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I. BACKGROUND TO THE STUDY

Auditing as we know today is as old as human existence. The Bible accounts for this in Genesis Chapter 1:29, that all the living creature after creation were entrusted to Adam for daily administration and management, implying that there was established agent relationship designed for accountability from the beginning, but no structured formal internal control mechanisms put in place for proper reporting. Despite the fact that there was no structure, or internal control mechanisms put in place for reporting. Adam was still invited after a certain period to accounts of his stewardship in the Garden of Eden to enable God to determine the value and status of everything in his possession for decision making. It implies that whenever there is a fiduciary relationship with or without financial commitments, there is a need for

accountability, as the end product of the stewardship, being the business statements upon which the owner will express an opinion as to the agent's honesty or dishonesty. It is also an indication that the relationship between the principal and agent then was based on personal and, as such, the services of a third party (auditor) was not required.

Furthermore, the lack of non-structured business and no formal internal mechanisms for proper reporting, the financial statement does not pass through the third party (i.e. auditor) as principal supervised the agent. There were no intermediary services of the third party who should have monitored the work performed by agents who held little or no interest in the businesses.

In the modern organization, due to innovations and changes that have taken place in accounting, financial reporting and auditing, agents of a company no longer present financial statement of a business to the owner directly, such prepared financial statement would pass through a third-party (auditor) who constitute a profession providing services to the people (Adeyemi & Fagbemi, 2010). It suggests that the audit is designed to meet the needs of financial statement users, such as investors, creditors, prospective creditors, and government institutions through auditors (Ho & Kang, 2011). The favorable auditor's opinion communicates to the owners that their business interests are protected and they can rely on the picture that the financial statement portrays. The purpose of owners demanding for audit services is to reduce the agency costs because of information asymmetry and competing interests that exist between them (owners) and managers. The only mechanisms that can be used to resolve the competing interests between owners and managers are independent auditors (Jensen & Meckling, 1976 in Suleiman, 2011). Therefore, auditor's opinion expressed in the form of the report upon which the economic decisions of the investors, creditors, and the government are depend. That means audit report should reflect the auditor's opinion regarding the company and with a reasonable assurance assure investors, creditors and any resource providers in an organization that the company's accounting and stewardship of the company are correct, which referred to as "audit quality".

Audit quality is subject to many direct and indirect influences. While some people place more emphasis on direct influences on audit quality, others

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rely on indirect influences. It resulted in arguments and counter-arguments of what constitutes audit quality and whether direct or indirect influence affects audit quality. Direct enrapture according to International Auditing and Assurance Standards Board (IAASB, 2014) are grouped into three categories: inputs, outputs and context factors, while the indirect sway on the other hand, is linked to output factors via ownership structure, which is made up of pressure from individual owners, the political influence of the owners and environmental factors. All the direct influences are within the power of auditors, and to some extent, they have control over it, which would address audit quality. However, the direct influence only is not sufficient to address the question of whether audit quality are being achieved in the broader context.

The indirect influence deals with ownership structure on audit quality, and it is critical. Because there are different forms of owners that constitute ownership structure and it is significance for the auditor to understand each owner's need and how an action of one shareholder affect on other's perspective, without which audit quality cannot be enhanced. The position of auditors in a firm is ethically expected to represent the interest of all the owners in respect of the owner's status in the company. However, this position are usually violated as auditors go into negotiation with some specially, family and foreign investors to undertake activities that are detrimental to other shareholders. That often results to audit expectation gap as the general public sees auditors as performing their fiduciary responsibility in order to satisfy statutory requirements of an audit, which impair audit quality. Therefore, audit quality is the ability of auditors to reduce noise such as material misstatement, errors or omission and improve fitness on the financial statement prepared and presented by the company's management.

This study considers indirect influence, that is, the effect of family and foreign ownership on audit quality of listed manufacturing firms in Nigeria. That suggests that when a family member and foreign investor acquire equity or stock of the company, such family and foreigner is one out of the many owners of a company. Equity or stock enable the holder to claim everything the company owns. Therefore, the more equity or stock the family and foreign investor acquire, so shall their ownership stake in the company become greater.

