the Financial Reporting Quality Model and Audit Fees.

The essence of estimating both the financial reporting quality model and the audit fees model is to weigh the benefit and cost of the various regulatory changes that was embarked upon the government and how it varies with firm characteristics. On the overall, the improvement in the financial reporting quality as evidenced in section 6.3.2 led to a subsequent increase in audit fees consistent with the expected increase in the complexity in section 6.3.6. However, the increase in financial reporting quality partially offset the risk associated with regulatory changes as evidenced in audit fees reduction when financial reporting quality and regulatory changes were interacted as evidenced in 6.3.7.

With respect to the firms' characteristics and their interaction with regulatory changes, the result of the interaction of abnormal audit fees with regulatory changes that was discussed in section 6.3.3 impairs auditor independence hence deterioration in the financial reporting quality of such firms. Furthermore, the interaction of politically connected firm with regulatory changes confirms that the financial reporting quality of politically connected firms deteriorated in the regulatory changes period as explained in section 6.3.4.

However, the interaction of politically connected firm with regulatory changes under the audit fees model which was discussed in section 6.3.8 revealed that the relationship was negative and insignificant. This raise further research question as the result suggest that the deterioration in the financial reporting quality of politically connected firms might not necessarily make auditors of politically connected firms to charge high audit fees in compensation for the high risk associated with such firms.

The result discussed in section 6.3.8 revealed the poor financial reporting quality of connected firms could as well be explained in the context of audit fees lowballing which might be due to the auditor incentive to get more referrals from politically connected firm hence expanding the auditors' client base. Meanwhile, the interaction

of overlapping directorship with regulatory changes deteriorate financial reporting quality as discussed in section 6.3.5 which implies dual committee membership compromise director's independence and objectivity hence high agency cost. Consistent with high agency cost agency cost associated with dual committee membership, the interaction of overlapping directorship with regulatory changes in the audit fees model discussed in section 6.3.9 increased the amount paid as audit fees by firms with dual committee membership.

6.5 Contributions of the Current Study

This section discusses the contributions of this study from the theoretical methodological and practical perspectives.

6.5.1 Contributions to the Existing Literature

As discussed in the problem statement, there is a widely held belief that regulatory changes influence the quality of financial reports and drive costs, empirical studies examining the relationship between regulatory changes, reporting quality and audit fees have reported mixed results.

A possible explanation for the mixed findings arises from the differences in firm characteristics and country-specific institutional qualities. In addition, endogeneity problem arising from unobserved heterogeneity, simultaneity, and measurement error could also provide a possible explanation for the mixed findings (Roberts & Whited,

2012). Motivated by the regulatory changes in Nigeria coupled with the mixed findings reported by previous studies this study contributes to the body of knowledge by investigating the moderating effect of firm characteristics (i.e. abnormal audit fees, political connection and overlapping directorship) on the relationship between regulatory changes, audit fees and financial reporting quality.

To the best of this researcher's knowledge, no extant literature examines the effects of regulatory changes from an auditing perspective in Nigeria. Even though the literature on corporate governance and auditing are budding in Nigeria, this literature predominantly focuses on environmental determinants of corporate governance in the country. Therefore, an important contribution of this study to the existing literature on regulatory changes is that it offers new empirical insights into the benefits and costs of regulatory changes using data from a less-studied and less-regulated environment vis-à-vis Sub-Saharan African (specifically Nigeria).

Further, while previous studies of (Chi, Lisic & Pevzner 2011, Cohen et al., 2013, Jamal & Tan 2013) on regulatory reforms have only established variations of the impact of regulatory reforms based on cross country differences, the present study established the variations of the impact of regulatory reforms based on firms level by introducing firm characteristics like abnormal audit fees, political connection and overlapping directorship. Hence by establishing the variation of regulatory impact at the level of the firm, the study further contributes theoretically to the regulatory

changes studies by investigating the indirect effect of abnormal audit fees, political connection and overlapping directorship which to the best of this researcher's knowledge previous studies had only established their directly effects on financial reporting quality and audit fees.

Accordingly, the study provides insights into the limitations of replicating international financial regulatory reforms without considering firm behaviour in localized, weak regulatory settings. In furtherance to Adegbite's (2014) call for a testable hypothesis on the drivers of sound corporate governance practises at the level of the individual firm, this study provides evidence suggesting that, although the financial reforms in Nigeria improved financial reporting quality, factors like abnormal audit fees, political connection and overlapping directorship impacted the process.

