



**BOARD CHARACTERISTICS AND FIRM PERFORMANCE OF SELECTED INSURANCE COMPANIES LISTED IN NIGERIAN EXCHANGE GROUP: A DUAL-MODEL APPROACH**

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**ABSTRACT:**

*Firms are expected to operate within acceptable standards of corporate governance for consistent profitable operations. Since adherence to governance practices is critical to winning and retaining customers' confidence and patronage, the imperative for good governance practices as can be demonstrated in the composition of the boards cannot be overemphasized. Against this background, this study investigates the effect of board characteristics on financial performance of quoted Insurance companies in Nigeria from 2012-2020. The specific objectives are to find out how Board Size and Board Nationality Diversity affect financial performance using a bi-model analysis involving Tobin Q and return on asset (ROA) as response variables. Firm Size and Leverage Ratio were used as control variables. The population of the study is the same as the sample size comprising Twenty-two (22) Insurance companies in Nigeria. The data were analysed with the aid of random regression method. The results show that Board Size has insignificant positive effect on Tobin Q, but a significant positive effect on ROA, while, Board Nationality Diversity has a significant negative effect on Tobin Q, but an insignificant positive effect on ROA. The study recommends that Nigerian Insurance companies with large board should measure their performance with ROA, while, those companies with board of diverse nationalities should estimate their financial performance with Tobin Q*

**Key words:** *Board Characteristics, Board Nationality Diversity, Board Size, Financial Performance, Return on Asset, Tobin Q.*

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**1. INTRODUCTION**

One of the most influential bodies in corporate decision-making, the board of directors is responsible for everything from approving capital structure changes and mergers and acquisitions to the difficult task of selecting the company's top executives. Best corporate governance, which specifies the distribution of rights and responsibilities among various participants such as board members, management staff, shareholders, and other stakeholders in the corporation, must be continuously recognized by every organization (Adesanmi et al.,2019).According to Boussaada and Karmani (2015), managers frequently have their own interests and incentives when it comes to managing earnings and potentially misleading stockholders, so boards are responsible for



monitoring the quality of information in financial reports. The requirement for board members from diverse backgrounds is also supported by Nigeria's code of corporate governance. According to Nwaorgu & Iormbagah (2002), individuals of any religion, cultural background, educational level, or nationality are eligible to serve on the board of directors of any listed company in Nigeria. Any business's board characteristics and financial performance are essential for determining how effectively resources are utilized and maintaining investor confidence. This study takes into account the size and diversity of nationalities on the board.

The term "board size" refers to the number of directors appointed to a company's board of directors; there is no legal requirement for a predetermined number of directors. According to Section 2.1 of the Nigerian Code of Corporate Governance (2018), the Board should be large enough to carry out its duties effectively; to oversee, monitor, direct, and control the company's activities and to have an understanding of the company's scale and complexity. However, section 5.4 of the 2016 Nigerian code of corporate governance stipulates that quoted companies, banks, and other financial institutions in Nigeria should have at least eight members on their boards. Board Nationality Diversity is the percentage of directors who are not citizens of the country where the business is based. Access to capital on international capital markets and gaining international market shares are just two of the many obstacles that come with business globalization, particularly for businesses that engage in cross-border trade. Ruigrok and co.2007) assert that in order for businesses to cope with global competition for market share control and cross-border investment decisions, they must employ board members with international experience and connections. Return on assets (ROA) play a significant role in explaining businesses' profitability-based financial performance. It is a ratio of its total assets to its income for comparative proposals. It measures an organization's management's capacity to utilize company assets to generate revenue. Return on Assets, or ROA, is a financial statement metric that tells people how well a company uses its assets to make money. A company's performance is reflected in its ROA. For instance, a rising ROA may initially appear to be positive, but when compared to other businesses in the same industry or the industry average (Siminica et al.,2012).The economic theory of investment behavior known as Tobin Q measures a business's performance in terms of value added. Ishaq and others2021), explain that the "Q" is the ratio of the cost of replacing all tangible assets to the market value of the outstanding shares. Because it promotes socio-economic activities through risk transfer, indemnification for businesses and individuals, and the mobilization of long-term funds, the insurance subsector is crucial to any nation's economic development. Bello and Ene, 2016).The Insurance Act of 2003 in Nigeria mandates the creation of the National Insurance Commission (NAICOM) as the country's highest insurance regulator. The audit and publication of financial statements are two of many provisions for the industry that are included in the Act.