The manufacturing sector are considers as one of the crucial driving force of the modern economy. The sector serves as the vehicle for the production of goods, generation of employment, and enhancement of incomes. Hence, described as the heart of the economy (Sola, Obamuyi, Asekunjo & Ogunleye, 2013). In developed economies, the manufacturing sector contributes a significant portion to the economic growth. For example, in the USA, the manufacturing sector

contributed 11.7% to economic growth. In Japan, the manufacturing sector contributed 27.2% to the economic growth. In the UK, the manufacturing sector contributed 25% to the economic growth. In China, the manufacturing sector contributed 40% to the economic growth. In developing country specifically Nigeria, the manufacturing sector contributed 2.54% to the economic growth. This percentage is far below what is happening in the wealthy and industrialized nations. It could be as a result of many factors including lack of confidence of foreign investors, audit quality, performance, quality of management saddled with the responsibility of managing the industries and other determinants. The researcher is disturbed as to why the low contribution to economic growth. The study is, therefore, examine the effect of family and foreign ownership on audit quality to determine whether the low contribution to the economic growth was as a result of poor audit quality of manufacturing firms in Nigeria.

The study objective examine the effects of family and foreign ownership on audit quality of Nigerian manufacturing firms. To achieve the research goal, the study evaluates the effect of family ownership on audit quality of listed manufacturing firms in Nigeria; and assesses the impact of foreign ownership on audit quality of listed manufacturing firms in Nigeria.

To accomplish the research objectives, two hypotheses are formulated. First, family ownership has no significant influence on audit quality of manufacturing companies in Nigeria. Second, foreign ownership has no significant effect on audit quality of manufacturing industries in Nigeria.

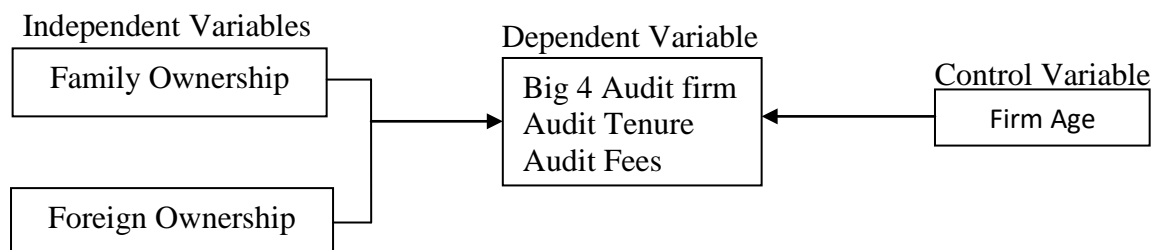
II. LITERATURE REVIEW

Family and foreign ownership were among the vital tools of the corporate governance mechanisms influencing audit quality. However, the influence of audit quality by a family member and foreign investor in a company has been debated theoretically and empirically in the corporate finance literature. Prior studies document that the principals ratified the appointment of external auditors, and they (auditors) saw them as a client and protect their interest (Otusanya & Laowu, 2010; Alabede, 2012). Auditors act as agents to principals when performing an audit work. That may induce auditors to establish the relationship with principals, which may jeopardize audit quality.

Also, the relationship between family and foreign ownership on audit quality has been debatable for several decades. It has generated arguments and counter-arguments in the corporate finance literature. Prior studies found that the relationship between owners and audit quality was drive by segregation of owners from control. The separation results to a conflict of interests between the owners and management (Berle & Means, 1932). The friction later metamorphosed into

agency theory (Jensen & Meckling, 1976; Fama & Jensen, 1983), where the sole aim of the owners is to maximize their wealth while managers prefer self-center benefits. In the absence of sufficient monitoring, managers can exercise opportunistic behavior to the owners detrimental. The action of managers requiring the services of external auditors as a monitoring mechanisms to checkmate such behavior. The ownership structure in this study consists of family and foreign ownership.

The study developed a conceptual framework to link the independent and dependent variables. The independent variables in this study consist of family ownership and foreign ownership. The dependent variable was audit quality measured by big four audit firms, audit tenure and audit fees, while firm age is used as control variable. Figure 1 below shows the conceptual framework.



Source: Built by the researcher based on literature

Figure 1

The family-owned firm is any public company where a family member or a founder owns 51% equity or more (Villalonga & Amit, 2006; Anderson & Reeb, 2003). Family ownership is also a firm which the founders or descendants of the founding family continue to hold positions in the top management, serve on the board or are directors, (Anderson & Reeb, 2003). That implies that any firm where a family member holds important position such as managers, directors, supervisor, CEO / Chairman of the board of directors and as well as owns 51% equity or more is family ownership firm. The explanation distinguishes family ownership from non-family ownership, showing that any public company that a family or a founder owns less than 51% equity is non-family ownership.

