



# Journal of Economics and Business

**Ugwu, Chukwuma C., Aikpitanyi, Lilian N., and Idemudia, Sonai. (2020), The Effect of Audit Quality on Financial Performance of Deposit Money Banks (Evidence from Nigeria). In: *Journal of Economics and Business*, Vol.3, No.1, 270-281.**

ISSN 2615-3726

DOI: 10.31014/aior.1992.03.01.196

The online version of this article can be found at:  
**<https://www.asianinstituteofresearch.org/>**

Published by:  
The Asian Institute of Research

The *Journal of Economics and Business* is an Open Access publication. It may be read, copied, and distributed free of charge according to the conditions of the Creative Commons Attribution 4.0 International license.

The Asian Institute of Research *Journal of Economics and Business* is a peer-reviewed International Journal. The journal covers scholarly articles in the fields of Economics and Business, which includes, but not limited to, Business Economics (Micro and Macro), Finance, Management, Marketing, Business Law, Entrepreneurship, Behavioral and Health Economics, Government Taxation and Regulations, Financial Markets, International Economics, Investment, and Economic Development. As the journal is Open Access, it ensures high visibility and the increase of citations for all research articles published. The *Journal of Economics and Business* aims to facilitate scholarly work on recent theoretical and practical aspects of Economics and Business.



ASIAN INSTITUTE OF RESEARCH  
Connecting Scholars Worldwide



# The Effect of Audit Quality on Financial Performance of Deposit Money Banks (Evidence from Nigeria)

Chukwuma C. Ugwu<sup>1</sup>, Lilian N. Aikpitanyi<sup>2</sup>, Sonia Idemudia<sup>3</sup>

<sup>1,2,3</sup> Department of Accounting, Faculty of Humanities, Management and Social Sciences, Federal University, Wukari, Nigeria

Correspondence: Chukwuma C. Ugwu. Email: ucollins98@yahoo.com

## Abstract

This study examines the impact of audit quality on the financial performance of all the 15 listed DMBs in Nigeria from 2011-2017. Independent variables used are audit firm size, joint audit and audit fee, while ROA, proxy for financial performance, is the dependent variable. Secondary data were used, which were extracted from the financial statements of the listed DMBs. The study employed correlation and ex-post facto research designs and multiple regressions were used for data analysis. The study revealed significant and positive relationship between audit firm size and ROA, negative and significant relationship between joint audit and ROA and negative and insignificant relationship between audit fee and ROA. The study, therefore, recommends that since joint audit showed significant relationship with firm performance in this regard regulatory bodies should try to make joint audit compulsory and any firms that fail to comply should be sanctioned. The study also recommends that since audit firm size positively and significantly affects firm performance. Smaller audit firm should be encouraged as they are likely to carry out a more thorough audit assignment, because most of the DMBs engaged the service of the bigger audit firm.

**Keywords:** Audit quality, Financial performance, Deposit Money Banks

## Background to the Study

Deposit Money Banks (DMBs) generally are motivated to have a high financial performance, which will attract more investors. Auditors are most likely to affect the quality of accounting information of DMBs; they can affect it positively or negatively depending on the quality of their work and their firm. One of the factors that can trigger their financial performance is quality auditing of their financial statements, which is for public consumption.

Audit quality is vital for DMBs to achieve efficient and effective resources management because it can lead to rapid improvement of firm's financial performance. The functions of external auditors reflect on the quality of financial report or information that firms maintain to create confidence among the stakeholders and reflect the efficiency, effectiveness and credibility of audit firms (Kwabena, 2017). Shehu and Musa (2014) assert that financial statement users, including current and potential investors, creditors and others, need reliable financial information on which to make investment decisions. As a result, when investors have confidence and trust in the

audited financial statements of a firm, they are bound to invest the more into the firm believing that their investment is secure, which in turn results in increased financial performance.

Miettinen (2011), is of the view that audit quality arouses the interest of the internal financial statement users such as management, audit committees and board of directors because they believe that it helps in reducing cost of capital. Dangana (2014) noted that one of the critical roles of auditors is that, they assure confidence to financial statements users about the reported information. Audit services have been critical to financial reporting quality and financial performance since industrial revolution.

However, Krishnan (2003), holds that the ability of auditors or audit firms to provide high audit quality capable of producing high financial reporting quality is attributed to some features of the audit firm which may include; audit firm size, audit fee and joint audit services.

Audit firm size is conceived as financially independent and highly experienced, thus less likely to be subjected to any pressure from the clients "to look the other way" in their role in discovering accounting irregularities (DeAngelo, 1981).

