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EVALUATION OF FACTORS DETERMINING AUDIT FEE IN QUOTED NIGERIAN
DEPOSIT MONEY BANKS

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Abstract

With auditors mostly found wanting in corporate scandals, there is growing emphasis on the need for auditors of companies in highly regulated sectors like banks to consider factors that are important to regulators. This study evaluates the determinants of audit fee based on variables that are peculiar to banking industry and considered salient to regulators of banking services. It also examines the effect of IFRS adoption on audit fee of banks. Data were sourced from annual reports and accounts of all the fifteen (15) quoted deposit money banks for the period covering 2006-2015 and were analysed using descriptive statistics and inferential statistics. The result of Hausman specification test favours random-effect over the fixed-effect models of panel least square regression. Findings of the study revealed that capital risk has negative influence on audit fees at 10% level of significance while credit risk shows positive influence at 1% level of significance. Also, complexity, IFRS adoption and size had significant positive relationship with audit fees at 1%, 10% and 5% levels of significance respectively. However, management efficiency and profitability showed no significant relationship with audit fees. As regards variables considered important to regulators of banks, the study concludes that auditors do not seem to consider management efficiency in determination of audit fees. The study recommended amongst others that auditors of banks should further align the determination of their fees with factors that are considered important to regulatory body; to reduce costly litigation associated with audit failure.

Keywords: Auditors, Audit Fee Pricing, Audit Quality, Deposit Money Banks

Introduction

The principal-agent conflict as depicted in agency theory, where principals lack reasons to trust their agents because of information asymmetries and differing motives is fundamental to the understanding of the development of audit as well as its usefulness and purpose. An agency relationship arises when one or more principals (e.g. owners) engage another person as their agent (or steward) to perform a service on their behalf. Performance of this service results in delegation of some decision making authority to the agent. Auditors are agents of the shareholders whose interests are usually different from those of the managers of the company being audited; the more reason information asymmetry is a direct consequence of audit. External auditors have two main functions complementing that of reduction in information asymmetry; unveiling non compliance with financial reporting regulations, and limit the discretionary accounting practices of the managers (Ng, 1978). Furthermore, the need for audit is three folds; to function as a monitoring mechanism, to meet the demand for information from investors in order to improve their decision-making, and to act as insurance against material misstatements (Ask & Holm, 2013). The global demand for improvement in audit quality mechanism has increased even further with the world being rattled with massive economic crises and corporate scandals sparking a plea for stricter control and regulations of companies. The Emerging economies are not exceptional from large corporate failures; for instance the corporate failures in the Nigerian financial sector in the early 1990s brought auditors into sharp focus and caused the public to question the role of accountants and auditors (Akinpelu, Omojola, Ogunseye, & Bada, 2013).

External audit is an important factor in the corporate governance function, as supervision of performance and assurance of accountability in management are important governance function. External audit constitutes a significant tool for maintaining good governance levels by creating confidence in the financial statements issued for stakeholders' use, and to enhance the credibility of audited companies. One of the main attributes of the auditor's independence is charging of correct audit fees (i.e. fees that are not too low and not too high) for the exercise which is determined ahead of the commencement of the engagement. In other words, audit fee is an economic cost of efficient auditors.

In the 1980s and 1990s, large external audit firms have gone through mega-mergers that reduced their number from eight – Big 8 – to five – Big 5 (Abidin, Beattie, & Goodacre, 2008). However, with accounting scandals in the 2000s– which led to Arthur Andersen's termination, the last decades have seen the consolidation of this sector around the current Big 4. This concentration accentuates the value assigned to the accounting information quality. It was revealed in Enron case that the reputation of audit firms has close ties with the independent audit conducted by them. Audit has value to the extent that investors, regulators and the market believe that the auditor is independent and, as a consequence, he will report significant distortions discovered in the audited company, thus reducing expenses due to opportunistic behaviour of managers (agency costs) (Watts & Zimmerman, 1986). The concentration of the auditing industry undermines competitiveness and reduces the options available to audited companies; such concentration, along with accounting scandals and the importance of auditing for corporate governance shed light on professional independence issues and the determination of external auditors' fees.

The pricing of audit services has been an interesting topic for audit researchers, and a plenty of audit studies were conducted to investigate factors believed to have an influence on audit fees in industrial companies. Unlike other industries, banking firms are characterized by the different nature of their operation and greater scrutiny from regulatory bodies. Audit fee researchers (Simunic 1980; Fields, Fraser, & Wilkins, 2004) suggest that audit fees for every company should be a function of client size, business complexities and client business risk. However, the audit fees studies for banking firms have not received adequate attention for two key reasons: first, most of the measurement variables for risk and complexities used in other industries are not suitable for banks. For instance, leverage and quick/current ratio measures used in other industries cannot properly capture the risk and complexities involved with banking firms. Secondly, the presence of vigilant regulation cast its effect in the audit service in either of the two ways. On one hand, tight regulation of banks may induce auditors to plan their audit in less intensive manner and charge lower audit fees (Boo & Sharma, 2008). On the other hand, it also places a higher litigation risk on the auditor because both regulators and owners may bring court action in case of audit failure (Fields *et al.*, 2004; Boo & Sharma, 2008). As a result of these two basic differences in banks operations and operating environment, most audit fee studies exclude firms in banking sector (Ireland & Lennox 2002; Gonthier-Besacier & Schatt, 2006; Thinggaard & Kiertzner, 2008; Caneghem, 2010; & Lawrence, Minutti-Meza, & Zhang, 2011). While few recent studies model bank audit fees in terms of factors that are considered most important to the regulatory bodies and found interestingly missed results.

