Effect of Audit Fee on Audit Quality of Listed Firms in Nigeria

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Abstract - The expectation of investors and other stakeholders of quoted corporate firms is that the financial statements and annual reports are true and fair about the position of the firm. In order to achieve this, the external auditors must ensure quality auditing. The study has examined the effect of audit fee on audit quality using a sample of selected firms from the consumer goods sector in Nigeria within the time period of 2011 and 2016. The core explanatory variables employed were the audit fee and audit tenure. Added to these explanatory variables were the control for firm size, profitability and leverage. The pooled data OLS regression technique was employed for data analyses. The results showed that audit fee and other explanatory variables determines 38% of audit quality of the selected firms. Specifically, the study found that audit fee, client profitability and financial leverage have positive but insignificant effect on audit quality in the consumer goods sector of quoted firms in Nigeria. However, audit tenure and client size have significant positive effect on audit quality in the consumer goods sector of quoted firms in Nigeria. The study thus concludes that the quality of firm audit is significantly enhanced by the length of audit tenure and client size, much more than the amount of audit fee, firm profit and leverage. It is recommended that firms should contract audit firms for longer than three years to encourage quality of audit reports.

Keywords: Audit fee, audit quality, audit report, Nigeria

I. INTRODUCTION

A. Background to the Study

The need for reliable audit report has increased tremendously in the recent times. One major factor that triggered this is the growing importance of good corporate governance mechanism arising from highly publicized accounting scandals in Nigeria and across the globe, many high profile corporate collapses, such as the case of Enron scandal of 2001; Parmalat in 2003; Cadbury Nigeria Plc in 2006 and Afribank Nigeria Plc in 2009 (Ajani, 2012; Miettinen, 2011). These incidences have created a revolution in the design and evaluation of the audit quality and have in fact reinforced the need for its improvement.

The business of auditing and the audit process provide an evaluation of the probability of material misstatement and reduce the possibility of undetected misstatement to a reasonable or appropriate assurance level (Knechel, 2009). The process involves performing procedures to obtain evidence about amounts and disclosures in the financial statements so as to evaluate the appropriateness of accounting estimates made by management (KPMG, 2008). Thus audit report quality is a basic requirement to enhance the credibility of financial statements within the stakeholders. The Audit quality therefore, is a basic ingredient in enhancing the credibility of financial statements to users of accounting information.

To this end, audit quality has come to be one of the most important issues in audit practice today. Several individuals and groups; both internal and external, have an interest in the quality of audited financial information (IAASB, 2011). Auditors express their audit opinions on a financial statement presented to them based on audit evidence. Insufficient or inappropriate audit evidence may lead to wrong conclusions and this may affect the quality of the report. Hence, the issue of audit quality has received increased attention due to highly publicized audit failures culminating in corporate scandals, corporate fraud, and corporate failure.

Previous researches have shown that auditor as well as firm characteristics influences the quality of audit reports. Authors have believed that audit fee can influence the quality of audit report. This is premised on the notion that audit firms that employed more experienced staff might charge higher fees to maintain their staff. The extent to which this notion holds in the Nigerian context is investigated using the consumer goods sector.

B. Statement of the Problem

The need to improve on audit quality arises out of the fact that investor confidence might suffer with its attendant effect on investment. Understanding the factors that influence audit quality could aid researchers and corporate firms to appraise how much they use such variables. A number of studies have been conducted both in Nigeria and abroad to understand the effect of audit fee on audit quality.

There is equally conflict in empirical findings on literature. While a good number of the studies posit positive relationship between audit fee and quality (Yuniarti, 2011; Rahmina & Ageos, 2014; Oladipupo & Monye-Emina, 2016; Onaolapo, Ajulo & Onifade, 2017), others support negative relationship (Enofe, Mgbame, Aderin & Ehi-Oshio, 2013; Hoitash, Markelevich & Barragato, 2007), whereas some found no relationship at all (Choi, Kim, and Zang (2010). However, there is no empirical study in Nigeria that studied the audit fee-quality nexus among the consumer goods firms in Nigeria.

Again, the review of empirical studies in Nigeria, to the best of our knowledge, are scanty. More so, no study in Nigerian context have isolated the consumer goods sector of the Nigeria Stock Exchange for a study of this nature, even as this study is the most recent covering data up to 2016 to bring the empirical debate on the effect of audit fee on audit quality to currency. These gaps are filled by this study.

