

## FOREIGN OWNERSHIP STRUCTURE AS A MONITORING TOOL FOR AUDIT QUALITY: EVIDENCE FROM NIGERIA

**AKINWUNMI, Abiodun Jelil**  
Babcock University, NIGERIA  
akinabiodun@yahoo.com

**ADEYEMI, Akeem Adekunle**  
Olabisi Onabanjo University, NIGERIA  
kunleadeyemi01@gmail.com

**ALAO, Abdul-Azeez Adeniyi**  
Olabisi Onabanjo University, NIGERIA  
alaoadeniyi@yahoo.com

**AJAYI-OWOEYE, Olotu Ayooluwa**  
Babcock University, Ilisan Remo, NIGERIA  
ayooluwaolotu@yahoo.com

### ABSTRACT

While minority stockholders may not be able to afford the costs attributable to monitoring executives, foreign stockholders possess the wherewithal to consciously monitor the executives. This study examined the impact of foreign ownership on audit quality. The population used was 186 listed companies on the NSE from 2007 to 2017. Secondary data was used while the sample size comprised 36 manufacturing firms purposively selected from the manufacturing companies listed on the NSE. The study focused on foreign ownership as the independent variable and audit quality (audit fees and audit size) as dependent variable. Correlational and experimental research designs were employed while descriptive and inferential statistics were used for analysis. The Study findings indicate that the coefficients of determination ( $R^2$ ) value of 0.448 and 0.749 of the explanatory variables account for about 45% and 75% variations that occur in audit fees and audit size respectively. Based on the coefficients ( $\beta = -0.427$ ;  $p\text{-value} = 0.090$ ) and ( $\beta = 0.926$ ;  $p\text{-value} = 0.006$ ), foreign ownership has a statistically significant impact on audit fees and audit size. It is therefore concluded that shareholding by foreigners in Nigerian listed manufacturing companies has a significant effect on audit quality. It is also recommended that Nigerian corporate entities should embrace a well-constituted ownership structure that guarantees effective and efficient utilization of firms' resources while it is imperative to hearten foreign investors' engagement and involvement in the affairs of the companies.

**Keywords:** Foreign Ownership, Audit Quality, Audit Fees, Audit Size, Manufacturing Companies, Efficient Resources

### INTRODUCTION

Ownership structure according to Seyedeh, Hamid and Hashem (2016) refers to the distribution of equity or ownership rights in terms of votes and capital as well as the nature and identity of the equity owners. This structure is of major importance in corporate governance because they determine the incentives of managers and thereby the economic efficiency of the corporations they manage. Since ownership structure entails the platform for exerting authority over organisations in conditions of imperfect conditions the agency problem needs to be resolved in line with firm's ownership structure which is aimed at ensuring overall efficiency and effectiveness. For a public limited liability company with large dispersed shareholders, the challenge for shareholders is how to monitor the activities of managers with dominating shareholdings. (Al Farooque, Ziji & Karim, 2007).

It is believed that one of the most important ways through which a firm maximizes its value is through well designed ownership structure of the firm's shares (Bai, Liu., Lu., Song & Zhang, 2004). The structure of ownership of a company may be dispersed meaning the

substantial percentage of shares is owned by concentrated or dominant investors. The unification of the dominant shareholders and the power of control during annual general meetings and the power to influence directors, is therefore anticipated engender effective corporate governance and, eventually, firm overall wellbeing. The difference in parties necessary to unify the majority of shares and the controlling power in elections during annual shareholder meetings and the power to control managers, is then expected to have an influence on corporate governance and, ultimately, firm performance. The Ownership structures identified in the literature include dominant, concentrated, managerial, foreign, institutional and government ownership structure. The focus of this present study therefore is on foreign ownership structure.

### **Statement of the Problem**

The importance of corporate governance in today's corporate environment cannot be over-emphasized. Governance issues relating to corporate organizations have attracted substantial attentions recently from researchers and business environment, where its explanatory power has been tested in empirical models (Masdiah, Irene, Qian, 2016). Corporate failures in various developed and developing markets, specifically, the Enron and WorldCom in the United State of America and Daewoo in Korea have further brought the issues relating to corporate governance into front burner. Similarly, the spate of corporate failures witnessed in Nigerian corporate environment since the early 1990s and 2000s gives the level of corporate governance decadence in the Nigerian business environment. According to Olotu, Salawu, Adegbe and Akinwunmi (2019), Okolie, (2014) precisely gave an account of those organizations found having involved in various situations of accounting malpractices which went unnoticed emanating from substandard audit quality in the past financial periods. According to Adeniyi, (2019), the absence of transparency and accountability in the Nigerian corporate environment had led to the latest scandal involving Oando Plc, a company that is quoted on both the Johannesburg and Nigerian Stock Exchanges. The cost of significant misrepresentation as a result of poor corporate governance practices to investors, the companies and even the broader society as a whole is enormous. This is made evident in the loss of huge sums of money every year by investors to frauds and corporate collapses. Consequently, the seemingly unending corporate governance infractions have brought auditors into attention and triggered the Nigerian public to question the roles of auditors (Ajibolade, 2008). This present study aims at examining the role of foreign ownership as a monitoring tool of internal control geared towards engendering effective and efficient corporate governance structure in Nigerian corporate environment. This study is necessary at a time such as this when the country is battling with myriads of scandals both in private and public establishments. While the empirical studies on the relationship between ownership structure and firm performance has been well researched in academic literature in the developed and developing nations (Al-Matari, *et al.*, 2017; Angaye, Gwilliam, Marnet & Thomas, 2000, Bariyima, 2012; IbnAdam & Bala, 2015; Khan, Nemati & Iftikhar, 2011) negligible effort has been deployed to studying the potential relationship between foreign ownership structure and audit quality most especially in Nigeria. The main objective of this study is to examine the impact of foreign ownership structure as a tool for improved audit quality.