The empirical results on this topic have been largely mixed, and the existing literature has demonstrated that scholars remain divided regarding the precise relationship between board characteristics and firms' financial performance. Take, for instance, the time when Okolie and UwajeyanIronkwe and Benvolio in 2022; Eluyela and others Sanni et al. (2020) report that Board Size has a significant impact on financial performance2020); Pervun and Rashid (2019);Joshua et al. (2019) note that the size of the board has little effect on financial performance. Similarly, Iormbagah and Nwaorgu (2021);In 2021, Ilaboya and Ashakofe Ogboi and co.2018) discover a negligible connection between financial performance and Board Nationality Diversity; Nevertheless, EmadEldeen et al.2021); Khidmat and co.2020);Abu and others, Board Nationality Diversity has a statistically significant impact on financial performance, according to a 2016) report. As a result, the study's mixed results suggest a need for additional writing.

In addition, documents from the Nigerian Exchange Group (2022) indicate that the insurance subsector has experienced more delisting (including mergers and acquisitions) than the banking subsector since Nigeria's adoption of the International Financial Reporting Standard (IFRS) in 2012.



Some of these delistings were the result of poor performance or violations of regulatory requirements. For instance, only Diamond bank and Skye bank have been delisted from the Stock Exchange since the adoption of (IFRS) in 2012 because of their mergers with Access bank and regulatory sanctions respectively. In 2019 however, additional insurance companies have been delisted. For instance, Acen insurance plc was taken off the stock exchange in 2012 as a result of regulatory sanctions, while Confidence insurance plc lost its license. Custodian and Allied insurance Plc and Crusader insurance merged in 2013. Oasis insurance Plc was purchased by First Bank Nigeria life Assurance Plc, and Great Nigeria insurance Plc and Continental Reinsurance Plc voluntarily delisted between 2019 and 2020. Therefore, regular studies must investigate the factors that led to this delisting and mergers and acquisitions in the insurance subsector of the Nigerian economy, highlighting the significance of this study.

### **1.2 Objectives of the Study**

The broad objective of this study is to evaluate the effect Board Characteristics on Firm Performance of quoted Nigerian insurance companies, while the specific objectives are to:

- i. determine the effect of Board Size on Financial Performance of Insurance Companies in Nigeria.
- ii. investigate the effect of Board Nationality Diversity on Financial Performance of insurance companies in Nigeria.

### **1.3 Research Hypotheses**

For the purpose of achieving the stated objectives, the following null hypotheses were developed.

Ho<sub>1</sub>: Board Size has no significant effect on Financial Performance of Insurance Companies in Nigeria;

Ho<sub>2</sub>: Board Nationality Diversity shows no significant effect on Financial Performance of Insurance Companies in Nigeria.

## **2. LITERATURE REVIEW**

### **2.1 Conceptual Review**

The conceptual review of this study comprises the concept of the independent variable Board Characteristics proxied by Board Size (BS), Board Independence (BI) Board Gender Diversity (BGD), Board Nationality Diversity (BND), Board Financial Expertise (BFE) and the dependent variable Financial Performance measured by Return on Asset (ROA) and Tobin q (TBQ).

