Directors Reputation Capital and Auditor Selection Choice of Selected Consumer Goods Firms in Nigeria

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ABSTRACT
This study investigated the effect of Directors reputation capital on auditor selection choice of selected consumer goods firms in Nigeria from (2010-2019). Ex-post facto research design was employed in the study. The population of the study included all manufacturing firms quoted on the Nigerian Stock Exchange (NSE) as at 30th June 2020 with a sample size of Sixteen (16) manufacturing companies purposively selected from the consumer goods sub-sectors. The study relied on secondary sources of data which was obtained from Annual reports of sampled companies as provided by individual companies and Nigerian Stock Exchange (NSE) website. The logit regression analysis was employed in validating the hypotheses. The study found that there is a significant positive effect of directorship human capital reputation on the choice of selecting a Big-4 or non-Big-4 audit firm. Also, that there is a significant positive effect of directorship experience reputation on the choice of selecting a Big-4 or non-Big-4 audit firm. Consequent on the findings, it was recommended amongst others that the personality and traits and experience of individuals to be appointed to corporate boards should be evaluated critically. Hence, Individuals that are considered for directorship role should meet minimum standards in ethical behaviour and requisite experience.

Keywords: Reputation, Audit selection, Directors

1.0 INTRODUCTION
1.1 Background to the Study

The reputational stance of an organization can enable it obtain trust and credibility in the society, which invariably leads to the achievement of its objectives and goals (Roper & Fill, 2012; Baur & Schmitz, 2011; Mahon & Wartick, 2003). At the heart of corporate reputation is the reputation of the board; which is responsible for steering the affairs of the company. Although, management change, financial distress and client sizes may be considered client-related factors; but, audit opinion qualification, audit quality, and change in auditor fees constitute auditor-related factors (Ismail, Aliahmed, Nassir, & Hamid, 2008). Hence, firms generally make a trade-off decision on auditor choice, i.e., hiring high-quality auditors to signal effective monitoring and good corporate governance, or choose lower quality auditors in order to reap the benefits derived from weak corporate governance or less-transparent disclosure (Lin & Liu, 2009a).

Presently, about 2,000 audit firms supply audit services to domestic listed and unlisted companies in Nigeria (World Bank, 2011). However, the market is dominated by the "Big

Four" firms (KPMG Professional Services; Ernst & Young; Deloitte Touche Tohmatsu; & Pricewaterhouse Coopers) which audit about 90 percent of listed firms in Nigeria, while the remaining national firms audit the remaining 10 percent (World Bank, 2004). Against this backdrop, the present study seeks to evaluate the influence directors' reputation capital has on auditor selection choice of quoted manufacturing firms in Nigeria.

1.2 Statement of the Problem

Thus, boards play a crucial role in the auditor selection process (Hay, Knechel, & Ling, 2008; Knechel & Willekens, 2006). Therefore, the decision to select a reputable auditor may be to assure outside investors of the credibility of financial statements and hence mitigate the agency problems (Anderson, Kadous, & Koonce, 2004). The influence of directorship industrial reputation has not been sufficiently investigated in the corporate governance literature in Nigeria. Majority of studies have focused on holistic board information, such as board sizes, etc., without having a disaggregated view of board members peculiarities. The individual attributes of the board members however play crucial role in explaining boardroom decisions. The literature has shown evidence that directorship industrial reputation increases the experience and quality of the directors but not quality of audit selection choice.

Prior studies, such as Akpan and Amran (2014); Ujunwa (2012) in Nigeria have only established a causal relationship between directorship human capital reputation and company's financial performance; others, such as Cheng, Chan, and Leung (2010) in China, show that university degrees held by the board chairman were positively associated with seven measures of performance (EPS, ROA, cumulative returns, cumulative abnormal returns, change in EPS, change in ROA, and market-to-book ratio). But no study had be done as it concerns directorship human capital reputation and audit selection decisions. Hence, the need to evaluate the influence of directorship human capital reputation on auditor selection decisions using the educational level of an individual as surrogate for human capital or intellectual competence (Barro & Lee, 2010; Wailderdsak & Suehiro, 2004).

Finally, the bulk of studies have focused mainly on audit committee membership, a subcommittee of the overall board of directors. Studies have not considered the auditor selection choice and the resource based proponents which posit that directors from different backgrounds bring different experience and expertise to the board. Salawu, Okpanachi, Yahaya, and Dikki (2017), Omoye and Aronmwan (2013).

The study is therefore set out to tackle the issues raised above in order to explore the effect of directorship reputation capital and auditor selection choice of manufacturing firms.

1.3 Objectives of the Study

The main objective of the study is to ascertain the effect of directors' reputation capital and auditor selection choice of quoted manufacturing firms in Nigeria. The specific objectives of the study are to:

1. Ascertain the effect of directorship human capital reputation on the choice of quoted manufacturing firms in Nigeria.
2. Examine the effect of directorship experience reputation on the choice of quoted manufacturing firms in Nigeria.

1.4 Research Questions

The following research questions were addressed in the study:

1. To what extent does directorship human capital reputation affect the choice of quoted manufacturing firms in Nigeria?
2. What magnitude of effect directorship experience reputation has on the choice of quoted manufacturing firms in Nigeria?

1.5 Statement of Hypotheses

The following hypotheses were formulated to guide the study; they are stated in the null form as follows:

1. H_2: There is no significant positive effect of directorship human capital reputation on the choice of quoted manufacturing firms in Nigeria.
2. H_3: There is no significant positive effect of directorship experience reputation on the choice of quoted manufacturing firms in Nigeria.