This study considers family ownership in two ways. Firstly, any firm where the family has ownership of 51% stock and above of the firm's total shares (Cascino, Pugliese, Mussolino & Sansone, 2010). Secondly, any firm where two members of the same family acquire a substantial proportion of equity and the total of their shares add together is 51% and above and at least one representative of the family is a member at the management level or board member (Abdallah, 2012). The presence of a family representative on the company's board can lead to a demand for high audit quality or lower audit quality (Chrisman, Chua & Sharma, 2005). However, a company with family ownership will experience two types of agency problems. Firstly, a company in which a family has a low proportion of shares may have a low incentive and may wish to hire a big4 audit firm to serve as their external monitoring mechanism to improve and strengthen their motivation, which they referred to as type 1 agency problem. Secondly, a company in which a family has a higher proportion of shares and hold vital positions on top management are willing to improve their financial statements and are less likely to hire a high-quality

auditor to cover up their wrongdoings, which they referred to as type II agency problems. Therefore, this study uses the ownership stake of the family as a proxy of family ownership.

Foreign ownership is typically sophisticated individual or institutional investors, who are potentially professional with a wealth of experience, resources, skills, and capacity to collect and process relevant and specific firm information for investment decisions (Kim & Yi, 2007). This wealth of experience, material resources, and skills gives added advantage to the firms with foreign investors against their counter-parts (firm with domestic investors) as firms with foreign owners are more productive, more prudent and more capital intensive and can pay higher wages when compared with a firm without foreign investors (Doms & Jensen, 1998).

However, one area in which foreign investors due consider in taking investment decision is to rely on credible financial statements as sources of information, and in doing so, auditors play essential role in certifying these statements as higher level of certification from big auditing firms could minimize information asymmetry between management and outside investors, thereby attracting greater foreign investment (Choi & Wong, 2007; Myers, Myers & Omer, 2003; Teoh & Wong, 1993). That means managers when left unmonitored, will likely engage in earnings management, fraudulent activities or make suboptimal corporate decisions (Bertrand & Mullainathan, 2003; Hope & Thomas, 2008; Leuz, Nanda & Wysocki, 2000). Thus, the quality of the audit will be a yardstick to determine whether the manager acted opportunistically or not. Therefore, the study expects that manufacturing firms in Nigeria that use Big4 auditors will have much potential to attract foreign investors than firms that use non-big four auditors, and such ownership stake of the foreign

investor as a proxy of foreign ownership on audit quality of listed manufacturing firms in Nigeria.

Audit quality is a variation of the market-assessed joint probability that a given auditor will both detect a breach in the client's accounting system, and report the violate (DeAngelo, 1981a). This explanation has made pompous contribution to motivating a large body of research. It portrays auditing as a binary process, whereby the auditor's role are reduced to detection and reporting of violations in the financial statements (Mark & Jieying, 2013). Audit quality is also a function of the auditor's ability to detect material misstatements (technical capabilities) and reporting the errors (auditor independence). However, the characteristics involved in this definition are largely unobservable (DeAngelo, 1981b). That results in the use of different proxies by the researchers to measure audit quality like audit size, audit hours, audit fees, audit tenure, reputation, litigation rate among others. Therefore, big 4 audit firm, audit tenure and audit fees are use to measure audit quality.

There are numerous theories regarding firm's owners and audit quality, but this study considered three. These are policeman, credibility and agency theory. The policeman theory required competent, objective, effective and efficient for officers in carrying out their responsibilities. Thus, they are expected to spend three to five years in any community, formation, unit or department to avoid ownership problems. If the officer exceeded five years, it will impair the independence in carrying out their duties. However, the harmonize Corporate Governance Code (2014) suggests minimum of five and ten years maximum tenure for external auditors. Thereafter, they can be changed. Thus, allowing auditors for ten years maximum in a particular client firm will affect audit quality.

Credibility theory claims that the primary function of the audit is to add value to the financial statements. One aspect of an audit firm that is considered most appropriate in adding value to the audit report is the size of the audit firm and fee. Therefore, the high remuneration charged by big-four audit firms is evidence of credibility theory. Thus, audit fee premiums yield high quality as the audit firm prove their integrity, expertise, and experience which add credibility to the financial statements prepared and presented to them by the management of the organization (Johnson, Daily & Ellstrand, 1995; Palmrose, 1986). If the remuneration charged by audit firm is so low, it may be difficult for auditors to carry out audit work by applicable technical and professional standards thereby induce them to accept compensation which in turn lower audit quality.

