

## **Impact of Audit Quality and Financial Performance of Quoted Cement Firms in Nigeria**

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### **Abstract**

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The financial statement audit is an important tool for reducing information asymmetries and maintaining an efficient market environment. However, if the audit is to improve financial performance, there must be credibility and reliability as regards audited financial information. This research work was designed to examine the impact of audit quality on financial performance of quoted firms in Nigeria. The study is descriptive in nature and the correlational and ex-post facto designs were adopted in carrying out this research. Data were obtained basically from the published annual reports and accounts, and notes to the financial statements of the four firms that represent the sample of the study. The data collected were quantified and presented in tables. Multiple regression analysis using the SPSS Version 15.0 was employed in analyzing the data and testing the stated hypotheses. The results of the findings shows that auditor size and auditor independence have significant impacts on the financial performance of quoted cement firms in Nigeria. However, auditor independence has more influence than auditor size on financial performance. The study recommends that the management of quoted cement firms in Nigeria increase the remuneration of auditors in order to improve their financial performance. The study further recommends that management should employ the services of audit firms whose character and integrity is beyond question.

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### **1.1 Introduction**

The turbulent effects of the global financial crisis have highlighted the critical importance of credible high quality financial reporting.

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Achieving quality financial reporting depends on the role that the external audit plays in supporting the quality of financial reporting of quoted companies.

It is an important part of the regulatory and supervisory infrastructure and thus an activity of significant public interest. Audit quality is 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; Heil, 2012).

The financial statement audit is a monitoring mechanism that helps reduce information asymmetry and protect the interests of the various stakeholders by providing reasonable assurance that the management's financial statements are free from material misstatements. The societal role of auditors should be a key contribution to financial performance, in terms of reducing the risks of significant misstatements and by ensuring that the financial statements are elaborated according to preset rules and regulations. Lower risks on misstatements increase confidence in capital markets, which in turn lowers the cost of capital for firms (Heil, 2012; Watts and Zimmerman, 1986).

External financial statement users, including current and potential investors, creditors and others need reliable financial information on which to base their resource allocation decisions. When the financiers of organizations have confidence and trust in the audited financial report of an organization, they are bound to pour in more funds into the organization, which in turn results in increased financial performance. Regulators and standard setters can increase the effectiveness of quoted companies by promulgating rules and regulations that help ensure that audits improve financial information quality. Internal financial statement users such as management, audit committees and board of directors have an interest in quality audits, for example; to help reduce the cost of capital (ISB, 2000; Miettinen, 2011).

Audit quality plays an important role in maintaining an efficient market environment; an independent quality audit underpins confidence in the credibility and integrity of financial statements which is essential for well functioning markets and enhanced financial performance.

External audits performed in accordance with high quality auditing standards can promote the implementation of accounting standards by reporting entities and help ensure that their financial statements are reliable, transparent and useful. Sound audits can help reinforce strong corporate governance, risk management and internal control at firms, thus contributing to financial performance (Internal Audits Board, 2011).

The statutory audit can reinforce confidence because auditors are expected to provide an external, objective opinion on the preparation and presentation of financial statements. Auditors need to be independent in the opinions they express, while the work they have to do to form their opinions is highly dependent on and rooted in the real world and may become challenging in some business environments such as the cement industry. It is against this background that this research work is carried out. The purpose of this study therefore is to determine the impact of audit quality on the financial performance of quoted firms in Nigeria.

There have been concerns about audit quality in the present environment, where severe failures have come to light, for example; Enron scandal of 2001; Parmalat in 2003; Cadbury Nigeria Plc in 2006 and Afribank Nigeria Plc in 2009 (Ajani, 2012; Miettinen, 2011).

It has been found that the perceived reliability of audited financial information has declined. In contrast, the perceived relevance of audited financial information has increased. The effect of audit quality on financial performance has recently received attention from researchers in the western world. Studies have shown that audit quality has an impact on the financial performance of an organization (Beasley, 1996; Heil, 2012; Miettinen, 2011).

While these studies provide evidence from vibrant capital markets, very little research on the relationship between audit quality and the financial performance of organizations has been conducted in countries where capital markets are less developed. Thus, it is evident that there is a need for research on audit quality and the financial performance of organizations in Nigeria.