Auditing of companies in the regulated industries is associated with a higher litigation risk exposure in case of audit failures. To avoid such a costly litigation, it is argued that bank auditors should take in to account factors that are most important to regulators in their audit fee determination to better align with the interest of regulators. It is known that in most countries of the world, be it developing or developed, bank regulators use CAMELS (Capital adequacy, Asset quality, Management Efficiency, Earning Quality, Liquidity, and Sensitivity to market) for their off-site surveillance mechanism including Nigeria. In the light of this, studies on bank audit fee model audit fees around these CAMELS ratios (Fields *et al.*, 2004; Lobo, Kanagaretnam & Krishnan, 2010; Ettredge, Fuerherm, & Li, 2014). Whether auditors in Nigeria consider these factors still remain an open question.

Objectives of the Study

The global aim of this study was to investigate factors determining audit fees in the Nigerian quoted deposit money banks. To achieve this, the specific objectives were to;

- i. examine the influence of banks' capital risk on external audit fees charged;
- ii. determine the effect of banks operational complexity on external audit fees charged;
- iii. examine the influence of banks' credit risks on external audit fees charged;
- iv. evaluate the influence of banks' management efficiency on audit fees charged; and
- v. assess the influence of IFRS adoption on external audit fees charged

Statement of Research Hypotheses

- The following hypotheses were formulated as a guide to the study;
- H₀₁: Capital risks of banks have no significant influence on audit fees charged
 - H₀₂: Banks' operational complexity has no significant effect on audit fees charged
 - H₀₃: Banks' credit risks do not have a significant influence on audit fees charged
 - H₀₄: The efficiency of banks' management has no significant influence on audit fee charged
 - H₀₅: The adoption of IFRS has no significant influence on audit fees charged.

Literature Review

Conceptual Issues

Auditing, Auditor's Independence and Audit Quality

There has been consensus among scholars/ authors, professional bodies and standard setters as to the exact definition of auditing. The general definition of an audit is an evaluation of a person, organization, system, process, enterprise, project or product. The term is commonly referred to as audit in accounting, but similar concepts also exist in project management, quality management, and energy conservation. Adeniyi (2010) defined audit as the independent examination of and expression of opinion on the financial statements of an enterprise by an appointed auditor in pursuance of that appointment and in compliance with any relevant statutory obligation. From the above definitions, it can be deduced that auditing is an independent examination by an auditor of the evidence from which financial statements of an organisation are prepared. The objective of an audit is to express an opinion on whether the financial statements are prepared in all material respects, in accordance with an identified financial reporting framework (sometimes referred to as established criteria) (Dandago, 2002).

Zerni (2012) explained audit service as a unique among other professional services for two major reasons. First, auditors are hired and paid by the client, but their product is really used by the third-parties (e.g., investors), to whom they owe a standard of care. Second, the quality of an audit cannot be directly observed prior to contracting and, in general, not even after the audit is conducted. The only observable outcome of the audit process is the issued audit report, which, at least in its standard form, does not contain much information about the state of independence and audit quality.

Needless to say, the opinion of an auditor must be an independent opinion given by a professional person with appropriate skills in audit work, and the opinion must not be influenced by anyone else, and in particular must not be influenced by the opinions and views of the management of the company whose financial statements have been audited. In order that an audit report is of value, auditors must have 'independence of mind' and be 'independent in appearance'. These principles of both being and being seen to be independent are at the centre of the role played by independence in auditing. Independence of the auditor is a matter of public confidence in the audit process. Auditors need to be fully aware of situations that may damage their independence and objectivity. Such situations are referred to as threats to auditor's independence. Any threat to independence may be reduced through safeguards provided in the code of ethics issued by accounting profession regulatory bodies (ICAN, 2014).

Several factors have been identified in literature which may influence auditor's independence such as lack of stricter regulations, the nature of the auditor-client relationship, extended audit tenure, the provision of non-audit services and competitive pressures leading to lowballing /price cutting. In addition to the audit service, audit firms provide various non audit services such as tax consultancy, system consultancy, management advice, international business advice, human resource management, and financial and investment consultancies. The collapse of the giant US corporations in the year 2002 (Enron, WorldCom and Global Crossing) marked a black spot on the auditing profession as a whole. Arthur Anderson, the auditor of these collapsed companies was highly criticized for over relying on non-audit fees and compromising independence. Economic dependence (proportion of non audit service fees to total audit fees) of external

auditors has received researchers attention. It is argued that provision of non-audit services by incumbent auditors impair auditor independence. First, non-audit service fees make auditors to be financially dependent on their client, and as a result weaken their ability to resist management pressure for fear of losing their business. Secondly, the consultancy nature of non-audit services puts auditors in a compromising position which potentially threaten their independence about the transactions they audit. In addition, Positive abnormal audit fees or the presence of positive client specific quasi rent creates an incentive for the auditor to compromise independence with respect to a specific client (Defond, Raghunandan, & Subramanyam, 2002; & Choi, Kim, Liu & Simunic, 2008). Although, a counter theoretical argument also suggests that auditors have market-based institutional incentives to act independently. The expected costs of sacrificed independence include the reputation loss and litigation costs associated with audit failures (Defond *et al.*, 2002).

