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Family and Foreign Ownership and Audit Quality of Listed 1 Manufacturing Firms in Nigeria 2 Abu Seini Odudu¹, Dr. Joshua Okpanachi² and Dr. Adabenege O. Yahaya³ 3 ¹ Federal University Dutsin-Ma 4 Received: 16 December 2018 Accepted: 3 January 2019 Published: 15 January 2019 5

Abstract 7

The essence of audit quality is to assure the users that the financial statements contain no 8 material misstatements. It show that the credibility and reliability of audited financial 9 statements is what produce audit quality. This reliability and credibility are what assuring the 10 investors, creditors and other resource providers that their investments are secured. However, 11 the family and foreign ownership have the potential to affect the quality of an audit which in 12 turn impair audit quality. This study examines the effect of family and foreign ownership on 13 audit quality of listed manufacturing firms in Nigeria using secondary data extracted from 14 published audited annual reports and accounts of manufacturing firms in Nigeria. Using 384 15 firm-year observations of 32 out of the total 59 listed manufacturing in Nigeria for 12 years, 16 2005-2016. Logistic regression technique was used for data analyses and test the hypotheses 17 with the aid of STATA. The results show a positive significant effect of foreign ownership on 18 audit quality, while inverse significant effect of family ownership on audit quality. The study 19 recommends among other things, that there should be upward review of foreign ownership, 20 and downward review of family ownership. It will encourage these group of owners to put in 21 their best to effectively monitor the audit quality thereby giving assurance and confidence to 22 other forms of ownership in the manufacturing firms that their investments are secured. 23

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Index terms — family ownership, foreign ownership, big 4 audit firms, audit tenure, and audit fees. 25 Abstract-The essence of audit quality is to assure the users that the financial statements contain no material 26 misstatements. It show that the credibility and reliability of audited financial statements is what produce audit 27 quality. This reliability and credibility are what assuring the investors, creditors and other resource providers that 28 their investments are secured. However, the family and foreign ownership have the potential to affect the quality 29 of an audit which in turn impair audit quality. This study examines the effect of family and foreign ownership 30 on audit quality of listed manufacturing firms in Nigeria using secondary data extracted from published audited 31 annual reports and accounts of manufacturing firms in Nigeria. Using 384 firm-year observations of 32 out of 32 the total 59 listed manufacturing in Nigeria for 12 years, 2005-2016. Logistic regression technique was used for 33 data analyses and test the hypotheses with the aid of STATA. The results show a positive significant effect of 34 35 foreign ownership on audit quality, while inverse significant effect of family ownership on audit quality. The 36 study recommends among other things, that there should be upward review of foreign ownership, and downward 37 review of family ownership. It will encourage these group of owners to put in their best to effectively monitor the audit quality thereby giving assurance and confidence to other forms of ownership in the manufacturing firms 38

Keywords: family ownership, foreign ownership, big 4 audit firms, audit tenure, and audit fees. 40 I.

Background to the Study uditing as we know today is as old as human existence. The Bible accounts for this in 42 Genesis Chapter 1:29, that all the living creature after creation were entrusted to Adam for daily administration 43

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and management, implying that there was established agent relationship designed for accountability from the 44 beginning, but no structured formal internal control mechanisms put in place for proper reporting. Despite the 45 fact that there was no structure, or internal control mechanisms put in place for reporting. Adam was still invited 46 47 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. 48

It implies that whenever there is a fiduciary relationship with or without financial commitments, there is a 49 need for accountability, as the end product of the stewardship, being the business statements upon which the 50 owner will express an opinion as to the agent's honesty or dishonesty. It is also an indication that the relationship 51 between the principal and agent then was based on personal and, as such, the services of a third party (auditor) 52 53 was not required.