Moreover, Big 4 auditors have more to lose should a scandal arise, in that their brand names and reputations are more valuable compared with small non-Big 4 audit firms. Becker, Defond, Jiambalvo and Subramanian (1998), and Francis, Maydew and Sparks (1999) opined that Big 4 audit firms have shown to have higher accrual quality (Financial reporting quality) as measured by lower absolute values of discretionary accruals, and their clients are less likely to manage earnings.

Another audit quality features found to be related with financial performance is the fee paid to auditors (DeAngelo, 1981). According to this feature, quality may decrease with fee dependence if marginal forces associated with managerial influence overwhelm those associated with the scope of activities involved (Frankel, Marilyn & Karen, 2002; Francis, 2004). On the contrary, audit fee is used as a measure of audit quality. Based on this view, audit fees reflect additional audit effort, which leads to a higher level of audit quality (DeAngelo, 1981; Carcello, Hermanson, Neal & Riley, 2002). Audit firms charge their fee based on the quantum of the work to be done, standard of their report, their reputation, among others that indicate the quality of the audit firms.

Audit firm characteristics with respect to clients include the joint audit, to ensure objective financial performance and audit quality as well. Joint audits create more differences in auditor choice and potentially in the level of financial performance than under non-joint audit. Based on joint audit perspective, DeAngelo (1981) states that audit performed by two audit firms produce the highest quality financial performance and financial reporting, while the lowest level of quality occurs when a single audit firm is responsible for the audit engagement.

Ibrahim (2017) holds that investors and all stakeholders use financial statements, which provide information about the economic activities of an entity for major decision-making such as investment decision, tax purpose among others. One of the vital variables of financial reports that investors use for efficient decision-making is the financial performance which is expected to be reliable, verifiable, understandable and timely.

(Shehu, 2013) holds the view that a quality accounting information gives certainty that the report provided is sensibly free from error and bias and it truly represents what it intends to represent and the presentation is not misleading or ambiguous to users. Investors and other users are interested in high quality financial report for effective decision-making (Ibrahim, 2017).

The study focuses on three major audit quality attributes which will include; audit firm size, audit fee, and joint audit against Return on Assets (ROA) using data from the DMBs in Nigeria. This was informed based on the fact that Nigeria does not give concern in the corporate accounting scandals that caused the collapse of some of these banks like; Oceanic Bank, Savannah bank, Society-General Bank, Afribank Plc, among others. These banks collapsed even when their financial report did not show any signal of collapse despite the auditors' endorsement that the financial reports are true and fair, and are in accordance with the relevant rules and regulation.

Deposit Money Banks deal with heavy assets and large volumes of transactions and as such, their management can use these large transactions to hide accounting irregularities, misstatement and earnings management, which have an adverse effect on financial performance (Shehu, 2011; Augustine, 2014). Therefore, the adverse consequence of poor financial performance and the need to ensure high-quality financial performance motivated the cause for this study.

### **Objectives**

Generally, Deposit Money Banks (DMBs) are motivated to have a high financial performance to be able to attract more investors. The apostles of Audit quality hold the view that it is vital for organizations to achieve efficient and effective resources management because it can lead to rapid improvement of firm's financial performance. Audit quality can affect financial performance positively or negatively depending on the quality of their work and their firm. The objective of this study is to investigate the effect of audit quality on financial performance of listed DMBs in Nigeria. Yearly data were generated from 16 Deposit Money Banks listed on the NSE and Central Bank of Nigeria statistical bulletin between 2011 which was within the period of consolidation to 2017. Here the multiple regression was used to analyze the effect of Audit Quality on Financial Performance of Deposit Money Banks in Nigeria.

### **Conceptual Framework**

The concepts discussed here are audit firm size, audit fee and joint audit. These are discussed in relation to ROA.

### **Concept of Return on Assets**

According to Investor's Education Initiative (2016) return on Assets (ROA) is an indicator of how profitable a company is relative to its total assets. ROA gives an idea as to how efficient management is at using its assets to generate earnings. Calculated by dividing a company's annual earnings by its total assets, ROA is displayed as a percentage.

Sometimes, ROA is referred to as "Return on Investment" (ROI). ROA tells what earnings were generated from invested capital (assets). ROA for public companies can vary substantially and will be highly dependent on the industry.

This is why when using ROA as a comparative measure, it is best to compare it against a company's previous ROA numbers or the ROA of a similar company (Investor's Education Initiative, 2016). The assets of a company are financed by both debt and equity. The ROA gives investors an idea of how effectively a company is converting the money it has to invest into net income. The higher the ROA the better, because the company is earning more money on less investment.

Rosikah, Dwi, Dzulfikri, Muh and Azis (2018) opine that ROA is used to measure a company's capability to create profits using total owned assets by the company in the future, higher ROA shows that company is very effective and this is a positive sign for investors to invest their stock in the company, and thus increase the company's stock in the capital market.

