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Audit Committee Effectiveness and Audit Fee among Listed Deposit Money Banks in Nigeria

Abdulrasaq Mustapha[1], Abdulrauf O. Isiaka[1*] and Kudirat A. Babatunde[2]

[1]Department of Accounting and Finance, Kwara State University, Kwara State, Nigeria.
[2]School of Basic and Remedial Studies, Kwara State College of Education, Ilorin, Nigeria.

Authors' contributions

This work was carried out in collaboration among the authors. Author AOI wrote the first draft of the manuscript, methodology and performed the statistical analysis. Author KAB did the analyses of the statistical result and wrote the protocol of the manuscript while author AM did the literature searches, writing and update of the references. All authors read and approved the final manuscript.

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ABSTRACT

The persistent cases of corporate accounting scandals which have rocked the Nigerian banking sector in spite of auditor certification of financial statements as free from material error have raised concern not only on the effectiveness of audit committees but also on audit services despite the huge amount charged on their clients. Hence, this study examined the effect of audit committee effectiveness on audit fee of listed deposit money banks in Nigeria. Using an ex-post facto research design, the data sourced through the annual reports of twelve (12) banks for the period between 2012 and 2018 were analysed using random-effect regression analysis. The result of the study revealed that audit committee effectiveness proxy with audit committee audit committee expertise (t-value =3.22 & p-value = 0.000), audit committee diligence (t-value = 3.57, & p-value = 0.000) and audit committee gender diversity (t-value = 3.85 & p-value =0.000) has significant positive effect on audit fee of listed deposit money banks in Nigeria. This implies that an effective audit committee would demand for high audit quality service from the auditor, thereby increasing the audit efforts and time which subsequently result to higher audit fee. The study concluded that an effective audit committee would demand high audit service from the external auditor thereby ensuring that the financial statement published is relevant and of faithful representation.

**Corresponding author: E-mail: abdulraufolayinka@rocketmail.com;*

Keywords: Audit committee effectiveness; audit fee; diligence; expertise; code of corporate governance; gender diversity.

1. INTRODUCTION

One of the mechanisms through which firms communicate their activities to shareholders and other stakeholders is through the publication of annual financial statement. The contents of financial statements are used by various decision-makers for different investment purposes [1]. However, the credibility and reliability of the information in the financial statements of firms globally have been questioned due to various accounting scandals that have rocked the business world in the last three decades despite the fact that auditors assure users of the financial statements prepared by managements as free from material error(s) and manipulation(s). The cases of Enron, WorldCom, Parmalat, Tyco, among others exemplify this phenomenon in countries across Europe. Nigeria is not left out of the challenge of recording corporate accounting scandals as the instances of Cadbury Nigeria Plc.; Lever Brothers Plc.; AfriBank Plc.; Savannah Bank Plc.; SocieteGenerale Bank Plc.; Intercontinental Bank Plc; MainStreet Bank Plc.; and the recent case of Skye Bank Nigeria Plc. in 2018 attest [2]. These cases have not only led to loss of public confidence in the relevance and credibility of reported earnings in financial statements but also raised concern on the effectiveness of corporate governance mechanisms.

Corporate governance mechanisms are two-folds; internal and external. The internal corporate governance includes the company's internal audit department, the Board of Directors and Audit committee (demand side) while the external corporate governance is the external auditor (the supply side) [3,4]. These mechanisms (both internal and external) are meant to protect the interest of the shareholders and other stakeholders who have invested their resources in the organisation. However, with various accounting scandals and closures of firms around the world, much emphasis is being laid on the effectiveness of audit committees and audit quality. The audit committee is saddled with the responsibility of overseeing the audit process through the selection, retention, compensation, and termination of the external audit firm engaged to moderate the activities of a firm's management as well as discuss the audit scope and financial reporting matters with the auditor [5,6]. However, the persistent cases of accounting irregularities in the banking sector in Nigeria especially the recent case which necessitated the takeover of Skye Bank Plc. by Polaris Bank in 2018 has heightened concerns about the effectiveness of audit committees. In this case, the scandal was bad insider loans to former directors and non-executive directors (Daily Trust, 5th October, 2018).

Globally, to curb the menace of accounting scandals as well as enhance corporate governance, various regulatory frameworks were reviewed and improved. For instance, Sarbanes-Oxley Act of 2002 was enacted in the United States in response to the WorldCom and Enron cases; so also is the Combined Code in the United Kingdom; and, the Malaysian Code of Corporate Governance (2007) among others. Nigeria has also responded by reviewing the Code of Corporate Governance of 2003 in 2016. For the banking sector, there are separate codes of corporate governance enacted in 2014 to strengthen the corporate governance of banks and discount houses. These regulatory frameworks were reviewed to enhance board activities, audit committee and audit quality services provided by auditors.

Audit quality is seen as the probability that an auditor will discover and truthfully report material errors, misrepresentation and omissions detected in a client's accounting system. This means that an auditor should be able to detect errors or manipulation of accounting figures and must report this to the shareholders as well as other stakeholders through their audit report [7]. Similarly, [8] on one hand viewed audit quality as when the auditor carries out his/her work with a high degree of independence and objectivity, and on the other hand defined auditor's independence as the auditor's objectivity and ability to withstand pressure from clients . This pressure may include monetary and non-monetary issues that could make an auditor comply with management's desire rather than follow his/her professional judgment.

The quality of audit service provided has been largely measured using different factors such as audit firm size/type, audit fee, audit firm tenure, industry specialisation of audit firm among others [2,9].

