



AUDITOR INDEPENDENCE AND AUDIT QUALITY: EMPIRICAL EVIDENCE FROM QUOTED OIL AND GAS FIRMS IN NIGERIA

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ABSTRACT

This study examines auditor's independence and audit quality in Nigeria's oil and gas sector. Two research hypotheses were formulated for the study. This study made use of ex-post facto research design. The data for the study were obtained from annual reports and accounts for the period. The data were analyzed using binary logit regression with the aid of E-views, 9.0. The results showed that the proxies of auditor independence; audit fee and audit tenure were both positive; but, only audit fee was statistically significant. The study recommends among others that audit firms are selected based on the tripartite characteristic of experience, exposure and specialisation. This study has implications for shareholders in determination of audit quality thereby safeguarding shareholder wealth.

Keywords: audit independence, auditor tenure, audit fee, auditor quality

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Introduction

Financial statements are outputs of the accounting process; which is used to communicate information to a wide range of users. To be reliable for users, several Company Laws in many countries mandate that such financial statements are certified by an external auditor. This involves a cross-examination of accounting records in order to establish whether they present a true and fair view of purported transactions. Before now, businesses were owned and managed by owners and as such self-accountability was eminent. But as businesses kept growing in an ever changing environment, there was a need to separate ownership from management. This gave rise to principal-agent relationship where owners (principals) entrusted the duty of running the day-to-day affairs of their businesses into the hands of professional managers (agents). There then came a need for business owners to look for an intermediary whose duty was to supervise the work performed by management who holds little or no interests in the business and assure them of fair performance (Emmanuel & Siriyama, 2014). This gave rise to the need for independent external audits.

Auditing is “concerned with the verification of accounting data, with determining the accuracy and reliability of accounting statements and reports” (Zayol, Kukeng, & Iortule, 2017). The auditing of financial statements refers to conducting an objective evaluation of the financial statements of a company by an independent auditor. Limited liability companies’ annual accounts are by law required to be audited, in order to ensure that the financial statements give a true and fair view to the users of these statements (European Commission, 2010). Although it is acknowledged that it is not reasonable to expect the audited accounts to be entirely free from misstatements, the European Commission (2010) argues that the goal of auditors is to minimize the risk that financial information is misstated. By performing the audit of companies’ financial statements, the auditor will provide stakeholders such as investors and shareholders with an opinion on the extent to which the companies’ financial statements are accurately presented. Porter, Simon, and Hatherly (2008) describes an external audit as an examination of an entity’s financial statements to provide evidence supporting the information contained in those statements.



Audit quality depends on auditor's independence as proposed by Aren, Elder, Randal, Beasley and Mark (2014) that the value of auditing depends heavily on the public's perception of the independence of auditors. Sadly, Audit quality in recent times has become a major concern locally, nationally and globally as most auditors seem not to be discharging their duties independently. Clients appear to be deciding for the auditor the audit scope, approach and opinion. This is evident in the massive corporate failures. Companies like Xerox, Enron and WorldCom, amongst others, have disclosed improprieties in their financial statements amounting to billions of dollars (Cullinan, 2004). Many studies have been performed in this area but these studies had concentrated more on evidence related to the auditor independence and audit quality of Banks as it is the main concern of a huge portion of the Nigerian population but there has been a gap of such research in the oil and gas sector of the Nigerian Stock Exchange.

Objectives of the Study

The specific objectives of the study are as follows:

1. To determine the effect of audit fee on audit quality of quoted oil and gas firms in Nigeria.
2. To determine the effect of audit tenure on audit quality of quoted oil and gas firms in Nigeria.



