

## Modelling Audit Fees if Nigerian Banks

**Omotola Adedoyin EZENWOKE**

Department of Accounting, School of Business, College of development studies,  
Covenant University, Nigeria.

[omotola.ezenwoke@covenantuniversity.edu.ng](mailto:omotola.ezenwoke@covenantuniversity.edu.ng)

**Uchenna Rapalchukwu EFOBI**

Department of Accounting, School of Business, College of development studies,  
Covenant University, Nigeria.

[efobi99@yahoo.co.uk](mailto:efobi99@yahoo.co.uk); [uche.efobi@covenantuniversity.edu.ng](mailto:uche.efobi@covenantuniversity.edu.ng)

**Francis IYOHA**

Department of Accounting, School of Business, College of development studies,  
Covenant University, Nigeria.

[francis.iyoha@covenantuniversity.edu.ng](mailto:francis.iyoha@covenantuniversity.edu.ng)

### ABSTRACT

Despite the economic importance of the banking industry and having a high market capitalization of 3.934 trillion in 2009, modicum research have focused on the relationship between Nigerian banks and their auditors. This models audit fees in relation to other variables like CEO duality, audit firm, firm age, firm location, firm risk, firm profitability, firm size, and the board composition. We achieve this objective by employing data from 17 banks listed on the Nigerian stock exchange, for the period of 2004-2009. The generalized least square regression technique was applied. We found, among others, that audit fees is an increasing function of firm age, firm location, firm risk, firm size, proportion of non executive directors to total directors and a decreasing function of firm profitability and proportion of executive directors to total directors.

**KEYWORDS:** Audit fees, Nigerian banks and audit effort

### 1. INTRODUCTION

The Nigerian financial system has experienced several reformations, which varies from the establishment of the Nigerian Stock Exchange in 1960 to the recapitalization process of 2005. The recapitalization process has compelled banks to meet the minimum capital base of ₦25billion capital base from ₦2billion. After this process, the number of banks was reduced to 21 banks out of the 299 companies listed on the Nigerian stock exchange in 2009, with a market capitalization of ₦3.934 trillion. Amidst this reformation, the Nigerian financial system is characterized by several issues such as poor corporate governance, bad stewardship disposition by corporate heads, poor financial reporting and noncompliance with statutory requirements in financial reporting.

In modeling audit fees, evidence has shown that attention has been paid to two broad group of data sets- macro-economic and data from financial and nonfinancial companies. From a macro-economic view, Taylor and Simon (1999) states that an increased litigation pressures, institutional traditions of increased disclosure, and increased regulation can put upward pressures on audit fees. From the other stance, Karim and Moizer (2002) studied both the financial and non financial companies in Bangladesh, the peculiarity of the Bangladeshi audit service being the non direct involvement of international audit firms. Their study revealed that the size of the auditor has the greatest influence on audit fees. Furthermore financial services companies were found to have higher audit fees relative to non-financial companies. The surprising result was that auditors which employed at least one qualified accountant had higher audit fees.

Evidence from developing countries as studied by Shammari *et al* (2008) shows that there were similarities in determining factors as other countries previously studied, the differences being no fee premium in Kuwait for the Big four auditing firms as audit fees is positively associated with client's size and clients operation complexities. Field *et al* (2004) asserts that audit fees are higher for banks due to the fact that they have more transaction accounts, high degrees of credit risk, regulatory risk and they are more involved in mergers and acquisition.

Alongside this, other studies have examined some determinants of audit fees: firm's risk (Choi *et al* 2007, Joshi and Al-bastaki 2000), Auditor's size (Chan *et al* 2006, Choi *et al* 2007), firm's corporate governance (Chan *et al* 2006 and Yatim *et al* 2006), firm's size (Cantoni *et al* n.d, Chan *et al* 2006, Field *et al* 2004 and Joshi and Al-bastaki 2000), Firm's profitability (Chan *et al* 2006; Joshi and Al-bastaki 2000 and Willenkens 2009), Firm's industry leadership (Chan *et al* 2006, Ferguson *et al* 2003 and Francis *et al* 2004) and Firm's age (Zulkarnain and Shamsheer 2008).

To this end, the study of audit fees in the Nigerian banks is of utmost importance as little or no evidence exist for Nigeria. The objectives of this study, therefore, is to examine the determinants of audit fees in the Nigerian banking sector.

The remainder of this paper is structured as follows: Section two deals with the literature review; section three explores the research method employed by the study; section four discusses the empirical results

## **2. LITERATURE REVIEW**

Banks form the chief cornerstone of any financial system, and indeed of the economy of a nation. However in the face of errors and intent to defraud, the audit function lies at the heart of banks. The experience of failed banks in Nigeria has called for reinforcement of audit in other to restore stakeholder's confidence back to the system. In today's volatile business environment, the Nigerian banking system is faced with wide array of complex business challenges which include challenges in form of regulatory compliance, litigation, competitive market, pressure, changing technology,

investors demand, corporate governance, business ethics and accountability. (Okafor and Ibadin, 2009)

In Nigeria the rave of corporate failures witnessed in the financial sector in the early 1990s brought auditors into sharp focus and caused the Nigerian public to question the role of accountants and auditors (Okike, 2004; Bakre, 2007; Ajibolade 2008). Furthermore, the investigations launched by the regulators and other stakeholders into the cases of distress and disclosure revealed that accountants and auditors were implicated (NDIC, 1995).