DeAngelo (1981) defined audit quality as the market-assessed joint probability that an auditor will discover an error in the client's account and report the error to the third parties. She also mentioned that the probability that a given auditor will discover a breach depends on the auditor's technological capabilities, the audit procedures employed on a given audit, the extent of sampling, etc. Furthermore, the conditional probability of reporting a discovered breach is a measure of an auditor's independence from a given client. Several researchers investigated the factors which affect audit quality. Size and independence related issues (i.e. the proportion of audit fees received from a particular client, auditor tenure, the provision of non-audit services and other audit client relationships) are given emphasis as determinants of audit quality. Huang (2006) reported that non-audit consultancy business began to rapidly develop during the end of the 1990s. It has been argued that non-audit fees have a higher profit margin than audit services by the US Securities and Exchange Commission (SEC) annual report of 2000. Consultancy services such as large-scale, big-fee financial information systems design, and implementation of information technology projects have been reported as providing more than a third of the revenues of the then Big Five accounting firms (Riesenberg, 2002). The new Public Company Accounting Oversight Board (PCAOB) established by the Sarbanes-Oxley Act of 2002, and other various groups have asserted that auditor's independence can be impaired when non-audit services are provided; considering the fact that high non-audit fees could lead to auditors compromising their independence to retain clients when they are performing auditing (Reynolds & Francis, 2000; & The Sarbanes-Oxley Act, 2002). Moreover, the PCAOB has to date banned certain non-audit services in the US. However, it has been argued that total prohibition of non-audit services for audit clients would, over time, reduce accounting firms overall technical competence and expertise, and undermine audit effectiveness. For instance, auditing the accuracy of a company's tax provision properly requires having skilled tax experts (Riesenberg, 2002). In this vein, the existence of such value-added services is reasonable and it is impossible to completely stop auditors from providing non-audit services; as the spill-over effect of expert knowledge inevitably adds new value to auditing services, and then differentiates auditors in their ability to provide these additional services.

In the Nigeria context, ICAN code of ethics provide guidance on provision of non-audit services. The Code recognises the value to both client and auditor of the provision of non-audit services, but requires the auditor to evaluate the significance of any threat to independence created by the provision of such services. In some cases, it may be possible to eliminate or reduce the threat by applying safeguards. However, ICAN considers that safeguards are not possible for activities such as authorising or executing a transaction, or

otherwise exercising authority on behalf of the assurance client, or having the authority to do so; determining which recommendation of the firm should be implemented; reporting, in a management role, to those charged with governance. All these activities involve the auditor or audit firm in assuming a management role. ICAN considers several specific areas of non-audit service provision. Most of these activities are considered permissible, provided that; management decisions are not taken, and appropriate safeguards are put in place. Some of these areas include taxation services, internal audit services, and IT systems services.

Choi *et al.* (2008) speculated that when the auditor receives abnormally high audit fees from a client (i.e., abnormal audit fees are Positive), the auditor possibly allows the client to engage in opportunistic behaviours like earnings management. He further reasoned that for clients with positive abnormal fees, the benefits to the auditor from agreeing to client pressure for opportunistic earnings management can outweigh the associated costs (e.g., increased litigation risk, loss of reputation). For those firms whose earnings increase has been gained through doubtful accounting practices are likely to pay higher audit fee to persuade their auditors to certify those earnings as correct, and give it a better audit opinion than the facts merit (Xie, Cai, & Ye, 2010).

The demand for audit quality is also differ relative to the strength of corporate governance. A more independent board of directors could prevent earnings manipulation in the first place and hiring an auditor with high quality may also protect the auditor from being fired by managers when he reports a breach or material misstatement (Chung & Kallapur, 2003; Ireland & Lennox, 2002). Hermalin and Weisbach (2003) argued that effective board monitoring was more likely when insiders have less influence on the board. In addition, audit committees are also regarded as an important group, since they are responsible for determining audit fees and independence arrangements. However, the effectiveness of the audit committees is mostly guaranteed and noticed when positions of the CEO and the chairman are separated and headed by two independent individuals (Gregory & Collier, 1999).

Arrunada (2000) explained two important attributes of audit quality; professional judgement and the impact of independence on the third party and other clients. Professional judgement is a crucial attribute of audit quality because it substantially enhances the informational value of auditing for the third party. However, if there is lack of independence, auditors may decide not to make efforts to discover problems they do not wish to report on. As a result, they may come to light in decisions that reduce effective technical competence. Therefore, the content of audit quality, competence and independence are interrelated. In other words, auditors have to exercise their professional judgement independently (Huang, 2006).

Theoretical Background

The Theory of Inspired Confidence

The theory of inspired confidence otherwise known as theory of rational expectation, developed by the Dutch Professor Theodore Limperg can be used to explain both the demand and the supply of audit services (Hayes, Dassen, Schilder, & Wallage, 2005). The demand for audit services is the direct consequence of the participation of third parties (interested parties of a company) in the company. These parties demand accountability from the management, in return for their investments in the company.

Accountability is realized through the issuance of periodic financial reports. However, since this information provided by the management may be biased, and outside parties have no direct means of monitoring, an audit is required to assure the reliability of this information. With regard to the supply of audit assurance, the theory states that auditors' report derives its added value (confidence) from expert work on which the audit opinion is to be founded.

The auditor in performing his task should be governed by rational expectations of the several of users of his report. Wallage and Drieënhauizen (1995) suggest that, "the auditor should act in such a way that he does not disappoint these expectations (users' expectation). However, he should not arouse greater expectations in his report than his examinations justify". Saleh (2011) argues that with the aid of audit technology, the auditor should do everything to meet reasonable public expectations. The public in this context does not preclude the uses to which observers, supervisors and regulators may want to put the audit report.

The Official Supervision Theory

Threats to independence and profit maximisation race by audit firms that may have imprisoned the trustworthiness of the auditors may dash sceptic view at their ability to maintain the public expectations of protecting the investors'/depositors' funds and the general public. The introduction of the complementary role of banks' regulators is to ensure probity in the management of depositors' funds. Hence, the official supervision theory as developed by Beck, Demirguc-Kunt, and Levine (2004), theoretically argues that governments have both the expertise and the incentives to ameliorate market imperfections, information, and enforcement to improve governance of banks. This extends the position of rational expectations theory beyond the spheres of public expectations. The responsibility of any government is to avoid public outcry and other negative impacts that may succeed incessant bank failures. The official supervision theory theoretically justifies further that government is sensitive about market failure, seismic risk and consumer dissatisfactions that may emanate from bank failure and is constantly unleashing its political brainpower in terms of regulatory institutions to prevent the ugly occurrence (Salami, Uthman, & Abdul-Baki, 2014). It therefore reasonably implies that the official regulation of banks shares common goals with external audits in the need to ensure healthy banking services. Considering the common goal of the duo, the protection of the depositors' fund and the general public become necessary as this study examines whether auditors of banks consider factors that are important to regulators by evaluating audit fees determinants in the subsector.