Furthermore, the lack of non-structured business and no formal internal mechanisms for proper reporting, the 54 financial statement does not pass through the third party (i.e. auditor) as principal supervised the agent. There 55 were no intermediary services of the third party who should have monitored the work performed by agents who 56 held little or no interest in the businesses. 57

In the modern organization, due to innovations and changes that have taken place in accounting, financial 58 reporting and auditing, agents of a company no longer present financial statement of a business to the owner 59 60 directly, such prepared financial statement would pass through a third-party (auditor) who constitute a profession 61 providing services to the people (Adeyemi & Fagbemi, 2010). It suggests that the audit is designed to meet the 62 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 63 business interests are protected and they can rely on the picture that the financial statement portrays. The 64 purpose of owners demanding for audit services is to reduce the agency costs because of information asymmetry 65 and competing interests that exist between them (owners) and managers. The only mechanisms that can be used 66 to resolve the competing interests between owners and managers are independent auditors (Jensen & Meckling, 67 1976 ??n Suleiman, 2011). Therefore, auditor's opinion expressed in the form of the report upon which the 68 69 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 70 and any resource providers in an organization that the company's accounting and stewardship of the company 71

are correct, which referred to as "audit quality". 72

73 Audit quality is subject to many direct and indirect influences. While some people place more emphasis 74 on direct influences on audit quality, others rely on indirect influences. It resulted in arguments and counterarguments of what constitutes audit quality and whether direct or indirect influence affects audit quality. Direct 75 enrapture according to International Auditing and Assurance Standards Board (IAASB, 2014) are grouped into 76 three categories: inputs, outputs and context factors, while the indirect sway on the other hand, is linked to output 77 factors via ownership structure, which is made up of pressure from individual owners, the political influence of 78 the owners and environmental factors. All the direct influences are within the power of auditors, and to some 79 extent, they have control over it, which would address audit quality. However, the direct influence only is not 80 sufficient to address the question of whether audit quality are being achieved in the broader context. 81

The indirect influence deals with ownership structure on audit quality, and it is critical. Because there are 82 different forms of owners that constitute ownership structure and it is significance for the auditor to understand 83 each owner's need and how an action of one shareholder affect on other's perspective, without which audit quality 84 cannot be enhanced. The position of auditors in a firm is ethically expected to represent the interest of all the 85 owners in respect of the owner's status in the company. However, this position are usually violated as auditors go 86 into negotiation with some specially, family and foreign investors to undertake activities that are detrimental to 87 other shareholders. That often results to audit expectation gap as the general public sees auditors as performing 88 their fiduciary responsibility in order to satisfy statutory requirements of an audit, which impair audit quality. 89 Therefore, audit quality is the ability of auditors to reduce noise such as material misstatement, errors or omission 90 and improve fitness on the financial statement prepared and presented by the company's management. 91

This study considers indirect influence, that is, the effect of family and foreign ownership on audit quality of 92 listed manufacturing firms in Nigeria. That suggests that when a family member and foreign investor acquire 93 equity or stock of the company, such family and foreigner is one out of the many owners of a company. Equity or 94 stock enable the holder to claim everything the company owns. Therefore, the more equity or stock the family 95 and foreign investor acquire, so shall their ownership stake in the company become greater. 96

The manufacturing sector are considers as one of the crucial driving force of the modern economy. The sector 97 serves as the vehicle for the production of goods, generation of employment, and enhancement of incomes. Hence, 98 described as the heart of the economy (Sola, Obamuyi, Asekunjo & Ogunleye, 2013). In developed economies, 99 the manufacturing sector contributes a significant portion to the economic growth. For example, in the USA, the 100 manufacturing sector contributed 11.7% to economic growth. In Japan, the manufacturing sector contributed 101 27.2% to the economic growth. In the UK, the manufacturing sector contributed 25% to the economic growth. 102 In China, the manufacturing sector contributed 40% to the economic growth. In developing country specifically 103 Nigeria, the manufacturing sector contributed 2.54% to the economic growth. This percentage is far below what 104 is happening in the wealthy and industrialized nations. It could be as a result of many factors including lack of 105 confidence of foreign investors, audit quality, performance, quality of management saddled with the responsibility 106

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.

118 **1 II.**

119 2 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

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 **??** below shows the conceptual framework.

¹⁴⁰ 3 Source: Built by the researcher based on literature

The family-owned firm is any public company where a family member or a founder owns 51% equity or more 141 (Villalonga & Amit, 2006; Anderson & Reeb, 2003). Family ownership is also a firm which the founders or 142 descendants of the founding family continue to hold positions in the top management, serve on the board or 143 are directors, (Anderson & Reeb, 2003). That implies that any firm where a family member holds important 144 position such as managers, directors, supervisor, CEO / Chairman of the board of directors and as well as owns 145 51% equity or more is family ownership firm. The explanation distinguishes family ownership from nonfamily 146 ownership, showing that any public company that a family or a founder owns less than 51% equity is nonfamily 147 148 ownership.

