

“Regulatory changes and reporting quality: the moderating role of firm characteristics”

AUTHORS	Salau Abdulmalik Ayoib Che-Ahmad
ARTICLE INFO	Salau Abdulmalik and Ayoib Che-Ahmad (2019). Regulatory changes and reporting quality: the moderating role of firm characteristics. <i>Problems and Perspectives in Management</i> , 17(2), 32-50. doi: 10.21511/ppm.17(2).2019.03
DOI	http://dx.doi.org/10.21511/ppm.17(2).2019.03
RELEASED ON	Friday, 19 April 2019
RECEIVED ON	Thursday, 15 November 2018
ACCEPTED ON	Friday, 08 February 2019
LICENSE	 This work is licensed under a Creative Commons Attribution 4.0 International License
JOURNAL	"Problems and Perspectives in Management"
ISSN PRINT	1727-7051
ISSN ONLINE	1810-5467
PUBLISHER	LLC "Consulting Publishing Company "Business Perspectives"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



NUMBER OF REFERENCES

72



NUMBER OF FIGURES

0



NUMBER OF TABLES

6

© The author(s) 2026. This publication is an open access article.



BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"
Hryhorii Skovoroda lane, 10, Sumy,
40022, Ukraine

www.businessperspectives.org

Received on: 15th of November, 2018

Accepted on: 8th of February, 2019

© Salau Abdulmalik, Ayoib Che-Ahmad, 2019

Salau Abdulmalik, Ph.D, Senior
Lecturer, Tunku Puteri Intan Safinaz
School of Accountancy, Universiti
Utara Malaysia, Kedah, Malaysia.

Ayoib Che-Ahmad, Ph.D, Professor,
Tunku Puteri Intan Safinaz School
of Accountancy, Universiti Utara
Malaysia, Kedah, Malaysia.



This is an Open Access article,
distributed under the terms of the
[Creative Commons Attribution 4.0
International license](https://creativecommons.org/licenses/by/4.0/), which permits
unrestricted re-use, distribution,
and reproduction in any medium,
provided the original work is properly
cited.

Salau Abdulmalik (Malaysia), Ayoib Che-Ahmad (Malaysia)

REGULATORY CHANGES AND REPORTING QUALITY: THE MODERATING ROLE OF FIRM CHARACTERISTICS

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 utilized the data of 90 companies listed on the Nigerian stock exchange over the period 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. 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, this study provides additional insights into the regulatory change literature by investigating how firm characteristics (abnormal audit fees, political connection and overlapping directorship) moderate the effect of regulatory changes particularly in Nigeria, one of the less developed and underresearched 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, abnormal audit fees, political connection and Nigeria

JEL Classification M42

INTRODUCTION

A close relationship exists between corporate entity collapse and poor financial reporting practices resulting from governance failure. This argument is substantiated 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 lot to the credibility crisis rocking the accounting profession (Beattie, Fearnley, & Hines, 2013; DeFond & Francis, 2005). Although good corporate governance and disclosure practices do not obligatorily ensure the continuous existence of companies, they do decrease the occurrence of business collapse arising from deceptive financial reporting resulting from the failure of corporate governance. Because of this, past and current legal reforms of corporate governance and financial reporting help to promote sound corporate governance principles. Two important 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 show significant regulatory changes in the history of accounting and audit practises around the world.

In Nigeria, 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 embarked on in an effort to improve the country's financial reporting climate¹. Despite the widely held belief that regulatory changes influence the quality of financial reports and drive cost, empirical studies examining the relationship between regulatory changes and 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 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 States subsequent to the issue of the SOX, and R. Hoitash, U. 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 over 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. Substantial evidence is available pointing out the limited role of accounting standards and that firm characteristics are important (Burghstahler, Hail, & Leuz, 2006; Daske & Gebhardt, 2006). Ball, Robbins, and Wu (2003), 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). In the same vain, previous studies have pointed out that stringent regulatory rules are corrective actions supposedly embarked upon to strengthen reporting environment, which consequently will make audit work become more complex and too risky, thus causing a change to audit fees.

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 of 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. Past events have shown that the consequences of a weak-reporting culture now transcend national borders. The lack of adequate accounting disclosures and corporate governance practices is the main issue that contributed to the financial crisis that disrupted the capital markets of emerging countries in 1997 and 1998 (Greenspan, 1999).