### **Audit Fee and Return on Assets**

Divergent views in literature depict that audit fees have a relationship with the financial performance of firms to some extent in that, financial performance is usually affected by fees paid to external auditors. For instance, quality might decrease with fees if marginal forces associated with managerial influence overwhelm those associated with the scope of activities or reputational incentives. If these forces ultimately reverse, then financial performance can also share a positive relationship with the audit fee. For instance, Francis and Ke (2003) and Reynolds and Francis (2004) found that the audit fee does have a negative relationship with financial performance, and thus improve the quality of financial reporting. They dispute the belief that audit fees erode independence.

Audit fees are also used as a measure of audit quality since they reflect additional audit effort which leads to a higher level of audit quality (Carcello, Hermanson, Neal & Riley 2002).

### **Audit firm Size and Return on Assets**

Audit firm size has a positive effect on firm financial performance because many stakeholders believe that firms that are audited by the Big Four are free from material misstatement, which encourages and boost their confidence to invest more of their money in such firms. The most common and well-researched indicator of audit quality characteristics is whether an audit firm is one of the “Big 4” (DeFond & Francis, 2005).

### **Joint Audit and Return on Assets**

Some scholars are of the view that the appointment of joint auditors to a firm will enhance its financial performance. Specifically, based on DeAngelo’s (1981) framework, audits performed by two big audit firms produce the highest-quality financial report, while the lowest level of quality occurs when a single non-big audit firm is responsible for the audit engagement.

Lesage, Ratzinger-Sakel, and Kettunen (2012) examined the struggle over joint audit: on behalf of public interest; they observed that firms that continue to use joint audits are associated with significantly higher audit fees compared with firms voluntarily choosing to use a single auditor. Similarly, Marmousez (2009) examines the impact of joint auditor pairs in France on financial reporting quality, measured by the degree of earnings conservatism. He provides evidence that Big 4–Big 4 auditor pairs are not associated with earnings conservatism whereas Big 4–non-Big 4 auditor pairs are associated with conservatism.

### **Theoretical Framework**

This study will be anchored on a number of theories;

#### **Agency Theory**

This theory was first used by Stephen Ross and Barry Mitnick in 1973. Agency theorists advocate the separation of ownership from control in modern business which creates conflicts of interest between managers and stakeholders. The most cited reference to the theory, however, came from Michael C. Jensen and William Meckling.

According to the agency theory, to ensure the effectiveness of an audit process, managers are encouraged to prepare financial statements adequately to specify the return generated by the companies. Jensen and Meckling (1976) states that in agency theory, agents have more information than principals do and this information asymmetry adversely affects the principals’ ability to monitor whether or not the agents are properly serving their interests.

Sarens and Abdolmohammadi (2007) opined that an assumption of agency theory is that principals and agents act rationally 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 principal’s 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 is the higher the divergence in preferences of the owners and managers, and the higher the observation 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 ought 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 understand 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, because 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.

### **Empirical Studies**

Tom and Ying (2018) studied the effect of audit quality on a firm's financial performance in China from 2010 to 2016. The study used audit size, audit fee and leverage as independent variables and Return on Investment as a dependent variable. The data employed in the study was secondary data using multiple regression to analyse the data. It was revealed that audit size and audit fees are positively correlated with ROI, although the correlation is not significant at traditional while leverage is negatively and insignificantly related to ROI.

Kwabena (2017) studied the effect of internal audit quality on firm's financial performance in Kenya from the period of 2010 to 2016. The study used primary and secondary data. Firm size, financial leverage and liquidity were used as independent variables and return on equity as dependent variable. The study used 121 listed firms on Nairobi Stock Exchange (NSE). Multiple regressions were used to analyse the data. The study revealed that firm size, leverage and liquidity have significant impact on return on equity. The study recommended that in order to implement good internal audit, managers need to know that they should be concerned about interrelation between internal audit and financial performance in order to improve the financial performance of the firm.

Sylvester and Eyesan (2017) studied the impact of audit quality on earnings management in Nigerian DMBs. The study used 18 banks quoted on the NSE as at December, 2010 as sample of the study. Data was gathered for the period 2005 to 2010. The cross-sectional year-by-year regression analysis was used to analyse the data. Audit quality was measured using audit fees and auditor change, and abnormal loan loss provision was used to measure earnings management.

The results show that both audit fees and auditor change were positively and significantly related to abnormal loan loss provision. This suggests that high audit fees and changes in auditor tenure will aggravate earnings management. The study recommended that auditor change should not be ceremonial but based on the fact of inefficiency and audit fee from each auditor client should be monitored to enforce the five percent maximum from each client as suggested by Institute of Chartered Accountants of Nigeria code of ethics of 2016.

