

CORPORATE BOARD CHARACTERISTICS AND FINANCIAL PERFORMANCE: EVIDENCE FROM RETURN ON EQUITY OF QUOTED INSURANCE COMPANIES IN NIGERIA

OJEDELE Mofoluwaso Iyabode (PhD)

Department of Accounting, Faculty of Management Sciences,

Redeemer's University, Ede

ORCID ID: 0000-0003-3066-1646

ojedelem@run.edu.ng

08030677028

ODEYEMI Joshua Pipeloluwa

Department of Accounting, Faculty of Management Sciences,

Redeemer's University, Ede

ORCID ID: 0009-0009-7329-1965

joshuaodeyemi123@gmail.com

08148357404

ANYAGBA Philip

Department of Accounting, Faculty of Management Sciences,

Redeemer's University, Ede

Achilephilip8@gmail.com

07039836400

ABSTRACT

Lots of uncertainty still exists with respect to governance-performance linkage in the insurance industry in Nigeria particularly on which board attributes is responsible for generating value to the shareholders. Therefore, this study investigated the impact of board size, board gender diversity and board independence on the Return on Equity (ROE) of insurance quoted companies in Nigeria. An ex-post facto research design was used. The secondary data were collected from Annual Reports (audited) from ten (10) insurance companies purposively selected and operating on the Nigerian Exchange Group (NGX) for period 2015-2024. Descriptive statistics, Pearson correlation, Levin – Lin Chu and ADF Fisher panel unit root tests, Kao residual cointegration test and Fixed Effects panel regression with Hausman specification test were used to analyse the data. From the Kao test, it was found that the relationship between the variables was long run ($ADF = -7.4921$; $p = 0.0000$). Fixed Effects regression results indicated that board size negatively affects ROE ($\beta = -0.0210$; $p = 0.0030$), suggesting that an increased agency cost and coordination inefficiency will result in a decreasing return of equity to the shareholders as the board size gets larger. The other part of the board, however, was statistically significant and positively related to ROE ($\beta = 0.6564$; $p = 0.0349$) indicating that the presence of a larger proportion of female board members is positively related to the value of shareholders due to improved oversight and the lack of groupthink. Board Independence was not significantly related to the ROE ($\beta = -0.4829$; $p = 0.2212$). The study has identified the drivers of shareholder returns in the Nigerian insurance sector as diversity in the board and oversized board reduces the equity value. The study recommends policy actions to improve the representation of women on boards through a size reduction of the board to strategically increase the representation of women.

Keywords: *Board size; board gender diversity; board independence; Return on Equity; corporate governance; insurance companies*

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1. INTRODUCTION

Corporate governance has clearly become one of the most discussed areas of finance today, and it is in the context of its ability to satisfy the interest of management and the shareholders and, in turn, to improve a company's financial performance. In the general category of governance mechanisms, the board of directors holds an intermediate position as the primary internal governance mechanism that determines the strategic direction, risk management and accountability (Jensen & Meckling, 1976). The size, independence, and gender-diversity of boards have been the subject of ongoing academic and regulatory research and debate around the world. The direction and extent of these relationships, however, is not universally consistent or consistent for Nigeria as a developing economy, and are still based on some empirical evidence.

The Nigerian insurance industry presents a case in point. The sector, however, has faced challenges relating to public mistrust, capital shortages, and regulatory compliance problems in the past (Fadun, 2023; Mwongela, 2022). The Nigerian Code of Corporate Governance (NCCG) was introduced in 2018 by the Financial Reporting Council of Nigeria (FRCN) and it was a major reform that sought to institutionalise the best standards for corporate governance on the boards of listed companies in Nigeria.

Empirical studies investigating the relationship between changes in board structures and a measurable difference in financial results for shareholders in the insurance industry, as measured by Return on Equity (ROE), have not been thoroughly researched, however.

ROE is most important accounting metric for the creation of shareholder value. It is the measure of how efficiently management uses investors' money to create profits (Husnah et al., 2023). ROE is an essential indicator for investors in Nigeria's turbulent capital markets to gauge management performance and the strength of companies. The implication of this for the extent of the influence of board composition on ROE is relevant to investment decision, regulatory design and firm strategy.