Although, 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 focused on institutional differences on the cross-country level (Daske & Gebhardt, 2006). Likewise, several studies starting from

¹ 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.

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; 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) and Yaacob and Che-Ahmad (2012) considered the overall effects of regulatory changes on 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.

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 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.² (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 method). Thus, the present study takes into consideration the various gaps in past studies highlighted in the discussion above.

The remainder of this paper is structured as follows: the next section reviews the literature and develops the hypotheses. The second section presents the research methods used, which includes the descriptive statistics, research design, model development and method of analysis. The third section presents the results and discussion. The final section concludes the paper.

1. HYPOTHESES DEVELOPMENT

1.1. Regulatory changes and FRQ

Events³ in the last few years, which raised concerns about the effectiveness of financial reporting process, resulted in new regulatory initiatives designed to address 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

² Antle et al. (2006) used 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.

³ 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.

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 (Cohen et al., 2013; Jamal & Tan, 2010). Cohen et al. (2013) examined the monitoring behavior of auditors under accounting standard types and the strength of external regulatory regimes. They used 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 re-

vealed 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.

1.2. The effect of regulatory changes and its interaction with abnormal audit fees on financial reporting quality

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 in-

formation gap created by the nexus. However, bonding mechanisms such as attaching 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 (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 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 ab-

normally 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 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.

1.3. The effect of regulatory changes and its interaction with political connections on financial reporting quality (RQ3)

Political patronage is widely acknowledged as a factor affecting firm performance. As a matter of fact, in corruption-ridden countries (Faccio, 2006), the degree of 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 (2011) 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 lev-

el, the level of managerial discretion exercised by preparers and auditor's acceptance of such control influence 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.

1.4. The effect of regulatory changes and its interaction with overlapping directorships on financial reporting quality

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 (C. Laux & V. 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 director's compensation package, which 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 the 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, 2013). Failure to create this separation will lead to suboptimal decisions being taken by both committees (C. Laux & V. 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 spillover 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 (2013) believed that the alignment of the objectives of the two committees would enable audit committee members to design monitoring strategies consistent with 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.

C. Laux and V. Laux (2009) provided compelling empirical evidence, which suggested that multiple committee memberships in their model reduced CEO incentives to manipulate earnings by providing 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. U. Hoitash and R. Hoitash (2009) and Zheng and Cullinan (2010) provided further empirical support that overlapping committee membership led to 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 com-

mittee 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 the 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 (2013) reported a negative effect of common committee membership on audit committee monitoring. Liao and Hsu (2013) 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 lack of independent directors is critical and the performance of audit committees is immeasurable (Adegbite, 2014), audit committee members who also belong to compensation committees are likely to compromise their independence and provide deficient 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.

2. RESEARCH METHODOLOGY

2.1. Population and sample size

The population of interest for this study consists of all companies listed on the main board of the Nigerian Stock Exchange. However, banks and other financial institutions were eliminated from this study because of the uniqueness in their reporting structure, as well as other severe regulations to which they are often exposed. Figures obtained from the Nigerian Stock Exchange website and the World Bank illustrate 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 (World Bank Group).

The choice of publicly listed companies as unit of analysis is explained by the fact that these com-

panies are statutorily required to deliver a copy of their annual reports to the 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. 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 website. 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; Mitra, Deis, & Hossain, 2009). Likewise, due to the requirements of the financial reporting proxy 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).

Table 1. 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

2.2. Model and variable measurement

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. The dynamic panel data estimation techniques were used to estimate the financial reporting quality model and the audit fees model:

$$FRQ_{it} = \alpha_{it} + \beta_1 FRQ_{t-1} + \beta_2 POST_{it} + \beta_3 POSTABNAF_{it} + \beta_4 POSTPOLI_{it} + \beta_5 POSTOVERLAP_{it} + \beta_6 ABNRAF_{it} + \beta_7 POLI_{it} + \beta_8 OVERLAP_{it} + \beta_9 BIG4_{it} + \beta_{10} CFFO2TA_{it} + \beta_{11} RLAG_{it} + \beta_{12} SALESG_{it} + \beta_{13} LEVERAGE_{it} + \beta_{14} LAGROA_{it} + \beta_{15} BUSISEG_{it} + \beta_{16} ACCRUALTA_{it} + \beta_{17} LOGTA_{it} + \beta_{18} TEMPLOY_{it} + \beta_{19} BSIZE_{it} + \beta_{20} NONEXC_{-it} + \beta_{21} INDP_{-it} + \beta_{22} FDIR_{it} + \beta_{23} FSHR_{it} + \beta_{24} INSTITSHR_{it} + \beta_{25} YEAREFFECT_{it} + \beta_{26} INDUSTRYEFFECT_{it} + \mu_{RQ} \dots \dots \dots Model 3,$$

where subscript *it* represents panel data notation, *i* – cross-sectional units, *t* – period from 2008 to 2013.

Table 2. Variable description table

Variable	Description
A	An intercept term, a constant
B	A regression slope coefficient
Dependent variable	
FRQ	FRQ represents 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
Hypotheses variables	
POST	Post is a dichotomous variable with a value of 1 for the regulatory changes period 2011–2013 and 0 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 is used to capture the effect of politically connected firms for post-regulatory changes (H3)
POSTOVERLAP	POSTOVERLAP is an interacting variable. POST*OVERLAP is 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 otherwise
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 otherwise
BIG4	BIG4 is a measure of firm's auditor coded 1 if the client is audited by a BIG4 firm and 0 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
BSIZE	BSIZE is the total number of directors serving on the board of directors of a company
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 _{RQ}	Error term

3. PRESENTATION OF FINDINGS

3.1. 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 3, 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 3. 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

3.2. Descriptive statistics

Table 4 presents the descriptive statistics for all the variables used in the financial reporting quality model and audit fees model. Panel A of Table 4 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 4 presents the mean, minimum, maximum and standard deviation of the independent variables of the two models.

3.2.1. 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 is -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.

3.2.2. Explanatory variables

Panel B of Table 4 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%.

3.2.3. 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. For the ratio of inventory to total assets, the mean variable was 0.18 times and the standard deviation was 0.15 times. While, the minimum and maximum number of employees of the selected companies' ranges between the values of 100 to 1,454. The mean ratio of return on assets (*LAGROA*) 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 stand-

ard 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, 5.74% were non-executive directors (*NONEXC_*) and 0.35% were independent directors (*IND_*).

On average, Big 4 audit firms audited 66.99% of the observations, while the rest 33.01% were non-Big 4 audit firms. The result illustrates that the Big 4 audit firms dominated the Nigerian audit market. About 60.64% of the firm observations were politically bound, and the rest 39.36% were not politically bound. 39.25% of the companies in the study's observations had directors who were members of both the audit committee and the remuneration committee.

3.3. Model estimation

3.3.1. Presentation model estimation result

The assumption in this current study is that the disturbance terms of the variables should be constant across the panel. The Wald test for groupwise heteroscedasticity that tests for the presence of heteroscedasticity for residuals of random effect regression was performed on 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 the homoscedasticity (or constant variance), and the results indicate the presence of heteroscedasticity. For the audit fees model, the same modified Wald test for groupwise heteroscedasticity

Table 4. Descriptive statistics of the regression variables for the financial reporting quality model

Panel A. Univariate analysis of the dependent variable from 2008 to 2013					
Dependent variable/ independent variables	Pre	Post	Full sample	t-statistic	
FRQ					
Mean	2.91	16.82	10.26	−2.45	
Standard deviation	19.09	76.95	57.79	−	
ABNRAF					
Mean	−0.05	0.04	3.63	−3.35	
Standard deviation	0.30	0.27	0.29	−	
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	100	1,454	−
ACCRUALTA	−10,66,844	11,900,000	−105,000,000	22,400,000	−
LAGROA	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	−
BSIZE	8.38	2.27	4	20	−
FDIR (n)	1.71	1.89	0	8	−
INDP_ (n)	0.35	1.23	0	10	−
NONEXC_ (n)	5.74	2.13	0	13	−
Dichotomous	−	−	−	−	−
BIG4	−	−	−	−	66.99
POST	−	−	−	−	52.81
POLI	−	−	−	−	60.64
OVERLAP	−	−	−	−	39.25

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

in the residual of a fixed effect regression model was conducted on both 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.