Hirhyel (2017) studied the effect of audit firm attributes on earnings quality of listed consumer goods firms in Nigeria. The study used 13 firms as sample size. Earnings quality is the dependent variable; Modified Jones Models was used to measure earnings management. Industry specialized auditor, audit compensation, audit tenure and audit firm type are the independent variables. Data for the study were obtained from the audited annual report of the 13 sampled consumer goods firms for a period of 8 years covering 2007 to 2014. The study employed ordinary least square regressions as tool for analysis.

The result shows that industry specialized auditors and audit firms type have a significant positive influence on earnings quality of sampled firms. However, audit tenure and audit compensation have no significant influence on earnings quality of the firms. For consumer goods firms to achieve higher earnings quality and provide quality

financial information for effective decision making, it was recommended that they should employ the services of industry specialized auditors and big four audit firm types who have the capability of influencing the quality of earnings of the company.

Sim, Daw and Abu (2016) studied the effect of financial reporting and audit qualities on firm performance for 56 firms listed on the Malaysian stock market, selected from the construction sector for the period of 2010 to 2013. Data were collected from the published annual reports and their notes to the financial statements of the sampled firms. To assess the level of compliance with the provisions of the Financial Reporting Standard (FRS) in Malaysia, content analysis was carried out. The firm's engagement with established audit firms was used as a proxy for audit quality, and return on assets was used as a measure of firm performance. Panel data analysis was employed in analyzing the data and testing the stated hypotheses. The use of panel data reveals that practices of FRS by firms significantly and positively related to their financial performance. The results also indicate that audit quality has a significant positive impact on business financial success. The study, therefore, recommends that the management of listed construction firms improve their practices of FRS and employ the service of established audit firms in support of financial success.

Anil (2016) studied the effect of audit quality on corporate governance in industrial companies in Borsa Istanbul from 2011 to 2015. For this purpose, data of 41 industrial companies traded in Borsa Istanbul in 2015 were obtained from the companies' annual reports, financial statements and their institutional web sites. The study used free float, company age, independent board members and institutional investors as independent variables and audit firm size, firm size, financial leverage and CEO duality as dependent variables. The study employed multiple regression to analyse the data. The study revealed that firm size, the rate of institutional ownership, duration of trading time in stock exchange market, and company history variables were found statistically positive on audit quality. The study recommended that the independent auditing should have a quality process.

Cheong, Boon, Ongtze and Hong (2015) studied the relationship between audit quality, earnings management, and financial performance among public listed companies in Malaysia. 100 companies were randomly selected from the Industrial Products and Consumer Products industry listed on the Main Board of Bursa Malaysia during the period of 2008 to 2013. The study used audit size, audit fee and audit tenure as independent variables, discretionary accrual and absolute discretionary accrual as mediating variables and ROA as a dependent variable. The study uses multiple regressions to analyse the data.

The findings indicate that audit quality significantly impacts on ROA and earnings management and it does not actually constrain earnings management practices in Industrial Products and Consumer Products companies. It also reveals that the financial performance of larger-sized companies is better than that of smaller-sized companies. Shehu and Musa (2015) studied the impact of audit quality on financial performance of four quoted cement firms in Nigeria from 2007 to 2011. The study is descriptive in nature and the correlational and ex-post-facto designs were adopted in carrying out this research. Data were obtained from the published annual reports and accounts, and notes to the financial statements of the four sampled firms'. The data collected were quantified and presented in tables. Multiple regression analysis was employed in analyzing the data and testing the stated hypotheses. The study used auditor independence and audit size as independent variables, net profit margin as dependent and leverage as control variable.

The results of the findings show that auditor size and auditor independence have significant impacts on the net profit margin of the sampled firms, however, auditor independence has more influence than auditor size on the net profit margin. The study recommends that the management of quoted cement firms in Nigeria should increase the remuneration of auditors in order to improve their financial performance and the services of audit firms whose character and integrity are beyond question.

Dangana (2014) studied the impact of audit firms attributes on financial reporting quality of quoted building material firms in Nigeria. The study used 4 firms out of the 8 quoted building material firms, and employed correlation research design for the period of ten years (2002-2011). Ordinary Least Square (OLS) multiple regression techniques was employed in the analysis of the panel data collected for the study. The study used audit

compensation and audit firms independence as independent variables and financial quality which Jones models were used for the measurement as a dependent variable.

The study found that audit compensation and audit firm independence have significant positive impact on the financial reporting quality of sampled firms at 99% confidence level. The study concluded that, audit compensation and provision of non-audit services in the quoted building material firms in Nigeria improved the quality of their financial reporting during the period under review.

Morteza (2014) studied the effect of audit quality on the performance of 25 listed companies in Tehran Stock Exchange for the period of 2008 to 2012. The study used primary data. The researcher distributed and collected the questionnaires administered to respondents. It used multiple regressions. The study used audit fee and audit firm size as audit quality proxy (independent variables) and Return on Equity as firm performance proxy (dependent variable).