The recent banking crisis in Nigeria members of the auditing profession in Nigeria are once again in the limelight, as the banking crisis and the revelation of unethical practices by bank executives and board members has raised many questions about the ethical standards of the accounting profession and about the integrity of financial reports issued by professional accountants. In 2009 the Central Bank of Nigeria conducted an audit into the activities of the 24 registered banks. Their investigation revealed that Afribank, Finbank, Intercontinental bank, Oceanic bank and Union bank were experiencing huge financial difficulties in their operations, as such ₦420 billion was injected into them as they had failed the CBN audit. Two months later, an additional ₦200 billion was injected to stimulate the liquidity of four other banks (Bank PHB, Equitorial Trust Bank, Spring Bank and Wema Bank). This injection of money was done in order to stabilize the banks and to ensure that they remained going concerns after their former managers had been sacked for reckless lending and for lax corporate governance which had rendered the institutions undercapitalized.

The nature of the recent banking crisis in Nigeria, which has resulted in concerns being voiced about the apparent lack of independence or technical incompetence of the auditors involved, has cast doubt on the functional capacity of audit technologies. The table below shows the bank that failed the Central Bank of Nigeria audit in 2009, even though they had all received unqualified audit reports in the preceding accounting year.

**Figure 2.1 Banks that failed the central bank report in 2009**

| Bank             | Auditor   | Date of Audit report | Audit Opinion | Auditor fees (N'm) |
|------------------|-----------|----------------------|---------------|--------------------|
| Afribank         | AWD       | Mar 2008             | Unqualified   | 38                 |
| Finbank          | AWD & AI  | Dec 2008             | Unqualified   | 67                 |
| Union Bank       | AWD & BTN | Oct. 2009            | Unqualified   | 118                |
| Intercontinental | PwC       | May 2008             | Unqualified   | 150                |
| Oceanic Bank     | PwC       | May 2009             | Unqualified   | 115                |

Note: AWD- Akintola Williams Delloite, AI- Aminu Ibrahim & Co, BTN- Baker Tilly Nigeria, PwC- Price water house Coopers

Source: Compiled from companies Annual reports and Accounts

From the table above it is glaring that auditors receive a considerable income from their audit clients. In 2009 Price Water House (PwC) had global gross revenue of \$26.2 billion, the Middle East and Africa (Nigeria inclusive) contributing \$704 million. Akintola Williams Deloitte (AWD) another giant accounting firm, with global revenue of nearly \$26.1 billion in 2009 with Middle East and Africa (Nigeria inclusive) contributing \$10.2 billion. (Otusanya and Lauwo 2010)

The contending proposition that auditees might be willing to pay more to competent, independent auditors and might not be willing to pay as much as for the services of an auditor whose competence or independence is perceived to be compromised still remain a puzzle as the Big four auditors in Nigeria are reputed to be more competent and render better audit services.

Several studies had delved on the determinants of audit fees around the world, much of this works focused on developed countries. These studies include Jubb *et al.*, (1996), Houghton and Jubb, (1999) in Australia, Anderson and Zeghal (1994) in Canada, Taylor (1997), in Japan, Palmrose (1996) and Gist (1992) in United States of American while Che Ahmad and Houghton (1996) in United kingdom. Nevertheless limited studies have undertaken emerging economies especially Nigeria.

Modeling audit fees has been observed in several dimensions. Hope and Langli (2009) used audit fees as a measure for potential auditor independence, impairment and test whether auditors that receive high unexpected fees are less likely to issue a going concern opinion, arguing that a private company setting provides a unique context to give independence impairment test due to both lower auditor reputation and litigation risk compared to a public company setting. Willekens (2009) investigated the effect of unexpected audit fees on financial reporting quality in private companies stating that unexpected fees are not an appropriate measure to test treat of auditor independence in private company setting, arguing that the private client segment of the audit market is subject to fierce price competition due to lower supplier concentration and larger number of potential suppliers, hence auditors should not be able to charge rents to their private clients and therefore unexpected audit fees can only reflect a client's willingness to pay for extra auditor effort or quality also unexpected audit fees enhance financial reporting quality in a private firm setting therefore not an appropriate proxy for testing auditor independence impairment.

Srinidhi and Gul (2009) observed that the positive relationship between audit fees and audit effort can be explained by the high level of competition in the audit services market, which reduces the possibility to earn rents in audit fees. Teo and Keith (2000) argues that audit quality is related positively to audit fees as the reputation of an audit firm is correlated to the perceived audit quality emphatically noting that audit litigation impacts on reputation negatively because it may be seen as an indicator of a lack of audit quality.

The complexities encountered in auditing client's company are determinant of audit fees. Hogan and Wilkins (2008) assert that audit firms seem to increase their fees when internal control deficiencies exist, particularly in cases where the problems are the most severe. Their work has been found to be the case in Bell *et al* (2001) and Johnstone (2006) studies suggesting that auditors increase their effort in the presence of increased control risk, highlighting that audit fees are significantly higher for internal control deficient client firms whether or not they hire a Big 4 auditor or not though the incremental fee for clients of Big 4 auditors is significantly higher than the incremental fee for clients of non Big 4 auditors.