## Objectives of the Study

Owing to the problem of the study, the main objective of this study is aimed at assessing the influence of audit quality on the financial performance of quoted cement firms in Nigeria. Therefore the following specific objectives are set out below:

- i. To determine the impact of auditors independence on the financial performance of quoted cement firms in Nigeria.
- ii. To ascertain the influence of auditor size on the financial performance of quoted cement firms in Nigeria.

The following null hypotheses have been developed with a view to achieving the research objectives:

Ho<sub>1</sub>: Auditors independence has no significant impact on the financial performance of quoted cement firms in Nigeria.

Ho<sub>2</sub>: Auditors size has no significant influence on the financial performance of quoted cement firms in Nigeria.

The need for studies on the relationship between audit quality and financial performance is important in a country like Nigeria where organizations are striving to gain credibility among local and global investors. While previous researches have focused on the relationship between audit quality and financial performance in developed countries, there has been relatively little empirical work on this relationship in developing countries. The aim of this study is to empirically test the impact of audit quality on the financial performance of quoted cement firms in Nigeria.

## 2.1 Literature Review and Theoretical Framework

Auditors are expected to be objective at all times in the course of their duties. The independence of an auditor guarantees objectivity and imposes trust and confidence in the users of the financial statements. Chia-Ah and Karlsson (2010), states that independence can be of two forms; independence of mind and independence in appearance.

Independence of mind requires the auditor to have a state of mind that permits the provision of opinion without being affected by influences that compromise professional judgement, allowing an individual to act with integrity and exercise objectivity and professional skepticism.

Independence in appearance requires the auditor to avoid situations that will cause others to conclude that they are not maintaining an unbiased attitude objective of mind.

De Angelo (1981), defines auditors independence as the conditional probability that the auditor will disclose any misstatement in financial statements given that this misstatement was already discovered. Chia-Ah and Karlsson (2010), opines that the threats to independence are often very significant and thus undermine the auditor's effectiveness in rendering the auditing services. It becomes even more challenging when the auditor overstays with a client as extended audit tenures have been found to hamper auditor independence (Bamber and Lyer, 2007; Jackson et.al, 2008).

De Angelo (1981), has theoretically analyzed the relationship between audit quality and auditor's size. Ebrahim (2001), observes that De Angelo (1981), argues that large auditors will have more clients and their total fees will be allocated among those clients. De Angelo (1981), argued that large auditors can contain the loss of a client and therefore, will provide higher quality of audit. Ebrahim (2001), states that the results of some empirical papers have provided additional support for the use of auditor size as a proxy for audit quality. Davidson (1993), used an indirect method to support the argument that size is a good proxy for audit quality. He argued that managers have incentives to manipulate the reported earnings to meet the analyst's forecasts. Therefore, if large auditing firms provide higher-quality audits than small auditing firms, we may expect that the forecast errors of big auditing firms' clients will be larger than those of small auditing firms' clients. Using data from Canadian firms, his results support that auditor size is a good proxy for auditor quality.

Lennox (1999), looked at the two explanations of the hypothesized positive relationship between audit quality and auditor size; the reputation hypothesis suggested by De Angelo (1981), who argues that large auditors have more incentives to be accurate because they have more specific rents to lose if their reports are not accurate and the deep pockets hypothesis by Dye (1993), who argues that large auditors will be more accurate because they have greater wealth that is exposed to risk in case of any litigation. Lennox (1999), examined the relationship between audit quality and auditor size and found greater support for the deep pockets hypothesis.

Based on De Angelo's (1981), analytical results, Lidang (2004), states that many studies use auditor size, specifically Big 4 firms versus Non-Big 4 firms to differentiate audit quality. For example, Krishnan, 2003; Zhou and Elder, 2001; Bauwhede et.al, 2000; Becker et. al., 1998.