The study revealed that audit fee and audit size significantly and positively affects the ROE of the sampled companies.

Most literature focused on audit quality and financial reporting quality while few looked at audit effect of audit quality on financial performance. More to that no study used joint audits to examine the effect on ROA and none used ROA to measure financial performance. With regard to this topic of study, only Cheong, Boon, Ongtze and Hong (2015) used ROA but they did not use joint audit. ROA is an indication of how profitable a company is relative to its total assets. ROA gives managers, investors, or analysts' idea as to how efficient a company is and how well a company has performed.

In addition, numerous studies were conducted on the relationship between audit quality and earnings quality but only a few on audit quality and financial performance (Shehu & Musa, 2014). Some of these studies include Kwabena (2016), Lucy, Mungai and Susan (2016), Cheong, Boon Ong and Hong (2015) and Lulian, Florin and Laura (2014) which were conducted in Kenya, Kenya, Malaysia and Romania respectively. Only Shehu and Musa (2014) conducted study in Nigeria with regard to effect of audit quality on financial performance. However, most of the studies, which were conducted in developing countries including Nigeria, did not make use of Joint audits as an attribute of audit quality and only Shehu and Musa (2014) used audit fees as audit quality attributes against financial performance. Hence, this study attempt to include an important variable of audit attribute, which is joint audit, and audit fee that was not used by most of the studies conducted.

## METHODOLOGY

The research design employed for this research is correlational and ex-post-facto designs. The design for the study is appropriate because it assists in determining the influence of audit quality on the financial performance of the DMBs in Nigeria. The general objective in this correlational and ex-post facto research design is to gain insight and generate a new ideas. The ex-post facto research design was used because the events have already occurred and variables not manipulated. Multiple Regression technique was also adopted as the tool of analysis as it is most appropriate for the study and because of its ability to use multiple independent variables to estimate their effect on a single dependent variable. The OLS method adopted in this study is a parametric statistical test that is based on a number of assumptions, the violation of which could affect the reliability of the results. The regression model was used because it assumed linearity and normality and it ascertains the impact of the independent variables on the dependent variable. Yearly data were generated from 16 Deposit Money Banks listed on the NSE and Central Bank of Nigeria statistical bulletin between 2011 which was within the period of consolidation to 2017. The model equation is stated in Error Correction Form to establish whether there will be a long-run effect of Audit Quality on the Financial Performance of Deposit Money Banks in Nigeria.

$$ROA_{it} = \beta_{0it} + \beta_1 AFS_{it} + \beta_2 AF_{it} + \beta_3 JA_{it} + \beta_4 FS_{it} + \beta_5 FS_{it} + \epsilon_{it}$$

Where

ROA = Return on Assets

$\beta_0$  = intercepts autonomous variable.



$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  = the regression coefficients of the independent variable  
 it = time for intercepts  
 AFS = Audit Firm Size;  
 AF = Audit Fees;  
 JA = Joint Audit  
 FS = Firm size;  
 FA = Firm age;  
 $\epsilon$  = Error Term

## Results

### Descriptive Statistics of Dependent and Independent Variables

Variables	Minimum	Maximum	Mean	Std. Deviation
ROA	-0.088	0.432	0.020	0.045
AFS	0.000	1.000	0.714	0.454
AF	3.180	5.250	4.174	0.427
JA	0.000	1.000	0.486	0.502
FS	6.916	22.650	17.833	3.562
FA	1.386	3.829	2.657	0.680

Source: STATA 14 Output:

Table 1 shows that the mean for ROA is 2% indicating the average level of ROA across the sampled DMBs. It also suggests that for every ₦1 use of assets generate 2% ROA in the sampled DMBs in Nigeria and the standard deviation of ROA is 0.045. The difference between the mean and the standard deviation is 0.025. This is an indication of wide variations in the ROA around the mean. It means that there is a significant variation in the ROA status of the sampled DMBs. The minimum and maximum are -0.083 and 0.432 respectively. This is an indication of a very wide range of 0.349. The range corroborates the revelation of the standard deviation that there is a very wide gap between the DMBs with regard to ROA some DMBs have low ROA and others with high ROA. The minimum value implies that other firms make a loss in some accounting years.