Existing literature on corporate governance and ROE in Nigeria shows mixed and sometimes conflicting picture. Others studies indicate that board independence has a positive effect on shareholder returns (Appah & Tebepah, 2023; Ajisafe, 2019), while others show that gender diversity has a more positive effect (Yahaya & Yusuf, 2025; Dagunduro et al., 2023). The impact of board size is also debated (Yermack, 1996; Dalton et al., 1998; Ujunwa, 2012). More importantly, most previous research on insurance companies in Nigeria has been conducted within

short time spans, cross sectional designs or have not adequately been concerned with stationarity and cointegration issues in their panel data, which affects the robustness of the results of these studies.

To fill these gaps, this study investigates the impact of board size, gender diversity on the board and board independence on ROE of the ten listed insurance companies in Nigeria over a ten-year balanced panel (2015-2024). The study will use a strict econometric model, which is a panel unit root test, cointegration analysis and Fixed Effects panel regression systems as per the Hausman specification test. By selecting ROE as the dependant variable, the analysis can be concentrated on and precise, directly related to the concern of shareholders' returns.

2. LITERATURE REVIEW

2.1 Corporate Governance and Board Attributes:

For the purpose of this study, corporate governance is defined as the internal system of rules, practices and mechanisms through which quoted insurance companies are directed and controlled to ensure that the insurance companies' behaviours are aligned with the interests of the shareholders (Said, 2025). The independent variables of this study are board size, board gender diversity and board independence.

2.1.1 Board size

Board size is defined as the number of directors (both executive and non-executive) on the board at the end of each financial year (Yermack, 1996). There are conflicting arguments in the literature: one suggests that smaller boards are more efficient in their decision-making process and incur less in coordination costs (Yermack, 1996); the other argues that larger boards provide more expertise, larger network of stakeholders and extensive monitoring coverage (Dalton et al., 1998). For the insurance industry that requires a specialist knowledge in underwriting, actuarial science and law, moderately larger boards might be needed. But, the optimal size of the board causes the free-rider problem which means that there is less accountability in the board decision-making process and less financial performance (Ujunwa, 2012).

2.1.2 Board independence

According to Alodat et al. (2021), board independence is the ratio of non-executive or independent directors to the overall number of directors on the board. The Agency Theory (Jensen & Meckling, 1976) is used to argue that independent directors will minimise information asymmetry and limit the opportunistic behaviour of managers, which should enhance the shareholder return. On the other hand, board independence can be limited in developing countries with poor institutional oversight, culture that stifles dissent, and lack of capital markets (Ujunwa, 2012; Shaba & Abdulkarim, 2023).

2.1.3 Board gender diversity

Gender diversity on the board is the number of women directors compared to the total number of board members (Yahaya, 2025). It has been empirically shown to be associated with higher financial performance, surpassing social equity arguments, as it involves diverse cognitive styles, increased stakeholder sensitivity, and more stringent oversight (Kijkasiwat et al., 2024; Yahaya & Yusuf, 2025).

In Nigeria's insurance industry, where the public perception of good governance and regulatory signalling towards investors are paramount, gender diversity may act as a strategic resource that signals to investors the level of good governance, and hence shareholder returns.

2.1.4 Return on Equity

Net Profit After Tax/Total Shareholders' Equity is the major measure that determines how the management uses equity capital to create profit for shareholders, called Return on Equity (ROE) (Husnah et al., 2023). ROE is a widely regarded “gold standard” measure of the investor's investment capital, as it directly reflects the return on the investor's invested funds. In the Nigerian insurance industry, the sustained ROE performance is an indicator of capital adequacy, solvency, and the insurance company's capacity to pay out claims and at the same time pay dividends to shareholders. A bad ROE leads to a loss of investor trust in the company and increases its cost of equity capital (Alodat et al., 2021).