### 2.1.1 Auditor Independence and Financial Performance

Woodland and Reynolds (2003), examined the association between indirect measures of audit quality and financial statement analysis using multivariate regression analysis. They found that audit fees is positively associated with financial statements but do not find evidence that auditor size, tenure or industry specialization are associated with audit quality in the directions predicted. Their results provide new evidence as to the current usefulness of these indirect measures in predicting audit quality. Zureigat (2010), examined the effect of financial structure among Jordanian listed firms on audit quality. Using a sample of 198 companies, his analysis of logistic regression shows a significant positive relationship between audit quality and financial structure. Nam (2011), examined the relationship between audit fees as a proxy for auditor independence and audit quality of firms in New Zealand. Employing three multiple regression models for a sample of New Zealand companies, his study discovered that the provision of non-audit services by the auditors of a firm comprises the auditor's independence, abnormal audit fee change rate is negatively associated with audit quality and auditor's independence of the previous year impacts on the audit fee that is negotiated in the current year.

Jeff et.al, (2012), examined the links between audit fees and measures of audit quality. Their results show that higher annual excess fees and abnormal audit fees are generally associated with lower audit quality while a multi-period measure that reflects consistently high audit fees is associated with a positive long-run relationship between audit quality and audit fees. Choi et.al., (2010), examined whether the association between audit fees and audit quality is asymmetric and thus non linear in the sense that the association is conditioned upon the sign of abnormal audit fees for their total sample of client firms with both positive and negative audit fees.

### 2.1.2 Auditor Size and Financial Performance

Ettredge et.al, (2008), investigated client choice of industry auditors from among the Big 4 or 5 in an international setting. They investigated client-specific industry level and country-level factors.

They found that international choice of home based Big 4 or 5 specialist auditors is positively associated with audit quality, capital intensity and membership in a regulated industry. Bouaziz (2012), examined the relationship between auditor size and financial performance on a sample of 26 Tunisian firms listed on the Tunis Stock Exchange. The result shows that auditor size has an important impact on the financial performance of firms in terms of return on assets and return on equity.

Miettinen (2011), examined the relationship between audit quality and financial performance. Audit quality was measured using auditor size and audit committee meeting frequency. The result shows that audit quality has both a direct effect as well as a mediated effect through audit size on financial performance. The results imply that measures of audit quality are not merely symbolic but that they contribute to financial performance.

Anderson and Verma (2012), examined the relationship between auditor size, auditor tenure and audit firm rotation using a probit model which they developed. The data they collected from 2,148 listed Asian companies shows that big audit firms provide high quality audit because big audit firms are more conservative than non-big audit firms. They also discovered that national level factors have a strong influence on audit quality. Auditor tenure is associated with impaired audit quality and audit firm rotation can help promote audit quality.

However, few studies have examined the relationship between measures of audit quality and those of financial performance in developing economies such as Nigeria. This study is expected to fill an existing gap in knowledge by examining the relationship between audit quality and the performance of quoted cement firms in Nigeria.

## 2.2 Theoretical Framework

Agency theory has been widely used in literature to investigate the information asymmetry between principals (shareholders) and agent (management). This study uses the agency theory to determine the impact of audit quality on the financial performance of quoted cement firms in Nigeria.

Sarens and Abdolmohammadi (2007), states that according to the agency theory, a company consists of a set of linked contracts between the owners of economic resources (the principals) and managers (the agents) who are charged with using and controlling these resources. Jensen and Meckling (1976), states that in agency theory, agents have more information than principals and this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by the agents.

Sarens and Abdolmohammadi (2007), opines that an assumption of agency theory is that principals and agents act rationally and use contracting to maximize their wealth. A consequence of this is the moral hazard issue. Jensen and Meckling (1976), opine that moral hazard constitutes a situation where to maximize their own wealth, agents may face the dilemma of acting against the interests of their principals. Since principals do not have access to all available information at the time a decision is being made by an agent, they are unable to determine whether the agent's actions are in the best interest of the firm. To reduce the likelihood of the moral hazard, principals and agents engage in contracting to achieve optimality, including the establishment of monitoring processes such as auditing.

Watts (1998), observes that auditing is considered as a bonding cost paid by agents to a third party to satisfy the principals' demand for accountability. Like any other cost of running the business, the cost of auditing is borne by principals to protect their economic interests.

Defond (1992), discusses the importance of the separation of ownership and control. He states that the more diffused the ownership of a company, the higher the divergence in preferences of the owners and managers, and the higher the observability and control of agents' actions by the principals. Thus, as the diffusion of ownership increases, so does the demand for monitoring. Thus, numerous auditing processes will be needed to monitor the agent's actions in more diffused ownership structures.