The results showed that:

1. An auditor independent impairment negatively affected financial reporting quality in the regulatory changes periods.
2. The quality of financial reports deteriorate in the regulatory changes periods for politically connected firms.

3. Dual committee board memberships, which influenced audit committee effectiveness in Nigeria negatively and is a bane of Nigerian companies, affected financial reporting quality in the regulatory changes periods.

The above findings resonate with previous theoretical arguments that the incentives of individual firms for adequate financial reporting are critical to the success of any regulatory initiative, most especially when applying an international regulatory reform model in a less-regulated environment (Ball 2006; Adegbite 2014).

Likewise the study contributes theoretically to financial reporting and audit fees literature by investigating how directors' "busyness" affects their monitoring role, hence the quality of financial report and audit pricing. Prior studies of busy directors examined busyness from the perspective of interlocking directorships that is directors appointed on the board of directors of more than one company. However, director busyness in this current study was proxied by dual board committee membership on the compensation and audit committees. The finding of the current study gives further theoretical insights suggesting that overlapping directorships weaken financial reporting quality and lead to increased prices by auditors.

6.5.2 Methodological Contributions

Finally, this study makes an interesting methodological contribution with respect to the choice of research design used to ameliorate the endogeneity issue raised in the

problem statement. A major concern in corporate governance studies is the endogeneity problem, which may arise because of several characteristics of firms that are unobservable. A second source of endogeneity is the issue of simultaneity, i.e., the problem of independent variables that are not fully exogenous. Last, is the possibility of current governance variable performance being a function of past firm performance.

Most past studies such as those of Antle et al. (2006) and Asthana and Boone (2012) utilized Two-Stage Least Squares analysis for the endogenous variables of the financial reporting quality model and the audit model. However, the limitation of adopting the Two-Stage Least Squares is that it only alleviates endogeneity concerns arising from simultaneity and unobserved firm characteristics in a regression model.

Previous studies (Antle et al. 2006; Asthana & Boone 2012) that proved the existence of an endogeneity problem between the endogenous audit fees variables and stochastic error terms of financial reporting quality model, this study alleviated endogeneity concerns arising from the correlation between past performance and presence performance in addition to endogeneity issues arising from unobserved firm characteristics and simultaneity issues which previous studies have mostly addressed using the Arellano Bond linear dynamic panel estimator (Arellano & Bond 1991). To the best of the author's knowledge, the study will be the first to investigate how firm characteristics the effects of regulatory changes on financial reporting quality and audit

fees taking into consideration the likely endogeneity issue that might arise from the effect of past performance on current firm performance.

The GMM estimation approach is more efficient than 2SLS when the problem of heteroscedasticity and serial correlation in the error terms is present (Arellano-Bond 1991; Wooldridge 2001). Basically, under panel data application, the unobserved heterogeneity correlates with the observed covariate, which is then corrected for using the fixed effect or within the estimator. The fixed effect estimator assumes that the time varying errors have zero means, constant variance and zero correlation (i.e., exogeneity assumption).

The GMM estimation technique that Hansen (1982) introduced is a non-parametric approach used to estimate model parameters with no data distributional assumptions, which is an important assumption under the Two-Stage Least Squares regression analysis. Arellano and Bover (1995) and Blundell and Bond (1998) developed a system dynamic model that incorporates simultaneous difference and level equations. Arellano and Bond (1991) proposed two estimators, which are the one-step and the two-step. The weighing matrix used in obtaining the estimates explains the differences between the two estimates; however, the two-step is optimal (Gyimah-Brempong & Traynor 1999). The dynamic GMM is consistent and efficient in the absence of second order serial correlation between error terms of the first differenced equation.

6.5.3 Practical Contributions

The findings of this study could serve as recommendations especially to FRCN, ICAN and other policymakers and regulatory authorities such as NSE. From a policy perspective, the study's empirical results revealed that abnormally high audit fees have a negative effect on financial reporting quality, as evidenced by the increase in the level of accrual and real earnings management. High audit fees compromise the objectivity of auditors as they lead to an undesirable auditor-client economic bond.