This study considers family ownership in two ways. Firstly, any firm where the family has ownership of 51%149 stock and above of the firm's total shares (Cascino, Pugliese, Mussolino & Sansone, 2010). Secondly, any firm 150 where two members of the same family acquire a substantial proportion of equity and the total of their shares 151 add together is 51% and above and at least one representative of the family is a member at the management 152 level or board member (Abdallah, 2012). The presence of a family representative on the company's board can 153 lead to a demand for high audit quality or lower audit quality (Chrisman, Chua & Sharma, 2005). However, 154 a company with family ownership will experience two types of agency problems. Firstly, a company in which 155 a family has a low proportion of shares may have a low incentive and may wish to hire a big4 audit firm to 156 serve as their external monitoring mechanism to improve and strengthen their motivation, which they referred 157 158 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 159 160 high-quality auditor to cover up their wrongdoings, which they referred to as type II agency problems. Therefore, 161 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 167 in which foreign investors due consider in taking investment decision is to rely on credible financial statements 168 as sources of information, and in doing so, auditors play essential role in certifying these statements as higher 169 170 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; 171 ??eoh & Wong, 1993). That means managers when left unmonitored, will likely engage in earnings management, 172 fraudulent activities or make suboptimal corporate decisions (Bertrand & Mullainathan, 2003; Hope & Thomas, 173 2008; ??euz, Nanda & Wysocki, 2000). Thus, the quality of the audit will be a yardstick to determine whether 174 the manager acted opportunistically or not. Therefore, the study expects that manufacturing firms in Nigeria 175 that use Big4 auditors will have much potential to attract foreign investors than firms that use non-big four 176 auditors, and such ownership stake of the foreign 177

¹⁷⁸ 4 Independent Variables Dependent Variable

Figure ?? investor as a proxy of foreign ownership on audit quality of listed manufacturing firms in Nigeria. 179 180 Audit quality is a variation of the market assessed joint probability that a given auditor will both detect a breach 181 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 182 183 role are reduced to detection and reporting of violations in the financial statements (Mark & Jieying, 2013). Audit 184 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 185 unobservable (DeAngelo, 1981b). That results in the use of different proxies by the researchers to measure audit 186 quality like audit size, audit hours, audit fees, audit tenure, reputation, litigation rate among others. Therefore, 187 188 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. 196 197 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 198 theory. Thus, audit fee premiums yield high quality as the audit firm prove their integrity, expertise, and 199 200 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 201 firm is so low, it may be difficult for auditors to carry out audit work by applicable technical and professional 202 standards thereby induce them to accept compensation which in turn lower audit quality. 203

Agency theory according to Berle and Means (1932); Jensen and Meckling (1976) in their separate study 204 suggests that due to information asymmetries and self-interest. The owners lack reasons to trust the management, 205 and will seek to resolve these concerns by putting in place mechanisms to align the interests of management 206 with owner. That reduce the scope of managers opportunistic and information asymmetries. The structural 207 device put in place is the board of directors. However, the acquisition of shares by directors prevent them to 208 summon courage in monitoring. Therefore, shareholders employ the services of independent auditors to carry 209 out such responsibility. An underlying notion behind the monitoring is the compliance of the relevant regulatory 210 bodies, which external auditors would contribute to corporate control, thereby increasing the quality of financial 211 statements. The financial statement quality form the bases of investors' decision making. Because it gives 212 assurance, trust and hope to investors that their investments are secured. 213

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.

220 Cascino, Pugliese, Mussolino, and Sansone (2010) investigate the effect of family ownership on audit quality in 221 Italy. The study sample 114 out of 263 firms listed in Italian Stock Exchange for the period 1998-2004 with 798 222 firm-year observations. Audit quality measured by Big 4, while family ownership was the independent variable. 223 The findings reveal that the family firm has a positive and significant effect on audit quality. This finding shows 224 that the presence of a family member in a firm encourage to engaged the services of big four audit firm since quality 225 auditors enhance a higher degree of compliance, hence audit quality (DeAngelo,198a1). Niskanen, Karjalainen, and Niskanen (2010) examine the relationship between family ownership and audit quality in Finland. The 226 study sample 441 firms out of 1,500 of small family firms listed in Finish Stock Exchange with 1,637 firm-year 227 observations for the period 2000-2006. Logistic regression was used to test audit quality as a dependent variable 228