Review of Related Literature

2.0 Conceptual Review

2.1.1 Concept of Auditor Independence

Auditor independence may be defined as an auditor's unbiased mental attitude in making decisions throughout the audit and financial reporting process (Okolie, 2014). An auditor's lack of independence increases the possibility of being perceived as not being objective. Independence refers to the quality of being free from influence, persuasion or bias, the absence of which will greatly impair the value of the audit service and the audit report, Egbunike, Egbunike, and Okafor (2017). Auditor independence is important because it has an impact on audit quality. DeAngelo (1981) cited in Egbunike, Egbunike, and Okafor (2017) defined audit quality as the probability that (a) the auditor will uncover a breach and (b) report the breach. If auditors do not remain independent, they will be less likely to report irregularities; thereby impairing audit quality. An auditor's lack of independence increases the possibility of being perceived as not being objective. Thus, impaired independence results in poor audit quality and allows for greater earnings management and lower earnings quality (Okolie, 2014).

a. Audit Fee

Audit fee is the amount received for a particular audit service. Large size of audit fees is normally associated with a higher risk of losing the auditor's independence (Adeyemi & Okpala, 2011). The IFAC's Code of ethics for professional Accountants suggests that client size (measured from size of fees) could raise doubts as to independence.

Most empirical studies conducted on size of audit fees do not look at the factor above; instead they inter-relate it with other factors. For instance, Shockley (1981) cited in Adeyemi and Okpala (2011) suggests that the adverse effects of Management Advisory Services, the size of the audit firm and competitive on a third party's audit independence actually arise because of the link of these variables to audit fees. Nevertheless, there is a study that proves otherwise. Gul (1989) as cited in Adeyemi and Okpala (2011) proved that each independence related variable namely Management Advisory Services, competition and audit firm size, after audit



independence in its own right. He also found size of audit fees to be an important determinant of audit fee (measured as a percentage of office revenues to the audit firm), though do not show any significant impact on audit independence, have influenced respondents to feel less confidence in the auditor's independence.

b. Audit tenure

The audit firms (auditors') total duration to hold their client or number of consecutive years that the audit firm (auditor) has audited the client's (Johnson, Khurana, & Reynold, 2002). Auditor tenure has two aspects: the tenure of individuals engaged in the audit, particularly the engagement partner, and the tenure of the audit firm. Empirical evidence regarding the effect of auditor tenure on audit quality supports both arguments, with studies finding that audit quality both increases and decreases as audit firm tenure increases (Johnson, Khurana, & Reynold, 2002). Some studies on audit partner tenure find a positive association between audit partner tenure and audit quality measured by discretionary accruals (Chi, Huang, Liao, & Xie, 2009). Hence, the imposed mandatory partner rotation, which limits auditor partner tenure, can result in decreased audit quality. On the other hand, other studies find a negative association. Hence, the effects of audit tenure on audit quality are still inconclusive.

2.1.2 Concept of Audit Quality

The most well-known definition of audit quality, which has been broadly accepted by scholars is the one by DeAngelo (1981) cited in Zayol, Kukeng and Iortule (2017) which states that: *"The quality of audit services is defined to be the market-assessed joint probability that a given auditor will both discover a breach in the client's accounting system and report the breach"*. This definition broadly means that audit quality depends on the probability that the auditor discovers a misstatement in a financial statement and actually reports the misstatement. Zayol, Kukeng and Iortule (2017) added that the probability of discovering such a breach depends on aspects such as the technological capabilities of the auditor and the employed procedures of the specific audit. She also argues that the probability that the auditor actually reports the discovered misstatement is a measure of the auditor's independence from the specific client. Thus, an auditor is perceived as independent when the auditor is able



to withstand the client's pressure not to report the discovered misstatement (Zayol, Kukeng & Iortule, 2017).

Francis (2004) describes audit quality as *—a theoretical continuum ranging from very low to very high audit quality*. In addition to the definition, he argues that audit failures occur on the lower end of the quality continuum. According to Francis (2004), audit failures can occur as a result of two different reasons, either when the General Accepted Accounting Principles were not applied by the auditor, or when the auditor fails to issue a qualified audit report in circumstances that require such a report. Francis (2004) argues that the degree to which audits meet the minimal legal and professional requirements can be used as an approximation of audit quality and that audit quality is inversely related to audit failures. Alternatively, when using the litigation rate as a measure for audit quality, auditors with relatively low litigation rates provide a higher quality of audit services (Palmrose & Saul, 2001). In the view of Orjioko, (2002) and Muhammad, (2004) Audit quality is the compulsion to react to a responsibility that has been conferred on the auditor. It is an obligation to answer for the execution of the auditor's assigned responsibilities. It involves a demonstration that work has been conducted in accordance with agreed rules and standards and the officer reports fairly and accurately on performance results vis-à-vis mandated roles and/or plans (Adegite, 2010).