Both FRCN and ICAN have roles to play in stopping the menace of high fees that lead to an undesirable auditor-client economic bond. First, FRCN, in its capacity as a regulatory authority, should mandate the proper disclosure of audit-related and non-audit related fees and prohibit non-audit related services deemed to likely compromise auditor independence. Second, this study's findings serve as a wakeup call for the audit inspection units of professional bodies like ICAN whose members are engaged in audits to intensify efforts to counter check the quality of audit services rendered by its members. If possible, regulatory authorities can further encourage external peer review of an auditor's work, whereby firm B should review the work of audit firm A. Such peer review will facilitate higher-quality financial reporting.

Again, constant review of audit fees received by audit firms should be encouraged and clear criteria should be set for audit fee charges in order to prevent excessive charges. Furthermore, serious disciplinary measures should be meted out to members found

wanting and the actions taken should be made public. However, until the date of study, despite the indictment of auditors, no news exists of any successful litigation against an auditor that might serve as a deterrent.

Next, the study demonstrated that firm-specific reporting incentives impede the quality of financial reports in some companies; therefore, future regulatory efforts should consider examining pronounced reporting peculiarities of individual firms. For instance, the weakness of the audit committee stemming from its composition, structure, and independence is an area that needs future regulatory intervention. To enhance the independence of the board audit committee, dual committee membership should be discouraged, and the promotion of a CEO to chairman status in companies should be avoided. As evidenced in this study's findings, political patronage negatively affects financial reporting quality, requiring special regulatory attention. It has become imperative for regulatory authorities to fashion ways in which to make politically linked companies more accountable, for instance, through shareholder enlightenment programs on shareholder activism.

With respect to the complexity of the new regulations, ICAN should provide detailed guidelines to educate members on the complex aspects of new regulations. This will facilitate auditing pricing negotiations between the auditors and their clients in order to reduce fee disputes and exploitation by auditors in the name of regulatory complexity.

6.6 Limitations of the Study

Like any other research, this study possesses a number of limitations that must be highlighted. The limitations of this research are discussed below:

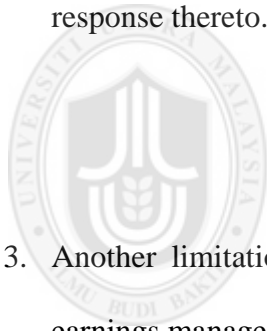
1. The data used for this study were collected in the early part of 2014. First, due to the timing of data collection, only a few observations were available for 2013, which covers the IFRS period. Second, only a few short time frames existed between the review of 2003 code of corporate governance, the establishment of FRCN and the adoption of IFRS making it a bit difficult to disentangle the effects of each particular regulatory initiative. Because of these two limitations, this study jointly examined the effects of all regulatory changes on financial reporting quality and audit fees. Therefore, the interpretation of the study findings is a limitation.
2. Because the annual reports from whence the data used results from a joint effort of both the management and the external auditor, the financial reporting quality proxy (i.e., earning management) best captures the level of earnings management tolerated by external auditors. Hence, the financial reporting bias introduced by management is not really captured.

3. The choice of earnings management proxy and its ability to accurately measure audit quality limits the strength of the evidence provided in this study. Hitherto, no consensus has existed on the measurement of the various earnings management proxies, and thus the measurements have the potential to exhibit high measurement errors. However, the study adopts other measures of earnings management, and the results remain unchanged.
4. Likewise, non-audit fees are lumped together with audit fees in the annual report and consequently the study used auditor's remuneration. However, the study does not expect the aggregation of audit and non-audit fees to affect the findings of the study because non-audit services are rarely provided in Nigeria.
5. Lastly, although this study estimates several audit fees models to re-estimate the main model and test for the validity of the findings. The results, however, are still subject to how well the audit fees model accurately predicts abnormal audit fees.

6.7 Future Research

All the limitations highlighted in the preceding section serve as an opportunity for future research.