### **Rationale and Development of the Hypotheses**

Foreign stockholders and non-executive directors have imperative parts in working out internal governance structure mechanism (Ching, Qian, Sherman 2010). While minority shareholders may not be able to afford the costs attributable to monitoring executives, foreign stockholders possess the wherewithal to consciously monitor the executives which may

herald higher shareholders value through monitoring tools for decision making by the management (Lee, Rhee & Yoon, 2018). Foreign investors, who are typically sophisticated institutional investors, may have superior capabilities, resources, and skills to collect and process value relevant, firm-specific information (Kim & Yi, 2007). These specific characteristics provide a distinctive advantage to assess the effect of foreign ownership on the flow of firm-specific information to minority investors and to study whether this effect varies analytically with the established architecture of the market on which foreign shareholders belong. Nevertheless, experimental researches on the effects foreign shareholders monitoring conjectures have shown mixed results so far.

Some studies found a significant impact of foreign ownership on firm performance (Barclay & Holderness, 1989, Black, Jang, & Kim, 2002, Choi, Park, Yoo 2007, Noe, 2002), Bhagat and Black (2002) found no any significant impact. These contradictory findings in prevailing empirical researches suggest that not all of the external concentrated stockholders and the non-executive directors are skilled managers with monitoring motivations. Hence, it is imperative to empirically ascertain managers with required monitoring inducements. It is in this regard we hypothesize that:

H01: Foreign ownership structure has no significant impact on audit quality of Nigerian quoted companies.

## LITERATURE REVIEW

This section of the study comprises review of the extant literature that is relevant to this study. It is subdivided into conceptual review, theoretical framework and empirical review

### Conceptual Review

#### Foreign Ownership

Foreign ownership is interpreted as the membership in the ownership structure of a firm by non-citizens. Tsegba (2011) provided two opinions in support foreign ownership of companies in evolving nations of which Nigeria is one. First, overseas companies are considered to have more business capability and entrepreneurship than indigenous companies and are therefore, more vibrant in their administration posture. Secondly, foreign organizations have technical know-how, financial resources, spare parts and other necessary resources at their disposal which could bring about efficient and effective management of the organization towards attainment of the overall corporate objective. Generally, there is a consensus that foreign ownership has an important role in firm performance, especially in developing economies like ours. Aydin, Sayim and Yalama, (2007) submitted that foreign enterprises outperformed the indigenously owned enterprises. This is therefore, the drive that the past years have seen upsurge in the levels of Foreign Direct Investments in the developing nations.

#### Audit Quality

Various definitions of quality audits have been given by different authors. According to Danjelo (1981), audit quality is the likelihood of discovery and substantial reportage of abnormalities in the financial reports. In this definition two factors that were considered entail audit quality. Audit quality involves the skill to spot substantial abnormalities considered as the capability of the auditor, aptitude and readiness to identify and report infractions pertaining to independence of the auditor. Audit quality is defined as the “accuracy of the information provided to investors and auditors” (Danjelo, 1981). Titman and Troman (1986) in a more elaborate clarification suggested that “audit quality is the auditor's skill to detect and eradicate material abnormalities and manipulations performed in the reported earnings”.

The inconsistency of remunerations among the shareholders and directors, smearing total control from the main shareholders, lessening of control influence and oversight function of non-controlling shareholders on the affairs of the firm thereby restricting the role to decisions making only to the managers can affect the quality and outcome of the companies' audit.

DeAngelo, (1981) provided unique definition for audit quality as “auditors’ possibility to detect errors and to report deviations in the accounting system of the client.” Therefore, according to this definition, audit quality is a function of the auditor’s ability to detect material misstatements and reporting the errors. (Palmrose 1988) defines audit quality as the probability that financial statements contain no material misstatements. Nevertheless, (Knechel, Gopal, Mikhail, Lori & Uma, 2013) note that there is little consensus among researchers regarding the definition of audit quality.

## **Theoretical Framework**

### **The Lending Credibility Theory**

The proponents of the lending credibility theory opine that the primary function of the audit is to add credibility to the financial statements as an essential portion of auditing which makes it a important service provided by the auditor to the clients. Consequently, the selling service of the auditors to the clients is credibility. Financial reports that have been audited are considered having elements that increase the confidence of the users of financial statements in those figures as indicated in the financial records prepared by the management. The stakeholders are considered to benefit from the improved credibility. The credibility is characteristically perceived to improve the quality of investment decision or new contracts, as a result of dependable financial information. The credibility gained by financial statements would affect decisions by stakeholders, rust in the management team which tends to reduce asymmetric information.

### **Empirical Framework**

Pursuant to the relevance of ownership structure to the economic wellbeing of organizations and the maiden study by Berle and Means, (1932) a number of studies had focused on empirical investigations examining the manner in which ownership structure affects audit quality within and outside Nigeria. This section reviews previous studies conducted to establish the correlation between foreign ownership structure and audit quality.

### **Foreign Ownership Structure and Audit Quality**

Experimental researches focusing the relationship between the perceived monitoring effects of foreign ownership and quality of audit had shown inconsistent outcomes. Whereas some studies showed positive relationships between foreign ownership and audit quality, others did not detect any statistically significant association. Lee, Rhee and Yoon, (2018) conducted a study on the impact of foreign investors’ presence in the management team on audit quality. Size of the audit firm and fees paid to the auditors were employed as the proxies for audit quality and used 1574 firm-year observations of firms quoted on the KSE. The results revealed that the presence of foreign block stockholders and foreign non-executive directors increases audit quality.

Harahap and Presetyo (2018) also researched on the structures and characteristics of corporate ownership and audit fees of firms quoted on Indonesian Stock Exchange (ISE) during the period of 2014-2016. The purposive sampling technique resulted in 150 companies. Multiple linear regressions were used to analyze the data. The results showed that firms with larger foreign ownership significantly and positively affected audit fees,

Similarly, Khashameh and Joseph (2017) investigated ownership structure and audit quality using Bahrain Bourse listed companies for 2015 and those companies not listed but registered by Central bank of Bahrain. Logistic regression used in testing the hypotheses showed that ownership by foreigners is significantly related with the quality of audit. Zureigat (2011) investigated ownership structure and audit quality among listed firms on the Amman Stock Exchange in Jordan. Logistic regression analysis was adopted to test the hypothesis which sought to examine the relationship between the audit size (dependent variable) and ownership structure as (independent variables). The result showed a positive and significant relationship between the variables.