2.1.3 Auditor Independence and Audit quality

If auditors are not independent, they will be less likely to report misstatements, which negatively influences audit quality. As a result, it can be argued that the lower the degree of independence of the auditor, the lower the quality of audit services will be (Palmrose & Saul, 2001). Abdul, Sutrisno, Rosidi and Achsin (2014) in their study on the effect of competence and auditor independence on audit quality with audit time budget and professional commitment as a moderation variable in Indonesia using primary data in form of a public accountant's perception, found that from that; *First*: auditor's competence has positive effect on audit quality. This means that the higher the auditor's competence, the higher the audit quality. *Second*: auditor's independence has a positive effect on audit quality. It means that the higher the auditor



independence, the higher the audit quality. *Third:* audit time budget weakens the effect of auditor's competence on audit quality. It means the smaller the audit time budget, the greater effect of auditor's competence on audit quality. *Fourth:* audit time budget weakens the effect of auditor independence on audit quality. It means the smaller the audit time budget, the greater effect of auditor independence on audit quality. *Fifth:* professional commitment strengthens effect of auditor's competence on audit quality. This means the stronger the audit time budget, the greater effect of auditor's competence on audit quality. *Sixth:* professional commitment strengthens effect of auditor independence on audit quality. Their findings also mean the stronger the audit time budget, the greater effect of auditor independence on audit quality. Babatolu, Aigienohuwa, and Uniamikogbo (2016) also found that there exists negative relationship between audit firm tenure and audit quality as the correlation between audit quality and leverage was strong, negative and statistically significant. The correlation between audit quality and company size was strong, positive and statistically significant.

Empirical Review

Table 1: Summary of Empirical Review

| Authors (Surname) | Year | Country | Period | Methodology | Key findings |
|---|-------------|----------------|---------------|--|--|
| Babatolu, Aigienohuwa and Uniamikogbo | 2016 | Nigeria | 2000 – 2016 | Descriptive statistics + correlation + Ordinary least square | There is a positive relationship between audit fee, audit firm rotation and audit quality. There exists negative relationship between audit firm tenure and audit quality. |
| Ahmed | 2014 | Egypt | 2014 | Descriptive statistics + correlation + T-test | Findings revealed that the auditors' perception indicate that there is a negative relation between long audit tenure and audit quality. |
| Okolie | 2014 | Nigeria | 2014 | Descriptive statistics + correlation + Multiple regression | Audit tenure and auditor independence exert significant effects with level of discretionary accruals. |
| Kabiru and Rufai | 2014 | Nigeria | 2004-2009 | Descriptive statistics + correlation + Multiple regression | They found that independence of an auditor significantly improves the quality of audited financial statements of money deposit banks in Nigeria. |
| Coulton, Livne, Pettinicchio and Taylor | 2012 | China | 2009-2012 | Descriptive statistics + correlation + Multiple regression | Their results show that higher annual excess fees and abnormal audit fees are generally associated with lower audit quality. |

Source: Authors' Compilation, 2019.



Design and Methodology

The study adopted the ex-post facto design. The sample comprised six (6) upstream quoted oil and gas companies on the Nigerian Stock Exchange as at 2017. The study made use of secondary sources of data. The data for the study were obtained from annual reports and accounts for the period, 2011 to 2017.

Methods of Data Analysis

The study employed multiple regression technique. Specifically, binary logistic regression technique was employed in validating the hypotheses.