Agency theory according to Berle and Means (1932); Jensen and Meckling (1976) in their separate study suggests that due to information asymmetries and self-interest. The owners lack reasons to trust the

management, and will seek to resolve these concerns by putting in place mechanisms to align the interests of management with owner. That reduce the scope of managers opportunistic and information asymmetries. The structural device put in place is the board of directors. However, the acquisition of shares by directors prevent them to summon courage in monitoring. Therefore, shareholders employ the services of independent auditors to carry out such responsibility. An underlying notion behind the monitoring is the compliance of the relevant regulatory bodies, which external auditors would contribute to corporate control, thereby increasing the quality of financial statements. The financial statement quality form the bases of investors' decision making. Because it gives assurance, trust and hope to investors that their investments are secured.

In light of the three theories, the study anchored on agency theory. This is because if family member and foreign investor would be allowed auditors to execute their statutory responsibility in the examination of financial statements prepared and presented to them by company's management as contained on the relevant laws, rules, and regulation, standards, and procedures are followed without undue influence or interruption from them, audit quality can be accomplished. It will prevent the sudden collapse of some companies witness in the past like that of Enron, Afri bank among others.

Cascino, Pugliese, Mussolino, and Sansone (2010) investigate the effect of family ownership on audit quality in Italy. The study sample 114 out of 263 firms listed in Italian Stock Exchange for the period 1998-2004 with 798 firm-year observations. Audit quality measured by Big 4, while family ownership was the independent variable. The findings reveal that the family firm has a positive and significant effect on audit quality. This finding shows that the presence of a family member in a firm encourage to engaged the services of big four audit firm since quality auditors enhance a higher degree of compliance, hence audit quality (DeAngelo, 1981a). Niskanen, Karjalainen, and Niskanen (2010) examine the relationship between family ownership and audit quality in Finland. The study sample 441 firms out of 1,500 of small family firms listed in Finish Stock Exchange with 1,637 firm-year observations for the period 2000-2006. Logistic regression was used to test audit quality as a dependent variable and family ownership as the independent variable. The findings reveal that family ownership has a negative and significant relationship with audit quality. That implies that an increase in managerial ownership in a sample of family firms decreases the demand for audit quality.

Franciele, Paulo, and Leandro (2015) evaluate the relationship between family ownership and audit quality in Brazil. The study population consists of 133 family firms and 128 non-family firms listed in Brazilian Stock Exchange for the period 2009-2011. Audit quality

measured by Big 4 and audit tenure, while family and non-family ownership were the independent variables. The findings reveal inverse insignificant relationship between family and non-family ownership and audit quality. This finding could have been as a result of the regression technique and the study period. Thus, expanding the study period with a robust regression technique could yield a different result.

Gaaya, Lakhal, and Lakhal (2017) examine the effect of family ownership on audit quality in Tunisia. The study sample 55 companies listed on the Tunisian Stock Exchange for the period 2008-2013 with 315 firm-year observations. Audit quality measured by Big 4 audit firm and audit tenure, while family ownership was the independent variable. Multiple regression was used data analyzes. The findings show that family ownership has a positive and significant effect on audit quality. It means that a unit increase in family ownership increases audit quality. The result of this study could have been as a result of inappropriate regression tool used. A research of this nature could have used binary logistic regression since the dependent variable is dichotomized into 1 or zero instead of multiple regression. Therefore, with the expansion of study period coverage, it could give a different result. In light of the above, family ownership is seen as an essential tool that could influence the quality of the audit

Khasharmeh and Joseph (2017) empirically examine the effect of ownership structure on audit quality in Bahrain. The study sample 138 companies out of 152 companies listed on Bahrain Burse Market for the period 2015-2016. Audit quality was measured by Big 4 audit firms, while ownership structure was the independent variables proxy by foreign ownership, institutional ownership, and block-holder ownership. Logistic regression is used for data analysis. The results reveal that foreign ownership has a positive and significant effect on audit quality, while institutional and block-holder ownership has a positive but not significant impact on audit quality. That means an increase in foreign ownership increases audit quality. The study used appropriate regression technique, which is capable of yielding a better result; however, two year study period is too small and cannot give a valid outcome to depend on it.

Shan (2012) examines the effect of internal corporate mechanisms on audit quality in China. The study population consists of 117 companies listed in Chinese Stock Exchange with 540 firm-year observations for the period 2001-2005. Audit quality was measured by Big 4 audit firms, while internal corporate mechanisms were the independent variables proxy by foreign ownership, board independence, board size, and State ownership. Logistic regression is utilized for data analysis. The results show that foreign ownership has a positive and significant effect on audit quality.