## METHODOLOGY

For the purpose of this study therefore, Correlational and experimental research designs were adopted. Explanatory method was used in assessing the impact of foreign ownership on audit quality. Descriptive method was employed in explaining the necessary characteristics of the firms used. The population consisted of 185 companies listed on the Nigerian Stock Exchange (NSE). The study sample frame was the entire 65 manufacturing companies quoted on the Nigerian Stock Exchange (NSE). 36 manufacturing firms were selected as sample size using judgmental sampling technique and a two-point filter method. Consistent with the previous researches on ownership structure, (Abu *et al.*, 2018; Kiamehr, Moghaddam, Ali pour & Hajeb, 2015; Seyedeh *et al.*, 2016), secondary data was used. The data was obtained principally from the Nigerian Stock Exchange (NSE). The data on foreign ownership structure and audit quality (audit fees and audit size) was extracted from the annual reports and accounts of all the companies under consideration from 2007 to 2017.

### Variables Definition and Measurement

In this study, foreign ownership structure is the independent variable while audit quality represents the dependent variable. While fees paid to the auditors and size of audit firm are the proxies for audit quality. Firm size (FSize) and financial leverage (FLev) were used as control variables metrics.

### Independent Variable Measurement

Foreign Ownership: Two arguments have been put forward backing foreign ownership of companies in developing countries like Nigeria (Tsegba & Ezi-Herbert, 2011). In the first instance, foreign companies are adjudged to possess business understanding and entrepreneurship skill that indigenous companies and are therefore, much more vibrant in management style. Secondly, foreign organizations have technical know-how, financial resources, spare parts and other necessary resources at their disposal which could bring about efficient and effective management of the organization towards attainment of the overall corporate objective. In measuring foreign ownership, this study used the percentage of shares held by foreign nationals thus:

$$\frac{\text{Number of shares held by foreign nationals and organizations}}{\text{Number of issued share capital}} \times \frac{100}{1}$$

### Dependent Variable Measurement

The dependent variable represents the measures of audit quality (audit fees and audit firm size ) that may be affected by foreign ownership structure. Scholars such as Azadi and Muhammadi, (2014); Abu *et al.* (2018); Lee *et al.* (2018); Zureigat (2011); Gacar (2016); Lennox (2005); Sulong *et al.* (2013); Harahap *et al.* (2018) and Khasharmeh *et al.* (2017) have employed these metrics as audit quality measures. Audit Fees: Audit fees in this study

are regarded as a consideration for quality audit. The large auditors are perceived to possess greater audit quality, hence they are projected attract greater audit fees. As a consequence of the superior proficiency of the external auditor, big auditors demand a premium that is relatively higher than that of the small audit firms (Simunic, 1980). For the purpose of this study therefore, the natural log of fees paid to the auditor was used to measure audit fees.

### Control Variable Measurement

This study will employ two control variables of firm size and financial leverage. They were employed as a device in controlling the impact of firm peculiar attributes. The choice of these two variables is in tandem with similar prior empirical studies (Kheirollahi, Behshour & Azadi, 2014; Zuregat, 2011).

**Audit Size:** The size of the audit firm is the best generally used proxy for quality of audit (Chang, Gygax, Oon & Zhang, 2008). This is as a result of the myriad of theories and empiricism that lend credence to the fact that big auditors may provide better quality audit reports. In this study, audit quality was assigned one (1) when the company is audited by one of the big 4 audit firms (Price WaterHouse Coopers, Akintola Williams Delloite, KPMG and Ernst and Young) and zero (0) otherwise (Abdullah, 2008).

**Firm Size:** Firm size factors are widely acknowledged as driving the performance of the firms (Boubakri, 2005; Gwillian. Marnet & Thomas, 2010). There are two arguments in support of firm size as an important driver of firm performance. First, big firms have the opportunity of accessing finances much easily. In the second argument, entry barriers may be easily created by big firms (Mangena & Tanringana 2006). The natural logarithm of total assets was used in this present study to measure firm size (Kheirollahi *et al.*, 2014; Zuregat, 2011) thus:

$$Fsize_{i,t} = LN ( TA_{i,t} )$$

Where:

Fsize = Firm size

LN = Natural logarithm

TA = Total Assets

**Financial Leverage:** Financial leverage may exert more active financial management on the managers than equity (Angaye *et al.*, 2010). This may lessen sources of disputes between shareholders (owners) and directors (agent). Financial commitments to banks or consortium of banks are similarly perceived to be a valuable mechanism for alleviating the agency problem (Sanda *et al.*, 2005). Total debts divided by total assets was used to measure leverage in this study (Abdullah, 2008, 2002; Kheirollahi *et al.*, 2014; Zuregat, 2011).

Total Debt

Total Assets

### Model Specification

The main purpose of this study is to examine the impact of foreign ownership structure and measures of audit quality of manufacturing companies quoted on the Nigerian Stock Exchange. Subsequently, to achieve this objective, the following regression model of Zuregat (2011) was adapted.

$$AQ = \alpha + \beta_1 OC + \beta_2 FO + \beta_3 IO + \beta_4 SI + \beta_5 LE + e$$

Where: AQ is Audit Quality; OC represents Ownership; FO stands for Foreign Ownership; IO is Institutional Ownership; SI represents Company Size; and LE means Leverage.

