Company Characteristics and Earnings Quality of Listed Non-Financial Companies in Nigeria

Adebimpe O. Umoren
Department of Accounting
University of Uyo, Nigeria
email bimpeumoren@yahoo.com**,** adebimpeumoren@uniuyo.edu,ng
mobile +234 8067655752

&

Eno G. Ukpong
Department of Accounting
Akwa Ibom State University
Obio Akpa, Nigeria
emailenogrwgoryukpong@gmail.com
mobile +234 8035016155

Abstract
The quality of reported earnings has been a concern among regulators, standard setters, practitioners and researchers. To this end, the researchers examined the relationship between company characteristics and the earnings quality of listed non-financial companies in Nigeria. The non-financial firms were classified into natural, industrial and service sectors. Company characteristics were proxied using six dimensions, company size, auditor type, company leverage, company age, board size and board meetings. Income smoothing was utilized in measuring earnings quality. An ex-post facto research design was employed in conducting this study. It utilized a total of 697 firm-year observations from 95 companies for the period from 2012 to 2019. The data collected were analysed using descriptive, correlation and regression analysis. Evidence from the study revealed that company leverage and company age were the most prominent company characteristics that significantly influence earnings quality for most of the sectors and the combination of all sectors. Company leverage had a negative influence while company age had a positive impact. It is concluded that highly geared and younger firms have a greater tendency to manipulate their income to impress stakeholders. Therefore, auditors and regulatory bodies such as Financial Reporting Council should pay close attention to young and highly geared firms to curb income manipulation practices and hence enhance earnings quality.

Keywords: Earnings quality, company characteristics, listed, non-financial companies

1.0 Introduction
Investors have become concerned about less informative accounting numbers, particularly as regards reported earnings (Gaio, 2010). Earnings influence investors' decisions because it is used extensively for predictive and interpretative purposes, among others. Earnings can be used as a means to maximize a firm's profit and reduce risks. Moreover, some managers tend to manipulate earnings for several reasons which may range from meeting shareholders' financial expectations, increasing the market value of shares, receiving a commission linked to financial performance and satisfying the insiders' needs (Hassan, Percy & Stewart, 2006). Company characteristics, on the other hand, play an important role in explaining the quality of earnings, as they affect the firm's internal and external decisions (Shehu, 2011) and restrain managers from manipulating the accounting numbers (Mutende, Mwangi, Njihia, & Ochieng, 2017). Company characteristics can be seen as varieties of information disclosed in the financial statement of corporate entities that

serve as the predictors of the firm's quality of earnings. Company characteristics are features that distinguish one company from the other and are numerous; it includes structural and governance attributes such as company size, profitability company age, leverage, industry type, geographical location, auditor type, the board size, board independence, board meetings and any other feature that distinguishes one company from the other (Akinsulire, 2011).

Over the last two decades, prior literature has examined the determinants and consequences of earnings quality (Dachomo & Bala, 2020; Dang, Pham, Nguyen, & Nguyen, 2020; Srinidhi, Gul, & Tsui, 2011; and Abdelghany, 2005), however, a fundamental issue that has received very limited attention over the years is the effect of company characteristics or attributes on earnings quality of listed non-financial companies in Nigeria. The listed non-financial sector is made up of agriculture, industrial and service sectors. The agricultural sector is important because Nigeria is blessed with large tracts of arable land and natural resources. The agricultural sector contributes 25% of Nigeria's gross domestic product (GDP) and the sector's growth rate over the last 5 years averaged 4%. The industrial sector is made up of mostly manufacturing companies. It produces a large proportion of goods and services for the West African subcontinent. The industrial sector contributes an annual average of 23% of the GDP. The service sector is made up of trade, information and communication, real estate, professional, financial and insurance services. Services currently account for 53% of Nigeria's gross domestic product (GDP) (NIPC, 2022). With the contributions of all these sectors to GDP, it is necessary to examine the effect of company characteristics on the earnings quality of listed non-financial firms in Nigeria, as a contribution to existing literature.

The main objective of this study is to examine the effect of company characteristics on earnings quality of listed non-financial companies in Nigeria. The specific objectives are to examine the individual and joint impact of company size, auditor type, company leverage, company age, board size and board meeting on earnings quality of listed natural, industrial and service sectors in Nigeria. Therefore, this study proposes five null hypotheses in line with the objectives. The remainder of the paper is structured as follows: Section 2 discusses the literature review, section 3 covers research methods, section 4 provides an analysis of data and Section 5 concludes the paper.

2.0. Literature Review
This section discusses the conceptual, theoretical and empirical reviews.

2.1 Conceptual Review
Penman & Zhang (2002) view earnings quality as that earnings stated on the financial statement before identifying the extraordinary items and are regarded as an adequate signal for futuristic earnings. Therefore, they assume that a high level of earnings quality relates to a desired sustainability of earnings while unsustainability is related to a low level of earnings quality. Also, Srinidhi, Gul & Tsuiet, (2011) describes earnings quality as the ability of current reported earnings to reflect the future cash flow and earnings. In this context, earnings quality refers to how best current reported earnings can predict future performance of entity.