Khanh and Khuong (2018) examine audit quality, firm characteristics and, real earnings management in Vietnam. The study sample 241 listed companies on Vietnam stock markets (HNX and HOSE) for the period 2010-2016 with 1,687 firm-year observations. The study used GMM- regression for data analysis. Firm characteristics and real earnings management were the independent variables proxy by firm age, firm size, and profitability, while audit quality was dependent variable measured by big four and non-big 4 audit firm. The findings show a positive and significant effect of firm age on audit quality. Aliu, Okpanachi, and Mohammed (2018) examine audit fees and audit quality of listed companies in Nigeria. The study sample 9 listed companies in the downstream sector of Nigerian Petroleum Industry for the period 2007-2017. Audit quality was measured by a big four audit firm, while audit fees were independent. Binary logit regression was used to analyze the data. The findings show a positive and significant influence of age on audit quality. Hartono, Subrato, Djumahir and Irianto (2013) examine the impact of firm characteristics proxy by firm age, profitability, leverage and firm growth on the audit quality and its impact on firm value in Indonesia. The research work sample 110 firms listed in Indonesia Stock Exchange excluding all financial firms. Two-Stage Least Square (2 SLS) statistical model was utilized to analyze the relationship between firm size and audit quality. The study failed to document the period of the study, but the findings of the study show that firm age has significant and negative effects on audit quality.

III. METHODOLOGY

The study adopts longitudinal research design specifically panel data. It is an effect study using regression models to examine the influence of family and foreign ownership on audit quality. The study uses the annual reports and accounts of listed manufacturing firms in Nigeria on the floor of the Nigerian Stock Exchange for the twelve (12) years period (1st January 2005 to 31st December 2016). Fifty-nine listed manufacturing firms form the total population for the study. Filters were employed to consider some firms and eliminate others (Shehu, 2012). The percolate removes all the companies listed after 31st December 2005. As they cannot produce complete data required for the study. The filter weed out all companies that had disappeared from the trading schedule of NSE as at 31st December 2016. The infiltrate also do way with all the companies that experienced technical suspension and were unable to meet up with the Nigerian Stock Exchange requirements within the period. Therefore, a total of 27 firms were weeded out. As they cannot produce data required for the study. Thus, 32 manufacturing firms form the sample size of the study as they met the criteria, which have the complete data

for all the variables of the study for the period under review.

This paper adopts the Jusoh, Ahmad and Omar (2013); Zureigat (2011) model with modification. The model is adopted and, the variables modified to suit the environment for the research. Therefore, the following model is design for testing the hypotheses of the study:

Audit firm size using Big 4 audit firm as a proxy to measure audit quality. If the financial information obtained from the companies' audited reports shows that it is audited by one of the "Big4" audit firms is 1 or otherwise 0. This forms the first model as seems below:

Model I

$$AQ1 = \alpha + \beta_1 MANO_{it} + \beta_2 BDSH_{it} + \beta_3 INSO_{it} + \beta_4 BLHO_{it} + \beta_5 FAMO_{it} + \beta_6 FRGO_{it} + \beta_7 FSIZ_{it} + \beta_8 FAGE_{it} + U_{it}$$

Audit tenure is used as a proxy to measure audit quality. If the information obtained from companies audited reports show the duration or years covered by the audit firm is between 3-5 is 1 or otherwise 0. This forms the second model as demonstrate below:

Model II

$$AQ2 = \alpha + \beta_1 MANO_{it} + \beta_2 BDSH_{it} + \beta_3 INSO_{it} + \beta_4 BLHO_{it} + \beta_5 FAMO_{it} + \beta_6 FRGO_{it} + \beta_7 FSIZ_{it} + \beta_8 FAGE_{it} + U_{it}$$

Audit fees are also utilized in this study as a proxy to measure audit quality. If the financial statement obtained from the audited firms reports shows the amount charged as fees is two million Naira (N2,000,000) and above is 1 or otherwise 0. This forms the third model as seems below:

Model III

$$AUDF = \alpha + \beta_1 MANO_{it} + \beta_2 BDSH_{it} + \beta_3 INSO_{it} + \beta_4 BLHO_{it} + \beta_5 FAMO_{it} + \beta_6 FRGO_{it} + \beta_7 FSIZ_{it} + \beta_8 FAGE_{it} + U_{it}$$

The Audit Quality is the composition of these three audit quality elements.

IV. RESULTS AND DISCUSSION

This section presents the results. It includes the presentation, analysis and, interpretation of collected data from published annual reports of the firms. After that, conclusion and recommendations are made based on the findings of the study.