Implicit Model

The following model was formulated for the purpose of this study

$$AQ_{it} = \alpha_{it} + \beta_1 F-own_{it} + \beta_2 Fsize_{it} + \beta_3 Flev_{it} + e_{it} \text{ -----(1)}$$

**Explicit Model**

$$AUDif_{it} = \alpha_{it} + \beta_1 F\text{-own}_{it} + \beta_2 Fsize_{it} + \beta_3 Flev_{it} + e_{it} \text{-----}(2)$$

$$AUDis_{it} = \alpha_{it} + \beta_1 F\text{-own}_{it} + \beta_2 Fsize_{it} + \beta_3 Flev_{it} + e_{it} \text{-----}(3)$$

Where; AQ represents audit quality (dependent variable) measured as audit fees (AUDif) and audit size (AUDis) while the explanatory variables are Foreign ownership (F-own); Firm size (Fsize) and Financial leverage (Flev). The alpha ( $\alpha$ ) and batas ( $\beta$ ) are the coefficients of the regression and the subscript i and t represent each quoted firm at time t (years), where t = 2007 to 2017.

**ANALYSIS, RESULTS AND DISCUSSIONS**

This study adopted descriptive and inferential statistics in analyzing the data. In estimating the data, panel data methodology was employed and multiple regressions were used for analysis.

**Descriptive Statistics**

The result in Table1 presents the number of observations, mean, median, maximum, minimum and standard deviation of each of the dependent and independent variables. The table shows two categories of variables. The first category is the dependent variables which are the Audit Fees (Audif) and Audit Size (Audis). The second category is the explanatory variables which include Foreign ownership (F-own), Firm size (F-size) and Financial leverage (F-lev).

**Audit Fees (Audif)**

From the Table, Audit Fees takes values between N450.00 and N1,293,405.00 with a Standard deviation of 67,119.17. These show that the fees paid to the external auditors by each of the selected firms and over the period of 11 years (2007 – 2017) considerably varied. Besides, the average values for all the firms is N18,556.08. This average figure is considerably greater than the median figure of N9,337.50. This further confirmed that the fees paid to the external auditors by each of the selected firms and over the period of 11 years (2007 – 2017) considerably varied and on average, the firms paid N18,556.08.

**Audit Size (Audis)**

Audit Size as presented in Table 1 has a minimum value of 0 and a maximum value of 1. These figures depict that the indicator is truly a dummy variables with the value of one (1) where the service of external auditor engaged by any of the firms in any of the years under study is one of the BIG4 and zero (0) otherwise. Additionally, the average value of Audit Size is 0.63 suggesting that the services of BIG4 firm was mostly (about 63.0% of times) engaged during the period.

**Foreign Ownership (F-own)**

Foreign ownership as reported in Table 1 took values between 0.00 and 0.88 with a Standard deviation of 0.31. These show that proportion of share owned by the foreigners hovers around 0.00% and 88.0%. Also, the average value of F-OWN is 0.27 and the median value is 0.01 suggesting that on average, the proportion of share owned by Foreigners is 27.0% of the entire share and the value relatively varies.

**Firm Size (F-Size)**

Firm size is computed as the Natural logarithm of the total asset. As can be seen from the Table, the average and median values of F-size are found to be 15.81 and 15.77 respectively. These indicate that the firms are relatively similar in terms of size. In addition, the minimum

and maximum values of 11.13 and 20.10 with a Standard deviation value of 2.02 further confirmed that during the period, all the firms' asset do not vary much.

### Firm Leverage (Flev)

This is measured as the ratio of total liabilities to total assets. This shows the ability of a firm to pay out debt from its total asset. The mean value of Flev is 1.01% while the median value was 0.56% indicating that the ratio of the total debt to the asset is 101.0% on average and that the debt is about 56.% (approximately) of the firms' asset during the period in terms of middle value. In addition, the results show that these ratios among the firm relatively vary. The minimum and maximum values of 0.00 and 22.06 with a Standard deviation value of about 2.42 show that during the period, one of the firms' assets is as low as 0%.

**Table 1: Summary Statistics**

	Obsns	Mean	Median	Maximum	Minimum	Std. Dev.
<b>Dependent Variable</b>						
<b>AUDif</b>	396	18,556.08	9,337.50	1,293,405.00	450.00	67,119.17
<b>AUDis</b>	396	0.63	1.00	1.00	0.00	0.48
<b>Independent Variable</b>						
<b>F-own</b>	396	0.27	0.00	0.88	0.00	0.31
<b>F-size</b>	396	15.81	15.77	20.10	11.13	2.02
<b>Flev</b>	396	1.01	0.56	22.06	0.00	2.42

*Source: Author's desk report (2019), Note: Audit Fees (Audif), Audit Size (Audis), Foreign ownership (F-own); Firm Size (Fsize) and Financial leverage (Flev).*

### Pearson Pairwise Correlation

In this segment, we present the result of correlation analysis that shows the degree of associations among the selected variables in this study as part of the preliminary analysis. The results of the correlation which considers audit fees (Audif), audit size (Audis), foreign ownership (F-own), with firm size (Fsize) and financial leverage (Flev) are discussed. This result is to establish the presence or otherwise of bivariate correlation between the explained and explanatory variables considered in the successive analysis and to guarantee that the relationships between a pair of the explanatory variables aren't too high to the degree of creating problems of multicollinearity. According to the result in Table 2, there are existence of positive correlations between Audit Size (Audis), Foreign ownership (F-own), Firm size (Fsize) and Audit Fees (Audif) with the correlation coefficients  $r = 0.673$ ,  $r = 0.517$ ,  $r = 0.845$ , respectively.

Focusing on the associations between Audit Size (Audis) and the rest of the variables, the correlation coefficients of  $r = 0.315$ , and  $r = 0.521$  indicate that Foreign ownership (F-own) and Firm size (Fsize) maintained positive associations with Audit Size (Audis) while Financial leverage (Flev) maintained negative associations with audit fees (Audif) and audit Size (Audis) with the correlations coefficients  $r = -0.181$  and  $r = -0.201$  respectively. More specifically, none of the correlation coefficients is too high to the point of causing multicollinearity problem.