Audit fees refer to the amount of fees received by auditors for their professional services based on

such factors as the complexity of the services, the level of expertise, and many other factors [10,11] also defined audit fee as the amount charged depending on, among others, the risk of the assignment, the complexity of the services provided, the level of expertise required to carry out the services or proficiency level, the cost structure of the firm concerned and other professional considerations. The audit fee consists of the amount paid for the audit of the financial statement and the amount paid for other non-audit services provided by the audit firm to the client's firm. Non-audit services are the services that the auditor can provide apart from normal auditing procedures, by offering different services to the clients from which he can earn extra revenue. This study focuses only on the audit fee. The audit fee charged by the external auditor goes a long way in influencing the objectivity and independence of the auditor. However, in order to maintain a high level of auditor independence in Nigeria, the professional body overseeing the external auditor service in Nigeria, the Institute of Chartered Accountants of Nigeria (ICAN), revised the scale of professional audit fee of 2007 in 2011. This was aimed at ensuring auditors' independence as it is expected that a reasonably remunerated practitioner should deliver first class service for the needs of private/public sector clients, regulatory authorities and the general public [12]. Hence, this study examines the implication of audit committee effectiveness on audit fee of listed deposit money banks in Nigeria.

2. THEORETICAL FRAMEWORK AND HYPOTHESES DEVELOPMENT

Previous studies on this topic had largely used agency theory [4,11,13-15] among others while a few [16] used the assumption of resource-based theory. This present study hinges on the assumptions of the agency theory. The origin of agency theory can be traced to Ross in 1973 and Mitnick in 1973. Ross looked at the agency theory from the perspective of economic theory which focuses on compensation while Mitnick viewed it from the perspective of institutional factors [17]. Generally, agency theory addresses the problem that usually arises between two parties; the principal and the agent where one party pools their resources together (the principal/shareholders) and employs someone (the agent) to oversee and manage the resources on their behalf. However, both the principal and the agent are risk averse, thereby going for their own self-interest. The divergence in interests of these two parties usually leads to an information asymmetry problem where the management (agent) has more information at hand than the principal, hence taking the opportunistic behaviour in maximising their aim [18]. To reduce this problem, there is need for a monitoring mechanism which would be a watchdog on the management. This is the audit committee. Agency theory posits that a corporate governance with an effective audit committee would improve the credibility and reliability of the financial reporting process and smoothen communication between managers, external auditors and internal auditors [19,20]. An effective audit committee will improve the corporate governance practice but will require higher audit fees due to the need to engage external auditors for additional assurance and to safeguard their reputational capital [21]. Therefore, a firm would pay higher fee for external auditors to ensure the reliability of the financial reporting and audit quality.

2.1 Hypotheses Development

One of the measures through which the previous empirical studies such as [22-25,11] have used as a proxy for audit committee effectiveness is the presence of member(s) with financial expertise who have knowledge and are able to read and comprehend the contents of the financial statement prepared by the management. Various regulatory frameworks such as SOX Act, the Combined Code in the UK, the Malaysian CCG, amongst others require that in the composition of audit committee teams, there should be at least one member with financial knowledge. In the same vein, the Nigerian Code of Corporate Governance (2016) and the Code of Corporate Governance for Banks and discount houses in Nigeria (2014) also requires that the board of the audit committee shall have at least one member who is financially literate and shall have relevant qualifications and experience (that is, shall be a qualified accountant or other finance professional with experience in financial and accounting matters) in explaining the contents of the financial statement. An audit committee that has a member with financial knowledge and experience would go a long way in strengthening audit committee effectiveness.

Prior studies on the effectiveness of the audit committee expertise based on audit fee have been conducted in the developed economies like the United States of America (such as [23,26], the United Kingdom [11,25]; Australia (such as

[22,24]; and France [4] among others. The few studies conducted in the developing countries were largely done in Malaysia [16,27-29]. Most of these studies had reported a positive and significant relationship between audit committee expertise and audit fee. An audit committee team with financial expertise has the tendency of reviewing the contents in the financial statement; evaluating those areas requiring the work of the committee on technical and decision making as some areas in the financial statement are subjective in nature; and, lowering the risk of internal control failure through reviewing of effective internal control and internal audit effectiveness which can motivate the external auditor to set a lower audit risk thereby reducing lower audit fee charged by the auditor [29,30]. In contrast, [23,16,4,28,26,11,25] revealed that audit committees with financial expertise would require high audit quality from the external auditor by demanding more thorough audit efforts as well as request the auditor to devote sufficient time and efforts to the audit exercise, thereby increasing the audit fee charged by the auditor on its client. More so, an audit committee with financial expertise may demand for a more thorough and higher quality audit to protect itself from any accounting scandal and meet regularly with the auditor to discuss audit matters and discuss the way forward to reduce audit failure, thereby leading to higher audit costs [31,32]. Therefore, based on the results of the previous empirical studies, it is hypothesised that:

H1: Audit committee financial expertise has significant positive effect of audit fee.

Another way the previous studies measured audit committee effectiveness is through the diligence of an audit committee. The audit committee diligence had been largely measured by previous empirical studies such as [12,27,4,28,26] through the number of times the audit committee meets during a year. For effective corporate governance, the Code of Corporate Governance for public companies in Nigeria (2016) requires an audit committee to meet and discuss with the management and external auditor for the annual audited and half-yearly unaudited financial statement and meet separately with the management, the external auditors and the internal audit department to discuss the strength and weakness of internal control of a firm. But it failed to state the number of times the committee should meet in a year. For the purpose of clarity, Section 5.2.6 of the Code of Corporate governance for banks and other discount houses (2014) requires that for an audit committee to perform effectively, the audit committee of the Board shall meet at least once every quarter, making it four [4] times in a year.