2.0 REVIEW OF RELATED LITERATURE
2.1 Conceptual Framework
2.1.1 Directors' Reputation Capital

Directors' reputation is a complement of corporate governance; for both are mechanism aimed at reducing agency problems. However, "while corporate governance mechanisms rely upon explicit contracts and external monitoring, reputation-based mechanisms rely upon self-discipline by the agent and repeated interactions between players" (Anginer, Mansi, Warburton, & Yildizhan, 2011). Corporate reputation measures the collective judgment of an organization held by its stakeholders (Brammer & Millington, 2005). According to Fombrun (1996) corporate reputation consists of four characteristics: credibility, reliability, responsibility, and trustworthiness. Argenti and Druckenmiller (2004) view corporate reputation as the 'collective presentation of all participants image, built through time and based on programs of company identity, its performance and perceptions of its behaviour'. Corporate reputation helps a company get good employees, attract consumers, increase consumers' loyalty, and obtain capital (Widerman & Buxel, 2005).

Reputation is the beliefs or opinions that are held about an organisation or an individual (CIPR, 2011). These "beliefs or opinions are formed through expectations (what and how it will deliver and how it will behave), experiences (what it has actually delivered and how it has behaved, which builds trust), the messages people are exposed to and the conversations they participate in or observe" (CIPR, 2011).

2.1.2 Directorship human capital reputation

The human capital reputation of directors plays a crucial role in their strategic choices and ultimate performance. Boards with high accounting and financial qualification have more capability at understanding financial reporting issues (Mustafa, Che Ahmad, & Chandren, 2017).

Graham and Harvey (2002) demonstrated that CFOs with financial background were more likely to use sophisticated methodologies in conducting capital budgeting and/or estimating cost of capital decisions. Ujunwa (2012) found a positive and significant relationship between directors with PhD and company's financial performance in Nigeria using data from 122 listed companies on the Nigerian Stock Exchange from 1991 to 2008. On the other hand, some studies document a negative relationship between level of education and clients demand for high audit quality (Cheng & Leung, 2012).

2.1.3 Directorship experience reputation

The background of a director has a significant influence on the role of the director (Markarian & Parbonetti, 2007). Studies have shown that audit quality is positively related to specialization and industry expertise (Lowensohn, Johnson, Elder, & Davies, 2007). García-Meca and Palacio (2018) investigated the influence of board composition on firm reputation

in Spain. The sample comprised 43 firms included in the MERCO (Spanish Monitor of Corporate Reputation) - ranking of the 100 most reputable firms in Spain from 2004 to 2015. Using multiple regression, the results showed that the proportion of business experts, support specialists, and other community influential had a positive statistically significant effect on corporate reputation. Gray and Nowland (2014) in Australia found that the market reacts to the appointment of directors with business experience increases with the numbers of years of experience and the number of directorships of the director. Francis, Hasan, and Wu (2015) found that the presence of academic directors is associated with higher acquisition performance, higher stock price informativeness and lower discretionary accruals.

2.1.5 Auditor Selection Choice

The external audit plays an important role in the corporate governance process (Abidin, 2006). They play a role in monitoring a firm's financial reporting process (Fan & Wong, 2005; Ashbaugh & Warfield, 2003; Cohen, Kbrishnamoorhy, & Wright, 2002). In Nigeria, the requirement for auditing public limited liability companies is enshrined in the Companies and Allied Matters Act. Specifically, Section 357 (1) of the Companies and Allied Matters' Act (2004) Cap C20, Laws of the Federal Republic of Nigeria states that:

> *"Every company shall at each annual general meeting appoint an auditor or auditors to audit the financial statements of the company and to hold office from the conclusion of that, until the conclusion of the next, annual general meeting".*

The auditor selection choice is a decision where company managers need to assess the marginal benefits and marginal costs in hiring a specific auditor (Okere, Ogundipe, Oyedeji, Eluyela, & Ogundipe, 2018). Shareholders are interested in auditor selection because it affects shareholders wealth (Jubb, 2000). In theory, auditor switch may take different forms, i.e., switching to a smaller auditor or to a larger auditor (Lin & Liu, 2009b). Prior studies have shown that switching to smaller auditors result in a negative response from investors and other market participants. This is opposed to the latter, which results in improved audit quality and decreasing likelihood of earnings management or "tunneling" behaviors (Lin & Liu, 2009b). Using a sample of 183 firms listed on the Karachi Stock Exchange Abid, Shaique, and ul Haq (2018) found no statistically significant difference between earnings management activities of firms audited by Big 4 and non-Big 4 auditors.

2.1.6 Directors' Reputation Capital and Auditor Selection Choice

Sila, Gonzalez, and Hagendorff (2017) find that there is a positive link between directors' reputation incentive and firm transparency. According to Reeb and Roth (2014) reputation reduces the confidence interval around hard (quantifiable) information estimates, thereby increasing creditor reliance on publicly available accounting statements. Reputation builds competitive advantage (Hall, 1993; Fombrun & Shanley, 1990; Weigelt & Camerer, 1988) and improves financial performance (Fernández & Luna, 2007; Roberts & Dowling, 2002). Reputation is one of the key conditions for stakeholders' support for a company in competitive relations. As directors' become increasingly concerned with reputation issues they may seek to employ a high quality auditor in order to stem the pressure of information asymmetry between the principals and agents.

2.2 Theoretical Framework

The study is anchored on the '*resource dependency theory*'. The justification for this theory is premised on the fact that it focused on the service role of boards is the perspective adopted

in the resource dependence (Hillman, Cannella, & Paetzold, 2000; Pfeffer & Salancik, 1978; Pfeffer, 1972).

2.2.1 Resource Dependence Theory (RDT)

RDT was first used in the finance literature by Pfeffer (1973). RDT posits that corporations depend on the environment and other organizations for required resources (Pfeffer & Salanick, 1978). According to RDT a firm is an open social system that depends on the external environment; and, thus organisations' attempt to exert control over their environment by co-opting the resources needed to survive (Pfeffer & Salancik, 1978).

The emphasis of RDT is on a firms' ability to form "links to secure access to critical resources such as capital, customers, suppliers, or cooperative partners" (Randøy, Thomsen, & Oxelheim, 2006). Hillman and Dalziel (2003) outline key resource dependence related contributions of the board, namely: enhancing the legitimacy and public image of the firm; providing expertise; providing advice and counsel; linking the firm to important stakeholders or other important entities; facilitating access to resources; building external relations; and aiding in the formulation of strategy and other important firm decisions.