**Table 2: Correlation Matrix**

Correlation	AUDif	AUDis	F-own	F-size	Flev
AUDit	1				
AUDis	0.673	1			
F-own	0.517	0.315	1		
F-size	0.845	0.521	0.359	1	
Flev	-0.181	-0.201	-0.122	-0.333	1

*Source: Author's desk report (2019), Note: Audit Fees (Audif), Audit Size (Audis), Foreign ownership (F-own); Firm Size (Fsize) and Financial leverage (Flev).*

### Empirical Analysis

This section presents and discusses the static panel regression results which involve the use of Random (RAM) and Fixed (FID) effects regression models using Eviews 10 to investigate the relationship between corporate ownership structure and audit quality of Nigerian quoted manufacturing companies. Several authors recommend that panel regression analysis should begin with simple model owing to the fact that the data for this study is a short panel. Therefore, Pooled (PLD) which is the rudimentary estimator of data that is cross-section and time series in nature. Using Pooled (PLD), the study assumes that individual-specific effects do not prevail. However, using random or fixed effect regression approaches the study assumes that excluded variable bias are removed by measuring change within firms. Alternatively, the individual-specific effects are assumed not present.

For better models' parameters, in choosing between a random effect (RAM) model and Pooled (OLS), the Breusch and Pagan Lagrangian multiplier test was employed. More specifically, for the panel regression estimator, to choose between Pooled and Random Effect Models the study used Breusch and Pagan Lagrange multiplier test for random effects. The null hypothesis of this test is that difference across entities does not exist. Using this test Random Effect model is preferred if the null hypothesis is rejected while non-rejection of the null hypothesis indicates the acceptance of Pooled (OLS) model. However, to choose between Pooled and Random Effect Models the study uses hausman test. Using this test, Random Effect model is preferred if the null hypothesis is rejected while non-rejection of the null hypothesis indicates the acceptance of fixed effect model. The study estimated three regression equations. That is, model one (1) has Audit Fees as the dependent variables model two (2) Audit Size (Audis) and model three (3) Auditor's Tenure (Audit) all with Managerial ownership (M-own), Foreign ownership (F-own), Concentrated ownership (C-own), Institutional ownership (I-own), Firm size (Fsize) and Financial leverage (Flev) as explanatory variables.

### Regression Result of Foreign Ownership Structure and Audit Quality

The relationship between foreign ownership structure and audit quality of Nigerian quoted manufacturing companies in terms of Audit Fees (Audif) using the pooled (OLS), random effect and fixed effect models are presented in this subsection. In achieving this, Audit Fees (Audif) is considered as dependent variable while the explanatory variables are, Foreign

ownership (F-own), Firm size (Fsize) and Financial leverage (Flev). Considering the Breusch and Pagan Lagrange multiplier (LM) in Table 3, the significant p-value of the test suggests that the preferred model is random effect model which is preferred over pooled. Knowing that the pooled regression is not favoured, the study conducted Hausman test to choose between Random effect model and fixed effect models. The null hypothesis of this test is that individual effects are uncorrelated with any regressor in the model (Hausman, 1978). From the result in Table 3, the P – value (0.644) is statistically insignificant. Therefore, the null hypothesis is accepted and concludes that the fixed-effects estimator is not more efficient in this case. Hence, the random effect model is considered appropriate to establish the relationship that exists between the relationship between foreign ownership structure and audit quality of Nigerian quoted manufacturing companies in terms of Audit Fees (Audif).

**Table 3: Lagrange Multiplier and Hausman Test for Audit Fees**

Tests	Breusch-Pagan Lagrange Multiplier (LM)	Hausman test
Chi2	703.95	4.241
P-Value	0.000	0.644

*Source: Author's desk report (2019)*

#### **Model 1: Foreign Ownership Structure and Audit Fees (AUDif)**

$$AUDif_{it} = 0.207 - 0.427 F\text{-own}_{it} - 0.525 F\text{size}_{it} + 0.029 F\text{lev}_{it} + e_{it}$$

In column 2 of Table 4, the significant F-statistics value ( F=52.557; P - value = 0.000) shows that the random effect model is statistically significant. The coefficient of determination (R – squared) value which is 0.448 implies that the explanatory variables account for about 45.0% variations that occur in the dependent variable. Based on the coefficient of Foreign Ownership (F-Own), the P – value (0.090) appears to be significant at 10% level of significance. The coefficient also indicates a negative impact. This means that a unit increase in Foreign Ownership (F-Own) causes about 0.427 units decrease in audit quality of the selected manufacturing firms in Nigeria. Alternatively, the significant result suggests that the impact of Foreign Ownership (F-Own) on Audit quality of the selected manufacturing firms in terms of Audit Fees (Audif) is significant.

For Firm size (Fsize), the coefficient is seen to be highly significant. This is confirmed by the P – value = 0.000 that is associated with the positive coefficient of the variable. This is indicative that a unit increase in firm size (Fsize) leads to about 0.525 units increase in audit quality of the selected manufacturing firms in Nigeria. Again, the significant result suggests that the impact of firm size (Fsize) on Audit quality of the selected firms in terms of Audit Fees (Audif) is significant. Similarly, the coefficient of financial leverage (Flev) the results show that financial leverage has a positive and significant impact on audit quality in terms of audit fees (Audif) (P – value = 0.001), hence, the significant result suggests that the impact of financial leverage (Flev) on audit quality of the selected manufacturing firms in Nigeria in terms of audit fees (Audif) is significant and a unit rise in financial leverage (Flev) will lead 0.029 increase in audit quality in terms of Audit Fees (Audif).