Prior research on the effect of audit committee diligence on audit fee had reported mixed results. For instance, the studies of [4,12,20,26-28,33-38] revealed that audit committees that meet regularly would be more likely to discuss accounting and auditing matters that need immediate decisions as well as organise meetings with the internal audit department and auditors in order to demand for high audit quality which would improve the quality of financial statements thereby leading to higher audit fees. [39] also revealed that audit committees that meet regularly can be proactive rather than being reactive and would positively influence the audit coverage during the various stages of the audit exercise, thereby resulting to high audit fees. Hence, this study hypothesised that:

H2: Audit committee diligence has significant effect on audit fee.

Another audit committee factor that had been perceived to also affect audit fee is gender diversity of the audit committee team. Audit committee gender diversity refers to an audit committee that is comprised of both male and female members. It has been argued that an audit committee that is composed of both genders usually performs their oversight function better than an audit committee that only consists of male members [40,41]. This could be a result of the fact that women tend to be strict whenever they hold high positions, they are less likely to be compromised, they ask questions where men may be afraid to ask the auditors and demand for better and higher audit quality service, thereby leading to high audit fee. More so, women exercise better monitoring of management and the possibility of corporate failure is usually decreased when female members are present on the board [42] and [43]. Women are risk-averse, conservative when making decisions and stringent in delivering their monitoring service through effective monitoring of management [40,44] in [45] stated that women tend to have better communication skills compared to their male counterparts especially where it requires communication within and among divergent groups and are more punctual at board meeting compared to their male counterparts, thereby making them more active in performing their oversight functions effectively.

Based on the previous empirical studies reviewed, it could be deduced that there are few studies [46-48,24,13] and [15] on the effect of audit committee gender diversity on audit fee and reported divergence results. For instance, the studies of [46,47] and [13] found that the presence of female members on the audit committee team improved the effectiveness of internal control activities, reducing the inherent risk of misstatement as well as reducing the auditor's assessment of audit risk and audit effort, thereby reducing audit fees. In contrast, the studies of [48,24] and [15] revealed that the presence of women on the audit committee strengthened the quality of financial reporting by demanding more audit efforts and high audit quality from the auditor, thereby resulting in a higher audit fee. From the foregoing, this study hypothesised that:

H3: Audit committee gender diversity has significant influence on audit fee.

3. EMPIRICAL REVIEW

[33] assessed the effect of audit committee and CEO ethnicity on audit fees using some Malaysian companies as evidence. The data obtained from the annual reports of five hundred and fifty-nine (559) companies listed on the Main Board of the Bursa Malaysia for the year 2005 were analysed using ordinary least square (OLS) regression analysis. The study found that audit committee independence has significant positive relationship with audit fee but found audit committee financial expertise having significant negative effect on audit fee. The study also revealed an insignificant relationship between audit committee meeting and audit fees.

[34] investigated the effect of audit committee attributes on audit fees taking into consideration the impact of Malaysian code of corporate governance of 2007. Data was obtained from the annual reports of one hundred and twenty (120) firms used as sample for the financial year 2008. The result of the multiple regression analysis shows that audit committee size has significant and negative association with audit fees. The study also found that audit committee financial related training had impact on lower audit fees, that is, a significant negative relationship exists between financial training of the audit committee members and audit fees. The study further shows that audit committee financial expertise has significant and positive association with audit fees. The result of the study revealed that audit committee meeting and audit committee independence do not have significant influence in determining audit fees.

[49] investigated the factors influencing audit fees with evidence from an emerging economy. Data was extracted from the annual reports of thirty [29] financial and thirty non-financial firms listed on Abu Dhabi stock exchange for the financial year 2011 and were analysed using panel regression analysis. The study found that audit committee independence reduces the amount of audit fee charged but found that profitability, risk and Big4 do not influence audit fee.

[50] conducted an empirical investigation of audit fee determinants in Nigeria using panel regression to analyse the data collected from the annual reports of one hundred and fifty three (153) firms quoted on the Nigerian stock exchange for the financial years 2007 to 2012. The result of the study revealed that audit committee independence has a significant and positive influence on audit fee.

[24] examined the influence of female audit committee members on audit fees in Australia. Data was sourced from the financial statement of six hundred and twenty-four (624) companies listed on the Australian Securities Exchange for the year 2011. The result of the multiple regression analysis revealed that the presence of females in the audit committee influences the quality of external audit leading to higher audit fee.

[35] assessed the impact of audit committee on audit fees in Malaysian public listed companies. The data extracted from the financial statement of four hundred and fifty-seven (457) non-financial public listed companies for the period 2003 to 2012 was analysed using pooled ordinary least square (OLS) to test the hypotheses of the study. The results revealed that audit committee independence, audit committee expenses, number of audit committee meetings and audit committee size are not significant factors influencing audit fees in Malaysia.

[14] examined the effect of board monitoring on audit fees using the CEO/chair dual roles as moderating roles in the United States. The data obtained from the annual reports and Thomson One Banker for seven hundred and forty-nine (749) active national commercial banks in the United States for the years 2009 to 2015 was

analysed using multiple regression analysis. The result of the study indicated that audit fees are positively associated with audit committee financial expertise.

[36] investigated the effect of corporate governance factors on audit features with evidence from the United Kingdom Small and Medium Enterprises. The data for the study was extracted from the FAME database and Thomson One Banker database from three hundred and seven (307) non-financial SMEs firms in the United Kingdom for the period 2000 to 2009. The data obtained was analysed using panel regression analysis and two-stages least squares (2SLS) techniques. The study found that audit committee independence and audit committee diligence (meeting) positively affect audit fees paid by non-financial SMEs in the United Kingdom.