The Cadbury committee report (1992) prescribed that CEO duality should be discouraged. It is perceived that the conflict of interests of an individual occupying both positions might result in reduced corporate governance. Shareholders protect themselves from the expropriation of the insiders via sound corporate governance. However the role of the auditor is to increase trust on the accounts audited by him stating his undiluted opinion on the truth and fairness of the accounts. Simunic (1980) explains that the amount of audit fees is a function of the auditor's effort during engagement and the risk incurred by the auditors after the disclosure of his/her audit report, CEO duality can increase the risk incurred by auditors during the audit process. Consequently agency conflicts influences the audit pricing (Lafond and Roychowdhury, 2008).

An audit firm size is being associated with audit quality as larger firms have more to lose from a lack of independence perceived than smaller firms due to their more substantial client base, giving them the incentive to be relatively more independent. Evidence on the relationship between the status of audit firm and audit fee charge had been divergent. Simunic (1980) and Firth (1985) found no difference between fees charged by big and small audit firms. On the contrary recent researches (Liu 2007, Teo and Keith 2000) observed that larger firms in fact do charge higher audit fees than smaller firms establishing that Big four auditors have better resources, reputation capable of providing better audit service, have higher litigation risk and may receive more severe punishment than non Big four auditors. In this study audit firms were classified as Big four or non Big four.

Zulkarnain and Shamsheer (2008), Hope and Langli (2008) Argued that younger firms are more vulnerable to higher risk of failure or incur losses in their early years of operations compared to older firms as such they are subjected to more audit work and as such auditors would charge more fees to young companies.

Firms' location has a significant impact on their performance. For example, firms' with head offices in Lagos have a high chance of performing better than others with head office in other states of the nation. This is argued because of the commercial intensity in this area compared to other locations and the likelihood of having higher access to capital, which invariably may not have been accessible if located in other states. It is worthy of note that 99% of the head offices of financial institutions are located in the

Lagos and having head offices in this location will somewhat enhance easy social connection, which can translate into easy access of capital when needed (Akinlesi and Efobi 2010).

Banks are exposed to higher risk due to transaction accounts, high degrees of credit risk, regulatory risk and their more involvement in mergers and acquisition. Fields, Frasers and Wilkins (2004) sees bank risks in the following dimensions; liquidity risk, operating risk, credit risk, capital or solvency risk, and market risk. Liquidity risk relates to the possibility that the bank cannot meet its obligations for cash through the clearing system or from its depositors. Operating risk refers to the possibility of high operating costs depleting the capital account of the bank. Banks with high operating risk will find it difficult or impossible to earn acceptable profit without taking unacceptable risk. Credit risk primarily involves the quality of the banks assets and the probabilities of default in its loan portfolio, though credit risk may also exist in the securities portfolio. Capital risk refers to the potential that shrinkage in the value of assets will deplete the banks equity account. Finally, market risk involves the potential for negative impact on the banks financial viability from adverse movements in interest rates.

The Nigerian bank is highly leverage debt contributing more that 90% of total assets. Liu (2007) opines that auditors seeks to charge higher fees for firms undertaking more financial risks in other to shield against liability for losses attributable to misrepresentations in the audited financial statements.

Profitability entails efficient use of resources usually results in a high return on assets. Highly profitable firms usually pay more fees in view of the fact that higher profits may require rigorous auditing testing of the validity of the recognition of revenue and expenses which requires more audit time. Nevertheless evidence is inconclusive in this regard as studies by Francis and Simon (1987) and Chan (1993) did not find it significant, subsequent studies of Joshi and Al-Bastaki (2000) found it significant.

In ascertaining the determinant of audit fees Chan *et al* (2006) sees Client's firm size as an influential factor. Karim and Moizer (2002) asserted that client's firm size has the greatest influence on audit fees. Prior researches (Liu 2007; Joshi and Al-bastaki 2000), measured client's firm size as total assets, this has however been found to be a significant explanatory variable in determine audit fees. The larger the client's firm size the more effort auditor has to put in audit process thus the higher the audit fees.

The two main functions of the Board of Directors are to monitor and provide resources to the company as postulated by Zahra and Pearce (1989) and Hillman and Dalziel (2003). Non executive directors will be more concern about their personal exposure and legal liability if mangers misbehave; therefore they are more interested in an extensive audit testing in order to minimize the risk of managerial misbehavior that could affect their personal liability. While executive directors representing large shareholders are typically better informed, having capital invested in the company as such seeks to promote shareholders interest and ability to influence management directing. Studies

from O'Sullivan (2000) and Salleh, *et al* (2006) found that the proportion of non executive directors encourage more intensive audits as a complement to their own monitoring role.