There is also no generally accepted approach to measuring earnings quality. However, Abdelghany (2005) suggests three (3) major approaches to measure earnings quality which control three different dimensions of earning management. The first approach is Leuz, *et al's* (2003) approach which focuses on the variability of earnings based on the idea that managers tend to smooth income because they believe that the investors prefer smoothly increased income. Quality of earnings is measured by income smoothing which is the standard deviation of operating income divided by the standard deviation of cash flow from operation. The smaller the ratio the lower the quality of earnings (i.e. smaller ratios imply more income smoothing). The second approach is Barton & Simko's approach. They focused on the idea of earnings surprise as reflected

in the beginning balance of net operating assets relative to sales. They provide empirical evidence that firms with a large beginning balance of net operating assets relative to sales are less likely to report a predetermined earnings surprise. Penman & Zhang (2002) suggests a third approach. This approach focuses on the ratio of cash from operation to income, this measure of earnings quality is based on the notion that the closeness to cash means higher quality earnings and this is the simplest technique to measure earnings quality. The smaller the ratio the higher the quality of earnings. Other indicators that are commonly used in assessing earnings attributes include accrual quality (Dechow & Dichev, 2002); persistence and predictability (Penman & Zhang, 2002), timeliness and conservatism (Francis *et al*., 2004).

Company characteristic/attribute refers to those variables of motivations which are moderately sticky to firms at various levels and across time. These attributes include company size, auditor type, company leverage, company age, board size and board meeting. The size of a company cannot be overruled in determining the value of the firm. A firm's size is measured in different ways such as asset, employment, sales and market capitalization, (Shuaibu, Ali & Amin, 2019). The size of a company varies in many ways and it's essential to consider how the size affects the quality of reported information. According to Pincus & Rajgopal (2002), company size is measured by the natural logarithm of total assets, implying that the larger the firm size, the more pressure is placed on management to report more desired earnings.

Auditing reduces information asymmetries that exist between managers and firm stakeholders by allowing outsiders the opportunity to verify the validity of financial statements. The effectiveness of auditing, and its ability to constrain the management of earnings, is expected to vary with the quality/type of the auditor (Ojong, Ushie & Saint-manuel, 2019). Despite the agency cost incurred by firms, auditor type/quality is very crucial. Moreso, some authors argue that to defuse the information asymmetry gap between shareholders and managers, shareholders mostly rely on audited information. Based on DeAngelo's (1981) reports, many studies
use auditor size (specifically Big 8, Big 6, Big 5 or Big 4 Vs non-Big8, non-Big6, non-Big5 or non-Big4) to differentiate auditor type.

Leverage is the ratio of debt to equity or the relationship between the external financing of the firm and its total assets. Leverage has been seen as one of the most vital corporate attributes that influences the earnings quality of firms. Firms in financial distress or near debt covenant violations may be more motivated to engage in earnings management practices (Defond & Park, 1997). When a company relies on debt, the managers tend to choose accounting policies that increase the income so that they abide by the debt covenants imposed by banks and bondholders and this allows them to avoid any renegotiation costs (Beatty, 1989).

Company age is the number of years a company has existed from incorporation. The question of whether young companies are mainly 'fast and furious' compared to old companies, and equally whether old companies are more 'slow and cautious' than their younger counterparts, is still unanswered. Prior studies have argued that firms that have been in the market for a long time tend to have low level of earnings management than beginners as they are well known companies, that have a great value in the market and reputation to protect, (Elshabasy, 2016). Moreover, Old firms might have improved their financial reporting practices over time (Alsaeed 2006) and second, they try to enhance their reputation and image in the market (Akhtaruddin 2005), so the older the firm, the less the tendency to perform earnings management practices (Bassiouny, Soliman & Ragab, 2016).

Board size is the number of directors (executive and non-executive) serving on a board of a company. The board is the chief decision-making organ of any corporate organization. The code of corporate governance of SEC for companies quoted on the NXG Plc. states that the board

should be of a number that relates to the size and complexity of the company. It recommends a minimum of 5 members. A board meeting is the number of board meetings held in an accounting year. The code of corporate governance of the SEC recommends that companies should hold board meetings at least once a quarter. Meetings allow directors more time to deliberate, set strategies and evaluate managerial performance and thus place them in a better position to timely address emerging critical problems (Mangena & Tauringana, 2008).