1. As discussed in the limitations section, few observations exist in the post-IFRS adoption period. Future studies can extend the number of years to examine the regulatory effect over a longer period.
2. Annual data were used in the estimation of earning management, which as discussed earlier, best capture an auditor's tolerance for deceptive accounting of managers. Future studies could instead employ quarterly data in their estimations of earning management. Introducing quarterly data would provide insights into management-induced earnings management and the auditor's response thereto.
3. Another limitation observed is an inherent one imposed by the choice of earnings management. As DeFond and Zheng (2014) suggested, future studies could consider the triangulation of some of the available proxies that capture audit quality/financial reporting quality. This approach would provide an in-depth insight into what constitutes financial reporting quality, as no single proxy is capable of giving a complete insight.
4. The insignificant negative relationship between the interactions of politically connected firm and regulatory changes periods on audit fees present an



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opportunity for future study. Prior studies showed that politically connected firms are associated with high agency cost which implied that politically connected firms are priced high by auditors due to the associated risk. However, the insignificant relationship reported in this study could possibly have presented a case for auditor's fees low balling in consideration for future referrals. Future studies could possibly consider the issue of lowballing in political connected firm and its impact on the reporting quality of connected firms.

6.8 Conclusions

This chapter provides a detailed summary of all chapters in this thesis starting from the introductory part in Chapter One to the research methodology aspect in Chapter Three and the results of hypothesis testing in Chapter Four. In line with previous studies, this research demonstrates that the various regulatory changes embarked upon by the Nigerian government have had significant impacts on both financial reporting quality and audit fees and that financial reporting incentives at the firm level further affect this relationship.

The results of this study contribute to the budding literature on the audit market, specifically financial reporting quality, and audit fees. Because these two elements proxy the benefits and costs of regulatory reforms, any significant impact on financial reporting quality and audit fees would affect the effectiveness of any regulatory

reform. Overall, seven out of the eight hypotheses were supported. From a theoretical perspective, the results indicate that regulatory changes introduce some amount of complexity into the financial process and, in return, improve financial reporting quality and increase the audit costs. Further still, the results reveal that excessive audit fees, politically connected firms and overlapping directorships moderate the effect of regulatory reform on financial reporting quality and audit fees. In a practical sense, this study provides useful insights to the parties involved in the financial reporting process and the regulatory authorities in Nigeria.



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Appendix 4A
Variance Inflation Factor For Financial Reporting Quality Mode

Variable	Model 1	Model 2
	VIF	VIF
POST	1.46	7.29
ABNRAF	1.20	2.65
POLI	1.48	2.77
OVERLAP	1.25	1.58
POSTABNAF		2.45
POSTPOLI		4.13
POSTOVERLAP		4.87
BIG4	1.39	1.42
SALESG	1.10	1.08
GEARING	1.12	1.12
ACCRUAL_TA	1.21	1.15
LOGROA	1.12	1.21
BUSSEG	1.13	1.14
CFFO2TA	1.10	1.11
LOGTA	2.18	2.26
TEMPLOY	1.09	1.10
RLAG	1.32	1.33
BFSIZE	1.85	1.89
NONEXC_	1.95	1.99
IND_	1.84	1.86
FDIR	2.49	2.52
FSHR	2.12	2.14
INSTITSHR	1.55	1.58

Appendix 4B
Variance Inflation Factor for Audit Fees Model

Variable	Model 1	Model 2
	VIF	VIF
POSTABDDAC		1.28
POSTPOLI		3.89
POSTOVERLAP		2.57
POST		2.99
ABDAC	1.07	1.30
POLI	1.45	2.66
OVERLAP	1.23	2.24
LOGTA	2.18	2.04
BIG4	1.38	1.39
LOSS	1.11	1.15
CRATIO	1.58	2.13
QUICK	2.23	1.92
DR	1.04	1.05
INVREC_TA	1.22	1.29
BUSSEG	1.16	1.16
ROA	1.31	1.28
BUSY	1.16	1.14
RLAG	1.23	1.29
INSTITSHR	1.46	1.51
FSHR	1.58	1.58
BSIZE	1.39	2.03
EXC_	5.26	1.09
NONEXC_	7.84	1.68
INDP_	3.05	1.17
Mean VIF	2.00	1.74