[1] examined the effect of firms' attributes on audit fees in Nigerian quoted firms. Panel regression analysis was employed in analysing the data collected from the annual reports of eighty-nine (89) firms chosen as sample for the period 2013 to 2017. The study found that audit committee independence has some influence in determining audit fee but found profitability to have insignificant effect on audit fee in Nigeria.

[51] investigated the factors determining audit fee in Malaysia. Using meta-analysis through a conceptual review of various studies, the study found that frequency of audit committee meetings has a significant positive relationship with audit fee. Abdu Rahim and Md. Yusof (2018) assessed the effect of internal governance structure on external audit fees in Malaysia. The data collected from the annual reports of one hundred and fifteen (115) companies listed on the main market of the Bursa Malaysia for the period 2015 was analysed using multiple regression analysis. The result of the study revealed a negative and significant relationship between audit committee financial expertise and external audit fee. This indicates that the existence of more expertise in the audit committee team tends to provide a complementary effect towards audit effort in the process of negotiating audit fee, thus lower audit fee to be paid. The study also revealed that audit committee independence and audit committee meetings have no significant influence on external audit fee.

[20] examined the effect of audit committee on audit fees in high regulated firms in Malaysia. Multiple regression analysis technique was employed in analysing the data obtained from the DataStream and annual reports of two hundred and nine (209) firms which comprised of twenty [19] high regulated firms and one hundred and eighty-nine (189) less regulated firms for the financial years 2013 to 2017. The result of the study revealed a significant positive effect between audit committee diligence and audit committee expertise and high audit fee. The study also found an insignificant relationship between audit committee independence and audit fee.

4. GAPS IDENTIFIED IN THE LITERATURE

Various empirical studies such as [23,4,26,14,11,25] have been conducted on the effect of audit committee effectiveness on audit fee. Most of these studies were observed to be conducted in the developed countries like the USA [23,26,14]; the United Kingdom [11,25]. There is little literature on the relationship between audit committee and audit fee in developing countries such as those conducted in Malaysia [16,27,28]. Based on the extant literature reviewed and to the best of the researchers' knowledge, there are no known studies that have been conducted on the effect of audit committee effectiveness on audit fee in the Nigerian context. The only known study that is close to this topic is the study of [39] where they examined the effect of audit committee attributes on audit quality. However, their study measures audit quality using audit firm size. Methodologically, the study picked fifty [50] companies out of one hundred and ninety-four (194) companies which only represents twenty-five percent (25%) of the total population and the technique used in picking the sample of fifty [50] was not stated. In addition, the time frame covered in the study of [39] is three years while the revised CCG in Nigeria was in 2016. The time frame is considered too small.

5. MATERIALS, METHODS AND METHODOLOGY

Ex-post facto research design was adopted due to the nature of data used in this study. The population of the study consists of all twenty-one deposit money banks in Nigeria. However, due to accessibility to data, the banks that were listed on the main floor of the Nigerian Stock Exchange (NSE) and with complete annual reports for the periods of the study were selected as the final

sample of the study. The sample for this study comprised of fourteen [13] deposit money banks listed on the floor of the Nigerian Stock Exchange as at December 31, 2019. However, due to the period covered by the study, 2010 to 2019, the final sample of the study was twelve [10] listed deposit money banks. One of the banks was yet to be listed during the year 2010 (Jaiz Bank Plc.) while Access Bank took over the international license of Diamond Bank Plc. in the year 2018/2019. This resulted in one hundred and twenty (120) firm year observations. The main source of data for this study was secondary data which was sourced from the annual reports of the sample banks. The annual reports of the sample banks were obtained from the official website of the Nigerian Stock Exchange since every company is expected to submit their audited financial statement with the body after each year end. The data collected was analysed using descriptive statistics and inferential statistics. The descriptive statistics employed were the mean, standard deviation and minimum and maximum values. In order to test the hypotheses of the study, multivariate regression was used through the use of panel data collected for the study.

The dependent variable for this study is audit fee which was measured using the natural logarithm of the audit fee paid by the sample banks to their auditors during the period covered by the study. The previous empirical studies [47,48] and [24,13,11] and [25] had measured audit fee in the same way. The independent variable was audit committee effectiveness which was a proxy for audit committee expertise, audit committee diligence and audit committee gender diversity. Audit committee expertise was measured as the percentage of audit committee members with accounting qualifications to total number of members on the audit committee composition [11,36,38] and [30]. The second proxy of audit committee effectiveness, audit committee diligence, was measured by the number of meetings held by the audit committee team during the year [4,38,20]. Audit committee gender diversity was measured by computing the percentage of women in the audit committee team of the sample banks for the period under study [46,47] and [24,13,15].

The control variables of this study were the bank size, bank complexity and audit firm size. The size of the bank can influence the amount an auditor would charge for providing audit service to its client because a bank with a large volume of transactions, receivables and customers scattered around the globe, can cause the work of the auditor to be rigorous, take more time to trace all the transactions, thereby resulting to more audit effort and time. This can subsequently lead to higher audit fee [33,4,28,47,1] and [52]. The bank size was measured through the natural logarithm of the sample banks. More so, banks with many branches can also mean increase in the audit fee to be paid. A bank with many branches can make it difficult for the auditors to review the financial report especially if the branches were audited by a different audit firm during the year as it could make it difficult to verify the different accounting bases used by various branches. This would lead to spending more audit effort and time and may even call for more auditors during the audit service, thereby resulting to increase in audit fee charged by the audit firm [16,33,28,11]. Bank complexity was measured using the number of branches a bank has for a particular year. The size of audit firm can also affect the audit fee. Large audit firms usually have more resources at their disposal, attract more employees to cover large audit services, have competent staff to tackle difficult audit work and always try as much as possible to protect their reputations from failed audit service. Since they have their reputation at stake, in both local and international markets, this could prompt the audit firm to charge higher audit fee as they are less likely to be compromised by their client, thereby providing better audit service compared to small audit firms, that is, non-Big4 audit firms [33,27,1,36,48]. Audit firm size is measured by a dummy variable of one [1] and zero (0). The value of one [1] is assigned if the bank is audited by one of the Big4 audit firms and zero (0) if otherwise. The Big4 audit firms are Deloitte; PricewaterhouseCooper (PwC); Ernst and Young; and KPMG.