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 nonfamily 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 239 study sample 55 companies listed on the Tunisian Stock Exchange for the period 2008-2013 with 315 firm-year 240 observations. Audit quality measured by Big 4 audit firm and audit tenure, while family ownership was the 241 independent variable. Multiple regression was used data analyzes. The findings show that family ownership has 242 a positive and significant effect on audit quality. It means that a unit increase in family ownership increases audit 243 quality. The result of this study could have been as a result of inappropriate regression tool used. A research of 244 this nature could have used binary logistic regression since the dependent variable is dichotomized into 1 or zero 245 246 instead of multiple regression. Therefore, with the expansion of study period coverage, it could give a different 247 result. In light of the above, family ownership is seen as an essential tool that could influence the quality of the 248 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 249 2015-2016. Audit quality was measured by Big 4 audit firms, while ownership structure was the independent 250 variables proxy by foreign ownership, institutional ownership, and block-holder ownership. Logistic regression is 251 used for data analysis. The results reveal that foreign ownership has a positive and significant effect on audit 252 quality, while institutional and block-holder ownership has a positive but not significant impact on audit quality. 253 That means an increase in foreign ownership increases audit quality. The study used appropriate regression 254 technique, which is capable of yielding a better result; however, two year study period is too small and cannot 255 give a valid outcome to depend on it. 256

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 263 Vietnam. The study sample 241 listed companies on Vietnam stock markets (HNX and HOSE) for the 264 period 2010-2016 with 1,687 firm-year observations. The study used GMM-regression for data analysis. Firm 265 characteristics and real earnings management were the independent variables proxy by firm age, firm size, and 266 profitability, while audit quality was dependent variable measured by big four and nonbig 4 audit firm. The 267 findings show a positive and significant effect of firm age on audit quality. Aliu, Okpanachi, and Mohammed 268 (2018) examine audit fees and audit quality of listed companies in Nigeria. The study sample 9 listed companies 269 in the downstream sector of Nigerian Petroleum Industry for the period 2007-2017. Audit quality was measured 270 by a big four audit firm, while audit fees were independent. Binary logit regression was used to analyze the 271 data. The findings show a positive and significant influence of age on audit quality. Hartono, Subrato, Djumahir 272 and Irianto (2013) examine the impact of firm characteristics proxy by firm age, profitability, leverage and firm 273 growth on the audit quality and its impact on firm value in Indonesia. The research work sample 110 firms listed 274 in Indonesia Stock Exchange excluding all financial firms. Two-Stage Least Square (2 SLS) statistical model was 275 utilized to analyze the relationship between firm size and audit quality. The study failed to document the period 276 of the study, but the findings of the study show that firm age has significant and negative effects on audit quality. 277

278 **5** III.

279 6 Methodology

The study adopts longitudinal research design specifically panel data. It is an effect study using regression models 280 281 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) 282 283 years period (1 st January 2005 to 31 st December 2016). Fifty-nine listed manufacturing firms form the total 284 population for the study. Filters were employed to consider some firms and eliminate others (Shehu, 2012). The percolate removes all the companies listed after 31 st December 2005. As they cannot produce complete data 285 required for the study. The filter weed out all companies that had disappeared from the trading schedule of NSE 286 as at 31 st December 2016. The infiltrate also do way with all the companies that experienced technical suspension 287 and were unable to meet up with the Nigerian Stock Exchange requirements within the period. Therefore, a total 288 of 27 firms were weeded out. As they cannot produce data required for the study. Thus, 32 manufacturing firms 289

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 $AQ1=?+\beta1MANOit+\beta2BDSHit+\beta3INSOit+\beta4BLHOit+\beta5FAM Oit+\beta6FRGOit+\beta7FSIZit+\beta8FAGEit +Uit$ 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:.

301 7 Model II

302 8 AQ2=?+ β 1MANOit+ β 2BDSHit+ β 3INSOit+ β 4BLHOit+ β 5FAM

Oit+B6FRGOit+B7FSIZit+B8FAGEit +Uit 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:

306 9 Model III

$_{307}$ 10 AUDF=?+ β 1MANOit+2 β BDSHit+ β 3INSOit+ β 4BLHOit+ β 5FA

308 MOit+&6FRGOit+&7FSIZit+&8FAGEit +Uit

- 309 The Audit Quality is the composition of these three audit quality elements.
- 310 IV.

311 **11 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.