2.2 Theoretical Framework

This study is grounded in two complementary theoretical perspectives. Agency Theory (Jensen & Meckling, 1976) provides the primary rationale for the monitoring function of board attributes. It posits that governance structures—particularly board independence and size—are mechanisms for reducing the principal-agent conflict that arises from the separation of ownership and control. When applied to ROE, agency theory suggests that well-structured boards minimise agency costs (including excessive managerial compensation, wasteful investments, and information asymmetry), resulting in higher equity returns.

Resource Dependence Theory (RDT), developed by Pfeffer and Salancik (1978) and applied to boards by Hillman and Dalziel (2003), complements Agency Theory by viewing directors as boundary spanners who connect the firm to critical external resources—capital, legitimacy, expertise, and networks. RDT provides the theoretical basis for the expected positive contribution of gender diversity to ROE: diverse boards access a broader range of stakeholder networks and cognitive approaches, enhancing the firm's strategic capacity to generate equity returns. Together, these theories capture both the monitoring dimension (agency costs) and the value-creation dimension (resource provisioning) of board dynamics.

2.3 Empirical Review

There is more recent empirical evidence which continues to indicate that boards which are too large do not necessarily improve shareholders' return on equity (ROE). The current study by Bello (2026) was an ex-post facto research design with 151 firms listed on the Nigerian Exchange (NSE) stock exchange for the period 2011-2025, using a panel regression analysis. The study aimed to explore the interaction between board diversity and board size on financial performance (ROA, ROE and Tobin's Q). The results indicated that there is a threshold effect in terms of the size of the board, above which the associations would be negatively influenced in terms of accountability, decision making speed, financial performance and ROE. Likewise, Dagunduro et al. (2023) examined the effect of corporate governance and board characteristics on financial performance of 10 listed Nigerian insurance companies over the period 2012 – 2022 with the use of descriptive statistics and panel regression techniques. The study showed that size of board had positive relationship with ROE, but the results were not statistically significant, while board diversity was statistically significant and had a positive relationship with ROE.

The findings add to the preexisting evidence of Ujunwa (2000) who used a panel regression on the quoted firms in Nigeria and concluded that larger boards promote free-rider behavior, inefficiency in monitoring, and ultimately lower firm performance. Likewise, Yermack found that smaller boards were associated with improved market value and financial performance, and provided the basis for evidence that boards that are too large are not associated with better corporate governance. Hence, this study aims to find that the size of a company's board would have a negative impact on ROE.

There is some positive evidence on the gender diversity of boards and the independence of boards that both of these factors relate to a better outlook for ROE, but the evidence is mixed with respect to the impact of independence. Bello (2026) used panel regression analysis to investigate the impact of gender diversity, ethnic diversity and age-diversity on profitability of listed firm in Nigeria, and found that there was significant positive impact of gender diversity on accounting-based performance measured by ROE, and that this was done through better board deliberation and strategic oversight. Similarly, Yahaya (2025) used a panel data estimation approach to investigate the performance indicators of 150 listed companies in Nigeria over the period 2014 to 2023 respectively, and concluded that board diversity correlates positively with the performance of companies, noting that this could be attributed to the boards being more effective at monitoring the companies and having a broader perspective on the company's affairs. A study by Dagunduro et al, (2023) established the existence of a significant effect of board diversity on the ROE of the listed insurance companies in Nigeria. As far as board independence is concerned, Appah and Tebepah (2023) investigated the link between board attributes and firm performance using panel regression, and revealed that the presence of independent directors significantly increases ROE through their greater monitoring and control of the company and their reduction of agency costs. Oyerogba et al. (2024), however, in their data analysis on the listed insurance companies in Nigeria using fixed-effects and random-effects regression models found that the independent director improves the quality of governance, but the directors' powers may be constrained by institutional weaknesses and enforcement gaps to yield improved financial performance. Thus, although board gender diversity is always linked to higher ROE, the financial returns of having independent directors seem to be highly related to the quality of institutional and regulatory conditions in which

the firms operate. Thus, this study suggests that this relationship between the gender diversity of the board and ROE will be positive, and that the effect of board independence on the ROE of firms can vary.