Louise (2005), states that audits serve as a fundamental purpose in promoting confidence and reinforcing trust in financial information. The principal-agent relationship as depicted in agency theory is important to understanding how the role of an auditor has developed. Principals appoint agents and delegate some decision making authority to them. In so doing, the principals place their trust in their agents to act in the principals' best interests.

However, as a result of information asymmetries between principals and agents differing motives, principals may lack trust in their agents and may therefore need to put in place mechanisms, such as the audit, to reinforce this trust. Agency theory therefore, is a useful economic theory of accountability, which helps to explain the development of audit quality.

### **3.1 Methodology and Variable Measurement**

The study examines the influence of Audit Quality on Financial Performance of listed Cement Firms in Nigeria over a period of five (5) from 2007 to 2011, The basis for selecting this period is due to the global financial crisis in 2009 and several financial crises in Nigeria between this period which has led to the clamour for quality financial reporting among quoted firms in Nigeria. Correlational and Ex-post factor design was adopted for the study, the design for the study is appropriate because it assist in determining the influence of Audit Quality on Financial Performance of the selected firms. The study makes use of data from secondary sources through the sampled firm's annual reports and accounts. A total of four (4) cement firms out of the five (5) listed were studied as a result of unavailability of Data for Nigerian Cement Company. Multiple Regression technique was adopted as our tool of analysis as it was found appropriate for the data analysis.

### 3.6 Model Specification

A multiple regression equation is set up to investigate the hypothesized relationships between the dependent variable and the four independent variables in this study. The econometric form of the equation is given as:

$$FP = \beta_0 + \beta_1 (AI) + \beta_2 (AS) + \beta_3 (LE) + \epsilon$$

Where FP = Financial Performance (Dependent Variable)

AI = Auditor's Independence (Independent Variable)

AS = Auditor's Size (Independent Variable)

LE = Leverage (Control Variable)

$\epsilon$  = Error Term

#### 3.6.1 Measurement of Variables

##### Financial Performance (Dependent Variable)

Financial performance; FP is measured using Net Profit Margin, FP is calculated as profit after tax divided by the sales for firm i at a given time t.

##### Auditor's Independence (Independent Variable)

Auditor independence; AI is measured using auditor's fees, that is, the sector average audit fees was taken and compared with the audit firm fee for a particular year. AI is coded 1 if the audit fee of a given firm is I than the sector average, otherwise AI is coded 0.

##### Auditor Size (Independent Variable)

Auditor Size; AS is measured using the Big 4 versus Non-Big 4 dichotomy. AS is coded 1 if the audit of the issued financial statements was performed by a Big 4 audit firm, otherwise, AS is coded 0.

The Big 4 audit firms in Nigeria are; Akintola Williams Delloite, Price Water House Coopers, Ernst and Young, and KPMG.

##### Leverage (Control Variable)

Leverage; LEVR is measured as total debts divided by debt plus equity. Leverage will help to ensure that extraneous variables such as debt commitments and size or assets composition which are external to the purpose of this study are minimized, nullified or isolated.

#### 4.1 Results and Discussions

This session presents the results of the empirical study. It is concerned with the presentation, analysis and interpretation of data collected from the secondary resources. The session makes conclusion and Recommendations from the Findings of the study. For the purpose of this study, the data collected were coded and presented in tables. Multiple regression analysis; specifically, the Ordinary Least Square method (OLS) was used in testing the stated hypotheses.

Table 4.1.1: Descriptive Statistics

The descriptive statistics for each of the variables were determined to show the minimum, maximum, mean and standard deviation values. Descriptive statistics helps readers to understand the measures of central tendency and measures of variances associated with the variables of the study.

#### Descriptive Statistics

| Variables | N  | Minimum | Maximum | Mean   | Std. Deviation |
|-----------|----|---------|---------|--------|----------------|
| NPM       | 20 | .02     | 1.53    | .3155  | 34766          |
| AUDSIZE   | 20 | .00     | 1.00    | .6000  | .50262         |
| AUDIND    | 20 | .00     | 1.00    | .6000  | .50262         |
| LEVR      | 20 | .00     | 35.80   | 7.9775 | 10.67594       |

Source: Extract from SPSS printout result

Table 4.1.1 shows that the mean of net profit margin, auditor size, auditor industry and leverage are 0.3155, 0.6000, 0.6000 and 7.9775 respectively. A comparison of the mean responses with the maximum values for each of the variables indicates that the cement industry presently operates at a net profit margin of 32 percent, auditor size is at 60 percent, auditor independence is at 60 percent and leverage is at 7.9775. The value of leverage indicates that the results of the findings would have been distorted if leverage had not been controlled as a variable.