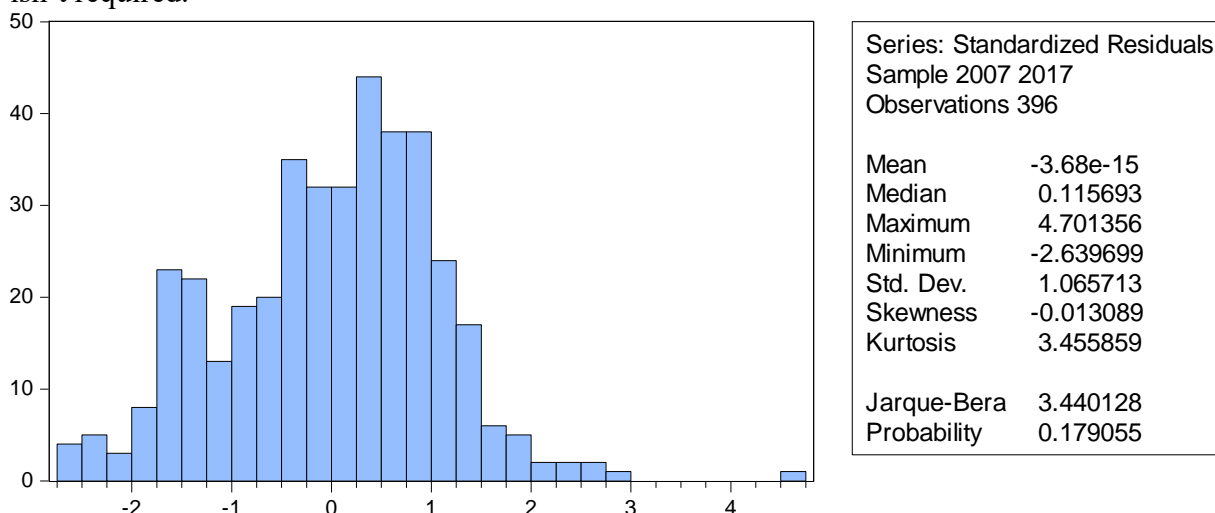
**Table 4: Regression result of Audit Fees**

Variable	PED	RAM	FID
<i>F_OWN</i>	-0.204*** (0.071) [0.005]	-0.427* (0.251) [0.090]	-0.935** (0.450) [0.038]
<i>F_SIZE</i>	0.490*** (0.014) [0.000]	0.525*** (0.041) [0.000]	0.553*** (0.053) [0.000]
<i>FLEV</i>	0.035*** (0.008) [0.000]	0.029*** (0.009) [0.001]	0.029*** (0.010) [0.002]
<i>C</i>	1.326*** (0.274) [0.000]	0.604 (0.683) [0.377]	0.207 (0.771) [0.788]
<i>Observations</i>	<b>396</b>	<b>396</b>	<b>396</b>
<i>R<sup>2</sup></i>	<b>0.747</b>	<b>0.448</b>	<b>0.911</b>
<i>Adj. R<sup>2</sup></i>	<b>0.743</b>	<b>0.439</b>	<b>0.901</b>
<i>F-Statistic</i>	<b>191.525</b>	<b>52.557</b>	<b>88.503</b>
<i>Prob. (F-Stat.)</i>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

*Source: Author's desk report (2019), Note: The dependent variable is Audit Fees (Audif). The Foreign ownership (F-own); the explanatory variables are firm size (Fsize) and Financial leverage (Flev); Standard deviation ( ), Probability [ ]. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$*

### Diagnostic Tests for Audit Fees

We used Jarque-Bera statistic to check whether the residual (error term) of the estimated model when the Audit Fees is regressed on foreign ownership structure is normally distributed. From Figure 1, the test statistics and its associated p-value is statistically insignificant. These mean that the residual is normally distributed. For heteroskedasticity, the study used heteroskedasticity consisted standard error, hence the test for constant variance isn't required.

**Figure 1: Diagnostic Tests for Audit Fees**

### Model 2: Foreign Ownership Structure and Audit Size (AUDis)

$$AUDis_{it} = 0.825 + 0.926F\text{-own}_{it} + 0.012 Fsize_{it} - 0.003Flev_{it} + e_{it}$$

For the foreign ownership structure and audit quality of Nigerian quoted manufacturing companies in terms of Audit Size (Audis) using the pooled (OLS), random effect and fixed effect models are presented in this subsection. In achieving this, audit size (Audis) is considered as dependent variable while the explanatory variables are Foreign ownership (F-own), Firm size (Fsize) and Financial leverage (Flev). Considering the Breusch and Pagan Lagrange multiplier (LM) in Table 5, the significant p-value (0.000) of the test implies that random effect model is preferred over Pooled. Knowing that the pooled regression isn't favoured, the study conducted Hausman test to choose between Random effect model and fixed effect model. Again, the null hypothesis of this test is that individual effects are uncorrelated with any regressor in the model (Hausman, 1978). From the result in Table 5, the P – value (0.022) is statistically significant. Therefore, the null hypothesis is rejected and concludes that the fixed-effects estimator is more efficient in this case.

**Table 5: Breusch and Pagan Lagrange multiplier and Hausman Tests**

Tests	Breusch-Pagan Lagrange Multiplier (LM)	Hausman test
Chi2	606.74	14.81
P-Value	0.000	0.022

Source: Author's desk report, (2019)

In column 3 of Table 6, the significant F-statistics value (25.769; P - value = 0.000] shows that the fixed effect model is statistically significant. The coefficient of determination (R – squared) value which is 0.749 implies that the explanatory variables account for about 75.0% changes that occur in the dependent variable. The coefficient ( $\beta = 0.926$ ) of Foreign Ownership (F-Own) in relationship with audit size appears to be significant at 1% level of significance (p- value = 0.006). The positive coefficient of the variable also implies that a unit increase in foreign ownership will attract a 0.926 rise in audit quality (Audit size). The significant result suggests that the impact of foreign ownership (F-Own) on audit quality of the selected firms in terms of audit size (Audis) is significant. For firm size (Fsize), the coefficient is seen to be positive but insignificant ( $\beta = 0.012$ ; p-value = 0.581).

Then again, the positive and insignificant result suggests that the relationship between firm size (Fsize) and audit quality of the selected firms in terms of audit size (Audis) is insignificant. The result of the coefficient of financial leverage (Flev), shows a negative and insignificant impact of financial leverage (Flev) on audit quality ( $\beta = -0.003$ ; p-value = 0.584) in terms of audit size (Audis). Then again, the insignificant result suggests that the effect of financial leverage (Flev) on Audit quality of the selected manufacturing firms in Nigeria is insignificant.