The model of this study was formulated based on the variables (dependent, independent and control variables) discussed earlier. The model of this study is written as:

$$AUDFEE_{it} = \beta_1 ACFE_{it} + \beta_2 ACDIL_{it} + \beta_3 ACGD_{it} + \beta_4 BS_{it} + \beta_5 BC_{it} + \beta_6 AFS_{it} + \varepsilon_{it}$$

Where: AUDFEE = audit fee; ACFE = audit committee financial expertise; ACDIL= audit committee diligence; ACGD = audit committee gender diversity; BS = bank size; BC = bank's complexity; AFS = audit firm size; ε = error term (5 per cent level of significance; subscript it = cross-sectional and time series.

6. RESULTS AND DISCUSSION

6.1 Descriptive Statistics

Table 1 depicts the descriptive results of both the dependent and the independent variables used in the study in order to show the characteristics of the data obtained from the annual reports of twelve sample banks for the period of 2012 to 2018 leading to eighty-four (84) firm-year observations.

The results in Table 1 revealed that the dependent variable, audit fee, has a mean value of 8.1623 with standard deviation of 0.4085. This implies that the sample banks paid, on average, the sum of eight million, one hundred and sixty-two thousand naira (N8.1623 million naira) as audit fees to their auditors during the period under review while the standard deviation shows a wide dispersion from the mean value. The result also revealed that the minimum audit fee paid by the sample banks is above seven million naira (N7.3010 million naira) and the maximum amount paid for audit service is N8.8663 million naira.

For the explanatory variables, the result in Table 1 shows audit committee expertise (measured with proportion of audit committee members with ICAN/ANAN or other accounting certificates to the total number of audit committee members) has a mean value of 0.3248 with standard deviation of 0.2499 with minimum and maximum values of 0 and 0.67 respectively. The mean value of 0.3248 implies that the number of audit committee members with pure accounting qualifications in the audit committee of the sample money deposit banks is 32.48 per cent of the total number of the audit committee members. The standard deviation result of 0.2499 signifies that the data deviates from the mean value of the sample deposit money banks by 25.49 per cent. The minimum value of 0 indicates that some sample banks did not have accounting experts in their committee while the bank with the highest number of members with accounting expertise during the period under review had 67 per cent committee members with pure accounting qualification.

The results in Table 1 also revealed that audit committee diligence (measured with number of meetings attended divided by total number of meeting to be attended in a year) has a mean value of 0.8079 with standard deviation of 0.1995. The mean value implies that on average, the member of the audit committee of the sample banks attended more than 80 per cent audit committee meetings during the period under study. This could be as a result of the regulation in the Nigeria code of corporate governance (2016) that each member of the audit committee must attend at least two-thirds of the committee's meetings in a year. The minimum value of 0.22 indicates that the period with least attendance is 22 per cent while the highest attendance during the period of the study is 1 which implies that 100 per cent of the audit committee member attended the whole meetings held during the year.

The results in Table 1 revealed that audit committee gender diversity (measured with proportion of women on audit committee to total number of audit committee members) has a mean value of 0.1719 with standard deviation of 0.1950 and minimum and maximum values of 0 and 0.78 respectively. The mean value of 0.1875 implies that the audit committee structure of the sample banks has around 19 per cent women on their various audit committees. The minimum value of 0 implies that some banks did not have women on their audit committees during the period of the study. The maximum value of 0.78 indicates that some banks have 78 per cent women on their board compared to their male counterpart during the period under review.

For the control variables, audit firm size, bank size and banks' complexity, the result in Table 1 show that audit firm size has an average value of 0.9167 with standard deviation of 0.2780 while the minimum and maximum values which are dichotomous are 0 and 1 respectively. The average value implies that 92 per cent of the sample banks employed the services of the Big4 audit firms during the period under study. More so, the results in Table 1 show that the bank's complexity (measured with the square root of the total number of branches a bank has during the period covered) has a mean value of 17.49885 with standard deviation of 4.188873. The mean value of 17.4988 implies that on the average, the sample listed money deposit banks have around three hundred and six (306) branches across Nigerian states during the period under study. The results in Table 1 also revealed that the minimum and maximum values are 11.22497 and 28.4605 respectively. This result implies that the bank with the lowest number of branches had one hundred and twenty-six (126) branches while the bank with the highest number of branches had eight hundred and ten (810) during the period under review.

Table 1. Descriptive statistics result

Variables	Mean	Standard deviation	Minimum values	Maximum values	Observations
Audit fee (in millions naira)	8.1623	0.4085	7.3010	8.8663	84
ACEXP	0.3248	0.2499	0	1	84
ACDIL	0.8079	0.1995	0.22	1	84
ACGD	0.1719	0.1950	0	0.78	84
AFS	0.9167	0.2780	0	1	84
BS	8.1117	1.5092	5.21	10.38	84
BC	17.4989	4.1889	11.2250	28.4605	84

Source: Author's Computation (2020)

6.1.1 Descriptive statistics result

The results in table 5.1.1 showed the summary of the data set collected on both dependent and independent variables.