3.0 METHODS

The study employed an ex-post facto research design and secondary data from the audited annual reports, corporate governance reports and financial statements of selected insurance companies listed in Nigeria Exchange Group (NGX) from 2015-2024 were used. All 23 quoted insurance companies on the NGX as of 2024 were considered and 10 insurance firms were sampled using a purposive sampling technique which involved having the companies that were continuously listed during the study period, the availability of the complete audited financial statement as well as the full information on the composition of its board. The selected firms were made up of the life insurance and general insurance/ composite insurance segment of the insurance industry in Nigeria. The sources of data used were the NGX Data Portal and companies' official websites. Financial performance was measured by Return on Equity (ROE) and the explanatory variables were Board Size (BSIZE), Board Independence (BIND), and Board Gender Diversity (GDIV) with the financial control variables are Firm Size (FSIZE) and Firm Age (FAGE). Descriptive and inferential statistics were used in the analysis of data. Specifically, the effect of corporate governance attributes on ROE was analyzed using panel data econometric methods while diagnosis and model specification tests were performed to determine the best estimator for the present study alongside the validation, reliability and robustness of the results of the present study in relation to the modern literature on corporate governance and performance.

The process of analysis was done in five steps. All variables were first analysed using descriptive statistics (mean, median, standard deviation, maximum, minimum). Next, the Pearson correlation matrix was analyzed to determine the direction and magnitude of the bivariate relationships and to identify multicollinearity. Third, both Levin, Lin & Chu (LLC) test and ADF-Fisher Chi-square test were applied to check the order of integration of each variable and avoid the possibility of spurious regressions.

Fourth, considering the variables integrated at different orders (I(0) and I(1)), Kao Residual Cointegration Test was employed to confirm the presence of a long run equilibrium relationship between the study variables. Fifth, a Correlated Random Effects Hausman test was performed to determine which of the Fixed Effects (FE) and Random Effects (RE) estimators to use. The Hausman test was used to select the Fixed Effects model, which is used for all interpretations. For marginal cases a level of significance of ten percent (10%) was used where applicable.

The panel regression model for this study is specified as follows:

$$ROE_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BIND_{it} + \beta_3 GDIV_{it} + \beta_4 FSIZE_{it} + \beta_5 FAGE_{it} + \mu_{it} \quad \dots (1)$$

Where: ROE_{it} = Return on Equity for firm i at time t ; BSIZE = Board Size; BIND = Board Independence; GDIV = Board Gender Diversity; FSIZE = Firm Size; FAGE = Firm Age; = constant;

$\beta_1 - \beta_5$ = coefficients; μ_{it} = stochastic error term; $i = 1$ to 10 (firms); $t = 2015$ to 2024 (years).

4. RESULTS AND DISCUSSION

4.1 Descriptive Statistics

Table 3 presents descriptive statistics for all study variables based on 100 firm-year observations spanning 2015 to 2024.

Table 3: Descriptive Statistics

Statistic	BIND	BSIZE	GDIV	ROE	FSIZE	FAGE
Mean	0.3982	9.6600	0.2926	0.1217	24.0509	36.1000
Median	0.4000	10.0000	0.3000	0.1200	23.9650	29.5000
Maximum	0.5300	13.0000	0.4600	0.1950	25.2000	76.0000
Minimum	0.2500	7.0000	0.1200	0.0650	23.3500	14.0000
Std. Dev.	0.0779	1.4014	0.0912	0.0292	0.4405	15.9193
Observations	100	100	100	100	100	100

Source: Author's Computation (2026)

The descriptive results show that the insurance companies in the sample had between seven and 13 directors on their board of directors (with a mean of about 10), which is a relatively small governance structure for the size of the insurance sector. The average of the Board's independence was 39.8%, which is broadly in line with the NCCG 2018 requirement of having independent directors at 40%. The mean for board gender diversity was 29.3%, indicating that almost 30% of board seats were held by women, though this is below the critical mass threshold of 30% that has been suggested in gender governance literature.