One important observation is that while auditor size and auditor independence have values higher than that of its respective standard deviations, net profit margin has a mean value which is lower than the value of its standard deviation. It therefore implies that the level of auditor size and auditor independence in the cement industry is high, while net profit margin for the industry can still be improved upon.

Table 4.1.2: Correlation Matrix

The correlation matrix is used to determine the correlation between the dependent and independent variables of the study. The table below represents the correlation matrix for the sample observations. The full results are contained in appendix 2.

#### Correlation Matrix

| Variable | NPM   | AUDSIZE | AUDIND | LEVR |
|----------|-------|---------|--------|------|
| NPM      | 1     |         |        |      |
| AUDSIZE  | -.023 | 1       |        |      |
| AUDIND   | .519  | -.458   | 1      |      |
| LEVR     | -.323 | .356    | -.014  | 1    |

Source: Extract from SPSS printout result

Table 4.1.2 indicates that there is a positive correlation between net profit margin and auditor independence, while there is a negative correlation between net profit margin and auditor size. However, care should be taken when interpreting the result as this does not mean that auditor size has a negative relationship with net profit margin. It only means that the correlation or relationship between auditor size and financial performance is not as strong as that of auditor independence and financial performance.

We can only establish if there is a negative relationship between auditor size and financial performance through the inferential statistics and test of hypothesis. The correlation between the net profit margin and leverage is negative as should be expected since debt principal and interest repayments are bound to infringe on net profit margin. The correlation between auditor size and leverage is positive; this can be explained by the fact that firms audited by Big 4 audit firms are likely to have credit worthiness and access to different forms of loans.

The correlation between auditor independence and leverage is negative but not too significant as should be expected since the debt composition or debt size of a firm should not affect the independence of their auditors.

**Table 4.1.3: Summary of Regression Result**

| Variables          | Coefficient | t-values | P-values | Tolerance/VIF |
|--------------------|-------------|----------|----------|---------------|
| Constant           | -0.066      | -0.445   | 0.662    |               |
| AUDSIZE            | 0.338       | 2.323    | 0.034    | 0.667/1.499   |
| AUDIND             | 0.509       | 3.750    | 0.002    | 0.764/1.308   |
| LEVR               | -0.016      | -2.607   | 0.019    | 0.845/1.184   |
| R                  |             |          | 0.727    |               |
| R <sup>2</sup>     |             |          | 0.529    |               |
| Adj R <sup>2</sup> |             |          | 0.440    |               |
| F-Stat.            |             |          | 5.979    |               |
| F-Sig.             |             |          | 0.006    |               |
| Durbin-Watson      |             |          | 1.919    |               |

Source: Extract from SPSS printout result

Financial Performance (FP) = -0.066 + .338(Auditor Size) + 0.509(Auditor Independence) -0.016(Leverage) + 0.26013

Table 4.1.3 above shows the combined correlation of the independent variables and the dependent variable at 73 percent indicating a strong positive relationship. An R<sup>2</sup> of 0.529 indicates that 52.9 percent of the variation in net profit margin can be explained by variability in auditor size and auditor independence. In addition, the Fishers statistics of 5.979 which is significant at one percent indicates that the financial performance model is fit. Therefore, the results of this study can be relied upon.

Durbin (1970), states that when the Durbin Watson statistic value is above 0.5 or 50 percent, independent observation is assumed. In other words, there is no auto correlation among the residuals of the study. The Durbin Watson statistic value of 1.919 therefore indicates that there is no autocorrelation among the residuals of this study.

The hypothesized relationships were tested; properties of the casual paths, including standardized path co-efficients, t-values and p-values for the equation in the hypothesized model are presented in the table above

The value of the regression co-efficient for the intercept reports the particular financial performance denominator for cement firms in Nigeria, while the remaining co-efficient describe the impact of each independent variable on financial performance and the impact of the control variable on financial performance.