Appendix 4C

GMM Step One Result for Financial Reporting Model

Variable	FRQ Without interaction (Step one)	FRQ With interaction (Step one)
ABDAC	0.2948	0.2567
LI.	(1.91**)	(2.30***)
POST	-0.4974 (-0.29)	-6.5971 (-0.83)
POSTABNAF	36.9053 (2.67)	-2.0375 (-0.13)
POSTPOLI	2.0052 (1.46)	3.8505 (2.78)
POSTOVERLAP	-0.1850 (-0.19)	-0.2719 (-0.21)
ABNRAF	-0.0125 (-0.03)	-2.0375 (-0.13)
POLI	0.0025 (0.51)	-1.3016 (-1.04)
OVERLAP	-1.7038 (-1.49)	-0.3284 (-0.37)
LOGTA	14.0330 (1.16)	0.4707 (0.82)
TEMPLOY	-0.3422 (-1.22)	0.0007 (0.16)
BIG4	1.1547 (1.64*)	-2.2568 (-3.29***)
SALESG	0.1572 (1.78**)	8.2237 (1.06***)
GEARING	0.1213 (0.49)	0.2080 (1.36)
ACCRUAL_TA	-0.0053 (-0.58)	0.0140 (1.60)

Note: * p = , ** p = , and *** p = .

Appendix 4C (continued)

Variable	FRQ Without interaction (Step one)	FRQ With interaction (Step one)
LOGROA	0.0003 (0.04)	1.2070 (2.52***)
BUSSEG	-0.0075 (-0.35)	0.2389 (1.33)
CFFO2TA	0.6186 (1.21)	-0.0054 (-0.82)
RLAG	-0.0402 (-0.12)	-0.0101 (-1.54)
INSTITSHR	-2.9586 (-0.97)	-0.0201 (-1.46)
FDIR	0.0040 (0.00)	-0.0819 -0.30
BFSIZE	-0.0098 (-0.24)	0.1694 (0.80)
IND_	Yes	-0.2675 (-0.12)
NONEXC_		1.4093 (0.75)
FSHR		0.0253 (1.47)
Year and Industry Effect		Yes
Mean VIF	0.012 0.993	
R ²	0.213	
Hausman test	211	
AR1		0.003
AR2		0.999
Hansen j		0.063
N		211

Note: * p = , ** p = , and *** p = .

Appendix 4D

GMM Step One Result For Audit Fees Model

Variable	Audit fee Without interaction (Step one)	Audit fee With interaction (Step one)
LAGAF	0.3940	0.7417
L1.	(6.36***)	(4.44***)
POSTABDDAC		-0.0040 (-0.02)
POSTPOLI		0.0597 (0.45)
POSTOVERLAP		0.2667 (1.87***)
POST	0.0070 (0.20)	-0.3353 (-1.43**)
ABDAC	0.0006 (1.95***)	-0.0038 (-0.38)
POLI	-0.0847 (-0.95)	-0.0489 (-0.45)
OVERLAP	-0.0781 (1.92***)	0.0868 (1.05)
LOGTA	0.2291 (4.80***)	0.1612 (1.50**)

Note: * p = , ** p = , and *** p =

Appendix 4D (continued)

Variable	Audit fee Without interaction (Step one)	Audit fee With interaction (Step one)
BIG4	0.2782 (3.79***)	0.0442 (0.49)
Loss	0.2280 (2.91***)	0.1051 (1.18)
CRATIO	-0.0377 (-0.90)	0.0139 (0.23)
Quick	0.0211 (1.67***)	0.0031 (0.25)
DR	0.2028 (1.41**)	0.0154 (0.08)
INVREC_TA	0.0794 (1.84***)	0.0953 (1.20)
BUSSEG	0.1159 (1.92***)	0.0135 (0.14)
ROA	-0.3101 (-1.62**)	0.1193 (0.53)
BUSY	-0.0072 (-0.09)	-0.0392 (-0.37)
RLAG	-0.0606 (-1.24*)	0.0404 (0.54)
INSTITSHR	0.0019 (1.70 **)	0.0014 (0.73)
FSHR	-0.0014 (-1.04)	0.0010 (0.36)

Note: * p = , ** p = , and *** p =

Appendix 4D
(continued)

Variable	Audit fee Without interaction (Step one)	Audit fee With interaction (Step one)
BSIZE	0.0012 (1.39**)	0.0002 (0.20)
EXC_	0.8352 (1.06)	-0.1986 (-0.40)
NONEXC_	0.9548 (1.16)	-0.1134 (-0.24)
INDP_	1.3142 (1.57**)	-0.1484 (-0.54)
Industry year effect	Yes	Yes
AR1	0.125	0.002
AR2	0.521	0.412
Hansen j	0.118	0.575
No of observations	244	244