### 2.3 Theoretical framework

The basic theory underpinning this study is the Simunic (1980) audit fees model. The theory iterates that audit fees are equal to audit costs at a competitive equilibrium and a function of auditors characteristics such as audit firm size and industry expertise at the national level

The mathematical expression to Simunic model is:

$$E(C) = cq + E(d)E(\theta),$$

Where  $E(C)$  is the expected total costs to the auditor or the audit fees;  $c$  the per unit factor cost of external audit resources to the auditor, including all opportunity costs and thus including a markup for a normal profit;  $q$  the quantity of resources that the auditor utilizes in performing the audit;  $E(d)$  the expected present value of possible future losses that may arise from this period's audited financial statements; and  $E(\theta)$  the likelihood that the auditor will have to pay for the losses from this period's audited financial statements.

According to Simunic model, the expected total costs to the auditor varies in relationship with the level of audit effort [ $cq$ ] and the expected liability loss component [ $E(d)E(\theta)$ ]. In an increasing audit effort it is envisaged that the expected liability loss component to decrease. This implies that the quality and efficiency of the audit work determines the liability losses that are typically manifested in the form of litigation, either actual or threatened against the audit firm. If this is true then  $E(d) = f(cq)$ .

Simunic (1980) posits that the auditor's assessment of the loss function should be influenced by the general legal environment as well as internal firm's specific factors. The size of the auditee, complexity of the auditee's operations, asset structure and whether the auditee is a publicly held company are all firm's specific characteristics that might influence the assessment of the loss function.

Drawing from the model, the focus of this study is to observe the factors that influence the audit fees. These factors include the firm's corporate governance, firm's size, firm's age, firm's profitability, firms' risk, audit firm, firm location

### 3.0 RESEARCH METHOD

The data used for this study was gotten both from content analysis and computation of adequate ratios from the financial statement of the sampled firms. The period 2004-2009 was studied. The financial statement of the firms is reliable since it contains detailed information about the firm. The items of interest from the financial statement

include; balance sheets and the profit and loss account. The data set is a panel data, consisting of 17 out of 21 banks listed on the Nigerian stock exchange (NSE)

The empirical model of this study is developed to capture the determinant of audit fees in the Nigerian banks is represented by this functional relationship;

$$Audfee = f (CEOdual_{it}, Audfirm_{it}, Firmage_{it}, Firmloc_{it}, Firmrik_{it}, Firmpro_{it}, Firmsiz_{it}, Pxdir_{it}, Pnxdir_{it}, U_{it} ) \text{-----}$$

----- (1)

Equation (1) is stated in an explicit form as thus:

$$Audfee = f (\beta_0 CEOdual_{it} + \beta_1 Audfirm_{it} + \beta_2 Firmage_{it} + \beta_3 Firmloc_{it} + \beta_4 Firmrik_{it} + \beta_5 Firmpro_{it} + \beta_6 Firmsiz_{it} + \beta_7 Pxdir_{it} + \beta_8 Pnxdir_{it} + U_{it}) \text{-----}$$

----- (2)

Where:

*Audfee*: To be represented by log of audit fees

*CEOdual*: This means that the chief executive officer is the same as the chairman. CEO Duality is measured as a categorical variable with 1, when the CEO holds the same position as the chairman and 0 if otherwise

*Audfirm*: Audit firm, 1 denoted Big four and 0 denoted Non Big four

*Firmage*: Firm age was represented by age of incorporation

*Firmloc*: Firm location, 1 represented firm's headquarters in Lagos and 0 for otherwise

*Firmrik*: Firm risk was captured by leverage which is proxied by total debt divided by total assets

*Firmpro*: Firm profitability was represented by Profit after tax

*Firmsiz*: Firm size was represented by log of total assets

*Pxdir*: Proportion of executive directors to total directors on board

*Pnxdir*: Proportion of non-executive directors to total directors on board

*U*: Error term that captures other factors influencing the dependent variables that are not included in the model. They are assumed to be identically and independently distributed.

*it*: The companies and the time dimensions

$\beta_i$  ( $i = 0 - 6$ ): Parameters to be estimated, which show the constant and the rate of change in the dependent variable induced by the respective chosen explanatory variables.

#### 4.0 EMPIRICAL RESULTS AND DISCUSSION

Our study utilized Generalised least square regression model in Gretl to analyze our data. The model formulated was based on panel data econometric technique. Panel data has several advantages which include that it helps to obtain efficient estimates by possibly controlling for unobserved fixed effects and also providing sufficient degree of freedom (Osabuohien and Efobi, 2010). The Generalised Least Squares (GLS) estimation was first examined, but due to the problem of heteroscedasticity and autocorrelation popularly encountered when using the (GLS) in estimation of panel data series, Hausman test was used to select the most suitable between the Fixed Effects (FE) and Random Effects (RE) and the fixed effect was found more suitable

This section discusses the descriptive as well as the empirical result, which further will aid the testing of the hypothesis.