2.2 Theoretical Review

This study is anchored on Agency and Signaling theories. Agency theory majorly looks into income smoothing behaviour as an outcome of the conflict of interests between managers (agents) and shareholders (principals). The agency concept stresses the complexities that can arise due to this agent-principal relationship. It suggests that the separation between ownership and control leads to a divergence between manager and owner interests, (Jensen & Meckling, 1976). The theory states that the shareholders act in a rational way to maximize their utility. They employ the managers to work for them, represent them and act on their behalf, whereas, the managers act to exploit their own personal interests instead of that of the shareholders (Jemâa, Toukabri & Jilani, 2015). The agency relationship leads to information asymmetry problems, due to the the fact that managers can access information more than shareholders. This allows the pursuit of self-interest, where management alters the company's reported earnings to meet or beat earnings targets. Leuz *et al*. (2003) assert that the effects of such behaviour will ultimately be reflected in the company's earnings. Therefore, strict monitoring of managers by the principals or external auditors is seen as a checkpoint to restore shareholders' interest by blocking the negative intentions of managers.

Signalling theory was originally developed to clarify the information asymmetry in the labour market (Spence, 1973), it has also been used to explain voluntary disclosure in corporate reporting (Ross, 1977). The theory argues that the existence of information asymmetry can also be taken as a reason for good companies to use financial information to send signals to the market (Ross, 1977). Information disclosed by managers to the market reduces information asymmetry and is interpreted as a good signal by the market. With an intent to signal their performance, management of a company will engage in earning management/income smoothing (Sun & Rath, 2008).

Further, the theory depicts that managers manoeuvre earnings to convey their inside information about firms' prospects and thus it serves as a signalling mechanism. Managers engaging in earnings management/income smoothing to creating a smooth and growing earnings string, over time, that will enable them to affect the stock price. Further, the signalling perspective also implies that earning management is sometimes demanded by shareholders. Signalling theory suggests that when a corporation's performance is good, managers will signal companies' performance to their investors, stakeholders and the market by making disclosures that poorer companies cannot make.

2.3 Empirical Review

Larger companies are prone to have a maximized value than smaller firms, (Shuaibu *et al*., 2019). Shehu (2013) observed that large firms have very strong reasons to manipulate their earnings to keep consistent earnings growth trend and meet and beat earnings expectations. For instance, Kim, Liu, & Rhee (2003) suggested that large companies tend to have more sophisticated operations and activities than small companies. As a result, it is difficult for analysts and other stakeholders to understand the nature of these complex operations, allowing more room for managers to manipulate earnings Similarly, Barton & Simko (2002) found that a positive relationship exists as large-sized firms face more pressures to meet the analysts' expectations. On the other hand, several kinds of research exist to prove a negative relationship between firm size and earnings management as explained by Widianingsih, Setiawan, Aryani , Gantyowati (2022)

Ahmad, Anjum & Azeem,(2014) and Kim *et al.,* (2003).

There is still so much debate on the relationship between auditor type and earnings management. Existing research has focused on the effect of audited firms versus non-audited firms on earnings quality and on whether a Big 4 auditor provides superior audit quality than a non-Big 4 firm (DeAngelo, 1981; Cascino, Pugliese, Mussolino & Sansone, 2010). DeAngelo (1981) demonstrated analytically that audit firm size has a positive relationship with audit quality, while many other studies indicate that Big Four auditors provide higher quality audits than non-Big Four auditors because the Big Four auditors have a greater ability to constrain their clients' use of earnings management practices. On the whole, the evidence is mixed, but it appears that there is some relationship between audit firm size and audit quality. Based on DeAngelo's (1981) reports, many other studies use auditor size (specifically Big 8, Big 6, Big 5 or Big 4 Vs non-Big8, non-Big6, non-Big5 or non-Big4) to differentiate audit quality levels and its effect on earnings quality.

Empirical evidence appears to be inconclusive on the relationship between leverage and earnings quality. While (Hossain, Tan & Adams, 1994). Khanh & Nguyen 2018) found a positive relationship between leverage and earning quality, other researchers have found no relationship (Ali, Ahmed & Henry 2004; Alsaeed, 2006). On the other hand, (Zarzeski, 1996; Jensen, 1986; Fung & Goodwin, 2013; DeFond & Jiambalvo, 1994) found a negative relationship between leverage and disclosure. These conflicting results provide genuine incentive for further investigation of this relationship. A negative relationship is said to exist between firm financial leverage and earnings management mainly for two reasons, first, leverage requires debt repayment, thus reduces cash available to management for non-optimal spending, second, when a firm employs debt financing, it undergoes the scrutiny of lenders and is often subject to lender-induced spending restriction (Jensen 1986). Jackson, Rountree, & Weston (2013) found a significant positive relationship between a firm's age and earnings quality. On the contrary, other researchers found a negative relationship between firm age and earnings quality. Research like those of Dachomo & Bala (2020) concluded that corporate age moderates the negative relationship between corporate growth and earnings quality. They suggested that older firms are more mature, and are more likely to protect their reputational capital than younger firms. Other studies do not find any significant relationship between earnings quality and age (Olowokure, Tanko & Nyor, 2015).