The main objective of the study is to examine the effect of audit fee on audit quality in listed firms in Nigeria. The specific objectives include:

1. To examine the effect of audit fee on audit quality.
2. Determine the effect of audit tenure on audit quality.
3. To examine the effect of client’s size on audit quality.
4. To find out the effect of firm profitability on audit quality.
5. To find out the effect of firm leverage on audit quality.

II. REVIEW OF RELATED LITERATURE

A. Conceptual Framework

The conceptual framework explained the concepts of audit quality and tried to explain that audit quality as a concept can be linked to audit fee and other control variables. The variables explained in this section includes Audit Quality, Audit Fee, Auditor Tenure, Client Size, Firm Profitability, and Firms’ Financial Leverage.

Audit Quality

The term audit quality does not have a universally accepted definition. It connotes the quality of audit report from an auditor. Audit itself is an independent examination of and expression of opinion on the financial statement of an enterprise by an appointed auditor, in pursuance of that appointment and in compliance with any relevant statutory obligation (Onaolapo, Ajulo & Onifade, 2017). To this end, audit is expected to improve the value of information presented in the financial statements and as a result of this, audit quality has to do with a display of professionalism, diligence and care by auditor in audit process which should lead to a true and fair view of financial statement (Arrunada, 2000).

Thus, audit quality is auditor’s ability on discovering the material misstatement and reports them (DeAngel, 1981). In the words of Arens, Elder, Beasley, Best, Shailer, Fielder (2011) audit quality means how well an audit detects and report material misstatements in financial statements, the detection aspects are a reflection of auditor competence, while reporting is a reflection of ethics or auditor integrity, particularly independence”. It can equally be referred to as the joint probability in which an auditor finds and reports errors contained in the audited financial statements to comply with general auditing standards in performing their duties so that credibility is maintained (Rahmina & Agoes, 2014).

These definitions suggest that audit quality has to do with detecting misstatements, and correcting them so that what is reported in the financial statement becomes the true position of the firm so audited. This is why Onaolapo, Ajulo and Onifade (2017) averred that the existence of audit quality is validated when a financial statement is free from information asymmetry. This implies that audit quality will bring actual quality and perceived quality to the same in context and value. The definition of Jackson, Moldrich and Roebuck (2008) view the quality of audits from actual and perceived quality. According to the definitions, actual quality shows levels of risk of material errors in financial statements that can be reduced by the auditor. Perceived quality indicates the level of confidence of users in financial statement and the auditor’s effectiveness in reducing material misstatement in financial statements prepared by management. Therefore, the concept of audit quality implies that the necessary actions that will ensure the report of the true financial position of a firm has been put in place.

The expertise needed to do these is believed to lie with the big and well established firms. Thus in Nigeria, audit quality has been denoted with the likelihood that a sampled company employs the services of one of the big audit firms. The variables is represented using dummy of the audit firm size where the big4 audit firm is assigned to represent quality audit and non-big 4 implies otherwise. The big4 audit firms in Nigeria are Akintola Williams Deloitte, PwC Nigeria, Ernst & Young, and KPMG. This criteria has been adopted by studies like (Onaolapo, Ajulo & Onifade, 2017; Oladipupo & Monye-Emina, 2016; Adeniyi & Mieseighana, 2013).

Audit Fee

The official assignment of the audit attracts service charge. The amount of money that make up this charge is called audit fee. This fee according to The Securities and Exchange Commission, Final Rule (in Yuniarti, 2011), is paid for annual audits and reviews of financial statements for the most recent fiscal year. The total fee paid is usually the amount of all costs covered for audit (Hoitash, Markelevich & Barragato, 2007); thus, it equally reflects the cost of the efforts of the public editors and litigation risks (Choi, Kim, Liu & Simunic, 2009). By this explanations, audit fee would vary depending on the auditee size and how complex the auditing process is (Lyon & Maher, 2005).

However, several authors seem to suggest that audit fee influences audit quality and hence they tend to use audit fee as proxy for audit quality. Yassin and Nelson (2012) suggested that a higher audit fees indicates that auditors provide more efficient audit services to the companies compared to lower audit fees. Since the audit market is closely regulated wherein the opportunities to earn rents is limited, auditor efforts are more likely reflected by audit fees (Kanagaretnam, Krishnan, Lobo, & Mathieu, 2011). Moreover, for a more thorough investigation, more audit hours and more specialized audit staff are required; thus higher audit fees would be expected (O'Sullivan & Diacon, 2002). Hence, it is expected that higher audit fees indicate a higher quality audit, as more audit work is required to ensure that the financial statements are free from material misstatement.