Empirical Discussion

Gonthier-Besacier and Schatt (2006) examined factors influencing audit fees in France. They attempted to elucidate the amount spent on audit fees in 2002 in a sample of 127 French (nonfinancial) firms. The main finding was that audit fees depend on firm size, firm risk, and the presence of two of the big four firms. According to them, when two big four firms audit company accounts, the fees charged (adjusted for company size) are significantly lower in comparison with those paid in the other cases, and that the results appeared not to have been influenced by the share of fees paid by the companies to the main auditor. Al-Harshani (2008) investigated factors influencing the amount of external audit fees in Kuwait. The results indicated that the amount of audit fees was significantly influenced by the audit client size, liquidity ratio, and profitability ratio. The results, however, did not provide evidence of a significant relation between audit fees and the number of audit locations, or the size of the audit firm.

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Hassan and Naser (2013) examined factors influencing audit fees paid by non-financial companies listed on Abu Dhabi Stock Exchange (ADX). Data were collected from the 2011 annual and corporate governance reports published by the Emirati non-financial companies listed on ADX. Backward regression analysis was employed to assess the association between audit fees and certain company's attributes. The findings showed a direct relationship between audit fees and each of corporate size, business complexity and audit report lag variables. An inverse relationship between audit fees and each of industry type and audit committee independence was found. The findings also revealed that audit fees are not significantly influenced by company's profitability, risk, and status of audit firm.

Akinpelu *et al.* (2013) investigated the determinants of audit fees in commercial banks in Nigeria. Data were collected from a sample of banks mostly quoted on Nigerian Stock Exchange. The result showed that bank size, degree of bank complexity and transaction and saving accounts to total deposit ratio were positively related and statistically significant to audit fees charged by the auditors. Also, the risk weighted capital adequacy ratio was negatively related and statistically insignificant to audit fees while non-performing loan was statistically insignificant.

Younas, Velte, and Ashfaq (2014) investigated the firm-level factors effect on the audit pricing in China and Pakistan. The study used the panel data of 160 firms of each country of study for the period from 2005 to 2011. They first run the combined model for two countries and observed that complexity of business transaction is the only variable contributing positively and significantly in audit pricing for both countries. Then, for comparative review, they then segregated the data of each country and run separate model. The results of separate models showed that, in the case of Pakistan, auditors mainly consider complexity of business transactions and client risk while pricing their engagement as an auditor. However, in the case of China, the auditors only considered the Big 4 audit firm effect as a reputational tool while pricing their audit activity. The study further added that auditors in China totally ignore the client risk and complexity of business transactions which may be problematic for their auditing firm in future. The study concluded that audit pricing in Pakistan is more rational in comparison to China.

Tamrat (2014) investigated the determinants of audit fees based on variables that are unique to the banking firms and considered important by regulators in a sample of Ethiopian commercial banks. The study also examined whether abnormally higher audit fees reduce the audit quality. A panel data for eight commercial banks from the year 2004-2012 was used. The panel fixed effect regression result revealed that bank size, liquidity, efficiency, loan growth, capital adequacy and auditor size are the main determinants of audit fees for the Ethiopian commercial banks. With regard to the factors considered important by the regulatory bank, auditors do not seem to consider credit risk in the determination of audit fees. In relation to the audit quality, the study failed to find any significant relationship between the extent of earning management through loan loss provision and abnormal audit fees. The study therefore concluded that auditors do not seem to compromise audit quality for the sake of securing abnormally higher audit fees.

Kikhia (2015) examined the factors influencing the level of external audit fees paid by firms to their auditors in Jordan. Specific attention was on the investigation of the potential influence of auditee size, complexity of client, profitability, client risk, auditor size and auditor tenure on audit fees. The study strongly reinforced that greatest of prior studies results were also appropriate and applicable to the Jordanian audit market. Moreover, the

study provided further evidence connecting variables such as the auditor tenure effects and auditee risk which have been found to have an inconclusive relationship with the amount of external audit fees in prior studies. However, they observed the auditee size seemed to have been the key determinant of external audit fees. Lastly, financial risk was found to be negatively and significantly associated with the level of external audit fees. On other side, empirical results found that the audit tenure has no significant relationship with audit fees.

Castro, Peleias and Silva (2015) analysed the determinants of audit fees paid by companies listed on the BM&F BOVESPA, Brazil. They found a positive relationship between fees and the variables; size, client's complexity, and Big N auditors. The risk perceived by the auditor demonstrated to affect the values of fees differently in larger and smaller clients. In smaller clients, the results suggested that the auditor charges lower fees to more leveraged and riskier clients, contrary to the hypothesis that the auditor might charge higher fees as a reward for his risk. In turn, in larger clients, the results demonstrated that clients with higher risk, as measured by liquidity and leverage, or those having stronger governance practices, tended to spend more on auditing. As for changing the auditor, the results revealed that larger clients paid less in the first year of audit.

Ahmed and Abdullah (2016) examined factors influencing the determinants of audit fees in the Kurdistan region/ Iraq. Specifically, the study investigated the significance of three major groups of factors which might considerably influence audit fees; audited firm attributes, auditor attributes, and market attributes. They developed a plausible proxy that can be beneficial in practical work. Furthermore, research questionnaire was distributed among experienced auditors, accountants and financial officers of client firms, and academics in the field. The results showed that all three proposed categories of factors are significant and might be taken in consideration when audit fees are determined.