In addition, the study uses the Lagran multiplier test for serial correlation in STATA using the xt-serial 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.

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 produces 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 test for the two models are presented in Table 5. 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. The Durbin-Wu-Hausman test for endogeneity of regressors

H₀: Regressors are exogenous	
Financial reporting quality model	
DHW test statistic	***17.17589
P-value	0.00003

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

Consequent to the Durbin-Wu-Hausman test for endogeneity of regressor, 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 6: the AR2 second order correlation, and Hansen/Sargan *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 6 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.

Table 6. Financial reporting quality regression model

Variables	Without interaction	Interaction
<i>FRQ</i>	0.14 (5.05***)	0.35 (7.41***)
<i>POST</i>	-0.53 (-1.23*)	-2.34 (-3.31***)
<i>POSTABNAF</i>	-	2.64 (2.06***)
<i>POSTPOLI</i>	-	2.79 (4.18***)

Table 6 (cont.). Financial reporting quality regression model

Variables	Without interaction	Interaction
<i>POSTOVERLAP</i>	– (–)	1.87 (2.78***)
<i>ABNRAF</i>	–15.31 (–4.71***)	–8.07 (–0.87)
<i>POLI</i>	1.45 (2.33***)	–0.41 (–0.80)
<i>OVERLAP</i>	0.32 (1.39**)	1.60 (5.32***)
<i>BIG4</i>	–1.92 (–7.74***)	–2.80 (–7.51***)
<i>CFFO2TA</i>	0.01 (1.68***)	0.01 (3.46***)
<i>RLAG</i>	0.00 (–3.68***)	0.00 (1.77***)
<i>SALESG</i>	16.16 (6.59***)	11.01 (3.83***)
<i>LEVERAGE</i>	0.30 (3.60***)	0.13 (2.73***)
<i>LAGROA</i>	0.47 (1.78***)	1.21 (4.96***)
<i>BUSSEG</i>	–0.10 (–1.10)	0.09 (–0.82)
<i>ACCRUAL_TA</i>	0.02 (7.62***)	–0.02 (–0.87)
<i>LAGROA</i>	0.47 (1.78***)	1.21 (4.96***)
<i>BUSSEG</i>	–0.10 (–1.10)	0.09 (–0.82)
<i>ACCRUAL_TA</i>	0.02 (7.62***)	–0.02 (–0.87)
<i>LOGTA</i>	0.83 (2.27***)	1.52 (6.36***)
<i>TEMPLOY</i>	–0.01 (–1.56**)	0.00 (–0.37)
<i>Bsize</i>	–0.17 (–1.06)	–0.09 (–1.14)
<i>NONEXC_</i>	0.29 (1.92***)	1.45 (1.67***)
<i>IND_</i>	0.25 (2.37***)	–1.25 (–1.37**)
<i>FDIR</i>	–0.17 (–1.30***)	0.31 (2.70***)
<i>FSHR</i>	0.00 (–0.14)	0.00 (–0.08)
<i>INSTITSHR</i>	–0.01 (–0.95)	–0.02 (–2.73***)
<i>Intercept</i>	–3.45 (–1.06)	–8.81 (–4.70)
<i>Year and industry effect</i>	Yes	Yes
<i>AR1</i>	0.01	0.01
<i>AR2</i>	0.70	0.73
<i>Hansen J</i>	0.05	1.00
<i>Number</i>	211	211

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

3.3.2. Discussion of findings

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 supports the process accountability theory that was discussed in subsection 1.1. 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. 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). 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 dis-

cussion explains the reasons behind the improvement in financial reporting quality brought that regulatory reforms brought about 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 section 3, 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.

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.

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 (C. Laux & V. 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.

CONCLUSION

The results of this study contribute to the budding literature on the audit market, specifically financial reporting quality, and audit fees. As discussed in the problem statement, there is a widely held belief that regulatory changes influence the quality of financial reports, empirical studies examining the relationship between regulatory changes, reporting quality and audit fees have reported mixed result. 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. This 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).