The tolerance values and the variance inflation factor (VIF) are two measures generally agreed by various authors as being good factors for determining multicollinearity between the independent variables of a study. If the variance inflation factors of all the independent variables are less than 10, multicollinearity does not exist and the model is said to fit. Another measure for determining multicollinearity is the tolerance values. A tolerance value of 1 or above signifies multicollinearity, while tolerance values of less than 1.00 in all the observed variables signifies the absence of multicollinearity (Cassey et.al., 1999; Neter et.al., 1996).

The variance inflation factors of both independent variables and that of the control variable are consistently less than 10 which is the benchmark for determining multicollinearity ( $1.499 < 10$ ,  $1.308 < 10$  and  $1.184 < 10$ ). In addition, the tolerance values are less than 1.00 which is another benchmark for determining multicollinearity ( $0.667 < 1.00$ ,  $0.764 < 1.00$  and  $0.8456 < 1.00$ ). This shows the appropriateness of fitting the model of this study with two independent variables and the control variable. It also shows the complete absence of multicollinearity between the independent variables and the control variable. Thus, the results of this study can be applied with the assurance that it measures what it purports to measure, that is, the relationship between auditor size and financial performance, and auditor independence and financial performance.

#### 4.1.3.1 Auditor Size on Financial Performance

A null hypothesis that auditor size has no significant influence on the financial performance of quoted cement firms in Nigeria was formulated to ascertain whether or not auditor size influences financial performance in the cement industry. The result for the test of hypothesis demonstrates a significant positive relationship between auditor size and financial performance. ( $\beta = 0.488$ ,  $t = 2.323$ ,  $p = 0.034$ ). The t-value of auditor size, that is, 2.323 is significant at 5 percent.

The calculated p-value of auditor size is 0.034 which is less than 5 percent (0.05) and significant at 5 percent. These, therefore produced evidence of rejecting the hypothesis that auditor size has no significant influence on the financial performance of quoted cement firms in Nigeria.

#### 4.1.3.2 Auditor Independence on Financial Performance

A null hypothesis that auditor independence has no significant impact on the financial performance of quoted cement firms in Nigeria was formulated with a view to assessing whether or not auditor independence influences financial performance in the cement industry. The result for the test of hypothesis demonstrates a significant positive relationship between auditor independence and financial performance. ( $\beta = 0.736$ ,  $t = 3.750$ ,  $p = 0.002$ ). The t-value of auditor independence, that is, 3.750 is significant at 5 percent. The calculated p-value of auditor independence is 0.002 which is consistently less than 5 percent (0.05) and significant at 5 percent. Therefore, these produced the evidence of rejecting the hypothesis that auditor independence has no significant impact on the financial performance of quoted cement firms in Nigeria.

### Discussion of the Findings

The main objective of this study is to assess the influence of audit quality on the financial performance of quoted cement firms in Nigeria. Profitability is adjudged to be the best measure of financial performance, while auditor fees are generally accepted as a good measure of auditor independence. Auditor independence and auditor size make up the concept of audit quality in this study. When both concepts are correlated, changes in one concept leads to changes in the other that is changes in net profit margin should correspond with changes in audit quality.

The study revealed that all the independent variables under consideration, namely; auditor size and auditor independence are statistically significant at 5 percent leading to rejection the stated hypotheses. What these findings suggest is that audit quality plays a vital role in determining financial performance.

Marginal effect analysis is used to illustrate the marginal change in the dependent variable (financial performance), given a degree of change in a selected independent variable, holding all other variables constant.

The two influencing factors derived from the multiple regression models are ranked below.