Sonu (2017) how the downward pressure on audit fees influences the determinants of audit fees during crisis using Korean data for the period 2005-2010. The study revealed that; first, consistent with prior studies, audit fees dropped significantly during the financial crisis period, supporting the existence of downward pressure on audit fees. Second, among the determinants of audit fees, the coefficients of firm size decreased significantly while those of firm risk increased during crisis. Accordingly, the findings suggest that auditors respond differently to small firms and risky firms when facing downward pressure on audit fees. Collectively, the results provide useful insights into how auditors behave when they are under pressure to reduce audit fees.

Methodology

Model Specification

The study builds on audit fee model of Soyemi and Olowookere (2013) which was modified thus;

$$AFEE = f(CAR, COMP, NPLR, EFFI, IFRS, SIZE, \text{ and } ROE) \dots \dots \dots (i)$$

$$LOGFEE_{it} = \beta_0 + \beta_1 CAR_{it} + \beta_2 COMP_{it} + \beta_3 NPLR_{it} + \beta_4 EFFI_{it} + \beta_5 IFRS_{it} + \beta_6 LOGASSET_{it} + \beta_7 ROE_{it} + \epsilon_{it} \dots \dots \dots (ii)$$

Where:

LOGFEE = Natural log of audit fee

CAR = Capital Risk

COMP = Complexity

NPLR = Non performing loan ratio

EFFI = Management efficiency

IFRS = Compliance with IFRS

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LOGASSET = Natural log of total assets of the auditee

ROE = Return on Equity

ε_{it} = Component error term given as $\mu_i + V_{it}$

β_0 = Intercept

$\beta_1, \beta_2, \dots, \beta_7$ = Parameters being investigated

The subscripts i and t refer to the cross-dimension and time series dimension of the model respectively, explaining the panel nature of the model

Measurement of Variable

The variables captured in the model specified in this study were measured as follows;

Dependent Variable

Audit Fees represent external audit fees measured as natural log of banks' annual audit fees

Independent and Control Variables

The explanatory and control variables in the specified model are measured as follows;

CAR: capital risk measured as capital adequacy ratio at the end of financial year for bank i in time t

COMP: complexity of operations measured as ratio of demand deposits to total deposit for bank i in time t

NPLR: credit risk measured as nonperforming loan ratio at the end of financial year for bank i in time t

EFF: management efficiency measured as the ratio of total operating expenses to total revenue for bank i in time t

IFRS: adoption of IFRS measure as 1 if adopted and 0 if otherwise for bank i in time t

LOGASSET: bank size measured as natural log of total asset for bank i in time t

ROE: bank profitability measured as ratio of profit attributable to owners to owners' equity for bank i in time t

Research Design, Nature and Sources of Data, and Estimating Techniques

The study adopted an ex post facto research design, since it examined an already occurred phenomenon. The study population consists of the listed deposit money banks on the Nigerian Stock Exchange and was all included in the study. Secondary data from annual reports and accounts of banks for the 2006-2015 was used. As for the method of data analysis, the inferential statistical methods which include pairwise correlation and Variance Inflation Factor (VIF) was to check the independent variables for possible multicollinearity. Hausman test was also conducted to make a choice between the Fixed and Random Effects Model (FEM; REM) of Panel Least Square regression.

Results and Discussion

Presentation of Preliminary Test Statistics

Table 1: Correlation Matrix

	CAR	COMP	EFFI	IFRS	NPLR	LOGASSET	ROE
CAR	1.0000						
COMP	0.0159	1.0000					
EFFI	-0.1526	-0.1002	1.0000				
IFRS	-0.1262	-0.0781	-0.0208	1.0000			

NPLR	-0.0376	0.1603	0.0542	-0.2093	1.0000		
LOGASSET	0.1489	0.0336	-0.0402	0.3929	-0.3307	1.0000	
T							
ROE	0.4174	-0.0061	0.0056	0.1128	-0.2414	0.2148	1.000

Source: Author's Computation, 2017

In Table 1, the results of correlation analysis of the independent variables were presented. The results indicated that the relationship between pairs of variables used as predictors is low and weak, as the correlation values are less than 0.50 or 50%. The relatively stronger relationships exist between CAR and ROE (42%); between LOGASSET and IFRS (39%); between NPLR and LOGASSET (33%); between NPLR and ROE (24%); and between LOGASSET and ROE (21%). This is expected as a strong correlation between independent variables is an indicator of collinearity which is a serious violation of Least Squares regression technique. Multicollinearity exist if there is high correlation (ranging from 50% - 90%) among the independent variables in a model (Baltagi, 2005). Since none of the correlation values is greater than 50%, it implies there is no problem of multicollinearity in the model estimated.

Table 2: Variance Inflation Factor

Variable	VIF	1/VIF
LOGASSET	1.47	0.679755
IFRS	1.34	0.746911
NPLR	1.21	0.826879
ROE	1.09	0.920290
COMP	1.06	0.944241
EFFI	1.02	0.983985
Mean VIF	1.20	

Source: Author's Computation, 2017

Table 2 brings out in clearer terms the extent to which the standard error of regression coefficients may be inflated due to relationship between the predictor variables. In other words, the variance inflation factors were conducted to measure the degree of correlation between one independent variable and another. As a rule of thumb (Kennedy 1992; Hair, Anderson, Tatham & Black, 1995; & Rogerson, 2001), a VIF in excess of 5 calls for further investigation whereas a VIF of at least 10 is suggestive of severe degree of collinearity between the predictors of interest which requires correction. A VIF of exactly 1 implies that there is absence of correlation. As can be seen from the table, the VIFs were slightly greater than 1 meaning that there is low relationship between the predictor variables. This is supported by tolerance levels (TOLs) which is the inverse of VIFs, the results being significantly higher than the common threshold of 0.20. Hence, there is no tendency that the standard errors of the regression coefficients would have been erroneously inflated.