6.1.2 Test for multicollinearity test

The result in Table 2 was used to test the level of relationship among the independent variables used in the study, that is, whether two variables are measuring the same thing. The result in Table 2 shows that there is an absence of the multicollinearity problem as the variance inflation factor (VIF) for all the independent variables is less than the benchmark of 10 [53]. The higher the tolerance (close to 1), the more the absence of collinearity seems obvious. Based on the result in Table 2, it could be deduced that all the variables used in the study have tolerance values higher than 0.5.

6.1.3 Hausman test

The result in Table 3 was employed in determining the regression result that would be appropriate in testing the hypotheses of the study between the random-effect and fixed-effect regression results. The result of the Hausman test in Table 3 has a p-value of 0.0840. This result implies that random-effect regression result would be more appropriate in testing the hypotheses of the study when compared with fixed-effect model as it has a p-value greater than 5 per cent level of significance.

6.1.4 Random-effect regression result

The result in Table 4, random-effect regression result, was used in testing the hypotheses of the study.

The regression result in Table 4 revealed that both independent (ACEXP, ACDIL and ACGEN) and control variables (AFS, BS and BCOMP) used in this study explained 40.30per cent variations in the dependent variables as shown by adjusted R2 value of 0.4030. The result also indicates that the model is fitted and was in the predicted direction as shown Wald-test result is significant at 1per cent level of significance. The results revealed that audit committee expertise has a significant positive effect on audit fees of listed deposit money banks in Nigeria as shown by t-value of 3.22 with p= 0.000 at 5per cent level of significance. The result indicates that audit committees that have member (s) with accounting and auditing knowledge would lead to higher audit fee. The result corroborates with the demand side of the audit service as it posits that audit committee expertise would assists the members in reviewing the financial statements, provide high assurance services, discuss relevant audit matters with the external auditor as well as demanding high audit service from the external audit firm, thereby leading to better audit quality, hence higher audit fees. This result is in line with the findings of [23,16,4,28,26,11] and [25] as they found that audit committee with accounting expertise would be able to require the auditor to conduct thorough audit work, to protect itself from any accounting scandals as well as requesting the auditor to devote sufficient time and efforts to the audit exercise, thereby increasing the audit fee charged by auditor on its client.

The results in Table 4 also revealed that audit committee diligence has significant and positive influence on audit fees as evidenced by the t-value of 3.57 with p= 0.000 at 5per cent significance level. This indicates that more diligent the audit committee, the higher the audit fee. This implies that diligent audit committees that meets regularly and record high attendance of its members at their meetings would be able to discuss the relevant audit matters with both internal auditor and external auditor, demand

high audit quality service, causing the external auditor to devote more audit time and efforts in ensuring that the financial statement presented to shareholders and other stakeholder is of high quality and consequently result in a high audit fee. The result corroborates with the outcomes of [4,20,26,28,35-38] as they concluded in their studies that audit committee expertise would lead to providing better assurance service as well as demanding for high audit quality service from the external auditor, leading to higher audit fee.

In addition, the study found that audit committee gender diversity has significant and positive effect on the audit fee of listed deposit money banks in Nigeria as shown by t-value of 3.85 with p= 0.000 which is significant at 1per cent level of significance. This indicates that the presence of women on the audit committee team would lead to an increase in audit efforts thereby resulting to increase in the audit fee. This could deduced from the fact that when women hold high or senior management position, they tend to be more strict and perform better, ask questions from both management and the external auditors than their male counterparts, thereby demanding more audit efforts, wider audit scope thereby leading to more audit time, hence higher audit fee. The result conforms to the arguments of [45] as he stated that women do have better communicative skills and capabilities within and among different groups. The result also corroborates with the findings of [48,24,52] and [15] as they revealed in their studies that the presence of a mixed audit committee team (that is, mixture of both men and women) usually demands higher audit services from the external auditor thereby increasing the amount of audit fee. The result contradicts the findings of [46,47,24] and [13] where they revealed that the presence of women on audit committee structure would improve internal control and monitoring of management, reduce audit risk, thereby leading to reduction in audit fee.

Table 2. Multicollinearity test – Variance Inflation Factor (VIF)

Variables	VIF	1/VIF
ACEXP	1.32	0.7549
ACDIL	1.09	0.9177
ACGD	1.31	0.7655
AFS	1.28	0.7806
BS	1.79	0.5588
BC	1.71	0.5852
Mean VIF	1.42	

Source: Authors' Computation, 2020

Table 3. Hausman test

Variable	Chi^2	p-value
Model	3.10	0.0840

Source: Author's Computation, 2020

Table 4. Random-effect regression result

Variables	Coefficient	Standard error	t-value	p-value
ACEXP	0.5770	0.1794	3.22***	0.000
ACDIL	0.7274	0.2037	3.57***	0.000
ACGD	0.8791	0.2283	3.85***	0.000
AFS	0.4825	0.1585	3.04**	0.003
BS	0.0715	0.0345	2.07**	0.042
BC	-0.0062	0.0122	-0.51	0.612
Constant	6.8886	0.5127	13.44***	0.000
Adjusted R^2	0.4030			
Wald (Chi^2)	43.98			
p-value	0.0000			

Notes: significant at 5per cent (**); and significant at 1per cent (***)
Source: Authors' Computation, 2020

Based on the control variables employed in the study, the result in Table 4 showed that two of the three control variables, audit firm size (measured with dichotomous variable of one and zero) and the bank's size have significant positive influence on audit fee of listed deposit money banks in Nigeria as shown by p-values of 0.003 and 0.042 respectively at 5per cent level of significance. This implies that banks that employed the service of one of the Big4 audit firms (PwC, Deloitte, KPMG and EY), pay a high audit fee. This could be as a result of the availability of resources at their disposals, attracting more capable and intelligent staff, have the experience of dealing with problems arising from audit service, protect their images from failed audit work, and hence demand a high audit fee. The result of the bank's size indicates that the larger bank, in terms of its assets and complexity of its transaction in terms of more documents to review from different branches, the more audit coverage, effort and time, and therefore a higher audit fee. The result in Table 4 revealed that bank's complexity has an insignificant influence on audit fee of listed deposit money banks in Nigeria.