Model Specification

The following model was tested in the study:

$$AQ_{i,t} = \alpha_0 + AF_{i,t} + AT_{i,t} + \mu$$

Test of Hypotheses

The following hypotheses were tested in the study stated in the null:

- Ho¹: There is no significant effect of audit fee on audit quality of quoted oil and gas firms in Nigeria.
- Ho²: There is no significant effect of audit tenure on audit quality of quoted oil and gas firms in Nigeria.

Table 2: Binary Logit Regression result

| Variable | Coefficient | Std. Error | z-Statistic | Prob. |
|-----------------------|-------------|-----------------------|-------------|-----------|
| C | -2.006692 | 1.243882 | -1.613249 | 0.1067 |
| AUDIT_FEE | 1.76E-08 | 7.93E-09 | 2.222873 | 0.0262 |
| AUDIT_TENURE | 0.426822 | 0.340907 | 1.252020 | 0.2106 |
| McFadden R-squared | 0.208129 | Mean dependent var | | 0.591837 |
| S.D. dependent var | 0.496587 | S.E. of regression | | 0.447969 |
| Akaike info criterion | 1.193349 | Sum squared resid | | 9.231102 |
| Schwarz criterion | 1.309174 | Log likelihood | | -26.23704 |
| Hannan-Quinn criter. | 1.237293 | Deviance | | 52.47409 |
| Restr. Deviance | 66.26594 | Restr. log likelihood | | -33.13297 |
| LR statistic | 13.79186 | Avg. log likelihood | | -0.535450 |
| Prob(LR statistic) | 0.001012 | | | |
| Obs with Dep=0 | 20 | Total obs | | 49 |
| Obs with Dep=1 | 29 | | | |

Source: E-views 9.0



The table above shows the binary logit regression result for hypotheses one and two. The model showed an R squared value of .208 (R^2 measures the proportion of the variance in the dependent variable that is explained by the independent variables); thus, the model explains approximately 20.8% variation in the dependent variable. The LR statistic (ratio of the mean regression sum of squares divided by the mean error sum of squares) which is used to check the statistical significance of the model showed a value of 13.79; p value $<.10$; therefore, the hypothesis that all the regression coefficients are zero is rejected.

Hypothesis one

Based on our result, the z-statistic of our variable of interest representing hypotheses one is 2.22 ($p = 0.026$; $p <.05$), confirming that audit fee has a positive relationship with audit quality. However, the result showed a ($p = 0.026$; $p <.05$); thus, the null hypotheses is rejected. Therefore, there is a significant effect of audit fee on audit quality of quoted oil and gas firms in Nigeria.

Hypothesis two

Based on our result, the z-statistic of our variable of interest representing hypotheses two is 1.25 ($p = 0.210$; $p >.05$), confirming that audit tenure has a positive relationship with audit quality. However, the result showed a ($p = 0.210$; $p >.05$); thus, the null hypotheses is accepted. Therefore, there is no significant effect of audit tenure on audit quality of quoted oil and gas firms in Nigeria.



Conclusion and Recommendations

The paper focuses on audit independence and audit quality from a binary logistic approach. The proxies of auditor independence showed a positive effect for both audit fee and audit tenure; however, only audit fee was statistically significant. The study makes the following recommendations:

1. Engaging firms based on experience, exposure and specialisation: Most often large firm (Big-4) often attract higher fee because they have a greater access to resources while smaller firms face pressures within their working environment due to minimum client exposure. Hence, it is recommended that companies engage firms based on the tripartite characteristic of experience, exposure and specialisation. This is to ensure engaged firms put due diligence and professional ethics above any pressure resulting from high or low fee.
2. Auditor tenure is sensitive and should be handled with due caution: It is expected that auditors rotate clients every five years, yet some auditors stay with clients for longer periods of time. As a result, questions can arise as to the connection and closeness of their relationship and what affect it would have on the audit. Therefore, irrespective of the non-significant effect of auditor tenure on audit quality, it is still recommended that audit rotation is maintained and within a reasonable period of time so as to prevent misguided worries from stakeholders and other users of the company's financial information.



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