##### 4.1 Summary of descriptive Statistics

**Table 1: Descriptive statistics**

|   | <i>Mean</i> | <i>Median</i> | <i>Std. Dev.</i> | <i>Minimum</i> | <i>Maximum</i> |
|---|-------------|---------------|------------------|----------------|----------------|
| <i>Audit fee</i>                            | 52628       | 40000         | 37308            | 5175           | 180000         |
| <i>CEO duality</i>                          | 0           | 0             | 0                | 0              | 0              |
| <i>Firm age</i>                             | 23.71       | 19            | 12.38            | 5              | 50             |
| <i>Firm location</i>                        | 0.9411      | 1             | 0.24956          | 0              | 1              |
| <i>Audit firm</i>                           | 1           | 1             | 0                | 1              | 1              |
| <i>Firm profit</i>                          | 7980100     | 5851500       | 11932000         | -57739000      | 46525000       |
| <i>Firm size</i>                            | 401450000   | 255870000     | 392450000        | 331800         | 1680300000     |
| <i>Firm risk</i>                            | 26.434      | 0.85811       | 140.28           | 0.000775       | 796.47         |
| <i>Percentage of director</i>               | 0.3492      | 0.36364       | 0.10149          | 0.066667       | 0.6            |
| <i>Percentage of non-executive director</i> | 0.64323     | 0.63636       | 0.11531          | 0.4            | 1              |

From the table above Audfee, Firmpro and Firmsize are in (₦, Million)

Table 1 represents the descriptive statistics of the 17 observed banks listed on the Nigerian stock exchange. The average audit fee paid by a bank in Nigeria is ₦52,628,000 with some Banks paying a minimum of ₦5,175,000 and others a maximum of ₦180,000,000. All the banks have their Chief executive Director different from their chairman in all cases this corroborates that the banking sector embraces good corporate governance. None of the banks is less than 5 years old from year of incorporation this is however a standard measure of more audit engagement. 93.4% of the banks have their headquarters in Lagos. The Big four audit firms in Nigeria are characterized with

having more and better resources, thereby capable of providing better audit service than the non big 4 audit firms. All the banks are being audited by big four audit firms (KPMG; Ernst and Young; Akintola Williams Delloitte; PWC) in Nigeria.

Averagely the profit after tax of the banks is almost ₦80, 000,000,000. On the average the Total assets of the banks is ₦401, 450,000,000. We can infer that the larger the size of an auditee the more the effort of the auditor in the audit process, the higher the audit fees. The risk of the bank is proxied by leverage calculated as total debt over total assets from the table (264%) is quite high, meaning the banking sector is highly leveraged. This means that on the average the debt of the firm is twice plus more than the total asset employed by the firm, this surrogates that the more the firm financial risks, the higher the auditor liability for misrepresentations in the audited financial statements thus the higher the expected audit fees.

On the average the proportion of the executive director to the total director is 35% this implies that why the proportion of non executive director to the director is 65% this implies that the non executive directors are almost twice the number of executive directors

#### 4.2 Correlation Analysis

The correlation matrix shows the expected relationship of all the independent variables with audit fee, it also shows the correlation amongst the independent variables which suggest the presence or absence of multicollinearity. We suspect any variable with coefficient in excess of 0.80 to exhibit multicollinearity as a result such variables will be dropped to avoid estimation that may result in spurious result. The test for multicollinearity was carried out using the correlation analysis, in order to investigate the existence of correlation between the independent variables. This is important because if such exist, it may adversely affect the result from the analysis, hence may lead to spurious regression result.

**Table 2** Correlation Coefficient Matrix of all Variables

|                | <i>Audfee</i> | <i>Firmage</i> | <i>Firmloc</i> | <i>Firmpro</i> | <i>Firmsiz</i> | <i>Firmrik</i> | <i>Pxdir</i> | <i>Pnxdir</i> |
|----------------|---------------|----------------|----------------|----------------|----------------|----------------|--------------|---------------|
| <i>Audfee</i>  | 1             | 0.1038         | -0.079         | 0.6632         | 0.3687         | 0.2698         | 0.2117       | -0.1749       |
| <i>Firmage</i> |               | 1              | 0.1479         | 0.2613         | 0.1307         | 0.0449         | 0.291        | -0.2333       |
| <i>Firmloc</i> |               |                | 1              | -0.0895        | -0.1025        | 0.044          | 0.0281       | -0.0536       |
| <i>Firmpro</i> |               |                |                | 1              | 0.5107         | 0.179          | 0.3348       | -0.2913       |
| <i>Firmsiz</i> |               |                |                |                | 1              | -0.6611        | 0.1395       | -0.1148       |
| <i>Firmrik</i> |               |                |                |                |                | 1              | 0.1146       | -0.1227       |
| <i>Pxdir</i>   |               |                |                |                |                |                | 1            | -0.9173       |
| <i>Pnxdir</i>  |               |                |                |                |                |                |              | 1             |

From our result there is a weak positive correlation exists between audit fee (*Audfee*) Firm age (*Firmage*), Firm size (*Firmsiz*), firm risk (*Firmrik*) and Proportion of executive directors to total directors (*Pxdir*) at 10%, 37%, 27% and 21% respectively. A strong positive correlation exists

between Audit fee (*Audfee*) and Firm profitability (*Firmpro*) at 66% while a weak negative correlation was found between Audit fee (*Audfee*), firm location (*Firmloc*) and proportion of non executive directors to total directors (*Pnxdir*) at 8% and 17% respectively.