REFERENCES

1. Adegbite, E. (2014). Good corporate governance in Nigeria: Antecedents, propositions and peculiarities. *International business review*, 24(2), 319-330. <https://doi.org/10.1016/j.ibusrev.2014.08.004>
2. Adelopo, I. (2011). Voluntary disclosure practices amongst listed companies in Nigeria. *Advances in Accounting*, 27(2), 338-345. <https://doi.org/10.1016/j.adiac.2011.08.009>
3. Agoglia, C. P., Douppnik, T. S., & Tsakumis, G. T. (2011). Principles-based versus rules-based accounting standards: The influence of standard precision and audit committee strength on financial reporting decisions. *Accounting review*, 86(3), 747-767. <https://doi.org/10.2308/accr.00000045>
4. Ahmed, A. S., Neel, M., & Wang, D. (2013). Does mandatory adoption of IFRS improve accounting quality? Preliminary evidence. *Contemporary accounting research*, 30(4), 1344-1372. <https://doi.org/10.1111/j.1911-3846.2012.01193.x>
5. Antle, R., Gordon, E., Narayanamoorthy, G., & Zhou, L. (2006). The joint determination of audit fees, non-audit fees, and abnormal accruals. *Review of quantitative finance & accounting*, 27(3), 235-266. <https://doi.org/10.1007/s11156-006-9430-y>
6. Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of accounting and economics*, 50(2), 179-234. <https://doi.org/10.1016/j.jacceco.2010.10.001>