Auditor Tenure

Tenure is the number of time period that a body is allowed to carry out a function in a consecutive sequence. In the view of Nuratama (2011) and Hartadi (2009), audit tenure is the agreed period of engagement between the auditor and client. In literature, it is believed that an audit contract that is up to three years means a longer term period while ones less than three years are short term (Iaboya & Ohiohka, 2014; Rahmina & Agoes, 2014; Oladipupo & Monye-Emina, 2016; Onaolapo, Ajulo & Onifade, 2017).

Client Size

Client size is the measure of how large is the firm. Literature has used amount of sales, total assets and branch network to measure the size of firm. In this study, the measure adopted is the total assets of the selected firms. It is believed that large firm connotes more work. External auditors have to spend more time for client meetings, understanding client complicated internal control systems, designing more audit procedures and conducting more test of detail (Steward & Munro, 2007). To this end, as the fees paid to auditors depend on the amount of time to complete the job given, it is expected that larger companies have to pay higher audit fees. Therefore, it is believed that higher audit quality can be easier achieved by the larger audit firm (Francis, 2004), because of their ability to discover and detect the misstatements (DeAngel, 1981). However, because of the existence of the auditor-related specifications such as professional competence, technical ability, auditor’s liability as well as auditor independence, it is...
more expected to reach higher audit quality in large audit firms (Hussein & Hanefah, 2013).

Audit Client Profitability

Profitability measures the extent to which a business generates a profit from the factors of production: labour, management and capital. Profitability analysis focuses on the relationship between revenues and expenses and on the level of profits relative to the size of investment in the business. Four useful measures of profitability are the rate of return on assets (ROA), the rate of return on equity (ROE), operating profit margin and net income (Hansen & Mowen, 2005). These are regarded as market-based indicators of financial performance that capture company’s internal efficiency (Orlitzky, Schmidt & Rynes, 2003). However, since the study aims to capture asset allocation, the proportion of net profit to total assets measures of return on assets (ROA) is used in this study to measure profitability. Joshi and Al Bastaki (2000) explain that companies reporting high levels of profits will be subjected to extensive audit testing of their revenues and expenses and this will result in higher audit fees. This implies that firm profitability is a control variables for audit fee.

Firm Financial Leverage

In the view of Bhatti, Majeed, Rehman, and Khan (2010), financial leverage is the use of borrowed funds along with owned funds for investment whereas the ratio of borrowed funds to own funds (or debt to equity) is called the leverage ratio. Onwumere and Okoyezu (2010) recognised that the key division in capital structure is between debt and equity, and further states that the proportion of debt funding is measured by leverage. Financial leverage results from the difference between the rate of return the company earn on investment in its own asset and the rate of return the company must pay its creditors (Garrison et al., 2004 as cited in Bhatti, Majeed, Rehman, & Khan, 2010). The term “Leverage” is commonly described as the use of borrowed money to make an investment and return on that investment. It is more risky for a company to have a high ration of financial leverage. It has also been noticed that on the outcome of financial leverage: if the level or point of financial leverage is high, the more rise is anticipated profit on company's equity. Thus, financial leverage is used in various circumstances as a means of altering the cash flow and financial position of a company.

An increase in financial leverage results increase in firm returns and risk. The amount of leverage in the firm’s capital structure – a mixture of long term debt and equity maintained by the firm – can significantly affect its value by affecting return and risk. Thus, Smith (2002) in Bhatti, Majeed, Rehman, and Khan (2010) posits that company's profits with high rate leverage level differ with the same condition as with the company's profits with lesser leverage level.

B. Theoretical Framework

The theoretical framework of the study is hinged on the principal-agent theory of audit pricing. The agency theory deals with the contractual relationship between the agent (manager) and the principal (shareholders) under which shareholders delegate responsibilities to the manager to run their business. This theory argues that when both parties are expected to maximise their utility, there is good reason to believe that the agent may engage in opportunistic behaviour at the expense of the principal's interest. Jensen and Meckling (1976) modelled this condition as an agency relationship where the inability of the principal to directly observe the agent's action could lead to moral hazard, thus increasing agency cost.