From the table, there was no problem of multicollinearity amongst Audit fee (*Audfee*) Firm Age (*Firmage*), Firm Location (*Firmloc*), Firm profitability (*Firmpro*), Firm size (*Firmsize*), Firm risk (*Firmrik*). While the problem of multicollinearity exist only between Proportion of executive directors to total director (*Pxdir*) and Proportion of non executive directors (*Pnxdir*) as such the collinear variable will be dropped to avoid estimation that will result in spurious result, since all the variables are important in our model, a stepwise regression will be done for the estimation. This will aid in preventing the multicollinear variables from being estimated in the analysis

### 4.3 Regression Analysis

**Table 3: Regression result for the estimated model**

|                                 | <i>OLS 1</i>        | <i>FE 1</i>         | <i>RE 1</i>          | <i>OLS 2</i>        | <i>FE 2</i>         | <i>RE 2</i>         |
|---------------------------------|---------------------|---------------------|----------------------|---------------------|---------------------|---------------------|
| <i>constant</i>                 | -3.7088<br>(0.0012) | -3.47<br>(0.0019)   | -3.82953<br>(0.0000) | -3.4736<br>(0.0051) | -3.6167<br>(0.0028) | -4.1978<br>(0.0000) |
| <i>Firmage</i>                  | -0.0038<br>(0.4744) | 0.0716<br>(0.3962)  | -0.0042<br>(0.5027)  | -0.0035<br>(0.4942) | 0.0763<br>(0.3631)  | -0.0046<br>(0.4594) |
| <i>Firmloc</i>                  | -0.0293<br>(0.7009) |                     | 0.0032<br>(0.9919)   | -0.0341<br>(0.6384) |                     | 0.0111<br>(0.9715)  |
| <i>Firmrik</i>                  | 0.0076<br>(0.0000)  | 0.00647<br>(0.0004) | 0.0078<br>(0.0000)   | 0.0077<br>(0.0000)  | 0.0063<br>(0.0004)  | 0.0078<br>(0.0000)  |
| <i>Firmpro</i>                  | -0.1561<br>(0.0143) | -0.0763<br>(0.2189) | -0.1089<br>(0.0459)  | -0.1558<br>(0.0156) | -0.7<br>(0.2466)    | -0.1052<br>(0.0546) |
| <i>Firmsiz</i>                  | 0.8197<br>(0.0000)  | 0.7031<br>(0.0003)  | 0.842<br>(0.0000)    | 0.8221<br>(0.0000)  | 0.685<br>(0.0003)   | 0.8339<br>(0.0000)  |
| <i>Pxdir</i>                    | 0.3317<br>(0.5935)  | -0.3916<br>(0.3496) | -0.5469<br>(0.1101)  |                     |                     |                     |
| <i>Pnxdir</i>                   |                     |                     |                      | 0.8848<br>(0.0018)  | 0.25<br>(0.4842)    | 0.438<br>(0.1713)   |
| <i>R-squared</i>                | 0.7613              | 0.9122              |                      | 0.7608              | 0.9111              |                     |
| <i>Normality test</i>           | 1.288<br>0.5251     | 1.956<br>0.3761     | 2.76<br>0.2515       | 0.658<br>0.7196     | 2.467<br>0.2912     | 2.682<br>0.2615     |
| <i>Breusch &amp; Pagan test</i> |                     |                     | 28.5376<br>0.0000    |                     |                     | 23.6432<br>0.0000   |
| <i>Hausman test</i>             |                     |                     | 6.9108<br>0.2274     |                     |                     | 7.836<br>0.1655     |
| <i>Observation</i>              | 73                  | 73                  | 73                   | 73                  | 73                  | 73                  |

The empirical results from the estimation process are presented in table 3 above. The result from different estimation techniques (i.e. Ordinary OLS, FE, RE) are presented and discussed herein. From the correlation matrix the existence of the multicollinear variables at 80% were dealt with by excluding proportion of non executive director to total directors in first regression including proportion of executive director to total directors while in the second regression, proportion of executive directors to total directors was included while excluding the proportion of non executive directors to total directors. The hausman test for the first and second regression showed that the fixed effect was more efficient and appropriate than the random effect

Most of the variables came out with expected signs; CEO duality and audit firm type was omitted in the regression result due to exact colinearity. All the sample banks observed had the chairman different from the chief executive officer this indicates a good corporate governance practice. Dual CEO role creates a strong individual power base, which could impair board independence and the effectiveness of its governing function may thus be compromised.

Within the five years of our observation the study revealed that all the banks were audited by at least one of the big four audit firm in Nigeria. A positive relationship exit between the age of the firm and audit fees, it implies that the older the firm gets the more the audit engagement as such more audit fee is required aside this we presume that older firm have more capacity to pay more for audit while younger firms do not have such capacity.

The result under the fixed effect for firm location was omitted being that almost all the observed banks had their headquarters in Lagos; this supports the proposition that 99% of the financial institution firm is located in Lagos. This is argued because of the commercial intensity in this area compared to other locations.

Firm risk is significantly related to bank audit fees. The risk of the firm proxy by firm leverage is positively related to the bank audit fees being as a result of the high leverage characterized by banks, thus the higher the bank risk the higher the auditor liability for misrepresentation in the audited financial statements the more the audit fees charged

Firm profitability is negatively related to bank audit fees this implies that more profit the firm makes the lesser the audit fee, perhaps profitable firms' cuts down excess audit.