Dang *et al*., Nguyen & Nguyen (2020) found that board size has a positive and significant impact on earnings quality for Vietnam companies. Similarly, Abed, Al-Attar & Suwaidan (2011) discovered a similar relationship for Jordanian firms, so also was Olaoye & Adewunmi (2020) for Nigerian companies. On the other hand, Ibadin & Dabor (2015, and Fodio, Ibikunle & Oba (2013) found a negative relationship between board size and earnings quality for Nigerian companies.

Ntim & Osei (2011) are of the view that a higher frequency of board meetings can result in a higher quality of managerial monitoring, thereby impacting positively on corporate financial performance and reporting quality. They found a statistical significance and positive relationship between the frequency of board meetings and the corporate performance of firms in South Africa. On the contrary, Gambo *et al* (2018) discovered that frequent board meetings have a negative effect on performance. Based on previous literature, it can be seen that large-sized companies, corporate leverage level, company's age, auditor type, board size and board meeting can have a significant effect on earnings quality.

3.0 Methodology
An ex-post facto research design is adopted for the study. This allows the researcher to establish the effect of the independent variables (company characteristics) on the dependent (earnings quality) variable. The focus of this study was the non-financial firms listed on the Nigerian

Exchange Group (NXG) Plc. The population is made up of 112 listed non-financial companies at NGX Plc. as of 31 December 2019. The sample size for the study was 95. The sample was based on the number of companies with available data online for the period under consideration The sector, population and sample are as tabulated in Table 3.1, the total list is made up of ten sectors, namely agriculture, conglomerate, construction/real estate, consumer goods, healthcare, ICT, industrial goods, natural, oil and gas, and service. They were all classified into 3 - natural (agriculture, natural, oil and gas), industrial (conglomerate, consumer goods, healthcare, industrial goods, oil and gas) and service (construction/real estate, ICT, service) sectors.

Table 3.1: Population and Sample of Study

Sectors	Description	Population	Sample Size	Total Years observed
Sector 1(Natural)	Agriculture, Natural	9	9	72
Sector 2 (Industrial)	Conglomerate, Consumer Goods, Healthcare, Industrial goods, Oil and Gas	60	54	397
Sector 3 (Service)	Construction/Real Estate, ICT, Service	43	32	228
Combined Sectors	All sectors	112	95	697

Source: Researcher's Compilation (2022)

Secondary data was used for the study and the data were sourced from the online audited financial statements of the companies from the period 2012 to 2019, which constitutes a total of 697 firm-year observations as analysed in Table 3.1. The main variables of interest examined in this study were measured thus:

Table 3.1: Measurement of Variables

Variables	Type	Measure	*Apriori Sign*
Earnings Quality (EQ)	Dependent	Standard deviation of net income Standard deviation of cash flow from operation	
Company Size (CS)	Independent	Log of total assets	+
Auditor Type (AT)	Independent	Big 4 (1) Others (0)	+
Company leverage (CL)	Independent	Total liabilities divided by total assets	-
Company Age (CA)	Independent	log of number of years since incorporation	+
Board Size (BS)	Independent	Number of Executive and Non-executive Directors	+
Board Meetings (BM)	Independent	Number of Board Meetings in a Year	+
Industry type	Control	0=Service 1= Non-Service	+

Source: Researcher's Compilation (2021)

The dependent variable, earnings quality, was proxied by earnings smoothing calculated as the standard deviation of net income divided by the standard deviation of cash flow from operations. This was ranked under the studies of Francis et al. (2004). Since the lower value of smoothness indicates high earnings quality and the high value indicates low earnings quality, the values are negated for ranking (Francis et al. 2004, Lyimo, 2014). The independent variables are company size measured by the log of total assets; auditor type measured by dichotomous variable, 1 representing "Big 4" and 0 otherwise; company leverage measured by total liabilities over total assets, and company age measured by the log of the year of incorporation to date. The industry was used as the control variable, represented as 0 for service, and 1 for non-service. The control variable was used only for the combined sectors. This was because it provides better predictability and analysis of the relationship existing between the constructs. The apriori expectation for the independent variables is all positive except for negative company leverage. Using the constructs of the dependent and independent variables, the regression equations adapted for this study are modelled in the following functional form:

$$EQ_{it} = \beta_0 + \beta_1 CS_{it} + \beta_2 AT_{it} + \beta_3 CL_{it} + \beta_4 CA_{it} + \beta_5 BS_{it} + \beta_6 BM_{it} + \varepsilon_{it}$$
.... Equation 1

$$EQ_{it} = \beta_0 + \beta_1 CS_{it} + \beta_2 AT_{it} + \beta_3 CL_{it} + \beta_4 CA_{it} + \beta_5 IND_{it} + \beta_6 BS_{it} + \beta_7 BM_{it} + \varepsilon_{it}$$
.... Equation 2

Equation 1 was applied to each of the sectors, while equation 2 (with control variable) was applied to the combination of all sectors. In other to examine empirically the influence of corporate attributes on earnings quality, this study employed the regression inferential statistics at a 0.05 level of significance. However, before conducting the regression, several preliminary tests were performed such as descriptive statistics including mean, standard deviation and correlation. The variance inflation factor (VIF) and tolerance were used to check the existence of multi-collinearity.