³¹⁵ 12 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 384 316 observations for 12 years (2005-2016). Three variables (big 4, audit tenure and audit fees) were dichotomized 317 as 1 and 0, while three others were the continuous variable. The continuous variables were family ownership, 318 foreign ownership, and firm age. The big 4 has a mean of .7395833, the standard deviation of .4394345, and a 319 maximum value of 1. It implies that for all the 32 listed manufacturing firms in Nigeria, there is an average value 320 of .7395833 with a deviation of .4394345 around the mean. The mean value of .7395833 is close to 1 maximum 321 value. That was in line with the data set of the study as firms audited by big4 audit firm was coded 1 and, those 322 investigated by non-big four was coded 0. The mean big 4 of .7395833 and a maximum value of 1 is indicating 323 that most Nigerian manufacturing firms are audited by big4 during the study period. 324

325 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 326 .43996735 around that value. The mean audit tenure of .53125 is nearness to the maximum value of 1. That 327 was in conjunction with the data set of the study. The mean audit firm tenure of .53125 implies that majority 328 of audit firms in Nigeria spent three to five years in auditing listed manufacturing firms in Nigeria. In the same 329 vein, the average for the audit fees stands at .7161458 with a standard deviation of .4514551 around the mean 330 and a maximum value of 1. The median of .7161458 and a maximum value of 1 conform with the data set of the 331 study. The middle audit fee of .7161458 implies that most audit firms in Nigeria charged as high as N2,000,000 332 and above for remuneration in auditing Nigerian manufacturing firms during the study period. 333

Family ownership has a mean of 2.38787, a standard deviation of 6.356533, a minimum of 0 and a maximum 334 of 40.52 showing that family member(s) on averaged acquired 2.39 shares of listed manufacturing firms in Nigeria 335 336 with 6.36 variation around this during the period. 40.52 was the highest shares obtained by a family member(s), 337 while based on the policy of some companies refused family member(s) possessing shares during the study period. 338 Foreign ownership has a mean of 40.7199, a standard deviation of 29.21663, a minimum of 0 and a maximum of 339 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, 340 while some listed manufacturing firms do not have their shares purchased by foreign investors. Firm age has 341 a mean of 47.81771, a standard deviation of 15.78174, a minimum of 12 and a maximum of 93 implying that 342 the average age of the listed manufacturing firms in Nigeria is 47.82 years with a variation of 15.78 around this 343 during the period. The highest age was 93 years, while the minimum age was 12 years. 344

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.

³⁴⁹ 13 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 350 test was conducted to check a variable that emanates from a normally distributed population. It was meant to 351 test the null hypothesis that the data were distributed at a 0.05 (5%) level of significance. The results of the test 352 are seems in table 2 below: A careful examination of Table 2 shows that the P-value of three variables were less 353 354 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 355 significant at 5% with a confidence level of 95%, implying that the data does not fit the normal distribution. 356 The failures of the three variables were attributed to several reasons amongst are: first, when the sample size is 357 adequately large, the normality of data is not required (Wooldridge, 2009). The 32 listed manufacturing firms 358 selected for 12 years is sufficiently large, and as such, the normality of data were not required. Second, in a panel 359 data set, there were repeated observations in the same components. The repeated perceptions from the same 360 unit usually cause a problem, since the perceptions are, very likely, 361

³⁶² 14 b) Regression Results and Hausman Specification

Tests Table 3 presents the summary of the regression analysis for all the three models. The result as summarized 363 in Table 3 reveals that only model 3 is statistically significant as the validity of the model is evident. The R 364 2 (2048) in table 3 is the multiple coefficients of determination. It gives the proportion or percentage of the 365 366 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 367 ownership. The Adjusted R-square shows the degree of freedom of the model only. It explains also about 19.85% 368 of the total systematic variations in audit quality. This variation (19.85%) in audit quality of the listed Nigerian 369 manufacturing firms is substantially accounted for by the different explanatory variables. Also, the P-value of 370 0.0000 for the estimation confirms the fitness of the model. However, model 1 and 2 with R 2 of 0.1667 and 371 0.0206 with Adj-R 2 of 16.01 and 01.28 respectively show the variation in audit quality of listed manufacturing 372 373 firms in Nigeria is not substantially accounted for by all the explanatory variables. Therefore, for analysis, model 3 only will be used. 374