2.2.2.1 Assumptions of Resource dependency theory:

RDT rests on certain assumptions (Tillquist, King, & Woo, 2002; Medcof, 2001; Ulrich & Barney, 1984):

1. Organisations are composed of internal and external coalitions which emerge from social exchanges that are formed to influence and control behaviour.
2. The environment is assumed to contain scarce and valued resources essential to organisational survival.
3. Organisations are assumed to work toward two related objectives: acquiring control over resources that minimise their dependence on other organisations and control over resources that maximise the dependence of other organisations on themselves.

2.3 Empirical Review

Fredriksson, Kiran, and Niemi (2018) examined the relationship between reputation capital of board of directors and the demand for audit quality in Finland. The study was based on a sample of 940 firm-year observations from listed companies on the Nasdaq OMX Helsinki, over the period 2007-2016. They proxied audit quality in two ways: (1) fees paid to the auditor; and, (2) abnormal working capital accruals. The results showed that both measures of reputation capital (number of directorships directors possess and total compensation that directors earn from their directorships) were positively associated to audit fees, and negatively associated to abnormal working capital accruals.

Hassan, Aljaaidi, Bin Abidin, and Nasser (2018) examined the effect of internal corporate governance mechanisms on audit quality in the Gulf Cooperation Council (GCC) region. The GCC comprise Saudi Arabia, Kuwait, the United Arab Emirates, Qatar, Bahrain, and Oman. The final sample was 109 firms listed on the Stock Exchanges of the members of the GCC from 2006 to 2009. The variable board effectiveness comprised independence, size, financial expertise, meetings, nationality, international experience and CEO duality. The hypotheses were tested using logistic regression. The results showed that board effectiveness had a positive and significant effect on auditor change.

De Nez and da Cunha (2018) examined the influence of board interlocking in audit firm selection in Brazil. This study used a documentary and quantitative design. The sample comprised 235 publicly traded firms in the BM&FBovespa. The data was analysed using descriptive statistics and logistic regression. The results showed that board interlocking had a non-significant negative effect on audit firm selection.

Huang and Kang (2018) investigated the effect of corporate reputation on auditor selection choice using a sample of Fortune 1000 companies. Corporate reputation was measured using the reputation scores from Fortune's "America's Most Admired Companies" list. The data was analysed using multiple regression, Heckman procedures and instrumental-variable two-stage least square regressions. The results demonstrate that corporate reputation is positively related to auditor selection choice, i.e., firms with higher reputations were more likely to hire industry-specialist auditors than their counterparts.

Lu and Cao (2018) examined individual characteristics of board members and internal control weakness in China. The sample comprised Chinese listed firms from 2007 to 2015. The data was analysed using multiple regression. The results showed that individual characteristics of board members such as education, experience, certification, integrity and training were related to internal control deficiencies. Also, the individual characteristics of board chairmen were related to internal control deficiencies.

Nguyen, Nguyen, Locke, and Reddy (2017) investigated the effect of the human capital of directors on financial performance in Vietnam. The final sample comprise of 315 firm-year observations over a four-year period from 2008 to 2011. The study used a dynamic system generalised method of moments (system GMM) estimator to test the hypothesis. The results showed that the human capital of directors has a positive influence on a firm's financial performance (Tobin's Q. ROA, and ROE).

Ghafran and O'Sullivan (2017) investigated the impact of audit committee expertise on audit quality in U.K. The sample comprised FTSE350 companies, and a total of 991 firm-year observations. The sample comprised secondary data between 2007 and 2010. The OLS results showed that audit committees with accounting expertise was non-significant and negative; audit committees with non-accounting expertise was significant and positive. Also audit committee interlocking, represented by additional audit committee seats held in other listed firms had a negative non-significant effect.

Alfraih (2017) investigated the association between board composition and external auditor selection choice in Kuwait. The sample comprised companies listed on the Kuwait Stock Exchange (KSE) in 2013. The proxies for board composition were independence, diversity, interlocks, size and duality. The hypothesis was tested using a logistic regression model. The results show that after controlling for firm-specific characteristics, independence, diversity and size were positive and statistically significant; while, role duality was statistically significant but decreased the likelihood of choosing a Big 4 audit firm.

Salawu, Okpanachi, Yahaya, and Dikki (2017) investigated the effect of audit committee expertise on audit quality in Nigeria. The study used a longitudinal panel research design. The sample comprised 15 manufacturing firms. The study relied on secondary data covering a period of 11 years, from 2006 to 2016. The hypotheses were tested using multiple regression technique. The results showed that audit committee expertise have positive non-significant effect on audit quality.

2.5   Gap in Literature

Three gaps were identified in the study. *Firstly,* the influence of directorship industrial reputation has not been sufficiently investigated in the corporate governance literature in Nigeria. Majority of studies focused on holistic board information, such as board sizes, etc., without having a disaggregated view of board members peculiarties. The literature has shown evidence that directorship industrial reputation increases the experience and quality of the directors.

Secondly, Prior studies, such as Akpan and Amran (2014); Ujunwa (2012) in Nigeria only established a causal relationship between directorship human capital reputation and

company's financial performance; others, such as Cheng, Chan, and Leung (2010) in China, showed that university degrees held by the board chairman were positively associated with seven measures of performance (EPS, ROA, cumulative returns, cumulative abnormal returns, change in EPS, change in ROA, and market-to-book ratio). But no study had been carried out as it concerns directorship human capital reputation and audit selection decisions.
Finally, the bulk of studies have focused mainly on audit committee membership, a subcommittee of the overall board of directors. Studies did not consider *the* auditor selection choice and the resource-based proponents which posit that director from different backgrounds bring different experience and expertise to the board. Salawu, Okpanachi, Yahaya, and Dikki (2017), Omoye and Aronmwan (2013). Hence, the study is therefore set out to breach the gaps identified.