#### **2.1.1 Board Characteristics**

Size, independence, diligence, diversity (age, gender, nationality, expertise, educational/functional background, and committee structure) are some of the board's characteristics (Qader & Yusoff, 2020). The board's administrative responsibilities include overseeing and monitoring the financial reporting process, and they meet regularly with the company's accountants and external auditors to review the internal control system, audit procedures, and financial statements with the goal of improving the company's performance (Anderson et al., 2004). According to Akeju and Babatunde (2017), an organization's financial reporting quality is enhanced by a board characteristic, an internal corporate governance mechanism. According to Kankanamage (2015), one of the most important components of corporate governance mechanisms that play a significant role in improving the quality of financial reporting is board characteristics. Board Size and Nationality Diversity are considered to be Board Characteristics for the purpose of this investigation.

#### **2.1.2 Board Size and Firm Performance**

The number of directors on a company's board of directors during an accounting year is known as its "board size." It demonstrates the board's ability to effectively monitor companies' performance. The number of people on a company's board of directors is referred to as its board size. According to the 2016 Nigerian code of corporate governance, a board must have a sufficient number of members to



carry out the necessary monitoring responsibilities. According to Adams and Mehran (2012), businesses with a large board of directors guarantee better performance. Andres and Vallelado (2008) found that larger boards were more effective at monitoring and creating more value for a company. They also found that the larger the board, the greater the knowledge of the various members, which can improve performance and exercise effective control. Ammari and others (2014) assert that a board with a large number of directors gives enough people to manage the board's work load more easily because members share responsibility for better performance.

### **2.1.3 Board National Diversity and Firm Performance**

The diverse nationalities of a company's board of directors are referred to as "board nationality diversity." Nwaorgu and Iormbagah (2021) highlight the fact that a company's inclusion of foreign directors on the board, which will entice investors, also sends a message to stakeholders regarding the company's willingness to expand into new markets and increase global business investment; lenders and equity providers willing to support the company's investment decisions. As a result of differences in culture, knowledge, experience, expertise, and the capacity to better control and monitor agents and reduce agency costs, diversity of nationality among directors will improve company performance (Kim & Lin, 2010). Ntim (2015) report a beneficial outcome on the monetary execution of firms having worldwide chiefs on their board. Nationality diversity has a positive effect on company performance, according to Ujunwa (2012). Companies gain a competitive advantage when foreign nationals join because they can network internationally, protect shareholders' interests, and avoid management entrenchment (Darmadi, 2011).

### **2.1.4 Firm Performance**

According to Nuryaman (2012), performance is a description of the level of achievement of the implementation of activities, programs, and policies in realizing the goals, purpose, mission, and vision of the establishments as stated in the formulation and long-term schemes (strategic planning) of an institution. In general, performance is the achievement that firms can achieve in a given period. According to Khanchel (2008), the process of measuring efficacy measures can be used to explain measurement performance. Any organization's activities' effectiveness and efficiency could be viewed as a performance measurement of the company's or firm's performance. According to Adediran and Alade (2013), the concept of corporate performance aims to establish a set of financial and non-financial measures through which a company can effectively track its performance and control its activities. Return on asset (ROA) and Tobin Q are used in this study to measure a company's performance. ROA is a more accurate indicator of a company's capacity to generate returns on its asset portfolio. ROA indicates how effectively management uses its assets to generate profits. According to Akani and Akani (2018), a company's ROA is its capacity to use its assets effectively and efficiently to generate a positive return. A higher ratio indicates how effectively management uses its funds in a cost-effective and efficient manner. According to Wolfe & Sauaia (2003), Tobin q is the ratio that represents the company's value from an investor's perspective between the market value of its assets and the replacement value of those assets. Ishaq and others (2021) explain that the "Q" is the ratio of the market value of the existing shares to the replacement cost of the total physical assets. Tobin Q is an economic theory of investment behavior that measures the performance of a business firm.