375 The test of model selection using Hausman specification was conducted. It enable us to determine between 376 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 377 effects model is adopted using model 3 for testing hypothesis. The bottom line here is that model 3 is the 378 best model that explained audit quality compare with other models. 4 reports that the family ownership has 379 significant and privative effect on AUDF as explained by a coefficient of -0.86327 and Z-value of -3.39 at 0.1% level 380 of significance (P-Value = 0.001). It means every unit increase in family ownership significantly decreases audit 381 quality by 0.86327. That was statistically significant at the 99.9% confidence level. Similarly, Foreign ownership 382 has significant and positive effect on AUDF as explained by a coefficient of 0.107858 and Z-value of 2.21 at 2.7%383 level of significance (P-Value = 0.027). It indicates that for every one unit increase in foreign ownership increases 384 385 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 392 firms in Nigeria. The regression result in table 4 shows that the family ownership of listed manufacturing firms 393 in Nigeria during the study period has significant and negative effect on audit quality. Table 4 shows a Z-Value 394 of -3.39 and P-Value of 0.001, which is statistically significant at 5% level of significance. It provides us with 395 396 evidence of rejecting the null hypothesis and accepting the alternative hypothesis that family ownership has 397 significant and effect on audit quality of listed manufacturing firms in Nigeria. This finding conforms with the 398 result of Niskanen et al. (2010), who also find significant and adverse relationship between family ownership 399 and audit quality. However, this finding contradicts the outcome of 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 400 regression as presented in table 4 shows that the foreign ownership is positively and statistically significant at 401 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 402 evidence of rejecting the null hypothesis. And as such, accepting the alternative that foreign ownership has a 403 significant effect. This finding is compatible with the report of Khasharmeh and Joseph (2017); Shan (2012), who 404

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 408 sample of 32 listed manufacturing firms on the Nigerian Stock Exchange. The result of the estimated regression 409 shows that both family ownership and foreign ownership have a significant effect on audit quality. While family 410 ownership has significant and negative effect, foreign ownership on the other hand, has significant and positive 411 effect on audit quality. Also, the R 2 of 20.5% and the Adj-R 2 of 19.9% evidence that family and foreign 412 ownership used in this study proved to be determinants of audit quality despite the low R 2 of 20.5% and Adj-R 413 2 of 19.9%. Firm age as a control variable has significant and positive effect on audit quality. That means that 414 the age of the corporation is an important determinant on audit quality as some firms have been established for 415 several years and have been doing very well as a result of a good management team and audit quality, while 416 other suddenly collapse as a result of poor audio quality. 417

⁴¹⁸ 15 V. Conclusion and Recommendations

In the light of the findings, the family ownership of Nigerian manufacturing firms is negatively related with 419 audit quality measured by audit fees, indicating that at a higher level of shares held by family owners, the 420 level of audit quality could be low. Therefore, reducing the shares held by family owners, in the companies to 421 a justifiable proportion by companies' board of directors or companies' management can help enhance family 422 ownership contribution toward improving audit quality; and The foreign ownership is significantly and positively 423 associated with audit quality measured by audit fees. It signifies that foreign ownership contributes positively 424 to audit quality. Thus, reviewing the proportion of shares upward for foreign ownership by the management or 425 board of directors would encourage foreign ownership toward sustaining audit quality in the listed manufacturing 426 firms in Nigeria. 427

428 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.

Family	Big 4	Audit	Control V	Variable	Year 2019
Ownership	firm	Audit	Firm Age		
	Fees	Audit			
	Tenure				
Foreign					71
Ownership					
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					Business Research
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			Journals		

Figure 1: D

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 $^{^{2}(}$) D Family and Foreign Ownership and Audit Quality of Listed Manufacturing Firms in Nigeria

1

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

Figure 2: Table 1 :

$\mathbf{2}$

Variable	Observa	ation	V	Ζ	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 1	Source: STATA 11 Output Results based on study data				

Figure 3: Table 2 :

3

Variable	Model1 BIG 4			Model 2 AUD	Т		Model 3 AUD	F	
	Coeff	t-	P-	Coeff	t-	P-	Coeff	t-Value	P-value
		value	value		value	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	-	0.022	.0086651	6.46	0.000
					2.31				
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		

Figure 4: Table 3 :

 $\mathbf{4}$

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

[Note: Source: STATA 11 Output Results based on study dataTable]

Figure 5: Table 4 :

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