The level of cordiality between the agent and the principal has influence on the price of audit. According to Jensen and Meckling (1976), a component of the agency costs is represented by the monitoring costs supported by shareholders for the monitoring of the managers actions. The audit fees are an important component of these costs, as long as auditors have to make sure that managers act according to the shareholders' interests, while also auditors have the required task to inspect the accounts of the company.

C. Empirical Studies

Enofe, Mgbame, Aderin, and Ehi-Oshio (2013) analyzed the determinants of audit quality in Nigerian business environment. The determinants studied include engagement and firm related characteristics such as audit tenure, audit firm size, board independence and ownership structure. A Likert scale questionnaire was developed and used to collected data from a sample of 100 respondents from the South-South geopolitical zone of Nigeria. A multiple regression model developed was analysed using the OLS regression technique. From the results, audit firm size, board independence and ownership structure were found to be positively related to audit quality; however, only board independence exhibited a significant relationship with audit quality. Audit tenure exhibited a negative relationship with audit quality which was also not significant.

Choi, Kim, and Zang (2010) employed a multiple regression technique to examine whether and how audit quality proxied by the magnitude of absolute discretionary accruals is associated with abnormal audit fees, that is, the difference between actual audit fee and the expected, normal level of audit fee. The results of various regressions reveal that the association between the two is asymmetric, depending on the sign of the abnormal audit fee. For observations with negative abnormal audit fees, there is no significant association between audit quality and abnormal audit fee. In contrast, abnormal audit fees are negatively associated with audit quality for observations with positive abnormal audit fees.

Following the nature of Indonesia where there is high audit market competition and strong client bargaining power resulting from regulation on mandatory audit firm rotation, Fitriany and Anggraita (2016) investigated the economic bonding between auditor and client by examining the association between abnormal audit fee and audit quality. The study employed the natural log of actual fees paid to auditors for their financial statement audits as dependent variable while the independent variables included total assets (firm size), number of business segments, number of geographic segments, inventory and receivables, number of employees, firm report a loss, leverage, return on assets, firm liquidity, the use of the Big4 auditors, tenure, book-to-market ratio, and sales change. The multiple regression model showed that a positive abnormal audit fees are negatively associated with audit quality and imply that the audit fee premium is a significant indicator of compromised auditor independence due to economic auditor-client bonding. Audit fee discounts could also increase audit quality, maybe due to the mandatory audit firm rotation and high audit market competition in Indonesia, so that the auditor must keep their independency and high audit quality to maintain good reputation.

Hoitash, Markelevich and Barragato (2007) examined the relationship between fees paid to auditors and audit quality
during the period of 2000-2003 in the USA. The study constructed a measure of auditor profitability that is used as a proxy for auditor independence. This approach was employed on the ground that auditor independence is influenced by effort and risk-adjusted fees, rather than the level of fees received from clients. Since, risk and effort are unobservable, the paper uses proxies based on client size, complexity and risk to estimate abnormal fees. Abnormal fees are derived using a fee estimation model drawn from prior literature. Two measures of audit quality were used: the standard deviation of residuals from regressions relating current accruals to cash flows and the absolute value of performance-adjusted discretionary accruals. The OLS regression results documented a statistically significant negative association between total fees and both audit quality proxies.

Krauß, Quosigk, and Zülch (2014) examined the presence and magnitude of initial audit engagement fee cutting and its potential effect on audit quality in Germany using a sample of 992 firm-year observations from 2005 to 2011. The results show a systematic fee cutting for initial audit engagement years in Germany. However, despite significant audit fee differences between initial and subsequent audit engagement years, there was no differences in audit quality.

Krauß, Pronobis, and Zülch (2015) examined the association between abnormal audit fee pricing and audit quality for the institutional setting of German IFRS firms by using a sample of 2,334 firm-year observations for the period from 2005 to 2010. The findings show that positive abnormal audit fees are negatively associated with audit quality and imply that the audit fee premium is a significant indicator of compromised auditor independence due to economic auditor–client bonding. Audit fee discounts generally do not lead to a reduced audit effort, or respectively, audit quality is not impaired when client bargaining power is strong. The association of positive abnormal audit fees and audit quality is robust to different audit quality surrogates such as absolute discretionary accruals, financial restatements, and meeting or beating analysts’ earnings forecasts.