## **2.2 Theoretical Review**

**2.2.1 Resource Dependency Theory:** The resource dependence theory was developed by the American business theorist Pfeffer and an American organizational theorist Salancik in the year of 1978 at the Stanford University. Resource dependency theorists asserts that the theory focuses on the role that directors play in providing or securing essential resources to an organization through their linkages to the external environment. Indeed, Johnson (1995) concurs that resource dependency theorists provide focus on the appointment of representatives of independent organizations as a means for gaining access in resources critical to firm success For example, outside directors who are



partners to a law firm provide legal advice, either in board meetings or in private communication with the firm executives that may otherwise be more costly for the firm to secure. It has been argued that the provision of resources enhances organizational functioning, firm's performance and its survival (Daily *et al.*, 2003). The Resource Dependence theory was chosen to anchor this study because according to Hillman *et al.* (2009), the directors bring resources to the firm; such as information, skills, access to key constituents such as suppliers, buyers, public policy-makers, social groups as well as legitimacy. (Zehir *et al.*, 2019; Hillman *et al.*, 2009; Pfeffer, 2005).

### **2.3 Empirical Review**

Benvolio and Ironkwe (2022) look at how board compositions affect a company's performance with a focus on the Nigerian banking subsector. A total of fourteen (14) quoted commercial banks in Nigeria were included in the study's sample for eleven (11) fiscal years, from 2011 to 2021. They only used two independent variables, board composition (board size and board independence), to measure performance: the market value of shares. Using fixed effect regression, the result demonstrates that board independence is positive but non-significant while board size has a significant negative effect on firm value. A higher proportion of independent directors should strongly adhere to established corporate governance principles, according to the study.

Mohammed and Kurawa (2021) look into how board characteristics affect the value of Nigeria's listed insurance companies. The study used secondary data from fifteen (15) of twenty-seven insurance companies from 2009 to 2018 (ten fiscal years). They used Market Price per Share and Tobin's Q as dual market performance measures. Using panel regression, they found that while board size has a negative significant relationship with firm value, board gender diversity has no negative significant relationship. According to the NAICOM code of corporate governance, the study suggests that investors should pay more attention to businesses with a large number of directors.

Nwaorgu and Iormbagah (2021) investigate the impact of diversity on the financial performance of Nigerian listed companies. The study used multiple regression analysis to analyze data gathered from the financial statements of the selected companies that were listed on the Nigerian stock exchange between 2014 and 2018. The study used an ex-post facto research design and a content analysis approach to specific variables. Gender diversity had no significant impact on the leverage ratio, a performance measure for listed companies, and educational diversity and nationality diversity also had no significant impact on the leverage ratio. According to the study, businesses should hire board members who are creative as a result of their educational diversity because doing so will give the board the human resources it needs to find the best financing option for better financial performance.

Oyedokun (2019) investigates the relationship between the characteristics of the board and the financial performance of Nigerian financial institutions from 2013 to 2017. The ex-post facto research methodology was used. Size, independence, gender diversity, and board meetings are some of the used board characteristics. Information were removed from the yearly reports of the cited business banks. The data were analyzed using random effect panel regression. The finding demonstrates that the characteristics of the board have a significant impact on the financial performance of Nigeria's quoted commercial banks. Board size has a negligible impact on financial performance, while board independence has a negligible impact on financial performance. In particular, board gender diversity has a significant positive effect, and board meetings have a significant negative effect on board characteristic. The study suggests that Nigerian commercial bank regulators should increase surveillance and supervision to ensure proper overall risk management, which could safeguard the interests of all stakeholders and improve bank reputations.

In a developing economy, Osiregbmhe (2017) looks into how ethnic diversity and board nationality affect a company's profitability and growth. ROA, ROE, and Tobin's Q were utilized as financial



performance indicators in the study. The ordinary least squares regression method was used to analyze data from 60 companies with periodic observations between 2012 and 2015. The sample included sixty businesses. According to Tobin's Q, the results show that board nationality and ethnic diversity have little impact on firms' growth and profitability (ROA and ROE) performance levels. Since there is no significant impact on financial-based performance, the study recommends a diverse board unless the costs exceed the benefits.