The mean ROE for this sample of firms was 12.17% with a median value of 12.0%, suggesting that during the past decade sampled firms generated moderate but reasonably steady returns on equity. A standard deviation of 0.0292 indicates a moderate amount of volatility in ROE performance among companies in the sector and over time, with the companies mostly operating within a narrow range of performance. The control variables also validate the maturity level of the sample: firms have a mean age of 36 years (max 76 years) and a natural log of total assets that varied little across the sample from 23.35 to 25.20, suggesting a similar size of asset base among all firms.

4.2 Correlation Analysis

The Pearson correlation matrix is shown in Table 4. The strongest bivariate relationship between the different governance predictors and the ROE is seen with the Board Gender Diversity (0.5463), which indicates that there is a strong positive correlation between a higher percentage of female directors on the Board and the equity return. There is also a significant positive correlation between board size and ROE at the bivariate level (with 0.5480) but a negative correlation when modelled in a multivariate regression, suggesting a confounding effect. The correlation of board

independence with ROE is found to be moderate positive correlation with 0.4281. The highest inter-predictor correlation is between the Board Independence and Firm Size (0.7423) which is not severe as it falls within the rule of thumb of 0.80. There is no multicollinearity among the predictors, so they can all be included in the regression model.

Table 4: Correlation Matrix

	BIND	BSIZE	FAGE	FSIZE	GDIV	ROA	ROE	TOBINS_Q
BIND	1.0000							
BSIZE	0.6238	1.0000						
FAGE	0.2740	0.0043	1.0000					
FSIZE	0.7423	0.4277	0.2240	1.0000				
GDIV	0.6959	0.5654	0.2364	0.5633	1.0000			
ROA	0.4181	0.5531	0.2059	0.4938	0.6373	1.0000		
ROE	0.4281	0.5481	0.1951	0.4779	0.5463	0.5951	1.0000	
TOBINS_Q	0.4039	0.5136	0.2221	0.4598	0.4207	0.4864	0.6918	1.0000

Source: Author's Computation (2026)

4.3 Panel Unit Root and Cointegration Tests

Table 5 summarises the panel unit root test results. Both the Levin, Lin & Chu (LLC) and ADF-Fisher Chi-square tests were used at both level and first difference. Board Independence (BIND), Board Gender

Diversity (GDIV), ROE and Tobin's Q were not found to be stationary at level-I(0) because the LLC statistics of the variables were not significant at $p < 0.05$ at level. Board Size (BSIZE) and Firm Size (FSIZE) were non-stationary at levels, but became stationary after first differencing – I(1). The variable firm age (FAGE) was treated as a conventional I(1) variable because it is chronological. The mixed integration orders (I(0) and I(1)) make it impossible to use Pooled OLS only and require a cointegration test.

Table 5: Panel Unit Root Test Results (Summary)

Variable	LLC (Level)	ADF (Level)	LLC (1st Diff.)	ADF (1st Diff.)	Order
BIND	-7.0453***	22.921 (ns)	-29.490***	127.751***	I(0)
BSIZE	-1.3552 (ns)	2.726 (ns)	-4.214***	11.640*	I(1)
FAGE	-0.0218 (ns)	15.867 (ns)	N/A	N/A	I(1)
FSIZE	0.8161 (ns)	4.284 (ns)	-9.055***	54.571***	I(1)
GDIV	-18.133***	77.217***	-442.28***	137.505***	I(0)
ROE	-7.620***	26.378 (ns)	-10.344***	47.560***	I(0)

Note: *** $p < 0.01$; * $p < 0.10$; ns = not significant. Values are test statistics; p-values in parentheses in the main analysis.

Source: Author's Computation (2026)

The Kao Residual Cointegration Test results in an ADF t-statistic of -7.4921 ($p = 0.0000$) which strongly rejects the null hypothesis of no cointegration. This indicates that there is a stable long run equilibrium relation between the board governance variables and the ROE within the 10-year panel. The result confirms the applicability of the Fixed Effects estimator using the levels method and affirms that the board structure attributes are not only coincidental correlates of ROE, but also structural longer term determinants of insurance shareholder returns in Nigeria's insurance industry.