**Table 4.1.4: Marginal Effects of Audit Quality Measures**

| Measure              | Marginal Effects | Ranking |
|----------------------|------------------|---------|
| Auditor Independence | .509             | 1       |
| Auditor Size         | .338             | 2       |

Source: Extract from SPSS printout result

The marginal effects table shows that auditor independence has the strongest influence on financial performance. As the result shows, a degree of decrease in auditor independence carries a 50.9 percent probability that there will be a decrease in the influence of audit quality on financial performance. This result is consistent with a number of researches that regard auditor independence as the main determinant factor of audit quality and in return financial performance (woodland and Reynolds, 2003; Jeff et.al, 2012; Miettinen, 2011). However, this does not mean that auditor size does not have an influence on financial performance; it only shows that auditor independence is more of a determinant factor of financial performance than auditor size is. It is important to note that while over 50 percent of cement firms in Nigeria employ the services of the Big 4 audit firms, auditor independence still plays the major role in determining financial performance. Finally, the study revealed that there are other extraneous variables which account for the financial performance of quoted cement firms to the tune of 47.1 percent. The researcher suggests that these other variables include auditor opinion, auditor specialization, auditor tenure, and leverage and auditor firm rotation.

## 5.1 Conclusion and Recommendations

The study examined the relationship between audit quality and financial performance through the proxies of auditor size and net profit margin, and auditor independence and net profit margin of quoted cement firms in Nigeria. Series of concepts, principles and contrasting views of scholars were discussed. An extensive review of literature on audit fees, auditor size, financial performance and net profit margin was undertaken.

The constructs investigated in this study are all correlated because auditor size and auditor independence influence the financial performance of quoted cement firms in Nigeria. The most important construct by regression analysis co-efficients is auditor independence followed by auditor size.

The impact of audit quality on financial performance is positive and significant and the greater the degree of an auditors independence, the greater the propensity of a firm making substantial net profit margins. The impact of auditor size is also positive and significant, although, its impact is lesser that that of auditor independence.

A positive relationship between auditor independence and financial performance implies that audit effort increases with the amount of audit fees paid and leads to more commitment and monitoring on the part of the of the auditors, thereby decreasing the propensity of an organization to incur losses through non-adherence to accounting principles and unnecessary waste of funds by management.

Audit fees do not compromise auditor independence, which normally would be thought to decrease an auditor's willingness to oppose management attempts to take advantage of this information asymmetries in the principal agent relationship. On the contrary, the results imply that auditors' fees give auditors a sense of responsibility and the desire to ensure that the organization gets value for money by giving the firm the best audit service possible.

The impact of auditor size cannot be ignored because it is an important factor for determining audit quality. While it would be easy for firms to arm twist Non-Big 4 audit firms and get them to do their bidding even when it is unethical.

It would be nearly impossible to get a Big 4 audit firm to go against the tenets of auditing practices because it has a reputation to protect.

In light of the various findings of this study, the following measures are hereby recommended for cement firms as a means of enhancing audit quality and ultimately financial performance:

Management of quoted cement firms in Nigeria can improve the financial performance of their firms by increasing the amount of audit fees paid to the audit firm of their respective organizations. Although, this might seem like a profit reducing decision in the short run, the benefits that will accrue to the firm far outweighs the cost. This will help ensure that all financial transactions are in order; give the users of the financial statements more trust and confidence in terms of the quality of audited reports.

Also, it would show management the aspects of the comprehensive income accounts and statements of financial position that needs to be worked upon. It will also allow audit firms to provide non-audit services to the firms that are in need of it.

Increasing auditor fees gives auditors a sense of responsibility which is an added advantage for the affected cement firms. The auditing firm would be obliged to send experienced auditors who will not be in a rush to finish the audit process considering the amount being paid. It should be remembered that audit firms normally bill their clients based on the number of the hours worked. Thus, quoted cement firms who pay high remunerations to their auditors are more likely to get audit quality when compared to those who pay relatively low remunerations to their auditors.

It is recommended that the management of quoted cement firms should employ the services of one of the Big 4 audit firms and where this is not possible, management should go for an audit firm whose character and integrity is beyond question. Audit firms who have a solid reputation will be less likely to employ auditors who will be willing to compromise their stand; the audit firm itself would not like to engage in any activity that will soil its name. This is a plus for the management of the cement firms and the shareholders alike, because rest assured, their interests will be duly protected.