3.0 METHODOLOGY
3.1 Research Design
This deductive study adopted the *ex-post facto* research design. The design is suitable because the researcher is interested in establishing the causal relationship among the dependent and independent variables (Asiriuwa, Aronmwan, Uwuigbe, & Uwuigbe , 2018).

3.2 Population of the Study
The population of the study comprises of quoted manufacturing firms on the Nigerian Stock Exchange (NSE) as at end of 2019 financial year. The number of firms included in the various sectors that constitute the population of the study is shown in the table below:

Table 3.1: Number of firms by sub-sector

S/No	Sector	Number of firms
1	Agriculture	5
2	Conglomerates	5
4	Consumer Goods	16
6	Health Care	10
7	ICT	9
8	Industrial Goods	10
	Total	**55**

Source: The Nigerian Stock Exchange Website (2020)

3.3 Sample Size of the Study
The study was limited to Sixteen (16) companies selected using purposive sampling technique; the decision was premised on the classification of the firms as manufacturing (based on the nature and description of activities) as shown on the Nigerian Stock Exchange (NSE) website. The sample selection criteria are shown in the table below.

Table 3.1: Sample selection

S/No	Sector	Number of firms
4	Consumer Goods	16
	Total	**16**

Source: The Nigerian Stock Exchange Website (2020)

The exclusion of the sectors was consistent with prior studies; firms from the Natural resources and Oil & gas are mainly excluded because of different regulatory environment, and it is also challenging to estimate discretionary accruals for these firms (Abid, Shaique, & Anwar-ul-Haq, 2018; Tsipouridou & Spathis, 2012).

3.4 Source of Data

The data for the study is secondary. Secondary data are information or data that has previously been collected and recorded for other purposes (Blumberg, Cooper, & Schindler, 2008). One of the primary advantages of using secondary data is that analysis time can be saved, however the data are not collected with the researcher's research problem in mind (Blumberg, Cooper, & Schindler, 2008). The data were extracted from the financial statements of the selected companies.

3.5 Reliability of Data

Annual reports are widely used document in secondary data analysis. The reliability of the data was ensured because annual reports are standardized and produced regularly (Buhr, 1998). They are also widely available to a large stakeholder group (Deegan & Rankin, 1996), have a high degree of credibility and reliability due to audit verification (Tilt, 1994).

3.6 Methods of Data Analysis

The study employs several techniques to analyse the data. *First*, descriptive statistics were computed such as the mean, median, standard deviation, minimum, maximum values, and Skewness-Kurtosis statistics, etc. *Secondly*, the correlation matrix was constructed to identify the correlation between the dependent and independent variables. *Thirdly*, multiple regression was used to validate the hypotheses. According to Hair, Black, Babin, Anderson, and Tatham (2006) multiple regression is a 'statistical technique which analyses the relationship between a dependent variable and multiple independent variables by estimating coefficients for the equation on a straight line'. The strength of 'multiple regression models' is its ability to analyze several variables simultaneously (Mussalo, 2015). The goodness of fit of the model was tested using the Coefficient of Determination (R-squared).

The study employed the use of logistic regression. Logistic regression is used for prediction of the probability of occurrence of an event by fitting data to a logistic curve. It is used mostly when the dependent variable has two possible outcomes: Big 4 or non-Big 4.

3.7 Model Specification

The empirical models specified below were tested in order to validate the hypotheses. They can be written econometrically as:

$$Audic_{it} = \eta_0 + \eta_1 DHR_{it} + \eta_2 Size_{it} + \eta_3 Leverage_{it} + \eta_4 Firm\text{-}Age_{it} + \sum\nolimits_t \dots\dots\dots\dots\dots\dots(1)$$

$$Audic_{it} = \eta_0 + \eta_1 DER_{it} + \eta_2 Size_{it} + \eta_3 Leverage_{it} + \eta_4 Firm\text{-}Age_{it} + \sum\nolimits_t \dots\dots\dots\dots\dots\dots(2)$$

Where:

Audic	=	Auditor Selection Choice of Big-4 or Non Big-4 Audit firms.
DHR	=	Directorship human capital reputation
DER	=	Directorship experience reputation
$\sum$	=	Stochastic or disturbance term.
t	=	Time dimension of the Variables
η_0	=	Constant or Intercept.
η_{1-4}	=	Coefficients to be estimated or the Coefficients of slope parameters.

3.8 Description of variables

Table 3.   Variable description and measurement

Variable	Proxy	Description
Directorship human	DHR	Ratio of highly qualified directors to total number

capital reputation		of directors on the board. A director is coded as a highly qualified if he or she obtains a Master or PhD qualification (Nguyen, Nguyen, Locke, & Reddy, 2017).
Directorship experience reputation	DER	The Blau's index is used to calculate the distribution of directors according to their specialisation. It is defined as the difference between 1 and the sum of the squares of the proportion of unit members (directors) d in each category k that composes the group, i.e., three categories (business experts, support specialists, and community influential) (García-Meca & Palacio, 2018). $$\text{Diversity} = 1 - \sum (d_k)^2$$
Dependent Variable		
Auditor Selection Choice	Audic	Auditor choice is a dummy variable which takes the value of 1 when the firm is audited by Big 4 (The "BIG 4" are: PriceWaterhouseCoopers, Deloitte &Touche, KPMG, and Ernst & Young). This proxy is consistent with prior researchers to represent audit quality, as size of audit firm (DeFond& Lennox, 2011; Guy, Ahmed, & Randal, 2010; Sundgren and Svanström, 2013; Kim et al., 2013)
Control Variables		
Firm Size	Size	Log of total assets
Firm Leverage	Leverage	Total long-term liabilities divided by total asset
Firm Age	FA	The number of years since initial listing.
Board Size	BS	The number of Directors sitting in the Board for a particular period.

Source: Researchers Compilation, (2021)

3.9   Decision Rule

The decision rule is based on the sign and significance of the computed *t-statistic* from the regression output. If the p value of the *t statistic* < *.05* (the chosen alpha level) the null hypothesis is rejected; and, the variable is postulated to have a significant effect.