Ilaboya and Ohiokha (2014) examined the impact of audit firms’ characteristics on audit quality. The study proxied audit quality using the usual dichotomous variable of 1 if big 4 audit firm and 0 if otherwise. A sample of 18 food and beverage companies listed on the Nigerian Stock Exchange market within 2007-2012 was used for the study. A multivariate regression technique with emphasis on Logit and Probit method was used to estimate the model for the study. The findings indicate that there is a positive relationship between firm size, board independence and audit quality whereas there is a negative relationship between auditor’s independence, audit firm size, audit tenure and audit quality.

Oladipupo and Monye-Emina (2016) examined the effect of abnormal audit fees on audit quality in audit market in Nigeria. The study thus employed audit quality as dependent variables while the explanatory variables were audit tenure, board independence, audit committee activeness, firm size and leverage. Using a probit binary regression technique on 350 firm observations data obtained from companies quoted on the Nigeria Stock Exchange, it was observed that both positive and negative abnormal audit fees had insignificant positive impacts on audit quality. This shows that abnormal audit fee does not matter to audit quality. Contrary to expectation, board independence and firm size had negative impacts on audit quality. However, only the impact of board independence was statistically significant. Of the auditor tenure, audit committee activeness and leverage that have positive impacts on audit quality, only the leverage had significant impact on audit quality.

Yuniarti (2011) examined the determinant factors of audit quality by proposing the hypothesis that the audit firm size (size of public accounting firm) and audit fees (audit fees) have an effect on the audit quality. The unit of analysis was the external auditor who has worked in (Certified Public Accountant) CPA firm, the author takes the CPA Firm in Bandung, West Java, Indonesia. This type of research is descriptive verification research, because it describes the variables and observes the correlation of these variables from the hypothesis that has been made systematically through statistical testing. The statistical test use path analysis and the examination of the hypothesis in this research using two ways: simultaneous test and separate test (partial), using t-test and f-test. Empirical test results that the CPA firm size does not significantly affect to audit quality in public accounting firm in Bandung, whereas the amount of audit fee significantly affect to quality of audit and simultaneously CPA firm size and audit fees do not significantly affect to quality of audit in public accounting firm in Bandung.

Rahmina and Agoes (2014) aimed to determine the effect of auditor independence, audit tenure, and audit fee both partially and simultaneously on the audit quality. This research uses primary data collected through the distribution of questionnaires in audit firm listed in Capital Market Accountant Forum – FAPM in Indonesia. The population of research are senior auditor, supervisors, managers, and partners positions and worked on the audit firm member of FAPM. The results of this research show that in general auditor independence, audit tenure, and audit fee have a positive influence on audit quality. The test Coefficient of Determination result of 21.4% indicates that the audit quality can be explained by variations in auditor independence, audit tenure, and audit fee, while the remaining 78.6% is explained by other variables that are not used in this research, such as auditor’s size, auditor’s industry specialization, and audit risk.

Onaolapo, Ajulo and Onifade (2017) examined the effect of audit fees on audit quality in Nigeria using a sample of listed cement companies on the floor of the Nigerian Stock Exchange. The explanatory variables were audit fee, audit tenure, client size, leverage ratio while audit quality as the dependent variable. Ordinary Least Square Model estimation technique was used for the data analyses. Secondary data derived from the published annual reports of the selected companies for a six year period (2010-2015) was used for the study. Findings from the study show that audit fee, audit tenure, client size and leverage ratio exhibit a joint significant relationship with audit quality. Further results show that audit fee in particular has a significant positive impact on audit quality.

D. Summary of Literature Reviewed

From the review, it can be seen that audit quality connotes the truism in the fairness of the financial report presented on the Financial Statements and Annual Reports of firms. The quality of audit report are believe to hinge on variables such as audit fee, audit tenure, client size, profit and leverage. The review have defined audit fee as the amount paid to audit firm for the services rendered with regards to auditing the firm financial accounts; while the tenure is the number of years of audit contract given to the audit firm. The control variables such as
firm size, firm profitability and financial leverage were included to factor in firm characteristics into the model. The size represent the largeness or smallness of the firm and is measured using the total asset of the firm. The profitability is the after tax profit divided by total asset called return on asset, while financial leverage is the measure of the level of indebtedness of the firm. These factors are believe to affect how much the firm can offer as audit fee and the length of years it can contract particular audit firm.

The theoretical foundation of the study is hinged on the principal-agent theory of audit pricing in which it is believed that since both parties are expected to maximise their utility, there is good reason to believe that the agent may engage in opportunistic behaviour at the expense of the principal's interest. The inability of the principal to directly observe the agent's action could lead to moral hazard, thus increasing agency cost. These calls for the need to always audit the records and account of the managers.