4.0 Data Analysis and Discussion of Findings

Table 4.1: Descriptive Statistics by sector and combined

Sector	Earnings Quality		Corporate Size		Auditor Type		Corporate Leverage		Corporate Age		Board Size		Board Meeting	
	Mean	Std. D	Mean	Std. D	Mean	Std. D	Mean	Std. D	Mean	Std. D	Mean	Std. D	Mean	Std. D
Natural	0.334	0.196	6.656	0.591	0.208	0.409	0.600	0.325	1.551	0.204	7.556	1.942	4.139	1.397
Industry	0.562	0.269	7.340	0.980	0.622	0.485	0.858	2.059	1.636	0.581	8.499	2.626	4.891	1.229
Service	0.449	0.320	7.030	0.750	0.483	0.501	0.660	0.530	1.412	0.269	8.026	2.090	4.544	1.317
Combined	0.502	0.290	7.171	0.903	0.533	0.499	0.766	1.589	1.554	0.480	8.247	2.416	4.700	1.297

Source: Researcher's Computation (2021)

Table 4.1 provides the descriptive statistics of the sampled firms. The mean and standard deviation are depicted in the table. The earnings quality reveals a mean value of 0.334 for the natural sector, 0.562 for the industrial sector, 0.449 for service and 0.502 for the combined sectors. The smaller the ratio the lower the quality of earnings. The lowest ratio is in the natural sector (0.334) while the highest ratio is in the industrial sector (0.562). The standard deviation is between 0.196 and 0.320, which shows there is only a slight deviation from the mean. The company size reveals that the industrial sector has the hugest mean of 7.340 while the others are 6.656 for natural and 7.030 for service. The combined average for company size is 7.717. The standard deviation ranges between 0.591 and 0.980. The auditor type shows a combined mean of 0.533. Individually, the mean of 0.208, 0.622 and 0.483 are observed for the natural, industrial and service sectors respectively. This reveals that the industrial sector is mostly audited by Big-4 audit firms, while the natural sector is mostly audited by non-Big Audit firms. The standard deviation is between 0.409 and 0.501 for all the sectors. The company leverage indicates an average of between 0.600 and 0.858, with the highest being industrial (0.858) and the least natural (0.600). The average of the combined sectors is 0.766 which reflects that most of the listed companies are highly geared. The standard deviation ranges from 0.325 to 2.059.

The company age reveals 1.551, 1.636, 1.412 and 1,554 for natural, industrial, service and combined sectors respectively with a standard deviation between 0.204 and 0.581. This implies that the oldest companies are in the industrial sector. The average board size is between 7.556 and 8.499 while the mean for frequency of board meetings is between 4.139 and 4.891. The results are quite in line with the SEC Code of corporate governance which recommends a minimum of 5 members for board members and board meetings at least four times a year. The standard deviation of board size ranged between 1.942 and 2.626 while board meetings raged between 1.229 and 1.397.

Table 4.2: Correlation Analysis

		Earnings Quality	Company Size	Auditor Type	Company Leverage	Company Age	Board size	Board Meeting
Natural	Earnings Quality	1						
	Company Size	0.134	1					
	Auditor Type	0.206	0.278**	1				
	Company Leverage	-0.129	-0.521**	-0.214	1			
	Company Age	0.391**	-0.391**	0.249	0.215	1		
	Board Size	-0.158	0.673**	-0.041	-0.626**	-0.183	1	
	Board Meeting	0.269**	-0.133	0.170	0.117	0.486**	0.106	1
Industry	Earnings Quality	1						
	Company Size	0.052	1					
	Auditor Type	0.128*	0.259**	1				
	Company Leverage	-0.270**	-0.354**	-0.165**	1			
	Company Age	0.169**	-0.088	0.105**	-0.044	1		
	Board Size	-0.039	0.343**	0.307**	-0.049	0.139**	1	
	Board Meeting	-0.089	0.154**	0.156**	-0.004	-0.065	0.191**	1