3.10   A Prior Expectations

Dependent variables	Independent/Control variables	A prior Expected sign (+/-)
Audic	DHR, Size, Leverage, Age, Board Size	Significant negative (-)
Audic	DER, Size, Leverage, Age, Board Size	Significant positive (+)

Source: Researchers Empirical review, (2021)

The data analysis prior expectation was considered using only the variables of interest of the three models of the study (DHR and DER).

4.0 DATA PRESENTATION AND ANALYSIS OF RESULTS

4.1 Descriptive Statistics

In this section, the descriptive statistics for both the explanatory and dependent variables of interest are computed. Each variable is examined based on the mean, median, maximum, minimum, and standard deviation. Table 1 below displays the descriptive statistics for the variables of interest in the study.

Table 4.2: Descriptive statistics

	DER	DHR	AUDIT_CHOICE	FIRMSIZE	FIRM_AGE	LEVERAGE
Mean	0.574072	0.219881	0.937500	7.528819	32.18750	3.652051
Median	0.593171	0.207143	1.000000	7.652750	37.00000	1.472400
Maximum	0.652778	0.500000	1.000000	8.683600	55.00000	202.9019
Minimum	0.408163	0.000000	0.000000	5.419500	4.000000	-2.982800
Std. Dev.	0.066582	0.128182	0.243013	0.780901	13.65823	18.27847
Skewness	-1.174226	0.548255	-3.614784	-0.724474	-0.762501	10.34930
Kurtosis	3.675656	2.790855	14.06667	2.965866	2.388702	112.3298
Jarque-Bera	31.84925	6.645748	931.9348	11.20327	14.39635	66034.35
Probability	0.000000	0.036049	0.000000	0.003692	0.000748	0.000000
Sum	73.48117	28.14476	120.0000	963.6888	4120.000	467.4625
Sum Sq. Dev.	0.563013	2.086673	7.500000	77.44532	23691.50	42431.02
Observations	128	128	128	128	128	128

Source: E-Views 9

4.4 Correlation Analysis

In this section, the association between the explanatory and dependent variables of the study are examined using Pearson Correlation Coefficient and the results are presented in the table below. Table 4.3 displays the correlation matrix for the variables of interest in the study.

Table 4.3: Correlation Matrix

Covariance						
Correlation	DER	DHR	AUDIT_CHOICE	FIRMSIZE	FIRM_AGE	LEVERAGE

	DER	DHR	AUDIT_CHOICE	FIRMSIZE	FIRM_AGE	LEVERAGE
DER	0.004399					
	1.000000					
DHR	1.96E-05	0.016302				
	0.002311	1.000000				
AUDIT_CHOICE	-0.002315	0.003326	0.058594			
	-0.144200	0.107612	1.000000			
FIRMSIZE	0.008417	0.015834	0.116554	0.605042		
	0.163162	0.159430	0.619028	1.000000		
FIRM_AGE	0.026796	-0.133312	1.542969	3.236746	185.0898	
	0.029698	-0.076746	0.468533	0.305861	1.000000	
LEVERAGE	0.122224	0.000763	0.178853	-0.915354	8.211891	331.4923
	0.101220	0.000328	0.040582	-0.064634	0.033152	1.000000

Source: E-Views 9

Correlation analysis is used to check for multicolinearity and explore the association between each explanatory variable and the dependent variables. The table above presents the correlation between the Directorship Human Capital Reputation (DHR), and Directorship Experience Reputation (DER) with each of the explanatory variables Firm Size (Log Total assets), Leverage, Board Size and Firm Age. The findings showed that Directorship Reputation Capital variables of DHR, and DER were positively associated with each other. The highest observation was recorded for the correlation coefficient between DER (p=0.607969).

The findings showed that DHR are positively associated with choice of Big-4 or non-Big-4 audit firm among quoted consumer goods companies in Nigeria while DER shows a negative relationship. With regards to the control variables the surrogate for Firm Size (Total asset), Board size, Leverage and Firm age are positively associated with auditor choice.

4.4   Test of Hypotheses

The study employs the binary logistic regression approach to validate the hypothesis. The binary logistic regression approach analyses the coefficients of the independent variables to investigate the probability of occurrence of a dichotomous dependent variable (Li & Liu, 2010). This approach specifically weights the independent variables and creates a score for each company in order to classify it as choice of Big-4 or choice of non-Big-4 audit firm.

4.4.1   Hypothesis One

Ho: There is no significant positive effect of directorship human capital reputation   on the choice of selecting a Big-4 or non-Big-4 audit firm

Table 4.5: Binary Logistic Regression Output for Hypothesis Two
Dependent Variable: AUDIT_CHOICE
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-35.44821	14.31840	-2.475710	0.0133
DHR	103.3379	43.14660	2.395041	0.0166
FirmSize	0.513006	0.555683	0.923200	0.3559
Leverage	0.210469	0.389237	0.540721	0.5887
Board Size	-0.148824	0.637419	-0.233479	0.8154
Firm Age	0.482165	0.187649	2.569505	0.0102
McFadden R-squared	0.755022	Mean dependent var		0.857143
S.D. dependent var	0.350973	S.E. of regression		0.180748
Akaike info criterion	0.272368	Sum squared resid		5.292525
Schwarz criterion	0.383938	Log likelihood		-16.87890
Hannan-Quinn criter.	0.317648	Deviance		33.75780
Restr. Deviance	137.7991	Restr. log likelihood		-68.89954
LR statistic	104.0413	Avg. log likelihood		-0.100470
Prob(LR statistic)	0.000000			
Obs with Dep=0	14	Total obs		128
Obs with Dep=1	114			

Source: E-Views 9

Decision:
The coefficient of DHR is positively related with choice of selecting a Big-4 or non-Big-4 audit firm, and, is also found to be significant. Thus, the null hypothesis is rejected and the alternate accepted. Therefore, there is 'a significant positive effect of directorship human capital reputation on the choice of selecting a Big-4 or non-Big-4 audit firm'.