7. CONCLUSION AND RECOMMENDATIONS

Following the review of code of code corporate governance on the function of both audit committees and auditors in Nigeria, it was expected that the frequency of corporate scandals would be minimised in the country. However, this seems to be the other way round. Hence, this study examined the effect of audit committee effectiveness on audit fee of listed deposit money banks in Nigeria. There have been few empirical studies on the effect of audit committee on audit fee. However, based on the empirical studies reviewed, no prior study examined the links between audit committee effectiveness and audit fee in the Nigerian context. This study extends this literature by examining some proxies of audit committee effectiveness such as audit committee expertise, audit committee diligence, and audit committee gender diversity.

The outcomes corroborate the opinion that audit committee effectiveness such as audit committee expertise, audit committee diligence, and audit committee gender diversity correspond with audit effort, rather than alternatives for audit work. The results showed that the three proxies of audit committee effectiveness (audit committee effectiveness such as audit committee expertise, audit committee diligence and audit committee gender diversity) have significant and positive relationship with audit fee.

As an empirical study, this paper is subjected to a number of limitations. The result is only applicable to deposit money banks and does not cover non-financial sectors and other financial institutions in the Nigerian economy. More so, this study only considered three proxies of audit committee effectiveness. There may be other audit committee factors that may have correlations with audit fees that were not tested in this study. However, these limitations do not prevent the use of the result of this study for policy formulation by practitioners and the policy makers.

CONSENT

As per international standard, participants' written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

The authors declared that there is no ethical issue in this manuscript.

COMPETING INTERESTS

The authors have declared that no competing interests exist. The products used for this research are commonly and predominantly used products in our area of research and country. There is absolutely no conflict of interest among the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

REFERENCES

1. Ohidoa T, Okun OO, Omokhudu firms attributes and audit fees in Nigeria Quoted Firms. International Journal of Academic Research in Business and Social Sciences. 2018;8(3):685–699.
2. Egbunike AP, Ezelibe CP, Aroh NN. The influence of corporate governance on earnings management practices: A study of some selected listed companies in Nigeria. American Journal of Economics,

Finance and Management. 2015;1(5):482-493.
3. Hay DC, Knechel RW, Wong N. Audit fees: A meta-analysis of the effect of supply and demand attributes. Contemporary Accounting Research. 2006;23:141-191.
4. Loukil L. Audit committees and audit fees: an empirical study in large french listed companies. Journal of Accounting Business & Management. 2014;21(2):36-53.
5. Sarbanes-Oxley Act. 107th Congress of the United States of America. Washington DC; 2002.
6. Securities and exchange commission of Nigeria code of corporate governance for public companies in Nigeria; 2016.
7. DeAngelo LE. Auditor independence, low balling and disclosure regulation. Journal of Accounting & Economics. 1981;3(2): 113-127.
8. Hope O, Langli JC. Auditor independence in a private firm setting. Working Paper No 1/2007. Norwegian School of Management; 2007.
9. Cahan SF, Sun J. The effect of audit experience on audit fees and audit quality. Journal of Accounting, Auditing & Finance. 2014;11(7):1-23.
10. Agoes S. Auditing salemba empat: Jakarta; 2012.
11. Ghafran CM, O'Sullivan N. The impact of audit committee expertise on audit quality: Evidence from UK audit fees. British Accounting Review. 2017;49(6):578-593.
12. The institute of chartered accountants of nigeria scale of professional fees. Revised Edition; 2011.
13. Imani M, Abdi A, Olum MKA. Investigating the impact of gender diversity in the audit committee on the audit fees of companies listed in Tehran Stock Exchange. Accounting and Auditing Review. 2017; 24(3):303-322.
14. Jizi M, Nehme R. Board monitoring and audit fees: The moderating role of CEO/chair dual roles. Managerial Auditing Journal. 2018;33(2):217–243.
15. Miglani S, Ahmed K. Gender diversity on audit committees and its impact on audit fees: Evidence from India. Accounting Research Journal. 2019;32(4):568-586.
16. Yasin F, Nelson SP. Audit committee and internal audit: Implications on audit quality. International Journal of Economics, Management and Accounting. 2012; 20(2):187-218.
17. Bendickson J, Muldon J, Liguori E, Davis PE. Agency theory: The times, they are a-changin. Management Decision. 2016;54(1):174-193.
18. Jensen M, Meckling W. Theory of the firm: Managerial behaviour, agency costs and ownership structure. Journal of Financial Economics. 1976;3(4):305-360.
19. De Zoort FT. An investigation of audit committees oversight responsibilities. ABACUS. 1997;33(2):208-227.
20. Norziaton IK. Audit committee and audit fees in high regulated firms: Moderating role of regulatory oversight; 2019.
21. Abbott LJ, Parker S, Peters G, Raghunandan K. The association between audit committee characteristics and audit fees. Auditing: A Journal of Practice & Theory. 2003;22(2):17–32.
22. Vafeas, N., &Waegelein, J. (2007). The association between audit committees, compensation incentives and corporate audit fees. *The Review of Quantitative Finance and Accounting, 28*(3): 241-255.
23. Hoitash R, Hoitash U. The role of audit committees in managing relationships with external auditors after SOX. Managerial Auditing Journal. 2008;24(4):368–397.
24. Aldamen H, Hollindale J, Ziegelmayer JL. Female audit committee members and their influence on audit fees. Accounting & Finance. 2018;58:57–89.
25. Bratten B, Causholli M, Sulcaj V. Overseeing the external audit function: Evidence from audit committees' reported activities; 2019.
Available:https://ssrn.com/abstract=3314334
26. Lee HY, Mande V. The relationship of audit committee characteristics with endogenously determined audit and non-audit fees. Quarterly Journal of Business and Economics. 2005;44(3/4):93-112.
27. Husnin A, Anuar N, Salin, ASAP. Corporate governance structure and its relationship with audit fee-evidence from malaysian public listed companies. Asian Social Science. 2013;9(15):305-317.
28. Norziaton IK, Devi SS, Meng CY. Audit committee and audit fees in Malaysia: The moderating role of political connection. Journal of Management Research. 2015;7(2):530-547.