Service	Earnings Quality	1						
	Company Size	0.127	1					
	Auditor Type	-0.216**	0.249**	1				
	Company Leverage	-0.178**	0.042	0.309**	1			
	Company Age	-0.084	-0.088	0.103	0.397**	1		
	Board Size	0.218**	0.059	-0.176**	0.103	-0.218**	1	
	Board Meeting	-0.061	0.304**	0.390**	0.208**	-0.093	-0.021	1
Combined	Earnings Quality	1						
	Company Size	0.139**	1					
	Auditor Type	0.065	0.301**	1				
	Company Leverage	-0.190**	-0.270**	-0.072	1			
	Company Age	0.140**	-0.057	0.125**	-0.001	1		
	Board Size	0.072	0.313**	0.165**	-0.051	0.083**	1	
	Board Meeting	0.004	0.211**	0.274**	0.035	-0.010	0.140**	1

Source: Researcher's Computation (2021) ** $p<0.05$

The result of the correlation analysis is depicted in Table 4.2. It shows the correlation coefficients on the relationship between the dependent variable (earnings quality) and explanatory variables (company size, company leverage, auditor size, company age, board size and board meeting). For natural firms, it reveals that a positive correlation exists between earnings quality and four of the independent variables which are corporate size (0.134), auditor type (0.206), corporate age (0.391**) and board meetings (0.269**). Earnings quality has a negative correlation with corporate leverage (- 0.129) and board size (-0.158). For the industrial sector, earnings quality has a positive and significant correlation with company size (0.052), auditor type (0.128*) and company age (0.169**). It has a negative correlation with company leverage (-0.270**), board size (-0.039) and board meetings (-0.089).

 For the service sector, earnings quality has a positive correlation with company size (0.127) and board size (0.218**). It has a negative correlation with auditor type (-0.216**), company leverage (-0.178**), company age (-0.084) and board meetings (-0.061). For the combined sectors, earnings quality shows a negative and significant correlation with company leverage (-0.190**) and a positive correlation with company size (0.139**), auditor type (0.065), company age (0.140**), board size (0.072) and board meeting (0.004). The outcome of the combined sectors is in line with the apriori expectation which expects a negative sign for corporate leverage and positive signs for company size, auditor type, company leverage, company age, board size and board meetings.

The variance inflation factor (VIF) and tolerance are used to check for the existence of multi-collinearity of individual independent variables and the computed values are presented in table 4.3. It can be observed that there was no multi-collinearity in each of the independent variables as the tolerance for each sector was not less than 0.25, which is the benchmark for all sectors, natural (0.309, 0.540, 0.485, 0.551, 0.280, 0.656); Industrial (0.729, 0.855, 0.850, 0.937, 0.788, 0.937); service (0.873, 0.749, 0.746, 0.776, 0.921, 0.766); and all sectors combined (0.737, 0.839, 0.905,

0.918, 0.885, 0.899, 0.887). Variance inflation factor (VIF) was not greater than 4, Natural (3.235, 1.853, 2.063, 1.814, 3.575, 1.527); industrial (1.373. 1.169, 1.176, 1.067, 1.269, 1.067); service (1.145, 1.336, 1.341, 1.289, 1.086, 1.305 and all sectors combined (1.356, 1.191, 1.104, 1.089, 1.130, 1.113, 1.127).

Table 4.3: Regression Result

		Beta	Std Error	t-ratio	Sig	Tolerance	VIF	F	F-Ratio	R^2	Adj R^2
Natural	Constant	-2.065	0.311	-6.634	0.00			22.6	0.00	0.68	0.65
	Company Size	0.358	0.042	8.509	0.00	0.309	3.235				
	Auditor Type	-0.244	0.046	-5.301	0.00	0.540	1.853				
	Leverage	-0.377	0.061	-6.171	0.00	0.485	2.063				
	Company Age	0.644	0.091	7.041	0.00	0.551	1.814				
	Board Size	-0.123	0.013	-9.110	0.00	0.280	3.575				
	Board Meeting	0.053	0.012	4.320	0.00	0.656	1.527				
Industrial	Constant	0.609	0.123	4.958	0.000			8.8	0.00	0.12	0.11
	Company Size	-0.001	0.015	-0.091	0.927	0.729	1.373				
	Auditor Type	0.063	0.028	2.227	0.026	0.855	1.169				
	Leverage	-0.033	0.007	-4.882	0.000	0.850	1.176				
	Company Age	0.071	0.023	3.119	0.002	0.937	1.067				
	Board Size	-0.009	0.005	-1.617	0.107	0.788	1.269				
	Board Meeting	-0.018	0.011	-1.650	0.100	0.937	1.067				
Service	Constant	-0.227	0.253	-0.896	0.371			5.0	0.00	0.12	0.10
	Company Size	0.075	0.029	2.595	0.010	0.873	1.145				
	Auditor Type	-0.124	0.047	-2.650	0.009	0.749	1.336				
	Leverage	-0.073	0.044	-1.651	0.100	0.746	1.341				
	Company Age	0.042	0.085	0.490	0.625	0.776	1.289				
	Board Size	0.026	0.010	2.565	0.011	0.921	1.086				
	Board Meeting	-0.002	0.018	-0.099	0.921	0.766	1.305				