With regards to the control variables the proxy for firm size and Leverage were positively related to the choice of selecting a Big-4 or non-Big-4 audit firm. However, both relationships were not statistically significant. The variable of Board Size was negative; however, not statistically significant. The variable of Firm Age was positive and statistically significant.

4.4.2 Hypothesis two

Ho: There is no significant positive effect of directorship experience reputation on the choice of selecting a Big-4 or non-Big-4 audit firm

Table 4.6: Binary Logistic Regression Output for Hypothesis Three
Dependent Variable: AUDIT_CHOICE
Method: ML - Binary Logit (Newton-Raphson / Marquardt steps)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-54.39309	15.26638	-3.562933	0.0004
DER	25.31757	10.48836	2.413872	0.0158
FirmSize	1.679497	0.446243	3.763638	0.0002
Leverage	0.393891	0.329477	1.195504	0.2319
Board Size	0.326282	0.513879	0.634940	0.5255
Firm Age	0.074663	0.027751	2.690428	0.0071
McFadden R-squared	0.702904	Mean dependent var		0.857143
S.D. dependent var	0.350973	S.E. of regression		0.203336
Akaike info criterion	0.315116	Sum squared resid		6.697949
Schwarz criterion	0.426686	Log likelihood		-20.46977
Hannan-Quinn criter.	0.360397	Deviance		40.93953
Restr. Deviance	137.7991	Restr. log likelihood		-68.89954
LR statistic	96.85955	Avg. log likelihood		-0.121844
Prob(LR statistic)	0.000000			
Obs with Dep=0	14	Total obs		128
Obs with Dep=1	114			

Source: E-Views 9

Decision:

The coefficient of DER is positively related with choice of selecting a Big-4 or non-Big-4 audit firm, and, is also found to be significant. Thus, the null hypothesis is rejected and the alternate accepted. Therefore, there is 'a significant positive effect of directorship experience reputation on the choice of selecting a Big-4 or non-Big-4 audit firm'.

With regards to the control variables the proxy for firm size and Firm Age were positively related to the choice of selecting a Big-4 or non-Big-4 audit firm. Both control variables were statistically significant @ .01. The other control variables Leverage and Board Size were positive but not statistically significant.

4.5 Discussion of findings

The current study is focussed on ascertaining directors' reputation capital and auditor selection choice of quoted manufacturing firms in Nigeria.

The study revealed a significant positive effect of directorship human capital reputation on the choice of selecting a Big-4 or non-Big-4 audit firm. This conforms to the study prior expectation but slightly varies with regards to nature of significance. Although, this is in line with Kusters (2016) who investigated the impact of professional networks of directors on auditor choice in Netherlands and found that board interlock has a positive significant effect on the choice of an auditing firm.

Finally, the study revealed a significant positive effect of directorship experience reputation on the choice of selecting a Big-4 or non-Big-4 audit firm. This conforms wholly to the study prior expectation and also consistent with Salawu, Okpanachi, Yahaya, and Dikki (2017) who investigated the effect of audit committee expertise on audit quality in Nigeria. The study used a longitudinal panel research design and found that audit committee expertise has positive non-significant effect on audit quality and Alfraih (2017) in Kuwait who found that after controlling for firm-specific characteristics, independence, diversity and size were positive and statistically significant; while, role duality was statistically significant but decreased the likelihood of choosing a Big 4 audit firm.

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS
5.1 Summary of Findings
The empirical results from the data analysis are briefly summarised below as follows:
1. There is a significant positive effect of directorship human capital reputation on the choice of selecting a Big-4 or non-Big-4 audit firm ($p<.05$); and,
2. There is a significant positive effect of directorship experience reputation on the choice of selecting a Big-4 or non-Big-4 audit firm.

5.2 Conclusion
The study was undertaken to investigate the effect of directorship reputation capital on the choice of selecting a Big-4 or non-Big-4 audit firm. Audit firms are broadly categorised as on a Big-4 or non-Big-4 firm. This categorisation followed the demise of Arthur Andersen in the millennia period; and, the merger of Pricewaterhouse and Coopers and Lybrand. These firms compete for clients in the audit market; and, the choice of a particular audit firm is predominantly based on the recommendation of the Board of Directors subject to ratification by the Shareholders. The decision to appoint particular individuals to corporate boards is hinged on several factors; such as experience and reputation, etc. The study utilises three proxies of directorship reputation capital identified from prior literature; i.e., directorship industry reputation, human capital reputation, and experience reputation to examine the influence of these factors on the choice of a Big-4 or non-Big-4 audit firm. The results showed a non-significant negative effect of directorship industry reputation; but, a significant positive effect of directorship human capital reputation and directorship experience reputation on the decision to choose a Big-4 or non-Big-4 audit firm.

5.3 Recommendations
The study makes the following recommendations based on the empirical results revealed above:
1. The personality and traits of individuals to be appointed to corporate boards should be evaluated critically: Individuals that are considered for directorship role should meet minimum standards in ethical behaviour. However ethical issues are usually subjective in nature and companies are advised to draft guidelines and frameworks for assessing individuals based on the corporate vision and mission. The regulatory agencies, such as, SEC, CAC, etc. should also come up with policy frameworks that deal with this often-neglected aspect in corporate governance.
2. The experience of a director is crucial in selecting or appointing individuals to the corporate board: The wider the experience of a director the more likely the director is to offer suggestions based on cumulative knowledge acquired over time; and, therefore the possibility that possible loopholes that may elude particular audit firms based on past

experience are put into consideration in the decision to choose a Big-4 or non-Big-4 audit firm.

5.4   Contribution s to Knowledge

The study has several academic contributions to the literature and more broadly to the corporate board reputation discuss. Firstly, it developed causal links between Directors' reputation and various audit selection choices which can be beneficial to managers in understanding actual effect of board reputation in choosing auditors. It also provides additional evidence from a developing country perspective such as Nigeria.