However, the empirical studies showed conflicting findings on the effect of audit fee on audit quality. These conflicts are:

1. Enofe, Mgbarue, Aderin, and Ehi-Oshio (2013) → Nigerian study showed that audit tenure exhibited a negative relationship with audit quality which was also not significant.
2. Choi, Kim, and Zang (2010) → in China, there is no significant association between audit quality and abnormal audit fee.
3. Hoitash, Markelevich, and Barragato (2007) → studied in USA showed a significant negative association between total fees and audit quality.
4. Ilaboya and Ohiokha (2014) → in Nigeria, there is a positive relationship between firm size and audit quality; and a negative relationship between audit tenure and audit quality.
5. Oladipupo and Monye-Emina (2016) → from Nigeria, abnormal audit fee does not matter to audit quality.
6. Yuniarti (2011) → in Indonesia firm size does not significantly affect audit quality whereas the amount of audits significantly affect to quality of audit.
7. Rahmina and Agoes (2014) → from Indonesia, audit tenure, and audit fee have a positive influence on audit quality; and
8. Onaolapo, Ajulo and Onifade (2017) → in Nigeria, audit fee, audit tenure, client size and leverage ratio exhibit a joint significant relationship with audit quality.

From the above sample studies, there is no agreement among the researchers on the effect of audit fee, audit tenure, firm size, firm profitability and leverage on audit quality of quoted firms.

E. Gap in Literature

One of the gaps identified in the study is that of conflict in empirical review. Lack of consensus on the effect of audit fees on audit quality would affect the decisions of the stakeholders. The need for further study becomes necessary to understand the effect of audit fees on the quality of audit reports. To the best of the researcher's knowledge, studies in Nigeria are scanty. Even at that, no study in Nigerian context have isolated the consumer goods sector of the Nigeria Stock Exchange for a study of this nature. Only the cement industry and food and beverages had specific study that identified the effect of audit fee on audit quality in the sectors. This calls for further study on this subject and a specific one for the consumer goods sector. A good number of the studies reviewed did not covered the most recent time period as the present study. Only the work of Onaolapo, Ajulo and Onifade (2017) employed a timeframe that extended up to 2015. The current study is more recent because it included 2016 data to bring the empirical debate on the effect of audit fee on audit quality to currency.

III. METHODOLOGY

A. Research Design

The study employed an expost facto research design to collect already existing data from records of the selected firms for the study. The study is an expost facto because the researcher will use the real data as obtained from the official documents of the firms.

B. Population, Sample Size and Technique

The population of this study comprises all the consumer goods firms quoted at the Nigerian Stock Exchange (NSE) for the period of six (6) years from 2011 to 2016. At present, there are 28 quoted consumer goods firms in Nigeria. The researcher adopted a purposive sampling technique to select a sample of eleven consumer goods firms for the study. The time frame ranges from 2011 to 2016 making it a six-year period. The number of firms’ data collected for five years were six (6) while five (5) were collected for five years. The total observations for each variable is therefore 60 series.

C. Description of Variables

The variables employed for the model development is explained on Table 1. The table shows the name of the variable, the acronym, type of variable and its proxy.

<table>
<thead>
<tr>
<th>Table 1: variables description</th>
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<tbody>
<tr>
<td><strong>SN</strong></td>
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<tr>
<td>1</td>
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<td>2</td>
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<td>3</td>
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<td>4</td>
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<td>5</td>
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<td>6</td>
</tr>
</tbody>
</table>

Source: Adapted from Oladipupo and Monye-Emina (2016) and authors conception

D. Model Specification

The model of the study is designed to show that audit fee can directly influence audit quality. The model was adapted from a number of studies carried out in Nigeria and Indonesia. These are:

1. Ilaboya and Ohiokha (2014) in Nigeria
   Audit quality =f(firm size, board independence, auditor’s independence, audit firm size, audit tenure).
2. Oladipupo and Monye-Emina (2016) in Nigeria
Audit quality = f(audit tenure, board independence, audit committee activeness, firm size and leverage)

3. Onaolapo, Ajulo and Onifade (2017) in Nigeria
   Audit quality = f(audit fee, audit tenure, client size and leverage ratio)