Firm size is positively related to bank audit fees. The significance of this indicates that larger firms will have larger balance sheets assets and liabilities thereby requiring more audit task as such attract more audit fees.

The proportion of executive directors to total director is negatively related to bank audit fees, while that of non executive directors is positively related to bank audit fees. This speculates that the higher the proportion of executive director to total directors the lower the expected audit fees, This follows stakeholders expectation of the executive director who are insider of the company assumed to have a good corporate governance practice and the existence of an improved control mechanisms thus reducing the need for external auditing, leading to lower audit fees. While the higher the proportion of non executive director the higher the expected audit fees, this could be as a result of the board being dominated by outside, nonaffiliated directors, who however, are thought to

play more effective monitoring roles because of their fiduciary duty towards shareholders and their presume independence from management as such might not mind paying more for a better audit quality

## 5.0 SUMMARY AND CONCLUSION

The audit report reveals the auditor's findings to users of financial report which plays a crucial role in warning them of the impending problems with the firm. Elucidating whether or not that audit fees does not compromise auditor objectivity; the objective of the study was to provide empirical evidence on the determinant of audit fees in Nigerian banks particularly from the demand side perspective. Using generalized least square regression model to analyse the significant relationship amongst our variables.

The empirical evidence on this relationship provides a unique contribution to the dearth of literature on this field in Nigeria. A total of 17 banks out of the 21 listed banks were observed. Based on the present study we found that in Nigerian banks audit fees are significantly related to CEO duality, Audit Firm, Firm Age, Firm Location, Firm Risk, Firm Profitability, Firm Size, Proportion of executive and non executive directors to total directors but with a positive relationship with Firm Age, Firm Location, Firm Risk, Firm Size, Proportion of non executive directors to total directors, a negative relationship with Firm Profitability and Proportion of executive directors to total directors and exact collinearity with CEO duality and Audit firm.

On the adequacy of a sound corporate governance climate in Nigeria, the study observed two indicators of corporate governance, the first being CEO duality and the second proportion of executive and non executive directors to total directors. Remarkably all the observed banks had the Chief Executive Director different from the chairman also the proportion of non executive directors to total directors surpasses the proportion of executive directors to total directors, surrogating that the management is not dominating the control of the companies.

Another interesting findings was that all the firms observed were at least audited by one of the big four auditors in Nigeria. This can be seen in two lights. The first being that banks are characterized with large asset, high expected regulatory compliance, high litigation risk, changing technology, adherence to sound corporate governance, complex transaction accounts, high degrees of credit risk, regulatory risk and their more involvement in mergers and acquisition as such more rigorous audit were require since the big four auditors are known for their access to resources, reputation, capable of providing better audit service, having higher litigation risk and may receive more severe punishment than non Big four auditors. However in the Nigerian case we recommend that banks audit should be carried out by a big four auditor and a non big four auditor simultaneously for a better audit coverage.

We identify the following limitations in this study. First, the sample only covers banks listed on the Nigerian stock exchange. It is therefore possible that the results may not be generalized to other listed companies in other sectors and Subsequent studies could

examine other sectors while making a sectorial comparison amongst them. Second, we majorly looked at the demand side perspective of the audit fee model; future research could carry out a simultaneous analysis of this model whilst looking at the determinant of audit fee from the supplier's perspective (auditors). However this data might be sourced via a survey method of data collection in the audit firms, such information will provide increased confidence to our results.

## REFERENCES

- Ajibolade, S. O. (2008) A Survey of the Perception of Ethical Behaviour of Future Nigerian Accounting Professionals, *The Nigerian Accountant*, Vol.43 (3):54-59.
- Akinlesi, O. and Efobi U. (2010) Does leverage maximize firm value? Evidence from Nigeria (unpublished)
- Anderson, T. and Zeghal, D. (1994) The pricing of audit services: further evidence from the Canadian market, *Accounting and Business Research*, Vol. 24 (95):195-207.
- Bakre, O. M. (2007) The Unethical Practices of Accountants and Auditors and the Compromising Stance of Professional Bodies in the Corporate World: Evidence from Corporate Nigeria, *Accounting Forum*, 31(3): 277-303.
- Cadbury Committee. (1992) *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee and Company Ltd.
- Cantoni, E., D'Silva, K. and Isaacs, M. (n.d). The determinants of audit fees. Further evidence from the UK Charity sector, *Research working papers*.
- Chan, P., Ezzamel, M. and Gwilliam, D. (1993) Determinants of audit fees for quoted UK companies, *Journal of Business Finance & Accounting*, Vol.20: 765-786.
- Che Ahmed, A and Houghton, K. (1996) Audit fee premiums to Big eight firms: evidence from the medium-size UK Auditees, *Journal of international Accounting, Auditing and Taxation*, Vol.5 (1): 53-72.
- Choi, J. H., Kim, J. B., Liu, X. and Zang, Y. (2007) Auditor locality, audit quality and audit pricing. *Working Paper*, Singapore Management University.
- Ferguson, A., Jere, R., Francis, D. and Stokes J. (2003) The effects of firm-wide and office level industry expertise on audit pricing. *The Accounting Review*, Vol.78 (2):429 - 448
- Fields, L. P., Fraser D. R., and Wilkins, M. S. (2004) An investigation of the pricing of audit services for financial institutions. *Journal of Accounting and Public Policy*, Vol.23(1):53-77.
- Firth, M. (1997) The provision of nonaudit services and the pricing of audit fees, *Journal of business finance and accounting*. Vol.24:511-525
- Francis, J. and Simon, D. (1987) A test of audit pricing in the small-client segment of the U.S. audit market, *The Accounting Review* Vol.62:145-157.
- Hillman, A. J. and Dalziel, T. (2003) Boards of directors and firm performance: Integrating agency and resource dependence perspectives, *Academy of Management Review*, Vol.28(3) 383-396.
- Hope, O-K, and Langli, J. C. (2008) Auditor Independence in a Private Firm setting Risk Setting, *working paper series*. Rotman school of Management, University of Toronto and Norwegian school of management
- Hope, O-K, and Langli, J. C. (2009) Auditor Independence in a Private Firm and Low Litigation Risk Setting' *The Accounting Review*, forthcoming.
- Houghton, K. and Jubb, C. (1999) The cost of audit qualifications: the role of non-audit services, *Journal of international accounting, Auditing and Taxation* Vol. 8(2): 215-240