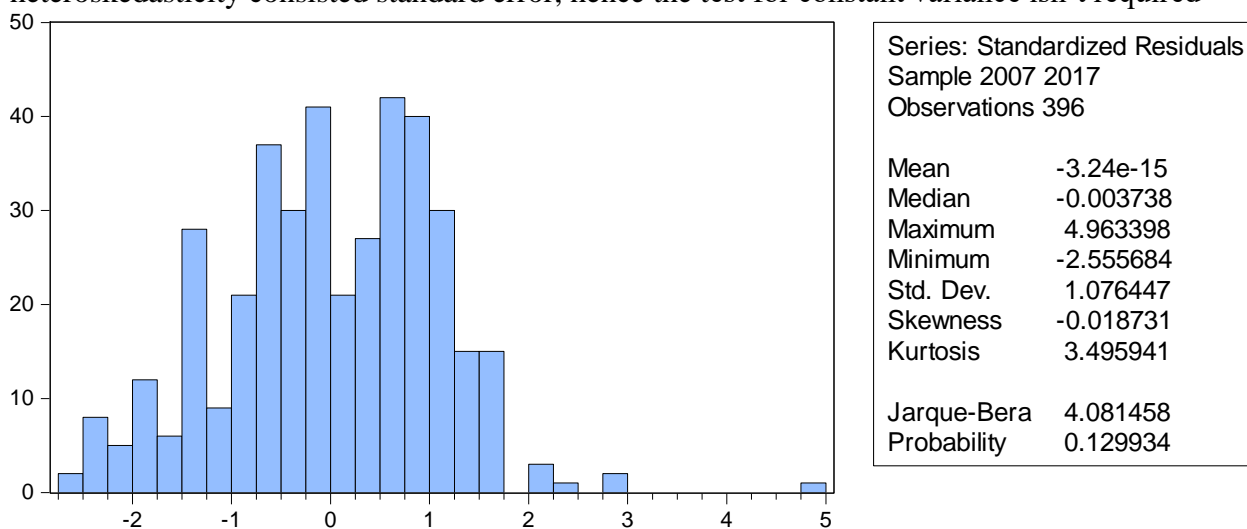
**Table 6: Regression result of Audit Size**

Variable	PED	RAM	FID
<i>F_OWN</i>	-0.009 (0.058) [0.880]	0.465* (0.245) [0.058]	0.926*** (0.332) [0.006]
<i>F_SIZE</i>	0.107*** (0.007) [0.000]	0.059*** (0.017) [0.001]	0.012 (0.022) [0.581]
<i>FLEV</i>	-0.015*** (0.005) [0.004]	-0.002 (0.005) [0.710]	-0.003 (0.005) [0.584]
<i>C</i>	-0.865*** (0.120) [0.000]	0.073 (0.267) [0.786]	0.825*** (0.296) [0.005]
<i>Observations</i>	<b>396</b>	<b>396</b>	<b>396</b>
<i>R<sup>2</sup></i>	<b>0.312</b>	<b>0.126</b>	<b>0.749</b>
<i>Adj. R<sup>2</sup></i>	<b>0.302</b>	<b>0.113</b>	<b>0.720</b>
<i>F-Statistic</i>	<b>29.442</b>	<b>9.362</b>	<b>25.769</b>
<i>Prob. (F-Stat.)</i>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>

**Source:** Author's desk report (2019), **Note:** The dependent variable is Audit Fees (Audif). The Foreign ownership (*F-own*); the explanatory variables are firm size (*Fsize*) and Financial leverage (*Flev*); **Standard deviation** ( ), **Probability** [ ]. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$

### Diagnostic Tests for Audit Size

This study used Jarque-Bera statistic to check whether the error term of the estimated model when the audit size is regressed on foreign ownership structure is normally distributed. From Figure 2, the test statistics and its associated p-value is statistically insignificant. These mean that the residual is normally distributed. For heteroskedasticity, the study used heteroskedasticity consisted standard error, hence the test for constant variance isn't required

**Figure 2: Diagnostic Tests for Audit Size**

## CONCLUSION AND RECOMMENDATIONS

This study examined the impact of foreign ownership structure on audit quality of Nigerian quoted manufacturing companies. To achieve this objective, hypothesis was formulated and tested to establish the impact and the level of significance which was achieved through descriptive statistics, correlations and linear regression analyses. The study covers a period of eleven years from 2007 to 2017. Based on the findings of this study, it can be concluded that foreign ownership structure has a statistically significant impact on audit quality. Based on the findings, it is recommended that Nigerian corporate entities should embrace a well-constituted ownership structure that ensures maximum utilization of firms' scarce resources. It is also imperative to hearten foreign investors' engagement and involvement in the affairs of the companies. The presence of foreign investors will bring about optimal management in terms of its control potential which is the wealth gain achievable through more effective monitoring of managerial performance by firm owners. Firm size should be relative to the firm's business needs, scope and complexity. Since no two firms are exactly alike in all ramifications, it is important that an appropriate size be understood to be a function of each firm's circumstances. Setting arbitrary size benchmarks may therefore be counterproductive.