4. Yuniaarti (2011) in Indonesia
   Audit quality = f(audit firm size, and audit fees)

5. Rahmina and Agoes (2014) in Indonesia
   Audit quality = f(auditor independence, audit tenure, and audit fee)

The present study recognised the importance of profit in financial decision making in corporate firms and then included profitability as one of the control variables in the study alongside firm size and leverage. The functional relationship is thus:

AUDQTY = f(AUDFEE, AUDTEN, SIZE, PROFIT and LEV)

Where the symbols are defined as in Table 2. The model can be rewritten in equation form as:

AUDQTY = β0 + β1AUDFEE + β2AUDTEN + β3SIZE + β4PROFIT + β5LEV + µ

Where β0 is a constant, β1,5 are the coefficient of the explanatory variables while µ is an error term.

E. Method of Data Analyses

Descriptive statistics and inferential statistical techniques were used to analyze the data. The Panel OLS regression technique was employed for data analyses. This panel data analysis, also called the constant coefficients model is one where both intercepts and slopes are constant, where the cross section of firm data and time series data are pooled together in a single column assuming that there is no significant cross section or temporal effects (Gujarati, 2003).

IV. DATA ANALYSES AND INTERPRETATION OF RESULTS

A. Presentation of Data

The data employed for the study was a six year time series data collected from eleven firms in the consumer goods sector. Thus, it is panel data. The variables on which data were collected are seven. They are audit quality dummy variable, total audit fee paid annually, audit tenure dummy variable, total asset, profit for the year, total debt and then equity of the firms. These data were used to obtain variables of the study. Thus the variables are Audit Quality (AUDQTY), Log of Audit Fee (AUDFEE), Audit Tenure (AUDTEN), Firm Size proxied by Log of Total Asset (SIZE), Client’s profit proxied by Return on Asset (ROA), and Leverage represented by Total debt/Equity (LEV). The data from which the variables were obtained is shown on Appendix 1.

Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean (AUDQTY)</th>
<th>AUDFEE</th>
<th>AUDTEN</th>
<th>SIZE</th>
<th>ROA</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDQTY</td>
<td>0.82</td>
<td>4.32</td>
<td>0.72</td>
<td>7.52</td>
<td>0.12</td>
<td>1.33</td>
</tr>
<tr>
<td>Median</td>
<td>1.00</td>
<td>4.36</td>
<td>1.00</td>
<td>7.69</td>
<td>0.09</td>
<td>0.89</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.00</td>
<td>4.67</td>
<td>1.00</td>
<td>8.48</td>
<td>0.57</td>
<td>5.27</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.00</td>
<td>3.78</td>
<td>0.00</td>
<td>6.24</td>
<td>-0.13</td>
<td>-2.97</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.39</td>
<td>0.22</td>
<td>0.45</td>
<td>0.59</td>
<td>0.11</td>
<td>1.51</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.64</td>
<td>-0.38</td>
<td>-0.96</td>
<td>-0.79</td>
<td>1.25</td>
<td>0.25</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>3.68</td>
<td>2.35</td>
<td>1.92</td>
<td>2.62</td>
<td>6.88</td>
<td>4.92</td>
</tr>
</tbody>
</table>

Jarque-Bera 27.94 2.53 12.14 6.54 53.28 9.89

Probability 0.00 0.28 0.00 0.04 0.00 0.00

Obs 60 60 60 60 60 60 60

B. Model Estimation

Table 2: Result of pooled data OLS regression on the effect of AUDFEE, AUDTEN, SIZE, ROA and LEV on AUDQTY

<table>
<thead>
<tr>
<th>Dependent Variable: AUDQTY</th>
<th>Coefficient (t-Statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUDFEE</td>
<td>0.394311 (1.310200)</td>
</tr>
<tr>
<td>AUDTEN</td>
<td>0.475393 (4.229942)</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.446787 (3.742019)</td>
</tr>
<tr>
<td>ROA</td>
<td>0.732673 (1.864869)</td>
</tr>
<tr>
<td>LEV</td>
<td>0.036632 (1.116418)</td>
</tr>
<tr>
<td>C</td>
<td>1.315273 (1.568089)</td>
</tr>
</tbody>
</table>