- Joshi, P and Albastaki (2000) Determinants of audit fees: evidence from the companies listed in Bahrain, *International journal of auditing*, Vol.4:129-138.
- Jubb, C., Houghton K. and Butterworth S. (1996) Audit fees: the plural nature of risk, *Managerial auditing journal* Vol.11 (3):25-40
- Karim, W. and Moizer, P. (2002) Determinants of audit fees in Bangladesh. *International Journal of Accounting*, Vol 31(4):497-509
- Lafond, R. and Roychowdhury, S. (2008) Managerial ownership and accounting conservatism. *Journal of Accounting Research* Vol.46(1):101-135.
- Liu, J. (2007) On determinants of audit fee: New evidence from China. *Journal of Modern Accounting and Auditing*, Vol.3 (4):60-64
- Nigerian Deposit Insurance Corporation (NDIC) (1995), *NIDC Secretariat*, Lagos.
- Okafor, C. and Ibadin, P. (2009) The imperatives of internal audit in Nigerian banks: Issues and prospects, *Global journal of social sciences*, Vol.8(2):21-27
- Okike, E. (2004) Management of Crisis: The Response of the Auditing Profession in Nigeria to the Challenge to its Legitimacy, *Accounting, Auditing and Accountability Journal*, Vol.17(5): 705-730.
- Osabuohien, E. and Efobi, U. (2010) Empirical investigation on role of infrastructure in determining manufacturing export in SSA
- O'Sullivan, N. (2000). The impact of board composition and ownership on audit quality: Evidence from large UK companies, *British Accounting review* Vol.32:397-414
- Otusanya, J. and Lauwo, S. (2010) The role of auditors in the Nigerian banking crisis. *Accountancy Business and the Public interest*. Vol.9
- Palmrose, Z-V. (1996) The effect of non-audit services on the pricing of audit services: Further evidence. *Journal of Accounting Research*, Vol.24:405-411.
- Salleh, Z., Stewart, J., & Manson, S. (2006) The Impact of Board Composition and Ethnicity on Audit Quality: Evidence from Malaysian Companies. *Malaysian Accounting Review*, Vol.5(2), 61-83
- Shammari, A, Abdullah, A. and Ahmad A (2008). Determinants of audit fees in Kuwait. *Journal of Academy of Business and Economics*, Vol.8 (1):140-152
- Simunic, D.A. (1980) The Pricing of Audit Services: Theory and Evidence, *Journal of Accounting Research*, Vol.18(1):161-190.
- Taylor, M.H. (1997) The Market for Audit Services in Japan, *The Pacific Accounting Review*, 59-74.
- Taylor, M. and Simon, D. (1999) Determinants of audit fees: the importance of litigation, disclosure and regulatory burdens in audit engagement in 20 countries, *The International Journal of Accounting*, Vol.34:375-388.
- Teo, E. and Keith (2000) Audit litigation and the pricing of audit services, Retrieved from <http://www.aahahq.org/audit/midyear/01midyear/.../32-AuditLitigationPricing2.pdf>
- Willekens, M. and Bruynseels, L. (2009). Unexpected audit fees and financial reporting quality in private companies.
- Yatim, P., Kent, P. and Clarkson, P. (2006) Governance Structures, Ethnicity and Audit Fees of Malaysian Listed Firms, *Managerial Auditing Journal*, Vol.21, 757-782.
- Zahra, S. A., and Pearce, J. A. (1989) Boards of directors and Corporate financial performance: A review and integrative model, *Journal of management*, Vol.15, 291-334
- Zulkarnain, M. and shamsher, M. (2008). Governance structure and external audit price: evidence from an emerging economy. *International Journal of Economics and Management*, Vol. 2(2):258-279