Fixed/Random Effects Model Estimation Results and Testing of Hypotheses

Table 3: Determinants of External Audit Fees in Nigerian Deposit money Banks

Model	Fixed Effects			Random Effects		
LOGFEE	Coefficient	Std. Error	Prob.	Coefficient	Std. Error	Prob.

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Constant	2.906774	2.231284	0.1950	2.678573	1.779844	0.1346
CAR	0.002339	0.008616	0.7864	-0.012786	0.006726	0.0593
COMP	-0.006504	0.002999	0.0320	0.010496	0.002249	0.0000
EFFI	-0.004114	0.003646	0.2613	-0.000570	0.003203	0.8590
IFRS	0.224810	0.156475	0.1532	0.259207	0.137402	0.0613
NPLR	0.002900	0.003728	0.4381	0.020147	0.003278	0.0000
LOGASSET	0.454242	0.193697	2.345120	0.451989	0.152703	0.0036
ROE	0.000206	0.001589	0.8969	0.000356	0.001513	0.8145
R-Squared	0.690296			0.736893		
Adjusted R ²	0.684017			0.715332		
F-statistic	1.823704			3.774957		
Prob(F-statistic)	0.022428			0.000874		
Hausman Test						
Chi-Sq. Statistic		10.781954	Prob.	0.1484		

Source: Author's Computation, 2017

Table 3 gives a comparison of the Fixed and Random Effects estimates. The results of Hausman test conducted to make a choice between Fixed and Random Effects Model estimates were also presented. As shown in the table, since the calculated p-value is higher than the significance level of 5%, we are not inclined to reject the null hypothesis that the differences between the estimated parameters yielded by the two estimation techniques are not systematic. As a result, Random Effects model produces better results for the model and is therefore adopted for this study.

Random Effects model results were used to evaluate the factors determining external audit fees in the Nigerian commercial banking industry. The results in Table 4.3 showed that external audit fee (LOGFEE) has a negative relationship with capital risk (CAR). This means that external audit fee decreases with capital risk. The significance of this negative effect is established by t-statistic of -1.901. As a result, the null hypothesis of no significant effect can be rejected at 10% level of significance. So in marginal effect terms, increase of 1% in capital risk would induce a decrease of 0.013% in external audit fee provided that all other factors are held constant.

Conversely, the table depicts that external audit fee is positively related to complexity of banks operations (COMP) at a significance level of 1%. This implies that null hypothesis of no significant influence of operational complexity on external audit fees is rejected due to t-statistic of 4.667. Thus, external audit fee increases with the level of complexity in the Nigerian deposit money banks operations. In economic terms, an increase of 0.0105% in external audit fees is expected if the complexity of banks operations in terms of transaction volume increases by 1%, assuming that all other things being equal.

Similarly, the results indicate a direct relationship between external audit fee and adoption of International Financial Reporting Standards (IFRS). The significance of this relationship is established by t-statistic of 1.886. Given a p-value of 0.0613, the null hypothesis of no significant effect of IFRS adoption on external audit fees can be rejected at 10%. Hence, external audit fee increases with adoption of IFRS.

In addition, the table shows that external audit fee is positively correlated with credit risk (NPLR). The significance of this relationship is established by t-statistic of 6.146. So the null hypothesis that external audit fee is not significantly affected by credit risk is rejected at 1% level of significance. The marginal effect then shows that external audit fee will increase by 0.020% if the credit risk builds up by 1%, supposing all other factors remain the same.

Nevertheless, the association between external audit fee and total asset is positive and significant; given a t-statistic of 2.960. By implication, external audit fees would ceteris paribus increase by 0.452% if the total assets appreciate by 1%. On the contrary, while external audit fee has a negative relationship with management efficiency ratio (EFFI), its relationship with return on equity (ROE) is positive but not statistically significant given the t-statistics of -0.178 and 0.235 respectively. Consequently, the null hypothesis of no significant effect of management efficiency on external audit fees is hereby accepted.

For the goodness of fit of the model, the R-Squared value of 0.7369 shows that 73.69% of the systematic variations in external audit fees were explained by variations in the predictor variables of interest. Overall, the joint significance of all the variables in the model is brought to light by the F-statistic of 3.775. Based on this, the null hypothesis that the predictor variables are not jointly significant can be rejected at 1% level of significance. Therefore, it can be concluded that capital risk, complexity of banking operations, management efficiency, reporting requirements of IFRS, credit risk, size, and profitability are significant factors affecting external audit fees in the Nigerian deposit money bank.

Conclusion and Recommendations

The study revealed that capital risks of banks have a significant negative relationship with audit fees. Additionally, complexity of banks operations had a significant relationship with audit fees but on a positive direction. Similarly, credit risks of banks showed a significant positive relationship with audit fee while efficiency of banks management did not appear significant in affecting audit fees determination. As regards IFRS adoption, it revealed a significant positive relationship with audit fees. Finally, banks size also showed a significant positive relationship with audit fees while banks profitability exhibited no significant relationship.

From the foregoing conclusions, it is recommended that auditors of banks consider factors which are important to regulatory bodies. Although, the study finds that salient factors such as capital and credit risks were considered by auditors while determining audit fees, adequate cognisance of banks management efficiency which is also important to regulatory bodies was not taken. The better alignment of the regulators' interest in the course of determining audit fees would help auditors focus on important areas, thereby avoiding costly litigation associated with audit failure. Similarly, banks should always ensure that minimum regulatory requirements are met to put them at advantage during negotiation with auditors.

References

- Abidin, S., Beattie, V., & Goodacre, A. (2008). Audit Market Structure, Fees and Choice following the Andersen Break-Up: Evidence from the UK. *British Accounting Review*, 42(3), 18-206.