The table also indicates that on average 71.4% of the listed DMBs in Nigeria are audited by Big 4 audit firms as indicated by the mean value of 0.714 with a standard deviation of 0.454. While the minimum and maximum values are 0 and 1 respectively. The table also indicates that the minimum and maximum values of the natural log of audit firm fees are 3.180 and 5.250 respectively, with the mean value of 4.174 and standard deviation of 0.427. This shows that there is a dispersion of audit firm fees from the mean in the sample firms. In addition, the minimum and maximum values of the joint audit (JA) variable are 0 and 1 respectively. The average proportion of joint audit has the mean value of 0.486 and standard deviation of 0.502. This implies that about 48.60% of the listed DMBs in Nigeria employ joint audit services. It also suggests insignificant variation around the mean based on the standard deviation of 0.502.

The average firm size as indicated on the table as mean value is 17.833. The standard deviation is 3.562 indicating a very high variability among the size of sampled DMBs. It means that most of the DMSBs are not within the same range in terms of their total asset. The minimum and the maximum firm size are 6.916 and 22.650 respectively. This implies that the range is 15.734, indicating a very high range in a total asset owned by DMBs within the period of the study. The mean of age of the sampled DMBs is about 2.615, which indicates that the average age of the sampled firms from the date of listing with a minimum 1.386 and a maximum of 3.829. The standard deviation of 0.680 indicates that there is a significant difference between the ages of the firms.

## Correlation

The results of Pearson correlation between the dependent and explanatory variables are presented in the table below:

## Correlation matrix

	ROA	AFS	AF	JA	FS	FA	VIF
ROA	1.000						
AFS	0.003	1.000					1.00
AF	-0.188	-0.002	1.000				1.30
JA	-0.196	-0.018	0.074	1.000			1.05
FS	0.128	0.009	-0.278	-0.051	1.000		1.09
FA	-0.216	0.001	0.427	0.220	-0.143	1.000	1.28

Source: STATA 14 Output:

This section shows the relationship between the independent variable and the dependent variables. Absolute value of the correlation coefficient and larger value indicate strength and strong relationships. The result shows that the correlation coefficients on the main diagonal are 1.000 for all the variables, which indicate perfect and positive linear relationship that each variable has with itself.

It also shows that there is positive relationship between audit fees, joint audit, firm age, and ROA. This suggests that an increase in audit fees, joint audit and firm age does not lead to an increase in ROA. The relationship between audit firm size, firm size and ROA is positive. This implies that an audit firm size and firm size contributes positively to the ROA. It also shows that audit firm size and firm size moved in the same direction with ROA.

### Analysis of Regression Results

This section presents the regression results of audit firm size, joint audit, audit fee (independent variables) and ROA (dependent variable).

## Regression Result

ROA	Coefficient	Robust Std. Err	t-value	P-value
Const	0.0746	0.0501	1.49	0.140
AFS	0.0001	0.0065	0.02	0.983
AF	-0.0102	0.0109	-0.93	0.353
JA	-0.0045	0.0070	-0.64	0.522
Firm_size	0.0009	0.0007	1.26	0.211
Firm_age	-0.0099	0.0050	-1.96	0.053

R-Square = 0.0660

F-Ratio = 1.20

Prob. = 0.3167

Source: STATA 14 Output:

Table 4.3 presents the coefficients and t-statistics of OLS regression results. The results depict that the  $R^2$  is about 7%, which gives the proportion, or percentage of the total variation in the dependent variable explained by the audit firm size, audit fee and joint audit of the sampled DMBs jointly. It signifies that 7% of the total variations in ROA of sampled DMBs are caused by their audit firm size, audit fee and joint audit, while the remaining 93% of the total variation in ROA was caused by factors not explained by the model.

Audit firm size has positive and insignificant impact on the ROA of the DMBs, from the coefficient of 0.090 with t-value of 0.020, which is statistically insignificant at t-value of 0.002 because is less than  $\pm 1.96$  the pre-selected level of significance. The results reveal that a unit increase in the size of the audit firm will lead to a 0.9% increase in the ROA of the DMBs.

Audit fee has negative and insignificant impact on the ROA of the DMBs, from the coefficient of -0.0102 with t-value of -0.93, which is statistically insignificant at t-value of 0.93 because it is less than  $\pm 1.96$  the pre-selected

level of significance. The results reveal that a unit increase in the audit firm fee will lead to a 1% decrease in the ROA of the DMBs.

The results also show that joint audit has a negative and insignificant impact on the ROA of the DMBs, from the coefficient of -0.0045 with t-value of -0.64, which is statistically insignificant at t-value of 0.64 because is less than  $\pm 1.96$  the pre-selected level of significance. The results reveal that a unit increase in the audit firm fee will lead to a .045% decrease in the ROA of the DMBs.

The result also revealed that there is a positive relationship between firms' size and ROA at beta coefficient value of 0.0009 with insignificant effect at t-value of 1.26. Lastly, the relationship between the ages of the firms is negative and significant at coefficient and t-value of -0.0099 and -1.96 respectively.