Combined	Constant	0.207	0.103	2.004	0.045			10.3	0.00	0.10	0.09
	Company Size	0.023	0.014	1.661	0.097	0.737	1.356				
	Auditor Type	-0.001	0.023	-0.029	0.977	0.839	1.191				
	Leverage	-0.033	0.007	-4.719	0.000	0.905	1.104				
	Company Age	0.064	0.023	2.800	0.005	0.918	1.089				
	Board Size	0.003	0.005	0.563	0.574	0.885	1.130				
	Board Meeting	0.055	0.012	4.570	0.000	0.899	1.113				
	Industry Type	-0.007	0.009	-0.772	0.440	0.887	1.127				

Source: Researcher's Computation (2021)

The Durbin-Watson (DW) statistic indicated that there was no first-order autocorrelation in all the models. The first null hypothesis (H01), which states that company size does not significantly influence the earnings quality of the listed companies in Nigeria, is rejected for natural (t= 8.509, p=0.00) and service sectors (t = 2.595, p = 0.010), but is not rejected for industrial (t=-0.091, p=0.927) and combined sectors (t=1.661, p=0.097). This means that company size significantly influences the earnings quality of the listed natural and service companies in Nigeria. The relationship is positive for both the natural and service sectors. These findings are consistent with the works of Ahmad et al. (2014) and Kim et al., (2003) who found that a significant positive relationship between firm size and earnings quality. They believed that large-sized firms may have stronger internal control system and may have more competent internal auditors as compared to small-sized firms, therefore, an effective internal control system helps in publishing reliable financial information to the public. This will likely reduce the ability of the management to manipulate earnings.

The second null hypothesis (H02), which states that auditor type does not significantly influence the earnings quality of the listed companies in Nigeria, was rejected (p < 0.05) for natural (t=-5.301, p=0.000), industrial (t 2.227, p = 0.026) and service sectors (t = -2.650, p = 0.009), but failed to be rejected (p > 0.05) for the combined sectors (t =-0.029, p=0.977). These results further indicate that auditor type influences the earnings quality of natural and service sectors negatively and industrial sectors positively. For example, Cascino et al. (2010) found that auditor type influences earnings quality positively. This is consistent with the study of DeAngelo (1981) that theorized that larger audit firms perform better audits because they have a greater reputation at stake and have a greater ability to constrain their clients use of earnings management practices. In addition, larger firms have more resources at their disposal, they can attract more highly skilled employees which invariably enhances their audit quality. However, Francis& Wang (2008) found that Big 4 auditors enforce high-quality earnings only in countries with stricter investor protection regimes.

The third null hypothesis (H03), which states that company leverage does not significantly influence earnings quality of the listed non-financial companies in Nigeria, is also rejected for natural (t=-6.171, p=0.000), industrial (t=-4.882, p=0.000) and combined sectors (t=-4.719, p=0.000). The significance is negative for all the sectors and this is quite in line with the apiori

expectation. This means that high leveraged companies are more likely to have lower earnings quality. The alternate hypothesis is supported which implies that company leverage influences the earnings quality of all the sectors except the service sector. Fung & Goodwin, (2013), found a negative relation between leverage and earnings quality while contrarily, Bassiouny et al., (2016) and Khanh & Nguyen (2018) found positive relationship between leverage and earning quality.

The fourth null hypothesis (H04), which states that company age does not significantly influence the earnings quality of the listed companies in Nigeria, was rejected ($p < 0.05$) for natural ($t = 7.041$, $p = 0.010$), industrial ($t = 3.119$, $p = 0.002$) and combined sectors ($t = 2.800$, $p = 0.005$), but failed to be rejected ($p > 0.05$) for the service sector ($t = 0.490$, $p = 0.625$). These results further indicate that company age positively influences the earnings quality of all sectors individually and collectively. The result is in line with the apriori expectation and consistent with the studies of Jackson, Rountree, & Weston (2013) who found a significant positive relationship between firm age and earnings quality. This is also in line with the works of Bassiouny, Soliman & Ragab (2016) who claimed that the older the firm, the less tendency to perform earnings management practices. On the contrary, other researchers (Dachomo & Bala, 2020), found a negative relationship between firm age and earnings quality.

The fifth null hypothesis (H05), which states that board size does not significantly influence the earnings quality of the listed non-financial companies in Nigeria, is rejected for natural ($t = -9.110$, $p = 0.000$) and service sectors ($t = 2.565$, $p = 0.011$). The alternate hypothesis is supported, which implies that board size influences the earnings quality of these sectors. The relationship was positive for the service sector but negative for natural. The positive relationship aligns with the result of Olaoye & Adewumi (2020) and Attar & Suwaidan (2012) that board size has a positive and significant impact on earnings quality. Whereas, Fodio, Ibikunle and Oba (2013) discovered that board size is negatively related to earnings quality using a sample of insurance companies in Nigeria.