Athalia and Sidharta (2016) look at how board characteristics affect a company's performance. This study examines 293 companies that were listed on the Indonesian Stock Exchange between 2008 and 2012 using fixed effects data panel regression. Tobin's Q, a market measure, and ROA, an accounting measure, serve as proxies for a company's performance. The results showed that while the proportion of independent directors can boost both Tobin's Q and ROA, the proportion of family commissioners and family directors only has a positive effect on the Tobin's Q value. The study also reveals that board size has a U-shaped non-linear relationship with firm performance as proxied by Tobin's Q and ROA, and that the proportion of ex-government officers on the board has no effect on performance. The study suggests conducting additional research to learn more about the independent commissioner, who is either an employee or a member of the management staff of other businesses that make up a business group.

Garba and Abubakar (2014) investigate the connection between insurance company financial performance and board diversity in Nigeria. They focus on how insurance companies listed on the Nigerian Stock Exchange's financial performance is affected by gender diversity, ethnic diversity, board size, board composition, and foreign directorship. The non-probability sampling method of availability sampling was used to select 12 listed insurance companies for this study over a six-year period, from 2004 to 2009. Gender diversity and foreign directors have a positive impact on insurance company performance, according to this study's findings, which employ Feasible Generalized Least Squares (FGLS) and random effects estimators as well as Return on Asset (ROA), Return on Equity (ROE), and Tobin's Q as measures of firm performance. Insurance companies in Nigeria's performance are also negatively correlated with board composition, according to the findings. The study suggests that management should keep the numbers as low as possible for improved performance because ethnic diversity, family directors, and board size have no significant impact on insurance companies' performance.

## **2.4 Gap in the Literature**

The gap this study fills in literature is the environmental gap that flows from the reviewed literature as this is the first study on Board Characteristics and Financial Performance of Insurance Companies in Nigeria in 2022. The 2022 Nigerian studies such as Benvolio and Ironkwe (2022) and Onyekwere and Babangida (2022) were on banks while Okolie and Uwajeyan (2022) did on all firms. The only study carried out on Insurance companies was that of Osuman and Samontaray (2022) conducted on Saudi Arabian insurance firms and not in Nigeria. This study fills that yawning gap.

## **3. MATERIAL AND METHOD**

Because the events under investigation have already occurred, this study employs the ex-post facto research design. The 22 insurance companies in Nigeria that were quoted on the Nigerian Exchange Group between 2012 and 2020 make up the study's population. This study's sample size includes all 22 Nigerian insurance companies (see appendix). This study embraces the Evaluation Inspecting method which is utilized when every one of the components of the populace are taken for assessment. The study's secondary data came from the financial reports of the various insurance companies included in the sample from 2012 to 2020. In this case, the data were not normally distributed and the residuals did not have a constant variance, so the model estimation was carried out using robust regression (Kutner *et al.*, 2004).



Variable Measurement and Justification

Table 1 Variable measurement and Justification

Table with 4 columns: Variable, Type, Measurements, Justification. Rows include Return on Asset, Tobins'Q (TBQ), Board Size (BS), and Board Nationality Diversity (BND).

Source: Researcher's Compilation, 2022.

This study adopts a dual-model approach for the purpose of clear presentation and understanding. The first model captures the effect of board characteristics on financial performance measured by Tobin Q, while the second model deals with the effect of board characteristics on financial performance measured by Return on Asset.

The first model which has Tobin Q as the measure of Financial Performance is linearly specified as used by Okoye et al. (2020) thus:

TBQ = f(BS + BND).

Representing this relationship in an econometric form, it becomes:

TBQit = beta\_0 + beta\_1BSit + beta\_2BNDit + mit..... Model I.

Model II. The second model which has Return on Asset as the measure of Financial Performance is linearly specified as follows.

ROA = f(BS + BND).

In econometric terms, the above relationship was represented as:

ROAit = beta\_0 + beta\_1BSit + beta\_4BNDit + mit.....Model II.