7. Ashbaugh, H., LaFond, R., & Mayhew, B. W. (2003). Do non-audit services compromise auditor independence? Further evidence. *Accounting review*, 78(3), 611-639. Retrieved from https://www.jstor.org/stable/3203219?seq=1#page_scan_tab_contents
8. Asthana, S. C., & Boone, J. P. (2012). Abnormal audit fee and audit quality. *Auditing: A journal of practice & theory*, 31(3), 1-22. <https://doi.org/10.2308/ajpt-10294>
9. Atwood, T., Drake, M. S., Myers, J. N., & Myers, L. A. (2011). Do earnings reported under IFRS tell us more about future earnings and cash flows? *Journal of accounting and public policy*, 30(2), 103-121. <https://doi.org/10.1016/j.jaccpub-pol.2010.10.001>
10. Aubert, F., & Grudnitski, G. (2012). Analysts' estimates: what they could be telling us about the impact of IFRS on earnings manipulation in Europe. *Review of accounting & finance*, 11(1), 53-72. <https://doi.org/10.1108/14757701211201821>
11. Ball, R. (2006). International financial reporting standards (IFRS): pros and cons for investors. *Accounting and business research*, 36(sup1), 5-27. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=929561
12. Ball, R., Robin, A., & Wu, J. S. (2003). Incentives versus standards: properties of accounting income in four East Asian countries. *Journal of accounting & economics*, 36(1-3), 235-270. <https://doi.org/10.1016/j.jacceco.2003.10.003>
13. Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International accounting standards and accounting quality. *Journal of accounting research*, 46(3), 467-498. Retrieved from https://www.jstor.org/stable/40058143?seq=1#page_scan_tab_contents
14. Beattie, V., Fearnley, S., & Hines, T. (2013). Perceptions of factors affecting audit quality in the post-SOX UK regulatory environment. *Accounting & business research*, 43(1), 56-81. <https://doi.org/10.1080/00014788.2012.703079>
15. Becker, C. L., DeFond, M. L., Jiambalvo, J., & Subramanyam, K. R. (1998). The effect of audit quality on earnings management. *Contemporary accounting research*, 15(1), 1-24. <https://doi.org/10.1111/j.1911-3846.1998.tb00547.x>
16. Benston, G. J., Bromwich, M., & Wagenhofer, A. (2006). Principles versus rules based accounting standards: the FASB's standard setting strategy. *Abacus*, 42(2), 165-188. <https://doi.org/10.1111/j.1467-6281.2006.00196.x>
17. Blankley, A. I., Hurtt, D. N., & MacGregor, J. E. (2012). Abnormal audit fees and restatements. *Auditing: A Journal of practice & theory*, 31(1), 79-96. <https://doi.org/10.2308/ajpt-10210>
18. Burghstahler, D. C., Hail, L., & Leuz, C. (2006). The importance of reporting incentives: Earnings management in European private and public firms. *Accounting review*, 81(5), 983-1016. Retrieved from https://www.jstor.org/stable/4093095?seq=1#page_scan_tab_contents
19. Burnett, B. M., Cripe, B. M., Martin, G. W., & McAllister, B. P. (2012). Audit quality and the trade-off between accretive stock repurchases and accrual-based earnings management. *The accounting review*, 87(6), 1861-1884. <https://doi.org/10.2308/accr-50230>
20. Chambers, D., & Payne, J. (2011). Audit quality and accrual persistence: evidence from the pre- and post-Sarbanes-Oxley periods. *Managerial auditing journal*, 26(5), 437-456. <https://doi.org/10.1108/02686901111129580>
21. Chandar, N., Chang, H., & Zheng, X. (2008). *Does overlapping membership on audit and compensation committees improve a Firm's financial reporting quality?* (Working paper). Drexel University.
22. Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of accounting & economics*, 51(1/2), 58-76. <https://doi.org/10.1016/j.jacceco.2010.07.003>
23. Chang, J. C., Luo, M., & Sun, H.-L. (2011). The impact of independent and overlapping board structures on CEO compensation, pay-performance sensitivity and accruals management. *Quarterly journal of finance & accounting*, 50(2), 54-84. Retrieved from https://www.jstor.org/stable/23646167?seq=1#page_scan_tab_contents
24. Choi, J.-H., Kim, C., Kim, J.-B., & Zang, Y. (2010). Audit office size, audit quality, and audit pricing. *Auditing: A journal of practice & Theory*, 29(1), 73-97. <https://doi.org/10.2308/aud.2010.29.1.73>
25. Chung, H., & Kallapur, S. (2003). Client importance, non-audit services, and abnormal accruals. *The accounting review*, 78(4), 931-955. Retrieved from https://www.jstor.org/stable/3203285?seq=1#page_scan_tab_contents
26. Cohen, J. R., Krishnamoorthy, G., Peytcheva, M., & Wright, A. M. (2013). How does the strength of the financial regulatory regime influence auditors' judgments to constrain aggressive reporting in a principles-based versus rules-based accounting environment? *Accounting horizons*, 27(3), 579-601. <https://doi.org/10.2308/acch-50502>
27. Cosgrove, S. B., & Niederjohn, M. S. (2008). The effects of the Sarbanes-Oxley act of 2002 on audit fees. *Journal of business strategies*, 25(1), 31-52.
28. Daske, H., & Gebhardt, G. (2006). International financial reporting standards and experts' perceptions of disclosure quality. *Abacus*, 42(3/4), 461-498. <https://doi.org/10.1111/j.1467-6281.2006.00211.x>
29. De George, E. T., Ferguson, C. B., & Spear, N. A. (2013). How much does IFRS cost? IFRS adoption and audit fees. *Accounting review*, 88(2), 429-462. <https://doi.org/10.2308/accr-50317>
30. DeFond, M. L., & Francis, J. R. (2005). Audit research after Sarbanes-Oxley. *Auditing: A journal of practice & theory*, 24, 5-30. <https://doi.org/10.2308/aud.2005.24.s-1.5>