## **Discussion**

### **Audit firm size and ROA**

As shown in the result of the test of the hypothesis one, a positive and insignificant relationship was observed between audit firm size and ROA. The result, therefore, achieves objective one of the study and answers research question one of the study. This finding is not in line with or contradicts any of the reviewed literature because all the reviewed literature does not use ROA as the dependent variable.

### **Audit fee and ROA**

The study hypothesized that there is no significant effect of audit fees on ROA of the listed DMBs in Nigeria. The regression results reveal the negative and insignificant effect of audit fees on ROA, implying that as audit fees decrease ROA insignificantly, suggesting that the higher audit fee, the lower the ROA. This result achieves objective two of the study and answers research question two of the study. This finding is not in line with or contradicts any of the reviewed literature because all the reviewed literature does not use ROA as the dependent variable.

### **Joint Audit and ROA**

The study hypothesized that there is no significant effect of joint audits on ROA of the listed DMBs in Nigeria. The regression results reveal the negative and insignificant effect of joint audits on ROA. This result achieves objective three of the study and answers research question three of the study. The study found that financial performance during the period decrease as the use of joint audits increase. This finding is not in line with or contradicts any of the reviewed literature because all the reviewed literature does not use joint audits as independent variables and ROA as the dependent variable.

Available evidence from the result shows that audit firm size and ROA of listed DMBs in Nigeria are positively and insignificantly related while audit fees and joint Audits are negatively and insignificantly related to ROA of listed DMBs in Nigeria.

## **Conclusion**

This study investigated the relationship between audit quality and the financial performance of DMBs in Nigeria. The results showed that audit quality has positive coefficients and insignificantly influences the firm's financial performance. Similarly, the result showed that audit firm size, audit fee, and joint audit had an insignificant and negative relationships with return on assets (ROA). Generally, the results revealed that audit quality does not add value to the financial performance of DMBs in Nigeria.

The results suggest important implications for practitioners and policymakers in Nigeria. One important and major implication is that, audit firm size, audit fee and joint audit do not improve significantly the financial performance of DMBs.

### Recommendations

In view of the findings of the study, the following recommendations are hereby suggested; since audit firm size positively affects firm performance. Consequently, a smaller audit firms should be encouraged to carry out more thorough audit assignments not necessarily attaching them with the big audit firms, because most of the DMBs engaged the service of the bigger audit firm. Some of the smaller firms can performance better than the big ones in the sense they may wish to be considered as one of the big audit firms. It is important that regulatory bodies such as SEC, CBN among others should state how much should be paid to audit firms, based on the quality of work and also make joint audits compulsory for public companies, especially DMBs and sanction any firm that fails to comply.

### References

- Anil, G. (2016). Relationship Between Audit Quality and Corporate Governance: An Empirical Research in Borsa Istanbul. *Journal of Business and Management*, 18(11), 84–88.
- Augustine, O. O., Famous, O. I. & Augustine O. E. (2014). Audit quality and accrual based earnings management of quoted companies in Nigeria. *IOSR Journal of Economics and Finance*, 2 (2), 07-16 [www.iosrjournals.org](http://www.iosrjournals.org)
- Becker, C., DeFond, M., Jiambalvo, J., Subramanyam, K.R. (1998), 'The effect of audit quality on earnings management', *Contemporary Accounting Research*, Spring, Vol. 15 pp.1-24.
- Cheong, P. C., Boon, H. T., Ong, T.S & Hong, Y.H, (2015). The relationship among audit quality, earnings management, and financial performance of malaysian public listed companies. *International Journal of Economics and Management* 9 (1).
- Carcello, J. V., D. R. Hermanson, and R. A. Riley. (2002). Board characteristics and audit fees. *Contemporary Accounting Research* 19 (3): 365-384.
- Dangana, U. (2014). *Audit Attributes and Financial Reporting Quality of Listed Building Material Firms In Nigeria*. unpublished thesis submitted to the school of postgraduate studies, ahmadu bello university zaria, in partial fulfillment of the requirements for the award of master of science degree (m.sc) in accounting and finance.
- DeAngelo, L.E.(1981). Auditor size and audit quality. *Journal of Accounting and Economics* 3(3): 183-199
- DeFond, M.L.,& Francis, J.R. (2005). Audit research after Sarbanes-Oxley. *Auditing: A Journal of Practice & Theory*, 24 (supplement), 5-30.
- DeFond, M. and Francis, J. (1992). Audit research after Sarbanes-Oxley. *Auditing: A Journal of Practice & Theory* 24: 5-30.
- Francis, J.R. Ke, B. (2006). Disclosure of fees paid to auditors and the market valuation of earnings surprises. *Review of Accounting Studies*, 11, 495–523.
- Francis, J.R. (2004) 'What Do We Know about Audit Quality?', *The British Accounting Review*, 36(4): 345-368.
- Francis, J.R., Maydew, E.L., & Sparks, H.C. (1999). The role of big 6 auditors in the credible reporting of accruals. *Auditing: a Journal of Practice & Theory*, 18(2), 17-34.
- Frankel, R., Johnson, M. and Nelson. K. (2002) 'The relation between auditors' fees for nonaudit services and earnings management', *The Accounting Review*, 77 (Supplement): 71-105.
- Hiryel, A.I. (2017). *Effect of Audit Firm Attributes on Earnings Quality of Listed Consumer Goods Firms in Nigeria*. Being a dissertation submitted to the department of accounting Ahmadu Bello University, Zaria, Nigeria for the award of master of science (m.sc) degree in accounting and finance
- Jensen, M.C. and Meckling, W.H.: (1976) „Theory of the firm: managerial behaviour, agency costs and ownership structure“, *Journal of Financial Economics*, 3, pp.306-360.
- Krishnan, G., (2003). Does Big 6 auditor industry expertise constrain earnings management? *Accounting Horizons* 17, 1-16.
- Kwabena, K. A. (2017). *The Effects Of Internal Audit Quality On Financial Performance Of Firms Listed At The Nairobi Securities Exchange*. A Thesis submitted in Partial fulfillment of the requirement for the award of Master in Business Administration. Degree of the School of Business University of Nairobi.
- Lesage, C., Ratzinger-Sakel, N. and Kettunen, J. (2012) Struggle over joint audit: on behalf of public interest? Available at: <http://papers.ssrn.com/abstract/42176729> (accessed 12 November 2012).
- Louise, M. (2005). *The effects of auditor independence on audit quality*. Paper presented the Department of