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
big4	384	0.7395833	0.4394345	0	1
Audt	384	0.53125	0.4996735	0	1
Audf	384	0.7161458	0.4514551	0	1
famo	384	2.387187	6.356533	0	40.52
Frgo	384	40.7199	29.21663	0	89.82
Fage	384	47.81771	15.78174	12	93

Source: STATA 11 Output Results based on study data

Table 1 shows a descriptive statistics panel data set made up of 32 firms, xix variables and a total of 384 observations for 12 years (2005-2016). Three variables (big 4, audit tenure and audit fees) were dichotomized as 1 and 0, while three others were the continuous variable. The continuous variables were family ownership, foreign ownership, and firm age. The big 4 has a mean of .7395833, the standard deviation of .4394345, and a maximum value of 1. It implies that for all the 32 listed manufacturing firms in Nigeria, there is an average value of .7395833 with a deviation of .4394345 around the mean. The mean value of .7395833 is close to 1 maximum value. That was in line with the data set of the study as firms audited by big4 audit firm was coded 1 and, those investigated by non-big four was coded 0. The mean big 4 of .7395833 and a maximum value of 1 is indicating that most Nigerian manufacturing firms are audited by big4 during the study period.

The audit tenure has a mean of .53125, a standard deviation of .4996735, and a maximum figure of 1. It shows that for all the 32 listed manufacturing

firms in Nigeria, there is an average value of .53125 with a deviation of .4996735 around that value. The mean audit tenure of .53125 is nearness to the maximum value of 1. That was in conjunction with the data set of the study. The mean audit firm tenure of .53125 implies that majority of audit firms in Nigeria spent three to five years in auditing listed manufacturing firms in Nigeria. In the same vein, the average for the audit fees stands at .7161458 with a standard deviation of .4514551 around the mean and a maximum value of 1. The median of .7161458 and a maximum value of 1 conform with the data set of the study. The middle audit fee of .7161458 implies that most audit firms in Nigeria charged as high as N2,000,000 and above for remuneration in auditing Nigerian manufacturing firms during the study period.

Family ownership has a mean of 2.38787, a standard deviation of 6.356533, a minimum of 0 and a maximum of 40.52 showing that family member(s) on averaged acquired 2.39 shares of listed manufacturing firms in Nigeria with 6.36 variation around this during the period. 40.52 was the highest shares obtained by a family member(s), while based on the policy of some

companies refused family member(s) possessing shares during the study period. Foreign ownership has a mean of 40.7199, a standard deviation of 29.21663, a minimum of 0 and a maximum of 89.82 implying that foreign investors on averaged acquired 40.72 shares of listed manufacturing firms in Nigeria with a variation of 29.22 around this during the period. 89.82 was the highest shares acquired by foreign investors, while some listed manufacturing firms do not have their shares purchased by foreign investors. Firm age has a mean of 47.81771, a standard deviation of 15.78174, a minimum of 12 and a maximum of 93 implying that the average age of the listed manufacturing firms in Nigeria is 47.82 years with a variation of 15.78 around this during the period. The highest age was 93 years, while the minimum age was 12 years.

Table 1 also depicts high standard deviation between family and foreign ownership. The high standard aberration shows that there is no uniformity in ownership of the listed manufacturing firms in Nigeria. That resulted into broad divergence of variables from their mean. If normal distribution of owners existed. The standard deviation would have been within the acceptable maximum of 2.

a) *The Result of Data Normality Test*

The study used the Shapiro-Wilk (W) data normality test to determine how normal the data collected is. The test was conducted to check a variable that emanates from a normally distributed population. It was meant to test the null hypothesis that the data were distributed at a 0.05 (5%) level of significance. The results of the test are seems in table 2 below:

Table 2: Results of Data Normality Test

Variable	Observations	W	V	Z	P-VALUE
Big 4	384	0.99333	1.770	1.357	0.08744
Audt	384	0.99984	0.044	-7.437	1.00000
Audf	384	0.96331	9.739	5.406	0.00000
Famo	384	0.62380	99.851	10.933	0.00000
Frgo	384	0.69229	81673	10.456	0.00000
Fage	384	0.95041	13.162	6.121	0.00000