Where:

TBQ = a predictor for Tobin Q (Dependent variable for Model I);

ROA = a predictor for Return on Asset (Dependent variable for Model II)

beta\_0 = Coefficient of the constant

beta\_1 - beta\_2 = Coefficients of the proxies of the Independent variable;

BS = a predictor for Board Size;

BND = a predictor for Board Nationality Diversity;

i = represents Firms;

t = represents Time/period

mu = represents Error term (effect of omitted variables);

f = denotes functional relationship between the independent and dependent variables.

4. RESULT AND DISCUSSIONS

4.1 Descriptive Analysis

The descriptive statistics that summarizes the dataset of this study is shown below.



Table 2 Descriptive Statistics

variables	Obs	Mean	Std. Dev.	Min	Max
TBQ	198	.9714	.8364	.261	5.791
ROA	198	.0158	.1038	-.692	.432
BS	198	9.2929	2.6534	4	19
BND	198	.0940	.1596	0	.75

Source: STATA 13 software output (2022).

Table 2 above shows that the performance evaluation of the Insurance companies in Nigeria using Tobin Q was higher with a mean value of 0.9714 compared to using ROA with the mean performance of 0.0158. However the standard deviation of Return on Asset (0.1034) was higher than its mean (0.0158), while the standard deviation of TBQ (0.8364) was lower than its mean (0.9714) indicating that they had different pattern of spread around their means. ROA deviates more from the central mean. Table 2 also reveals that Board size has a standard deviation of 2.6534 that is lower than its mean (9.2929) suggesting that the variable had a slower increase in values, while, Board Nationality Diversity has a standard deviation of 0.1596 which is higher than its mean of 0.0940, indicating that BND had a faster positive increase in values during the period covered by this study.

4.2 Correlation Matrix

Table 3 below presents the Pearson Correlation coefficients for the purpose of determining the presence of multicollinearity among the independent variables. The decision rule is to accept the presence of multicollinearity if a pair or more of independent variables correlate above 0.85, or reject it if no pair of the independent variables correlates above 0.85 (Hair et al., 2005).

Table3 Pearson Correlation Matrix

	TBQ	ROA	BSZ	BND
TBQ	1.0000			
ROA	-0.6181	1.0000		
BSZ	-0.2105	0.0937	1.0000	
BND	-0.1586	0.0753	0.1680	1.0000

Source: STATA 13 Software output (2022).

Table 3 above reveals that both Board Size and Board nationality diversity correlate negatively with Tobin Q at 21% and 16% respectively, which imply that the variables reduce performance if measured by Tobin Q. The correlation of board size and board nationality diversity with ROA was weakly positive at 9% and 8% respectively. This result suggests that based on the decision rule, there is no multicollinearity in the models.

4.3 Data Normality Test

Table 4 below shows the result of the data normality test to reveal the normality of the model residuals. The decision is that any variable with a p-value higher than 0.05 is normally distributed around its central mean, while any variable with a p-value lower than or equals to 0.05 is not normally distributed around its mean.





Table 4 Data Normality Test

Variable	Obs	W	V	z	Prob>z
TBQ	198	0.444	82.146	10.138	0.000
ROA	198	0.692	45.556	8.782	0.000
BSZ	198	0.968	4.723	3.570	0.000
BND	198	0.785	31.862	7.960	0.000

Source: STATA 13 software output (2022).

Table 4 above reveals that none of the variables has a p-value higher than 0.05 as they are significant at 1% indicating that, the residuals were not normally distributed. The abnormal distribution of the residual variance could be due to the presence of outliers (Fernandes et al., 2019). The implication of this abnormal distribution is that the models cannot be estimated by ordinary least square regression method as one of the basic assumptions of least square regression which require normality of data has been violated. The estimation technique for this study is the robust regression which is insensitive to the presence of outlying observations and therefore less susceptible to be influenced.

4.3.1 Heteroskedasticity Test for Residual Variance Stability

Table 5 belows present the results of the heteroskedasticity tests for the two models using the fitted values TBQ and ROA. The decision rule is that any model with a p-value lower than or equals to 0.05 has no constant residual variance (heteroskedal), while a model with a p-value higher than 0.05 has constant residual variance (homoskedal).