5.5   Suggestions for Further Studies

The study offers the following suggestions which researchers and policy developers can further explore, as follows: *firstly,* studies should further examine the issue of Directors reputation capital using alternative proxies of reputation capital of directors and more refined models, such as Dynamic Panel Models to account for endogeneity and simultaneity. *Secondly*, future studies may examine other robust proxies for audit selection criteria as peculiar to Nigerian environment in order to fully disintegrate the effect of Directors reputation capital on audit choices.

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APPENDIX I: Computed Variables from sampled companies

Fiscal Year	Total Asset (Millions of US Dollar)	FirmSize	Firm Age	Leverage	Highly qualified		DHR	DER	Audit Choice
2012	5.40650	7.60380	37	1.00390		3	0.4285714	0.40816	1
2013	5.43850	7.63520	38	0.79920		3	0.4285714	0.40816	1
2014	5.24170	7.45970	39	1.49700		3	0.4285714	0.40816	1
2015	5.16940	7.45360	40	1.31310		3	0.4285714	0.40816	1
2016	5.07900	7.45320	41	1.56790		3	0.4285714	0.40816	1
2017	4.96890	7.45370	42	1.42050		3	0.4285714	0.40816	1
2018	4.90200	7.43980	43	1.17160		3	0.4285714	0.40816	1
2019	4.97370	7.45940	44	1.12390		3	0.4285714	0.40816	1
2012	4.63520	6.83250	30	-2.98230		1	0.1250000	0.53125	1
2013	4.76410	6.96080	31	-2.98280		1	0.1250000	0.53125	1
2014	4.76390	6.98190	32	0.63400		1	0.1250000	0.53125	1
2015	4.72990	7.01410	33	0.45040		1	0.1250000	0.53125	1
2016	4.62410	6.99830	34	0.29860		1	0.1250000	0.53125	1
2017	4.51910	7.00380	35	0.24010		1	0.1250000	0.53125	1
2018	4.48280	7.02070	36	0.32150		1	0.1250000	0.53125	1
2019	4.55490	7.04070	37	0.36720		1	0.1250000	0.53125	1
2012	5.72160	7.91890	6	0.79290		2	0.2222222	0.56790	1
2013	5.72320	7.91990	7	0.77020		2	0.2222222	0.56790	1
2014	5.74950	7.96760	8	0.80500		2	0.2222222	0.56790	1
2015	5.72700	8.01130	9	0.76490		2	0.2222222	0.56790	1
2016	5.87720	8.25140	10	1.69650		2	0.2222222	0.56790	1

2017	5.80550	8.29020	11	1.10360	2	0.222222	0.5679	1
2018	5.70550	8.24330	12	0.76930	2	0.222222	0.5679	1
2019	5.80140	8.28710	13	0.79130	2	0.222222	0.5679	1
2012	6.16980	8.36710	34	1.82800	3	0.214285	0.6428	1
2013	6.25080	8.44750	35	2.34050	3	0.214285	0.6428	1
2014	6.25510	8.47310	36	2.55730	3	0.214285	0.6428	1
2015	6.25090	8.53510	37	3.06450	3	0.214285	0.6428	1
2016	6.16410	8.53830	38	2.60620	3	0.214285	0.6428	1
2017	6.19890	8.68360	39	3.70630	3	0.214285	0.6428	1
2018	6.07320	8.61100	40	1.71120	3	0.214285	0.6428	1
2019	6.13420	8.62000	41	1.76090	3	0.214285	0.6428	1
2012	5.82810	8.02530	48	1.74550	2	0.166666	0.6527	1
2013	5.88630	8.08300	49	1.62950	2	0.166666	0.6527	1
2014	5.90360	8.12170	50	1.93660	2	0.166666	0.6527	1
2015	5.80300	8.08720	51	1.52880	2	0.166666	0.6527	1
2016	5.76250	8.13670	52	2.28830	2	0.166666	0.6527	1
2017	5.67970	8.16450	53	2.40070	2	0.166666	0.6527	1
2018	5.64760	8.18540	54	0.07500	2	0.166666	0.6527	1
2019	5.72050	8.20630	55	0.80540	2	0.166666	0.6527	1
2012	5.45540	7.65260	4	1.67460	2	0.222222	0.5679	1
2013	5.54710	7.74380	5	1.98800	2	0.222222	0.5679	1
2014	5.58700	7.80500	6	2.09780	2	0.222222	0.5679	1
2015	5.54790	7.83210	7	2.34440	2	0.222222	0.5679	1
2016	5.50690	7.88110	8	3.64760	2	0.222222	0.5679	1

2017	5.56890	8.05370	9	1.16210	2	0.2222222	0.56790	1
2018	5.55850	8.09630	10	1.21370	2	0.2222222	0.56790	1
2019	5.65260	8.13830	11	1.42650	2	0.2222222	0.56790	1
2012	4.96270	7.15990	18	10.09460	4	0.5000000	0.59375	1
2013	5.16570	7.36240	19	1.45590	4	0.5000000	0.59375	1
2014	5.16890	7.38690	20	1.16240	4	0.5000000	0.59375	1
2015	5.19540	7.47960	21	1.47950	4	0.5000000	0.59375	1
2016	5.15060	7.52480	22	1.39200	4	0.5000000	0.59375	1
2017	5.16810	7.65290	23	2.23970	4	0.5000000	0.59375	1
2018	5.95390	8.49180	24	7.82450	4	0.5000000	0.59375	1
2019	6.07670	8.56250	25	47.92300	4	0.5000000	0.59375	1
2012	3.22220	5.41950	4	0.51670	1	0.1666667	0.61111	0
2013	3.30990	5.50660	5	0.69420	1	0.1666667	0.61111	0
2014	3.35980	5.57780	6	0.70430	1	0.1666667	0.61111	0
2015	3.33920	5.62340	7	0.61310	1	0.1666667	0.61111	0
2016	3.30260	5.67680	8	0.57560	1	0.1666667	0.61111	0
2017	3.24710	5.73180	9	0.65520	1	0.1666667	0.61111	0
2018	3.37900	5.91680	10	1.47840	1	0.1666667	0.61111	0
2019	3.37310	5.85890	11	1.08570	1	0.1666667	0.61111	0
2012	4.83170	7.02900	21	0.62510	2	0.2000000	0.54000	1
2013	4.86140	7.05810	22	0.65850	2	0.2000000	0.54000	1
2014	4.88080	7.09880	23	0.99070	2	0.2000000	0.54000	1
2015	4.92780	7.21200	24	1.29890	2	0.2000000	0.54000	1
2016	5.01680	7.39100	25	2.05770	2	0.2000000	0.54000	1