Source: STATA 11 Output Results based on study data

A careful examination of Table 2 shows that the P-value of three variables were less than or equal to 5% significant level, while the data for audit quality variables, such as big 4, audit tenure and audit fees are normally distributed. The three independent variables failed the normality test, as the tests were significant at 5% with a confidence level of 95%, implying that the data does not fit the normal distribution. The failures of the three variables were attributed to several reasons amongst are: first, when the sample size is adequately large, the normality of data is not required (Wooldridge, 2009). The 32 listed manufacturing firms selected for 12 years is sufficiently large, and as such, the normality of data were not required. Second, in a panel data set, there were repeated observations in the same components. The repeated perceptions from the same unit usually cause a problem, since the perceptions are, very likely,

not independent, which most times violates normality assumptions (Baltagi, Song, Jung, & Koh, 2007; Baltagi, Song, & Koh, 2003; Elliott & Woodward, 2007). Third, in panel dataset where observations are repeated across the sample firms for several years, data normality become a sufficient condition, but not a necessary condition for the model to be a good model (Alejo, Galvao, Montes-Rojas, & Sosa-Escudero, 2015; Baltagi, Song, Jung, & Koh, 2007). That is an indication that despite the failure of the normality test in these variables, it does not affect the model of the study.

b) *Regression Results and Hausman Specification Tests*

Table 3 presents the summary of the regression analysis for all the three models.

Table 3: Regression Results- Model 1, 2 and 3

Variable	Model1 BIG 4			Model 2 AUDT			Model 3 AUDF		
	Coeff	t-value	P-value	Coeff	t-value	P-value	Coeff	t-Value	P-value
FAMO	-.015526	-4.71	0.000	.001531	0.38	0.707	-.0160824	-4.86	0.000
FRGO	-.0022323	-3.09	0.002	-.0008703	0.98	0.303	.0020854	2.87	0.004
FAGE	.0089144	6.67	0.000	-.0037956	-2.31	0.022	.0086651	6.46	0.000
CONS	.4412777	6.26	0.000	.7445308	8.57	0.000	.2552743	3.61	0.000
NO. OBS	384	384	384	384	384	384	384	384	384
R ²	0.1667			0.0206			0.2048		
Adj- R ²	0.1601			0.0128			0.1985		
F-Value	25.34			2.66			32.62		
P-Value	0.0000			0.0480			0.0000		

Haus-chi ²	263.37	2.68	0.00
P-value	0.0000	0.2622	0.4322

Source: STATA 11 Output based on study data

The result as summarized in Table 3 reveals that only model 3 is statistically significant as the validity of the model is evident. The R^2 (2048) in table 3 is the multiple coefficients of determination. It gives the proportion or percentage of the total variation in the dependent variable explained by the explanatory variable jointly. Hence, it signifies 20.48% of the total aberration in audit quality of listed manufacturing firms in Nigeria caused by family and foreign ownership. The Adjusted R-square shows the degree of freedom of the model only. It explains also about 19.85% of the total systematic variations in audit quality. This variation (19.85%) in audit quality of the listed Nigerian manufacturing firms is substantially accounted for by the different explanatory variables. Also, the P-value of 0.0000 for the estimation confirms the fitness of the

model. However, model 1 and 2 with R^2 of 0.1667 and 0.0206 with Adj- R^2 of 16.01 and 01.28 respectively show the variation in audit quality of listed manufacturing firms in Nigeria is not substantially accounted for by all the explanatory variables. Therefore, for analysis, model 3 only will be used.

The test of model selection using Hausman specification was conducted. It enable us to determine between random and fixed effects model. The result enables us to reject the fixed effects and accept random effects estimator as Hausman Chi2 and, the Prob > chi2 shows 0.00 and 0.4322 respectively. Therefore, a random effects model is adopted using model 3 for testing hypothesis. The bottom line here is that model 3 is the best model that explained audit quality compare with other models.

Table 4: Regression Results- Model 3

Variable	Model 3 Random Effect		
	Coeff	Z-Value	P-value
FAMO	-.0866327	-3.39	0.001
FRGO	.0107858	2.21	0.027
FAGE	.0644158	4.95	0.000
CONS	-2.203718	-3.55	0.000

Source: STATA 11 Output Results based on study data

Table 4 reports that the family ownership has significant and privative effect on AUDF as explained by a coefficient of -0.86327 and Z-value of -3.39 at 0.1% level of significance (P-Value = 0.001). It means every unit increase in family ownership significantly decreases audit quality by 0.86327. That was statistically significant at the 99.9% confidence level. Similarly, Foreign ownership has significant and positive effect on AUDF as explained by a coefficient of 0.107858 and Z-value of 2.21 at 2.7% level of significance (P-Value = 0.027). It indicates that for every one unit increase in foreign ownership increases audit quality by 0.107858. That was statistically significant at 97.3% confidence level.