Table 5 Heteroskedasticity Tests

Model I (TBQ)	Model II (ROA)
Chi2(1) = 63.49	Chi2(1) = 45.02
Prob > chi2 = 0.2152	Prob > chi2 = 0.3911

Source: Stata software output (2022).

Results from Table 5 above show that both models I and II have p-values of 0.2152 and 0.3911 respectively) which are higher than 0.05 indicating that the residuals have constant variance and therefore homoskedal. The implication of these findings is that results obtained in this study has high predictive powers on future outputs.

#### 4.4 Test of Hypotheses

The Table 6 below presents the regression analysis of model I which uses TBQ as a dependent variable and the Model II which has ROA as its dependent variable placed side by side for the purpose of facilitating easy comparison.

Table 6 Regression Analyses Using Robust Regression

Variable	Model I (DV: TBQ)				Model II (DV: ROA)			
	Coef.	Std. Err.	z	P> z	Coef.	Std. Err.	z	P> z
BS	0.0045	0.0066	0.68	0.499	0.0073	0.0022	3.24	0.000
BND	-0.1843	0.0992	-1.86	0.063	-0.0255	0.0278	-0.92	0.360
_cons	0.0731	0.6648	0.11	0.837	-0.1041	0.1239	-0.84	0.735
R-squared Overall				0.5837	0.6147			
Wald chi2				1724.31	2251.73			
Prob chi2				0.0000	0.0000			

Source: STATA 13 output (2022).

Table 6 above reveals that Model I which has Tobin q as the dependent variable has a coefficient of determination of 0.5827 which implies that the proxies of the independent variable namely: Board size and board nationality diversity jointly account for approximately 59% variation in financial performance of Nigerian insurance companies using Tobin q as a measure. Model II reveals a coefficient of determination of 0.6147 which indicates that approximately 61% of the variation in financial performance measured by Return on asset (ROA) of the Nigerian insurance companies was due to the effect of the proxies of the board characteristics used in this study. The implication of these result is that insurance companies in Nigeria’s financial performance was better when measured with ROA compared to TBQ. Similarly, Model I has a Wald Chi of 1724.31 which is lower that of model II (2251.73), but both models have p-values of 0.0000 that are significant at 1% level.

#### 4.4.1 Hypothesis One

Ho<sub>1</sub> Board size has no significant effect on financial performance of Nigerian insurance companies.

Table 6 above reveals that *board size (BS) has an insignificant but positive effect on Tobin q which measures financial performance in model I with a p-value of 0.499 and a z- value of 0.68, while in model II, board size has a significant and positive effect on ROA with a p-value of 0.000 and a z- value of 3.24.* These findings indicate that the formulated null hypothesis one (Ho<sub>1</sub>) which states that board size has no significant effect on financial performance of Nigerian insurance companies is accepted in model I but rejected in model II where return on asset (ROA) was the measure of financial performance.

Table 7a: Summary of finding one

Hypothesis	Statement	Decision Model I	Decision Model II
Ho <sub>1</sub> :	Board Size has no significant effect on financial performance of Nigerian insurance companies.	Accepted	Rejected

Source: Table 6

Since Board Size (BS) has an insignificant but positive effect on financial performance when measured by Tobin Q with a coefficient of 0.0045, z-value of 0.68 and p-value of 0.499, then a unit increase in the number of directors on boards of insurance companies in Nigeria will lead to a slight increase in financial performance. This result tallies with those of Osman and Samontaray (2022); Mohammed and Kurawa (2021); Eluyela *et al.* (2020) whose found out that Board Size has an insignificant effect on financial performance measured by Tobin Q, but the finding disagrees with those of Rashid and Pervin (2019); Vaidya (2019) Palaniappan (2017) who observed that Board Size has significant effect on financial performance measured by Tobin Q. This result supports agency theory that advocates for small board size. In model II where return on asset (ROA) was the response variable, Board Size has a significant effect on financial performance which corroborates those of Okolie and Uwajeyan (2022); Bonvolio and Ironkwe (2022); Bekiaris (2021), but the result contradicts those of Sanni *et al.* (2020); Joshua *et al.* (2019); Oyedokun (2019) who reported that Board Size has an insignificant effect on financial performance. This finding in model II supports Resource dependence theory that advocates for large boards.