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**Correlations**

|         |                     | NPM   | AUDSIZE | AUDIND | LEVR  |
|---------|---------------------|-------|---------|--------|-------|
| NPM     | Pearson Correlation | 1     | -.023   | .519*  | -.323 |
|         | Sig. (2-tailed)     |       | .924    | .019   | .165  |
|         | N                   | 20    | 20      | 20     | 20    |
| AUDSIZE | Pearson Correlation | -.023 | 1       | -.458* | .356  |
|         | Sig. (2-tailed)     | .924  |         | .042   | .123  |
|         | N                   | 20    | 20      | 20     | 20    |
| AUDIND  | Pearson Correlation | .519* | -.458*  | 1      | -.014 |
|         | Sig. (2-tailed)     | .019  | .042    |        | .954  |
|         | N                   | 20    | 20      | 20     | 20    |
| LEVR    | Pearson Correlation | -.323 | .356    | -.014  | 1     |
|         | Sig. (2-tailed)     | .165  | .123    | .954   |       |
|         | N                   | 20    | 20      | 20     | 20    |

\*. Correlation is significant at the 0.05 level (2-tailed).

**Variables Entered/Removed<sup>d</sup>**

| Model | Variables Entered                  | Variables Removed | Method |
|-------|------------------------------------|-------------------|--------|
| 1     | LEVR, AUDIND, <sup>a</sup> AUDSIZE | .                 | Enter  |

a. All requested variables entered.

b. Dependent Variable: NPM

**Model Summary<sup>e</sup>**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate | Change Statistics |          |     |     |               | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|-------------------|----------|-----|-----|---------------|---------------|
|       |                   |          |                   |                            | R Square Change   | F Change | df1 | df2 | Sig. F Change |               |
| 1     | .727 <sup>a</sup> | .529     | .440              | .26013                     | .529              | 5.979    | 3   | 16  | .006          | 1.919         |

a. Predictors: (Constant), LEVR, AUDIND, AUDSIZE

b. Dependent Variable: NPM

**ANOVA<sup>b</sup>**

| Model |            | Sum of Squares | df | Mean Square | F     | Sig.              |
|-------|------------|----------------|----|-------------|-------|-------------------|
| 1     | Regression | 1.214          | 3  | .405        | 5.979 | .006 <sup>a</sup> |
|       | Residual   | 1.083          | 16 | .068        |       |                   |
|       | Total      | 2.296          | 19 |             |       |                   |

a. Predictors: (Constant), LEVR, AUDIND, AUDSIZE

b. Dependent Variable: NPM

**Coefficients**

| Model |            | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. | Collinearity Statistics |       |
|-------|------------|-----------------------------|------------|---------------------------|--------|------|-------------------------|-------|
|       |            | B                           | Std. Error | Beta                      |        |      | Tolerance               | VIF   |
| 1     | (Constant) | -.066                       | .149       |                           | -.445  | .662 |                         |       |
|       | AUDSIZE    | .338                        | .145       | .488                      | 2.323  | .034 | .667                    | 1.499 |
|       | AUDIND     | .509                        | .136       | .736                      | 3.750  | .002 | .764                    | 1.308 |
|       | LEVR       | -.016                       | .006       | -.487                     | -2.607 | .019 | .845                    | 1.184 |

a. Dependent Variable: NPM

**Collinearity Diagnostics**

| Model | Dimension | Eigenvalue | Condition Index | Variance Proportions |         |        |      |
|-------|-----------|------------|-----------------|----------------------|---------|--------|------|
|       |           |            |                 | (Constant)           | AUDSIZE | AUDIND | LEVR |
| 1     | 1         | 2.858      | 1.000           | .02                  | .02     | .02    | .04  |
|       | 2         | .654       | 2.091           | .01                  | .09     | .25    | .17  |
|       | 3         | .397       | 2.683           | .04                  | .20     | .03    | .75  |
|       | 4         | .091       | 5.617           | .94                  | .69     | .69    | .04  |

a. Dependent Variable: NPM

**Residuals Statistics<sup>a</sup>**

|                      | Minimum | Maximum | Mean   | Std. Deviation | N  |
|----------------------|---------|---------|--------|----------------|----|
| Predicted Value      | -.0662  | .7808   | .3155  | .25275         | 20 |
| Residual             | -.50081 | .74919  | .00000 | .23872         | 20 |
| Std. Predicted Value | -1.510  | 1.841   | .000   | 1.000          | 20 |
| Std. Residual        | -1.925  | 2.880   | .000   | .918           | 20 |

a. Dependent Variable: NPM