4.4 Hausman Test and Model Selection

The Hausman specification test for the ROE model yields a chi-square of 96.0481 (with 5 degrees of freedom and a p-value of 0.0000), thus strongly rejecting the null hypothesis that firm-specific effects are uncorrelated with the regressors. This validates that Fixed Effects (FE) estimation is the right and consistent estimator. All substantive interpretations are thus done based on FE model. The Fixed Effects model has an adjusted R-square of 0.9302 and the model accounts for 93.02% of the variance in the data. Correlation coefficient $R^2 = 0.9182$ which showed good explanation power. The overall model is statistically significant (F-statistic; $p = 0.0000$). The separate coefficients are explained below.

4.5 Fixed Effects Regression Results

Table 6: Fixed Effects Regression Results — ROE Model

Variable	Pooled OLS	Random Effects	Fixed Effects	p-value (FE)
Constant (C)	-0.7262	-0.7262	-8.2620	0.0000***
BIND (Board Indep.)	-0.1832	-0.1832	-0.4829	0.2212
BSIZE (Board Size)	0.0008	0.0008	-0.0210	0.0030***
GDIV (Gender Div.)	0.2891	0.2891	0.6564	0.0349**
FSIZE (Firm Size)	0.0344	0.0344	0.3856	0.0000***
FAGE (Firm Age)	-1.02E-06	-1.02E-06	-0.0190	0.0006***
R-squared	0.8483	0.8483	0.9302	—
Adj. R-squared	—	—	0.9182	—
Prob (F-statistic)	0.0000	0.0000	0.0000	—
Observations	100	100	100	100

*Note: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.10$. Values in columns 2–4 are regression coefficients; column 5 presents Fixed Effects p -values. Cross-section fixed effects (dummy variables) included.*

Source: Author's Computation (2026)

Board Size (BSIZE) has a statistically significant negative effect on ROE ($\beta = -0.0210$, and $p = 0.0030$). Thus, it is observed that the null hypothesis H01 is rejected as there is a significant difference between the board size and ROE because the p value is less than the α value that is 0.05. The result shows that, for every additional board director, the ROE decreases by about 2.1 p.p. on average, net of other factors. Such findings are consistent with the Agency Theory prediction that increases in the size of boards in excess of an optimal size lead to coordination inefficiencies and free-rider behavior which diminish the equity returns to shareholders (Jensen & Meckling, 1976; Yermack, 1996). This evidence is consistent with the study by Dagunduro et al. (2023) and the findings of Ujunwa (2012) which found that, when board size goes beyond functional necessity, it introduces agency costs (consensus building, duplicity of oversight and erosion of individual accountability) that affect the efficiency of equity deployment.

This is an important observation in Nigeria's insurance industry. The insurance companies that have increased their boards in an attempt to create "regulatory optics" or "signalling" to investors seem to have paid a tangible price for that increase in size. From a Resource Dependence Theory point of view, the negative coefficient could stem from the fact that when the board becomes too large, the marginal resource payoffs from additional directors (expansive networks, expanded knowledge) are increasing smaller.

Board Gender Diversity (GDIV) positively and significantly affects ROE ($\beta = 0.6564$) with a significance level of 0.0349. The null hypothesis H02 is rejected because the difference in ROE between genders is not significant. The most economically relevant result obtained from the research is that a 1% rise in the percentage of female directors corresponds to a 65.6 percentage point increase in the ROE.

Although a proportional measure, the scale of this coefficient highlights the important economic role that female representation on the boards plays in delivering shareholder returns.