**4.4.2 Hypothesis Two**

Ho<sub>2</sub> Board gender diversity has no significant effect on financial performance of Nigerian insurance companies.

Table 5 above indicates that board nationality diversity (BND) has an insignificant negative effect on Tobin q which measures financial performance in model I with a p-value of 0.063 and a z- value of -1.86, while in model II, board gender diversity also has an insignificant negative effect on return on asset (ROA) with a p-value of 0.360 and a z-value of -0.92. These findings indicate that the formulated null hypothesis four (Ho<sub>4</sub>) which states that board gender diversity has no significant effect on financial performance of Nigerian insurance companies is accepted in both models I and II.

Table 7b: Summary of finding two

Hypothesis	Statement	Decision Model I	Decision Model II
Ho <sub>4</sub> :	Board Nationality Diversity has no significant effect on financial performance of Nigerian insurance companies.	Accepted	Accepted

Source: Table 6

Since Board Nationality Diversity (BND) has an insignificant negative effects on financial performance measured by both Tobin Q and Return on Asset of the insurance companies in Nigeria, with a coefficient of -0.1843, a z-value of -1.86 and a p-value of 0.063, then a unit increase in the number of non-Nigerian directors on boards of insurance companies in Nigeria will lead to a minor reduction in financial performance. Board Nationality Diversity also has an insignificant (0.360) negative (-0.92) effect on return on asset (ROA) in model II indicating that a unit increase in the number of non-Nigerian directors on the boards of Nigerian insurance companies will lead to an insignificant decrease in financial performance. These insignificant effects in both models agree with Akinwole and Ajide (2020); Ogboi *et al.* (2018); Osiregbmhe (2017) those of who pointed out that Board Nationality Diversity has an insignificant effect of financial performance. The findings, however, contradict those of EmaEldeen *et al.* (2021); (2020); Eluyela *et al* (2020); Abu *et al.* (2020) who reported that Board Nationality Diversity has a significant effect on financial performance. This results fail to support the Resource dependence theory that encourages the directors of diverse backgrounds for the purpose of deploying their resources, skill and expertise to help improve corporate image and performance.



## 5. CONCLUSION AND RECOMMENDATIONS

Board nationality diversity is a financial performance diminutive factor in the Nigerian insurance industry because it displays a negative effect on both ROA and Tobin Q. This study recommends that Insurance companies in Nigeria should have put in place boards that have number of directors sufficient enough to carry out the oversight responsibility effectively and that the number of directors of other nationalities should be minimized for enhanced financial performance. From the findings of this study, it is possible to draw the conclusion that board size is a positive contributing factor to the financial performance of Nigerian insurance.

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## **APPENDIX**

Sampled Insurance Companies listed on the Nigerian Exchange Group

1. African Alliance Insurance Companies
2. AIICO Insurance Plc
3. Capital Express Assurance Plc
4. Consolidated Hallmark Insurance Plc
5. Continental Reinsurance Co. Plc
6. Cornerstone Insurance Plc
7. Custodian and Allied Insurance
8. Equity Assurance Plc
9. FBN Insurance Plc
10. Guinea Insurance Plc
11. LASACO Assurance Plc
12. Gold link insurance
13. Law Union & Rock Insurance Plc
14. Linkage Assurance Plc
15. Mutual Benefits Assurance Plc
16. N.E.M Insurance Company Nig. Plc
17. Niger Insurance Company Plc
18. Noor Takaful Plc
19. Lead way Assurance Co. Plc
20. Regency Alliance Insurance Company
21. Royal Exchange Assurance Plc
22. Sovereign Trust Insurance Plc