The result on Table 2 is the pooled data OLS regression that attempt to explain the effect of audit fee and its control variables on audit quality in the consumer goods sector of quoted firms in Nigeria. The coefficient of determination (R-Squared) is 0.3826 which indicate that about 38% of changes in audit quality is determined by the explanatory variables, that is, audit fee (AUDFEE), audit tenure (AUDTEN), client size (SIZE), profitability (ROA) and financial leverage (LEV). This suggest that the explanatory variables accounted for 38% of audit quality prospects in consumer goods firms in Nigeria. This implies that audit fees is not a veritable factor to determine audit quality of consumer goods firms in Nigeria. The F-statistics (6.694937) with p.value of 0.0000 indicate that the explanatory variables (AUDFEE, AUDTEN, SIZE, ROA, and LEV) significantly explains audit quality among consumer goods firms in Nigeria. The result of the Durbin Watson is relatively equal to 2 and this indicate that there is no autocorrelation in the model used for the data analyses. This suggests that the result is robust.

However, the test of hypotheses using the result of the coefficient of regression and t-statistics is done below. The aim is to explain effect of each of the explanatory variables on the dependent variable. The equation of the relationship as shown below:

AUDQTY = 1.3153 + 0.3943AUDFEE + 0.4754AUDTEN + 0.4468SIZE + 0.7327ROA + 0.0366LEV

H0: Audit fee has no significant effect on audit quality.

The coefficient of audit fee is 0.394311. This indicate that there is a positive relationship between audit fee and audit quality. The result of the t-statistics is 1.310200 with p.value of 0.1957. Since the p.value is not less than 0.05 level of
significance, we cannot reject the null hypothesis that audit fee has no significant effect on audit quality. Thus the analysis showed that audit fee has positive but insignificant effect on audit quality in the consumer goods sector of quoted firms in Nigeria.

**H₀:** Audit tenure has no significant effect on audit quality.

The result of the coefficient of regression of the audit tenure is 0.475393. This indicate that there is a positive relationship between audit tenure and audit quality. This implies that an increase in audit tenure will result in higher audit quality for firms in the consumer goods sector in Nigeria. The t-statistics of the coefficient is 4.229942 with p-value of 0.0001. Since the p-value is less than 0.05 level of significance, we reject the null hypothesis that audit tenure has no significant effect on audit quality. This implies that a unit increase in audit tenure significantly improves audit quality by 0.47 units.

**H₀:** Client size has no significant effect on audit quality.

On another case, the result of the coefficient of client size (SIZE) is 0.475393 indicating that SIZE has a positive effect on audit quality of consumer goods firms in Nigeria. This means that an increase in client size will bring about increase in audit quality. However, the t-statistics is 3.742019 with the p-value of 0.0004. Since the p-value is less than 0.05 level of significance, we reject the null hypothesis that client size has no significant effect on audit quality. Thus the study posit that client size has significant positive effect on audit quality. This suggest that bigger firms would tend to have more quality audit reports than smaller firms in the consumer goods sector of the Nigeria Stock Exchange.

**H₀:** Firm profitability has no significant effect on audit quality.

Moreover, the coefficient of regression for ROA as proxy for firm profitability is 0.732673 which indicates that firm profitability has positive effect on audit quality of consumer goods firms in Nigeria. The t-statistics is 1.864869 with p-value of 0.0676 which indicates that firm profitability has no significant effect on audit quality for consumer goods firms in Nigeria. The quality for audit reports for consumers goods firms cannot be determined using the level of firm profitability.

**H₀:** Firm financial leverage has no significant effect on audit quality.

Lastly, the coefficient of LEV is 0.036632 and indicates that firm leverage might have a positive effect on audit quality. This means that the higher the firm leverage the higher the audit quality of consumer goods firms in Nigeria. This implies that a unit increase in firm leverage will lead to 0.03 units of increase in audit quality for the firms. The t-statistics is 1.116418 with the p-value of 0.2692. Since the p-value is not less than 0.05 level of significance, we do not reject the null hypothesis that firm leverage has no significant effect on audit quality.

**CONCLUSION AND RECOMMENDATIONS**

The quality of firm audit is significantly enhanced by the length of audit tenure and client size, much more than the amount of audit fee, firm profit and leverage. Thus, firms that engage external auditors for longer time frame periods tend to obtain more quality audit report than ones that establish short term audit contract. In the same vein, larger firms have more quality audit report than smaller firms. The study has thus recommended that firms should contract audit firms for periods longer than three years to encourage quality of audit reports. More to this is that the professional bodies should always watch governmental actions and raise alarm on policies which affects audit practice especially in the consumer goods sector and make guidelines that will penalise auditors that offer less quality report on smaller firms.

**References**