- Accounting, Bowling Green State University
- Marmousez, S. (2009). *The choice of joint-auditors and earnings quality: Evidence from French listed companies*. CAAA Annual Conference 2009.
- Miettinen, J. (2011), The role of audit quality on the relationship between auditee's agency problems and financial information quality. Paper presented at the Department of Accounting and Finance, University of Vaasa, Finland
- Morteza, Z. (2014). *The effect of audit quality on the performance of listed companies in Tehran Stock Exchange*. 21, 36–43. <https://doi.org/10.18052/www.scipress.com/ILSHS.21.36>
- Mungai J. N., Lucy M. & Susan W. N. (2016), Effect of auditing on financial Performance of water and sanitation company in kirinyaga county, kenya, *Journal of Finance and Accounting* 2016; 4(5): 271-284, ISSN: 2330-7331 (Print); ISSN: 2330-7323 (Online)
- Rosikah, Dwi K. P., Dzulfikri A. M., Muh. I. A. and Miswar R. (2018); Effects of Return on Asset, Return On Equity, Earning Per Share on Corporate Value; *The International Journal of Engineering and Science (IJES)*; Volume 7, Issue 3 Vol. I; 2018 ISSN (e):2319 –1813ISSN (p):23-19 –1805
- Sarens, G. & Abdolmohhamadi, M. J. (2007). Agency theory as a predictor of the size of the internal audit function in Belgian Companies. *Paper presented at the Annual Congress of European Accounting Association in Lisbon*.
- Shehu, U.H., (2011), Corporate Governance and Financial Reporting Quality: A Study of Nigerian Money Deposit Bank, *International Journal of Research in Computer Application and Management (U.S.A)*, 1(6): 12-19 ISSN: 2231-1009
- Shehu, S. H. (2012). *Firm Characteristics and Financial Reporting Quality of Quoted Manufacturing Firms in Nigeria*. An Unpublished PhD Dissertation School of Postgraduate Studies Ahmadu Bello University, Zaria
- Shehu U. H. and Musa A. F. (2014), Firm Attributes and Earnings Quality of listed Oil and Gas Companies in Nigeria; American Research Institute for Policy Development; Review of Contemporary Business Research March 2014, Vol. 3, No. 1, ISSN: 2333-6412 (Print), 2333-6420 (Online) [www.aripd.org/rcbr](http://www.aripd.org/rcbr)
- Sim, H. C., Daw, H.T., & Abu I.H. (2016). *Malaysia Financial Reporting Practices and Audit Quality Promote Financial Success : The Case of Malaysian Construction sector*. 1(1), 36–50.
- Sylvester, E. & Eyesan, L.D. (2017). Audit quality and Earnings Management in Quoted Nigerian Banks. *Journal of Accounting, Finance and Auditing Studies*.
- Tom, A., & Ying, Z. (2018). *The Effect of Audit Quality on a Firm's Internal Information Environment: Evidence from Group Audits*
- Watts, R. L. (1998). A review of agency problems, auditing and the theory of the firm. *Journal of Law and Economics*, 26 (3).