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MUIDEEN ADESEYE AWODIRAN, RAMAT TITILAYO SALMAN AND ISIAKA KAREEM JIMBA
EVALUATION OF FACTORS DETERMINING AUDIT FEE IN QUOTED NIGERIAN DEPOSIT.....

- Adeniyi, A. A. (2010). Auditing and Assurance Services (1st ed.). Lagos: Values Analysis Consult.
- Aguolu, O. (2002). Fundamentals of Auditing (2nd ed.). Enugu: Meridian Associates.
- Ahmed, A. R. & Abdullah, H. A. (2016). A Proposed Framework of Audit Fees. *Management*, 8(12), 1-12.
- Akinpelu, Y. A. O., Omojola, S. O., Ogunseye, T. O., & Bada, O. T. (2013). The Pricing of Audit Services in Nigerian Commercial Banks. *Research Journal of Finance and Accounting*, 4(3), 74-80.
- Al-Harshani, M. (2008). The pricing of audit services: Evidence from Kuwait. *Managerial Auditing Journal*, 23(7), 685-696.
- Arrunada, B. (2000). Audit Quality: Attributes, Private Safeguards and the Role of Regulation. *European Accounting Review*, 9(2), 205-224.
- Ask, J., & Holm, M. L. (2013). Audit Fee Determinants in Different Ownership Structures. Unpublished M.Sc. Thesis, Uppsala University, Department of Business Studies.
- Baltagi, B. H. (2005). *Econometric Analysis of Panel Data* (3rd ed.). John Wiley and Sons Limited.
- Beck T., Demircug-Kunt A., & Levine R. (2004). Bank Supervision and Corruption in Lending. World Bank Policy Research Draft Paper. Accessed on 23/7/2016 at <<http://siteresources.worldbank.org/DEC/Resources/BankSupervisionAndCorruptionInLending.pdf>>
- Boo, E., & Sharma D. (2008). Effect of Regulatory Oversight on the Association between Internal Governance Characteristics and Audit Fees that Auditors Perceive Lower Risk. *Accounting and Finance* 48 (2008) 51-71, doi: 10.1111/j.1467-629x.2007.00229.x
- Caneghem, T. V. (2010). Audit Pricing and the Big4 Fee Premium: Evidence from Belgium. *Managerial Auditing Journal*, 25(2), 122-139. Accessed 12/03/2016 <<http://dx.doi.org/10.1108/02686901011008945>>
- Castro, W. B. L., Peleias, I. R., & Silva, G. P. (2015). Determinants of Audit Fees: A Study in the Companies Listed on the BM&FBOVESPA, Brazil. *R. Cont. Fin. – USP, São Paulo*, 26(69), 261-273.
- Choi, J. H., Kim, J. B., Liu, X., & Simunic, D. A. (2008). Audit Pricing, Legal Liability Regimes, and Big 4 Premiums: Theory and Cross-country Evidence. *Contemporary Accounting Research*. 25(1), 55-99.
- Chung, H., & Kallapur, S. (2003). Client Importance, Nonaudit Services, and Abnormal. *The Accounting Review* 78 (4), 931-956.
- Dandago, K. I. (2002). *Auditing in Nigeria: A Comprehensive Text* (2nd ed.). Kano: Adamu Joji Publishers.

- DeAngelo, L. E., (1981). Auditor Size and Audit Quality. *Journal of Accounting and Economics*, 3, 183-199. Accessed on 18/05/2016. <<http://wlkc.gdqy.edu.cn/res/skillsres/resources/2012/04/05/18/E6EA4279>>.
- Defond, M. L., Raghunandan, K. & Subramanyam, K. R. (2002). Do Non-Audit Service Fees Impair Auditor Independence? Evidence from Going Concern Audit Opinions. *Journal of Accounting Research*, 40(4). Accessed on 10/05/2016 <<http://web.ebscohost.com/ehost/pdfviewer/pdfviewer?sid=84d33568-28dc-4a43-b0233ed04bd50cf0%40sessionmgr11&vid=1&hid=27>>.
- Ettredge, M., E., Fuerherm, E. & Li, C. (2014). Fee Pressure and Audit Quality, *Accounting, Organizations and Society*, 39(1), 247-263.
- Fields, L. P., Fraser, D. R., & Wilkins, M. S. (2004). An investigation of pricing of audit services for financial institutions. *Journal of Accounting and Public Policy*, 23(6), 53-77. Accessed on 28th May 2016, <www.elsevier.com/locate/jaccpubpol>
- Ghosh, A., Kallapur, S., & Moon, D. (2006). Audit and Non-audit Fees and Capital Market Perceptions of Auditors Independence. *Journal of Account. Public Policy* 28(2009), 369-385
- Gonthier-Besacier, N., & Schatt, A. (2006). Determinants of audit fees for French quoted firms. *Managerial Auditing Journal*, 22(2), 139-160. Accessed on 25th May, 2016, <<http://dx.doi.org/10.1108/02686900710718654>>.
- Gregory, A. & Collier, P. (1999). Audit fees and auditor change: an investigation of the Persistence of Fee Reduction by Type of Change. *Journal of Business Finance and Accounting*, 23(1), 13-28.
- Hair, J. F., Anderson, R. E., Tatham, R. L. & Black, W. C. (1995). *Multivariate Data Analysis*. New York: Macmillan.
- Hassan, Y. M., & Naser, K. (2013). Determinants of audit fees: Evidence from an emerging economy. *International Business Research*, 6(8), 13-25
- Hayes, R., Dassen, R., Schilder, A. & Wallage, P. (2005). *Principles of Auditing: An Introduction to International Standards on Auditing* (2nd ed.). Englewood Cliffs, NJ: Prentice Hall.
- Hermalin, B. & Weisbach, M. (2003). Boards of Directors as an Endogenously Determined Institution: A survey of the Economic Literature. *Economic Policy Review*, 9(1), 7-26.
- Higson, A. (2003). *Corporate Financial Reporting: Theory & Practice*. London: Sage Publications Ltd.
- Huang, J. (2006). An Investigation into the Determinants of Auditor Selection and Audit Fees in China. PhD thesis- unpublished, Cardiff Business School, Cardiff University ICAN (2014). *Advanced Audit and Assurance*. United Kingdom: Emile Woolf International
- Ireland, J. C. & Lennox, C. S. (2002). The Large Audit Fee Premium: A Case of Selectivity Bias?. *Journal of Accounting, Auditing and Finance*, 17(1), 73-91. Accessed on 14/04/2016 <<http://www.ntu.edu.sg/home/cslennox/JAAF.pdf>>.
- Kennedy, P. (1992). *A Guide to Econometrics*. Oxford: Blackwell