31. DeFond, M. L., & Lennox, C. S. (2011). The effect of SOX on small auditor exits and audit quality. *Journal of accounting & economics*, 52(1), 21-40. <https://doi.org/10.1016/j.jacceco.2011.03.002>
32. DeFond, M. L., & Subramanyam, K. (1998). Auditor changes and discretionary accruals. *Journal of accounting and economics*, 25(1), 35-67. [https://doi.org/10.1016/S0165-4101\(98\)00018-4](https://doi.org/10.1016/S0165-4101(98)00018-4)
33. Dimitropoulos, P. E., Asteriou, D., Kousenidis, D., & Leventis, S. (2013). The impact of IFRS on accounting quality: Evidence from Greece. *Advances in Accounting*, 29(1), 108-123. <https://doi.org/10.1016/j.adiaac.2013.03.004>
34. Drakos, A. A., & Bekiris, F. V. (2010). Corporate performance, managerial ownership and endogeneity: A simultaneous equations analysis for the Athens stock exchange. *Research in international business and finance*, 24(1), 24-38. <http://dx.doi.org/10.1016/j.ribaf.2009.01.002>
35. Eshleman, J. D., & Guo, P. (2014). Do Big 4 auditors provide higher audit quality after controlling for the endogenous choice of auditor? *Auditing: A journal of practice & theory*, 33(4), 197-219. <https://doi.org/10.2308/ajpt-50792>
36. Faccio, M. (2006). Politically connected firms. *American economic review*, 96(1), 369-386. Retrieved from https://www.jstor.org/stable/30034371?seq=1#page_scan_tab_contents
37. Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of finance*, 58(3), 1087-1112. <https://doi.org/10.1111/1540-6261.00559>
38. Fisman, R. (2001). Estimating the value of political connections. *American economic review*, 91(4), 1095-1102. Retrieved from https://www.jstor.org/stable/2677829?seq=1#page_scan_tab_contents
39. Francis, J. R. (2006). Are auditors compromised by Non-audit services? *Assessing the evidence* *Contemporary accounting research*, 23(3), 747-760. <https://doi.org/10.1506/4VD9-AE3K-XV7L-XT07>
40. Frankel, R. M., Johnson, M. F., & Nelson, K. K. (2002). The relation between auditors' fees for non-audit services and earnings management. *Accounting review*, 77(4), 71-105. Retrieved from https://www.jstor.org/stable/3203326?seq=1#page_scan_tab_contents
41. Greenspan, A. (1999). *Do efficient financial markets mitigate financial crises?* Paper presented at the A Remark before the 1999 Financial Markets Conference of the Federal Reserve Bank of Atlanta, Sea Island, Georgia.
42. Guedhami, O., Pittman, J. A., & Saffar, W. (2014). Auditor choice in politically connected firms. *Journal of accounting research*, 52(1), 107-162. <https://doi.org/10.1111/1475-679x.12032>
43. Habib, A., & Bhuiyan, M. B. U. (2016). Problem directors on the audit committee and financial reporting quality. *Accounting and Business Research*, 46(2), 121-144. <https://doi.org/10.1080/00014788.2015.1039477>
44. Hoitash, R., Hoitash, U., & Bedard, J. C. (2008). Internal control quality and audit pricing under the Sarbanes-Oxley Act. *Auditing: A journal of practice of theory*, 27(1), 105-126. <https://doi.org/10.2308/aud.2008.27.1.105>
45. Hoitash, R., Markelevich, A., & Barragato, C. A. (2007). Auditor fees and audit quality. *Managerial auditing journal*, 22(8), 761-786. <https://doi.org/10.1108/02686900710819634>
46. Hoitash, U., & Hoitash, R. (2009). Conflicting objectives within the board: Evidence from overlapping audit and compensation committee members. *Group decision & negotiation*, 18(1), 57-73. <https://doi.org/10.1007/s10726-008-9125-y>
47. Jamal, K., & Tan, H. T. (2010). Joint effects of principles-based versus rules-based standards and auditor type in constraining financial managers' aggressive reporting. *The Accounting Review*, 85(4), 1325-1346. <https://doi.org/10.2308/accr.2010.85.4.1325>
48. Jeanjean, T., & Stolowy, H. (2008). Do accounting standards matter? An exploratory analysis of earnings management before and after IFRS adoption. *Journal of accounting & public policy*, 27(6), 480-494. <https://doi.org/10.1016/j.jaccpubpol.2008.09.008>
49. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
50. Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of financial economics*, 67(2), 351-382. [http://dx.doi.org/10.1016/S0304-405X\(02\)00255-6](http://dx.doi.org/10.1016/S0304-405X(02)00255-6)
51. Kim, J.-B., Liu, X., & Zheng, L. (2012). The impact of mandatory IFRS adoption on audit fees: Theory and Evidence. *Accounting review*, 87(6), 2061-2094. <https://doi.org/10.2308/accr-50223>
52. Krishnan, J., Sami, H., & Zhang, Y. (2005). Does the provision of non-audit services affect investor perceptions of auditor independence? *Auditing: A journal of practice & theory*, 24(2), 111-135. <https://doi.org/10.2308/aud.2005.24.2.111>
53. Laux, C., & Laux, V. (2009). Board committees, CEO compensation, and earnings management. *The accounting review*, 84(3), 869-891. Retrieved from https://www.jstor.org/stable/27784197?seq=1#page_scan_tab_contents
54. Leung, S., & Clinch, G. (2014). The effect of IFRS adoption on accounting quality and market liquidity: The impact of family control. *Financial Markets & Corporate Governance Conference*. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2384268
55. Leuz, C. (2010). Different approaches to corporate reporting regulation: How jurisdictions differ and why. *Accounting and*