29. Broye G. Honorairesd' audited comitésd' audit: Le cas de la France. Comptabilité Contrôle Audit. 2009;15(1):199-225.
30. Mustafa ST, Youssef NB. Audit committee financial expertise and misappropriation of assets. Managerial Auditing Journal. 2010;25(3):208-225.
31. Abbott LJ, Parker S, Peters G, Raghunandan K. An empirical investigation of audit fees, non-audit fees and audit committees. Contemporary Accounting Research. 2003b;20(2):215–234.
32. Karim K, Robin A, Suh SH. Board structure and audit committee monitoring: Effects of audit committee monitoring incentives and board entrenchment on audit fees. Journal of Accounting, Auditing & Finance. 2015;1–28.
DOI: 10.1177/0148558X15583412
33. Johl S, Subramanian N, Zain M. Audit committee and CEO ethnicity and audit fees: Some Malaysian evidence. The International Journal of Accounting. 2012; 47:302-332.
34. Nurul Azlin A, Omar S, Zakaria NB, Md Yusof M. Audit committee attributes on audit fees: The impact of Malaysian Code of Corporate Governance (MCCG) 2007. Journal of Modern Accounting and Auditing, 2013;9(11):1442-1453.
35. Kee HW. The impact of audit committee on audit fees in Malaysian public-listed companies. Malaysian Accounting Review. 2017;14(2):29-53.
36. Al-Najjar B. Corporate governance and audit features: SMEs evidence. Journal of Accounting, Auditing & Finance. 2018;13(3):17-53.
37. Mustafa AS, Che-Ahmad A, Chandren S. Board diversity, audit committee characteristics and audit quality: The moderating role of control-ownership wedge. Business and Economic Horizons. 2018;14(3):587-614.
38. Farooq MU, Kazim I, Usman M, Latif I. Corporate governance and audit fees: Evidence from a developing country. Pakistan Journal of Commerce and Social Sciences. 2018;12(1):94 – 110.
39. Asiriuwa O, Aronmwan EJ, Uwuigbe U, Uwuigbe OR. Audit committee attributes and audit quality: A benchmark analysis. Business: Theory and Practice. 2018; 19:37–48.
40. Thiruvadi S, Huang HW. Audit committee gender differences and earnings management. Gender in Management: An International Journal. 2011;26:483-498.
41. Gul FA, Hutchinson M, Lai KM. Gender-diverse boards and properties of analyst earnings forecasts. Accounting Horizons. 2013;27(3):511–538.
42. Burgess Z, Tharenou P. Women board directors: Characteristics of the few. Journal of Business Ethics. 2002;21:39-49.
43. Adams R, Ferreira D. Women in the boardroom and their impact on governance and performance. Journal of Financial Economics. 2009;94(2):291–309.
44. Ittonen K, Peni E. Auditor's gender and audit fees. Journal of Accounting Research. 2010;22:1-33.
45. Schubert R. Analyzing and managing risks – on the importance of gender difference in risk attitudes. Managerial Finance. 2006; 32;706–715.
46. Ittonen K, Miettinen J, Vähämaa S. Does female representation on audit committees affect audit fees? Quarterly Journal of Finance and Accounting. 2010;49:113-139.
47. Xiang R, Qin M, Peterson CA. Gender diversity of audit committees and audit fees: evidence from chinese listed companies. Asian Journal of Finance & Accounting. 2015;7(2):239-254.
48. Sultana N, Singh H, Rahman A. Experience of audit committee members and audit quality. European Accounting Review; 2019.
DOI: 10.1080/09638180.2019.1569543
49. Hassan Y, Naser K. Determinants of audit fees: Evidence from an emerging economy. International Business Research. 2013;6(8):13-25.
50. Urhoghide RO, Izedonmi OI. An empirical investigation of audit fee determinants in Nigeria. International Journal of Business and Social Research. 2015;5(8):48-58.
51. Samsuri ASB, Arifin TRBT. Determinants of Audit Fees: A ConceptualView of Audit Quality Characteristics.International Journal of Advanced Scientific Research and Management.2018;3(5):110-116.
52. Nekhili M, Gull AA, Chtioui T, Radhouane, I. Gender-diverse boards and audit fees: What difference does gender quota

legislation make? Journal of Business and Financial Accounting. 2019;2(1):1–48.
DOI: 10.1111/jbfa.12409

53. Wooldridge JM. Introductory econometrics: A modern approach. 5th Edition. Singapore: South-Western Cengage Learning; 2013.

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