2017	4.99420	7.47890	26	1.61140	2	0.2000000	0.54000	1
2018	4.94320	7.48100	27	1.54510	2	0.2000000	0.54000	1
2019	5.10160	7.58740	28	2.48700	2	0.2000000	0.54000	1
2012	5.75190	7.94920	34	1.60240	1	0.0588235	0.60208	1
2013	5.83750	8.03430	35	1.66560	1	0.0588235	0.60208	1
2014	5.80760	8.02560	36	1.95110	1	0.0588235	0.60208	1
2015	5.79210	8.07630	37	2.13670	1	0.0588235	0.60208	1
2016	5.85520	8.22940	38	4.49210	1	0.0588235	0.60208	1
2017	5.68200	8.16670	39	2.27120	1	0.0588235	0.60208	1
2018	5.67260	8.21040	40	2.23240	1	0.0588235	0.60208	1
2019	5.80070	8.28640	41	3.24460	1	0.0588235	0.60208	1
2012	6.20690	8.40420	40	1.71420	2	0.1333333	0.55111	1
2013	6.20600	8.40270	41	1.24960	2	0.1333333	0.55111	1
2014	6.32510	8.54310	42	1.03080	2	0.1333333	0.55111	1
2015	6.26750	8.55170	43	1.06720	2	0.1333333	0.55111	1
2016	6.19060	8.56480	44	1.21290	2	0.1333333	0.55111	1
2017	6.09760	8.58230	45	1.14380	2	0.1333333	0.55111	1
2018	6.05130	8.58910	46	1.32730	2	0.1333333	0.55111	1
2019	6.09720	8.58290	47	1.28180	2	0.1333333	0.55111	1
2012	4.13860	6.33590	34	5.04320	0	0.0000000	0.44444	1
2013	4.14640	6.34310	35	0.86110	0	0.0000000	0.44444	1
2014	4.27110	6.48910	36	1.48390	0	0.0000000	0.44444	1
2015	4.41670	6.70090	37	2.84690	0	0.0000000	0.44444	1
2016	4.28280	6.65700	38	2.21830	0	0.0000000	0.44444	1

2017	4.28070	6.76540	39	3.08280	0	0.000000	0.44444	1
2018	4.12270	6.66050	40	2.21410	0	0.000000	0.44444	1
2019	4.15590	6.64160	41	2.70650	0	0.000000	0.44444	1
2012	4.32880	6.52610	35	1.46640	2	0.1333333	0.64000	1
2013	4.36240	6.55910	36	1.25660	2	0.1333333	0.64000	1
2014	4.29610	6.51410	37	0.84150	2	0.1333333	0.64000	1
2015	4.32990	6.61410	38	202.90190	2	0.1333333	0.64000	1
2016	4.22070	6.59490	39	0.16510	2	0.1333333	0.64000	1
2017	4.15250	6.63720	40	2.49910	2	0.1333333	0.64000	1
2018	4.23430	6.77210	41	4.03950	2	0.1333333	0.64000	1
2019	4.21260	6.69840	42	3.33900	2	0.1333333	0.64000	1
2012	5.61170	7.80890	39	0.52620	3	0.2500000	0.61111	1
2013	5.66240	7.85910	40	0.58620	3	0.2500000	0.61111	1
2014	5.63300	7.85100	41	0.63730	3	0.2500000	0.61111	1
2015	5.54440	7.82860	42	0.62630	3	0.2500000	0.61111	1
2016	5.49760	7.87170	43	0.71490	3	0.2500000	0.61111	1
2017	5.46990	7.95470	44	0.99580	3	0.2500000	0.61111	1
2018	5.40970	7.94750	45	0.96450	3	0.2500000	0.61111	1
2019	5.41700	7.90270	46	0.74720	3	0.2500000	0.61111	1
2012	5.36500	7.56230	40	1.86760	3	0.3333333	0.59259	1
2013	5.44430	7.64100	41	3.53900	3	0.3333333	0.59259	1
2014	5.44230	7.66030	42	5.11540	3	0.3333333	0.59259	1
2015	5.41630	7.70050	43	5.26900	3	0.3333333	0.59259	1
2016	5.48610	7.86030	44	5.20120	3	0.3333333	0.59259	1

2017	5.59840	8.08310	45	0.59510	3	0.333333 3	0.5925 9	1
2018	5.58220	8.12010	46	0.59250	3	0.333333 3	0.5925 9	1
2019	5.53000	8.01570	47	0.55840	3	0.333333 3	0.5925 9	1
2012	4.82070	7.01800	35	2.38020	4	0.363636 4	0.6281 0	1
2013	4.80160	6.99830	36	2.20290	4	0.363636 4	0.6281 0	1
2014	4.86050	7.07850	37	2.95530	4	0.363636 4	0.6281 0	1
2015	4.87700	7.16120	38	2.12740	4	0.363636 4	0.6281 0	1
2016	4.75110	7.12530	39	2.80380	4	0.363636 4	0.6281 0	1
2017	4.64270	7.12750	40	2.97520	4	0.363636 4	0.6281 0	1
2018	4.66730	7.20510	41	3.13010	4	0.363636 4	0.6281 0	1
2019	4.65480	7.14060	42	1.31530	4	0.363636 4	0.6281 0	1

Source: Annual Reports of sampled companies, (2012-2019)