The sixth null hypothesis (H06), which states that board meeting does not significantly influence the earnings quality of the listed non-financial companies in Nigeria, is rejected for natural ($t = 4.320$, $p = 0.000$) and combined sectors ($t = 4.570$, $p = 0.000$), but is not rejected for industrial ($t = -1.650$, $p = 0.100$) and service sectors ($t = -0.099$, $p = 0.921$). The significant relationship was positive for both natural and combined sectors. The findings are supported by Ntim & Osei (2011), who found a statistically significant and positive relationship between the frequency of board meetings and the corporate performance of firms in South Africa. On the contrary, Gambo *et al* (2018) discovered that frequent board meetings have a negative effect on performance.

The seventh null hypothesis (H07) that company size, auditor type, company leverage, company age, board size and board meeting do not significantly jointly influence the earnings quality of the listed (natural, industrial, service, combined) companies in Nigeria, is rejected. R squared shows 68% for natural, 12% for industrial, 12% for service and 10% for combined sectors, while R squared adjusted shows 65%, 11%, 10% and 9% for natural, industrial, service and combined sectors respectively. These show the degree to which changes in earnings quality can be explained by the influence of the independent variables. All the F-ratios computed showed that the model was significant ($p < 0.05$) for all the sectors. In this regard, corporate attributes have a significant influence on the earnings quality of the listed firms in Nigeria. The control variable, which is the industry variable is not significant for the combined non-financial sectors ($t = -0.772$, $p = 0.440$). It shows no significant relationship with earnings quality

5.1 Discussion of Result

The natural sector shows that earnings quality has a negative and significant relationship with auditor type, corporate leverage and board size. It also reveals a positive and significant relationship with corporate size, corporate age and board meetings with an R squared of 68% and adjusted R squared of 65%. The F ratio of 22.6 is significant with a p-value of 0.000. All the signs were in line with the *apriori* expectation except for auditor type and board size which were expected to be positive but shows negative.

The industrial sector reveals that earnings quality has a negative and significant relationship with corporate leverage and a positive and significant relationship with auditor type and corporate age. There is no relationship between earnings quality and the other variables namely, corporate size, board size and board meeting, with p >0.05. The R squared is 12%, while the adjusted R squared is 11%. The F ratio of 8.8 is significant with a p-value of 0.000.

It was revealed that for the service sector, earnings quality has a negative and significant relationship with auditor type but a positive and significant relationship with corporate size and board size. No significant relationship exists between earnings quality and corporate age, corporate leverage as well as a board meeting. The R squared of 12% and the adjusted R squared of 9.6%. The F ratio (5.006) is significant with a p-value of 0.000.

The combined sectors show that earnings quality is negatively significant with corporate leverage and positively significant with corporate age and board meetings. Other variables (corporate size, auditor type and board size) were not significant, with p > 0.05. R squared was 10%, while adjusted R squared was 9%. The F ratio (10.3) is significant with a p-value of 0.000.

The findings of this study reveal that company leverage has a negative relationship with earnings quality of the natural, industrial and service sectors individually and when combined. They were all significant except in the service sector. The negative relationship is in line with our *apriori* expectation and the findings of Fung & Goodwin, (2013) who assumed that managers tend to manipulate earnings to avoid debt covenant violation and also convince their creditors that they could recover from any financial distress. Company age also shows a positive and significant relationship with earnings quality for all the sampled sectors except the service sector. This assumes that the older the firm, the higher the quality of earnings and the lesser the tendency to manipulate earnings. The result is in line with Jackson *et al* (2013) and Bassiouny *et al* (2016). Company size has a positive and significant relationship with the earnings quality for natural and service sectors only. Auditor type has a positive and significant influence on the industrial sector alone, board size has a positive and significant relationship for the service sector alone, while board meeting has a significant positive effect on natural and combined sectors.

5.0 Conclusion and Recommendations

The study was conducted to ascertain the influence of corporate attributes on the earnings quality of listed non-financial firms in Nigeria. Specifically, the influence of company size, company leverage, company age, auditor type, board size and board meeting on earnings quality was ascertained. Evidence from the study reveals that the two main company characteristics that influence earnings quality are company leverage and company age. Company leverage shows a negative and significant relationship for most sectors while company age shows a positive and significant relationship for others. This implies that highly geared and young firms have greater tendencies for income manipulation. Therefore, auditors and regulatory bodies such as Financial Reporting Council should pay close attention to young and highly geared firms to curb income manipulation practices and enhance earnings quality. Also, the management of firms should adopt proper debt management practices to reduce company gearing, prevent manipulations and engender greater transparency and accountability.

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