- business research*, 40(3), 229-256. <https://doi.org/10.1080/00014788.2010.9663398>
56. Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of financial economics*, 81(2), 411-439. <https://doi.org/10.1016/j.jfineco.2005.06.006>
57. Liao, C. H., & Hsu, A. W. H. (2013). Common membership and effective corporate governance: Evidence from audit and compensation committees. *Corporate governance: An international review*, 21(1), 79-92. <https://doi.org/10.1111/corg.12000>
58. Méndez, C. F., Pathan, S., & Garcia, R. A. (2015). Monitoring capabilities of busy and overlap directors: Evidence from Australia. *Pacific-Basin Finance Journal*, 35, 444-469. <https://doi.org/10.1016/j.pacfin.2015.05.006>
59. Mitra, S., Deis, D. R., & Hossain, M. (2009). The association between audit fees and reported earnings quality in pre-and post-Sarbanes-Oxley regimes. *Review of Accounting and Finance*, 8(3), 232-252. <https://doi.org/10.1108/14757700910980840>
60. Nelson, M. W., Elliott, J. A., & Tarpley, R. L. (2002). Evidence from auditors about managers' and auditors' earnings management decisions. *Accounting review*, 77(4), 175-202. Retrieved from https://www.jstor.org/stable/3203332?seq=1#page_scan_tab_contents
61. Otunsanya, A., & Lauwo, S. (2010). The role of Auditors in the Nigeria Banking Crisis. *Accountancy Business and the Public Interest*, 9, 159-204. Retrieved from <http://repository.essex.ac.uk/7121/>
62. Raghunandan, K., & Rama, D. V. (2006). SOX Section 404 material weakness disclosures and audit fees. *Auditing: A journal of practice & theory*, 25(1), 99-114. <https://doi.org/10.2308/aud.2006.25.1.99>
63. Schipper, K. (2003). Principles-based accounting standards. *Accounting horizons*, 17(1), 61-72. <https://doi.org/10.2308/acch.2003.17.1.61>
64. Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of accounting research*, 18(1), 161-190. <https://doi.org/10.2307/2490397>
65. The Nigerian Stock Exchange (2014). *Listed companies*. Retrieved from <http://www.nse.com.ng/Issuers-section/listed-securities/listed-companies>
66. Van der Zahn, M., Jean-Luc Wolfgang, & Tower, G. (2005). Composition of key board of director sub-committees: Did the Higgs report get it right?
67. Wan-Hussin, W. N., & Bamahros, H. M. (2012). Audit committee-compensation committee overlap and earnings management: Some Malaysian evidence.
68. World Bank Group (n.d.). *Listed domestic companies, total*. Retrieved from <http://data.worldbank.org/indicator/CM.MKT.LDOM.NO>
69. Yaacob, N. M., & Che-Ahmad, A. (2012). Audit fees after IFRS adoption: evidence from Malaysia. *Eurasian business review*, 2(1), 31-46. Retrieved from https://www.researchgate.net/publication/254407231_Audit_Fees_after_IFRS_Adoption_Evidence_from_Malaysia
70. Yi Lin, C., Chee Seng, C., & Graeme, G. (2012). The impact of mandatory IFRS adoption on accounting quality: Evidence from Australia. *Journal of international accounting research*, 11(1), 119-146. <https://doi.org/10.2308/jiar-10212>
71. Zhang, I. X. (2007). Economic consequences of the Sarbanes – Oxley Act of 2002.256.
72. Zheng, X., & Cullinan, C. P. (2010). Compensation/audit committee overlap and the design of compensation systems. *International journal of disclosure & governance*, 7(2), 136-152. <https://doi.org/10.1057/jdg.2009.23>