## REFERENCES

- Abdullah, W. Z. W. (2008). The impact of board composition, ownership and CEO duality on audit quality: The Malaysian evidence, *Malaysian Accounting Review*, 7(2) 17-28
- Abu, S. O., Nyor, T. & Okpanachi, J. (2018). Institutional ownership and Block hold ownership and audit quality of listed manufacturing firms in Nigeria, *Journal of Finance and Accounting*, 6(1), 15-26.
- Adeniyi, O. (2019). Nigeria: Why Oando scandal matters, *Thisday newspaper*, 6<sup>th</sup> June.
- Angaye, E. G., Gwilliam, D., Marnet, O. & Thomas, D. (2000). Board structure and value added performance in Nigeria *Economics, finance and accounting applied research working paper series*.
- Al-Farooque, O.A, Zijl, T.V., Dunstan, K & Karim, A. N (2007). Ownership structure and corporate performance: Evidence from Bangladesh, *Asian Journal of Accounting & Economics* 14, 127-150.
- Al-Matari, E.M., Al-Matari, Y.A. & Saif, S.A. (2017). Ownership structure, audit quality and firm performance moderating and direct-effect models: An empirical study. *Corporate Board: Role, Duties and Composition*, 13(1), 28-35
- Aydin, N., Sayim & Yakama, (2007), Foreign ownership and firm Performance: Evidence from Turkey. *International Research Journal of Finance and Economics*, 11.
- Azadi, M.Z. and Mohammadi, E. (2014). Investigating the relationship between institutional ownership and audit fees, *International Journal of Empirical Finance*, 2(1),27-33.
- Bai, C. Liu, Q. Lu, J. Song, F.M and Zhang, J. (2004). An empirical study of corporate governance and market valuation in China, *Economic Research Journal*, 2, 84-110.
- Barclay, M. & Holderness, C. (1989), Private benefits from control of public corporations. *J. Financ. Econ.* 25, 371–395.
- Bariyima, D. K. (2012). Internal auditing and performance of government enterprises: A Nigerian study, *Global Journal of Management and Business Research*, Vol. 12, No. 6, pp.5-20.
- Berle, A. A & Means, G. C (1932). *The modern corporation and private property*, MacMillan publishing Co; New York.
- Bhagat, S., Black, B. (2002), The non-correlation between board independence and long-term firm performance, *Corp. Law*, 27, 231–273.

- Black, B., Jang, H., & Kim, W. (2002). Does corporate governance affect firm value? Evidence from Korea, Working paper; The University of Texas at Austin: Austin, TX, USA.
- Boubakri, N., Cosset, J. C & Guedhami, O. (2005). Post privatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics* 7(6).
- Chang, X., Gygax, A. F., Oon, E. & Zhang, F. (2008), Audit quality, auditor compensation and initial public offering underpricing, *Accounting and Finance*, 48(3), 391-416.
- Choi, J., Park, S., & Yoo, S. (2007). The value of outside directors: Evidence from corporate governance reform in Korea, *J. Financ. Quant. Anal.*, 42, 941–962.
- De-Angelo, L. E. (1981). Auditor independence, low balling and disclosure regulation. *Journal of Accounting and Economics*, 3, 183–199.
- Harahap, J. O. & Presetyo, A. B. (2018), Ownership structures and characteristics influence on audit fee, *Journal of Economics, Finance and Accounting*, 5(2), 160-167.
- Ibn Adam, S. & Bala, H. (2015). Ownership structure and audit quality of Nigerian deposit money banks, *Journal of Social Sciences and Management Science*, 2(3), 54-65.
- Kane, G. D., & Velury, U. (2004), The role of institutional ownership in the market for auditing services: An empirical investigation, *Journal of Business Research*, 57(9), 976-983.
- Kheirollahi, F., Behshour, I., & Azadi, M. (2014), “Investigating the effect of corporate governance mechanisms (company ownership structure) on audit quality”, *Indian Journal of Science Research*, 4(3), 465-469.
- Khan, K., Nemati, A. R., & Iftikhar, M. (2011), “Impact of corporate governance on firm performance evidence from the tobacco industry of Pakistan”, *International Research Journal of Finance and Economics*, 61(7), 14-31.
- Khasharmeh, H. & Joseph, N. (2017). Does ownership structure affect audit quality: Evidence from Bahran? *Global Journal of Accounting, Economics and Finance*, 4(3), 92-100.
- Kiammehr, M., Moghaddam, A. A., & Hajeb, H. R. (2015), Examining the impact of institutional ownership on monitoring cost: The case of Iranian firms listed on Tehran Stock Exchange, *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 5(4) 22-30.
- Kim, J. B., & Yi. C. H. (2007). Ownership structure, business group affiliation, listing status, and earnings management: Evidence from Korea, *Contemporary Accounting Research*, 23, 427-464.
- Knechel, W. R., Gopal, V. K., Mikhail, P., Lori, B. S., Uma, K. V. (2013), Audit quality: Insights from the academic literature, *Auditing: A Journal of Practice and Theory*, 32(1), 385-421.
- Lee, S. C., Rhee, M., & Yoon, J. (2018). Foreign monitoring and audit quality: Evidence from Korea. *Sustainability* 10(151), 1-22.
- Mangena, M. & Taurigana, V. (2006). Corporate boards ownership structure and firm performance in an environment of economic and political instability: The Case of Zimbabwe Stock Exchange listed companies; paper presented at the BAA national conference, University of Portsmouth, April .70
- Manry, D. L., Mock, T. J., Turner, J. L. (2008). Does increased audit partner tenure reduce Audit quality, *Journal of Accounting, Auditing & Finance*, 23(4), 553-572.
- Noe, T. (2002). Investor activism and financial market structure. *Rev. Financ. Stud.*, 15, 289-318.
- Palmrose, Z. V. (1988), An analysis of auditor litigation and audit service quality, *The Accounting Review*, 64(1), 55–73.

- Sanda, A., Mikailu, A. S., & Garba, T. (2005). Corporate governance mechanisms and firm financial performance in Nigeria, AERC Research Paper 149, *African economic research consortium*, Nairobi., 1–47.
- Seyedeh, E. M. R., Hamid S., & Hashem, V. P. (2016). The impact of audit quality and ownership structure on earnings management on Tehran Stock Exchange, *International Business Management*, 10(10), 1827 – 1832.
- Simunic, D. (1980). The pricing of audit services: Theory and evidence, *J. Account. Res.*, 18, 161–190.
- Tsegba, I. N & Ezi-Herbert, W. (2011). The relationship between ownership structure and firm performance: Evidence from Nigerian listed Companies, *African Journal of Accounting, Economics Finance and Banking Research* 7(7), 51–63.
- Watts, R., & Zimmerman, J. (1986). *Positive accounting theory*. Englewood Cliffs, New Jersey: Prentice-Hall
- Zureigat Q. (2011). The effect of ownership structure on audit quality: Evidence from Jordan”, *International Journal of Business Social Science*, 2(10), 38-46.