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EVALUATION OF FACTORS DETERMINING AUDIT FEE IN QUOTED NIGERIAN DEPOSIT.....

- Kikhia, H. Y. (2015). Determinants of Audit Fees: Evidence from Jordan. *Accounting and Finance Research*, 4(1), 42-53.
- Kimeli, E. K. (2016). Determinants of Audit Fees Pricing: Evidence from Nairobi Securities Exchange (NSE). *International Journal of Research in Business Studies and Management*, 3(1), 23-35.
- Lawrence, A., Minutti-Meza, M., & Zhang, P. (2011). Can Big 4 Versus Non-Big 4 Differences in Audit Quality Proxies be Attributed to Client Characteristics?. *The Accounting Review*, 86(1), 259-286. Accessed 28 July 2016 at <http://www.10.2308/accr.000000009>.
- Lobo, G. J., & Kanagaretnam, K., & Krishnan, G.V., (2010). An Empirical Analysis of Auditor Independence in the Banking Industry. *The Accounting Review*, 85(6), 2011-2046, DOI: 10.2308/accr.2010.85.6.2011.
- Ng, D. (1978). 'An Information Economics Analysis of Financial Reporting and External Auditing'. *The Accounting Review*, 4, 910-920.
- Reynolds, K. J., & Francis, J. R. (2000). Does Size Matter? The Influence of Large Clients on Office-Level Auditor Reporting Decisions. *Journal of Accounting and Economics*, 30 (3), 375-400.
- Riesenberg, T. L. (2002). The Non-Audit Service Restrictions of the Sarbanes-Oxley Act. Reproduced with permission from Daily Tax Report, No 185, J-1-J-5 (Sept, 24). www.bna.com
- Rogerson, P. A. (2001). *Statistical Methods for Geography*. London: Sage
- Salami A. A., Uthman, A. B., & Abdul-Baki, Z. (2014). Perceived Going Concern of Nigerian Banks: Testing the Relevance of Regulatory Audit in the Shadows of Periodic Audit. *Ilorin Journal of Accounting*, 1(1), 85-102.
- Saleh, M. (2011). Audit Expectation Gap: Concept, Nature and Trace. *African Journal of Business Management*, 5(21), 8376-8392
- Simunic, D. A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*, 18(1), 161-190. Accessed on 27/05/2016 < <http://www.jstor.org/stable/2490397>
- Sonu, C. H. (2017). Determinants of Audit Fees and Financial Crisis. *International Journal of Management and Applied Science*, 3(1), Jan 2017. Accessed on 15th March 2018 at http://www.iraj.in/journal/journal_file/journal_pdf/14-337-148920360195-97.pdf
- Soyemi, K. A., & Olowookere, J. K. (2013). Determinants of external audit fees: Evidence from the banking sector in Nigeria. *Research Journal of Finance and Accounting*, 4(15), 50-58.
- Swanson, K. (2008). *The Determinants of Audit Prices for Financial Services Institutions in the United States*. Major Themes in Economics Spring.
- Tamrat A. (2014). Audit Fees Determinants and Audit Quality in Ethiopian Commercial Banks. Unpublished M.Sc. thesis, College of Business and Economics, Addis Ababa

University, Addis Ababa, Ethiopia. Accessed on 26/05/2016 at
<<http://ssrn.com/abstract=2208717>>

Thinggaard, F., & Kiertzner, L. (2008). Determinants of audit fees: Evidence from a small capital market with a joint audit requirement. *International Journal of Auditing*, 12(2), 141-158, accessed on 26/05/2016 <<http://dx.doi.org/10.1111/j.1099-1123.2008.00377.x>>

Wallage, P., & Drieënhauizen, F. (1995). Reflections on Auditing Theory: A Contribution from the Netherlands. Volume 4 of Kluwer/Limberg Instituut-reeks. Netherlands: Kluwer Bedrijfswetenschappen. Accessed on 28/7/2016 at
<<https://books.google.com/books?isbn=9026721455>>

Watts, R., & Zimmerman, J. L., (1986). The Demand of and Supply for Accounting Theories. *The Accounting Review* 54(2), 273-305.

Xie, Z., Cai, C., & Ye, J. (2010). Abnormal Audit Fees and Audit Opinion— Further Evidence from China's Capital Market. *China Journal of Accounting Research*, 3(1), 51-70. Accessed on 10/06/2016.
<http://www.cb.cityu.edu.hk/research/cjar/doc/201006/03Xie_Cai%20and%20Ye.pdf>

Younas, Z. I., Velte, P. & Ashfaq, K. (2014). Audit Pricing in China and Pakistan: A Comparative Review of Audit Practices. *Accounting and Management Information Systems*, 13(1), 98- 110.

Zerni, M. (2012). Audit Partner Specialization and Audit Fees: Some Evidence from Sweden. *Accounting Research*, 29(1), 312-340.