The age of the sample firms during the study period has significant and positive effect on AUDF as explained by a coefficient of 0.644158 and z-value of 4.95 at a 0.000 level of significant (P-Value = 0.000). It implies that every unit increase of firm age significantly increases audit quality by 0.644158. That was statistically significant. The regression results in table 4 show that the coefficient of the CONS is -2.203718, which determines the value of AUDF given a unit increase or decrease in any of the two independent variables, while all others are held constant.

Hypothesis 1 states that Family ownership has no significant effect on audit quality of listed manufacturing firms in Nigeria. The regression result in table 4 shows that the family ownership of listed manufacturing firms in Nigeria during the study period

has significant and negative effect on audit quality. Table 4 shows a Z-Value of -3.39 and P-Value of 0.001, which is statistically significant at 5% level of significance. It provides us with evidence of rejecting the null hypothesis and accepting the alternative hypothesis that family ownership has significant and effect on audit quality of listed manufacturing firms in Nigeria. This finding conforms with the result of Niskanen et al. (2010), who also find significant and adverse relationship between family ownership and audit quality. However, this finding contradicts the outcome of Cascino et al. (2010); Gaaya et al. (2017), who find significant and positive relationship between family ownership and audit quality.

Hypothesis 2 states that Foreign ownership has no significant effect on audit quality of listed manufacturing firms in Nigeria. The result of the binary logit regression as presented in table 4 shows that the foreign ownership is positively and statistically significant at 5% level of significance. The Z-Value of 2.21 and P-Value of 0.027 attest to the fact. The result provides us with evidence of rejecting the null hypothesis. And as such, accepting the alternative that foreign ownership has a significant effect. This finding is compatible with the report of Khasharmeh and Joseph (2017); Shan (2012), who also find significant and positive relationship between foreign ownership and audit quality. However, The finding is contrary to the result of Darmadi (2012); Kim and Yi (2009), who find

significant and negative relationship between foreign ownership and audit quality.

The findings of this study were based on the balanced panel data collected for 12 years (2005-2016) from a sample of 32 listed manufacturing firms on the Nigerian Stock Exchange. The result of the estimated regression shows that both family ownership and foreign ownership have a significant effect on audit quality. While family ownership has significant and negative effect, foreign ownership on the other hand, has significant and positive effect on audit quality. Also, the R^2 of 20.5% and the Adj- R^2 of 19.9% evidence that family and foreign ownership used in this study proved to be determinants of audit quality despite the low R^2 of 20.5% and Adj- R^2 of 19.9%. Firm age as a control variable has significant and positive effect on audit quality. That means that the age of the corporation is an important determinant on audit quality as some firms have been established for several years and have been doing very well as a result of a good management team and audit quality, while other suddenly collapse as a result of poor audio quality.

V. CONCLUSION AND RECOMMENDATIONS

In the light of the findings, the family ownership of Nigerian manufacturing firms is negatively related with audit quality measured by audit fees, indicating that at a higher level of shares held by family owners, the level of audit quality could be low. Therefore, reducing the shares held by family owners, in the companies to a justifiable proportion by companies' board of directors or companies' management can help enhance family ownership contribution toward improving audit quality; and The foreign ownership is significantly and positively associated with audit quality measured by audit fees. It signifies that foreign ownership contributes positively to audit quality. Thus, reviewing the proportion of shares upward for foreign ownership by the management or board of directors would encourage foreign ownership toward sustaining audit quality in the listed manufacturing firms in Nigeria.

Given the proceedings, the following recommendations are put forward:

The regulatory authorities particularly the Security and Exchange Commission (SEC), who are responsible for monitoring the compliance of corporate governance by listed companies in Nigeria, should come up with policies or revisit the policy regarding allotment of shares in all the listed companies in Nigeria. Based on the data available and extracted from the annual reports of listed manufacturing firms in Nigeria, family member(s) have acquired the huge sum of shares in some firms, while others, they do not acquire the shares of the companies. Such policies, if formulated and implemented will go a long way in encouraging the monitoring capability of family ownership toward

improving audit quality of listed manufacturing firms in Nigeria.

Foreign ownership is significantly related to audit quality. This was evidenced by calculated logit regression result which was statistically significant at 5% level of significance. Therefore, the study recommends that the relevant regulatory body responsible for monitoring and administering the activities of listed manufacturing firms in Nigeria should design policies toward upward reviewing or maintaining the proportion of shares assigned to foreign ownership. This will enhance the capability of foreign ownership to put more effort and commitment for effective monitoring, like any other shareholders, toward sustaining audit quality. This is because foreign ownership will stand to lose their investment if the firms collapse for lack of audit quality.

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