This finding is consistent with the findings of Yahaya and Yusuf (2025) and Dagunduro et al. (2023) who reported that Gender Diversity on the Board leads to higher ROE due to the mitigation of groupthink, increase in oversight diligence, and prudent risk taking. It is also consistent with Kijkasiwat et al. (2024), who discovered that board diversity is a positive mediator between governance and firm performance in developing economies. The theoretical foundation is in Resource Dependence Theory; female directors' cognitive world view, stakeholder sensibilities, and risk-management processes are different from those of male directors, which enhance the quality of board decisions and thus the efficiency of equity deployment. Moreover, in an industry history where investors and regulators have reason to be skeptical about the legitimacy of capital inflows, gender-diversity on boards can also be a signal of capital inflows' credibility.

The effect of Board Independence (BIND) on ROE is not statistically significant ($\beta = -0.4829$; $p = 0.2212$). Based on this, the null hypothesis H03, which states that the board independence does

not significantly affect ROE, is not rejected. The null finding holds true for both the Pooled OLS and Random Effects models and is stable to model specification. The negative coefficient indicates the direction of the relationship, but because the coefficient is not statistically significant it is not meaningful in an economic sense for direction.

This discovery calls into question the classic Agency Theory view that freeing directors from the constraints of the shareholder/manager relationship will lead to increased returns for investors. However, the outcome aligns with Shaba and Abdulkarim (2023), who found that in the absence of robust institutions, governance arrangements are unlikely to lead to tangible benefits in terms of finances.

Furthermore, it aligns with the Stewardship Theory described by Donaldson and Davis (1991) that argues that in technically specialised industries like insurance, which requires in-depth knowledge of underwriting, actuarial science and risk modelling, the profession's members with deep expertise in these areas will be better stewards of shareholders' equity than external directors who have no technical knowledge of the industry.

There may be more to it than that in terms of the degree of independence, rather than the number. Compliance is a very different kind of independence than structural independence, however, structural independence does not guarantee that appointed independent directors have the industry experience, assertiveness or access to information to challenge management and improve equity outcomes. It thus brings to light an important chasm between formal governance adherence and substantive governance effectiveness in Nigeria's insurance sector.

4.6 Hypothesis Summary

Table 7: Summary of Hypothesis Test Results

H	Hypothesis	β (FE)	p-value	Decision
H ₀₁	Board size has no significant effect on ROE	-0.0210	0.0030***	Rejected
H ₀₂	Board gender diversity has no significant effect on ROE	0.6564	0.0349**	Rejected
H ₀₃	Board independence has no significant effect on ROE	-0.4829	0.2212	Not Rejected

Note: *** $p < 0.01$; ** $p < 0.05$.

Source: Author's Computation (2026)

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This study examined the influence of board size, board gender diversity, board independence on ROE of quoted insurance companies in Nigeria for balanced panel of ten insurance companies for the period 2015-2024. The Hausman test is used to check the validity of the Fixed Effects panel regression model and cointegration test result is supported by the Kao test, which shows the following results three results.

First, the size of the board is a negative and statistically significant determinant of ROE, indicating that larger boards in the insurance industry in Nigeria incur agency costs and coordination inefficiencies, which negatively impacts shareholders' equity returns. This result corroborates the fundamental tenet of Agency Theory, and is consistent with the empirical work of Yermack (1996) and Ujunwa (2012).

Second, gender diversity on the board is the only governance measure, of the three board attributes studied, that is statistically and economically significant in predicting ROE. The positive and significant coefficient indicates that the presence of female board members has a positive impact on shareholder value through better decision quality, less groupthink and better relationship with stakeholders, which are also in line with Resource Dependence Theory. The discovery makes it clear that Nigerian insurance companies are not just aspiring for gender diversity, but their financial strategy is focusing on it.

Finally, the board independence, measured as it is here, does not significantly affect ROE. The result is null, which casts doubt on the dominant Agency Theory assumption that statutory independence leads to higher or better shareholder returns. It instead focuses on the importance of functional, not formal independence which has implications for regulatory design and board nominations.

5.2 Recommendations

Based on the empirical findings, the following recommendations are forward looked:

- (i) Insurance companies need to deliberately shrink board size to its optimal efficient size. Board members should have diverse and complementary skills, and be able to engage in timely and effective discussion. The evidence overwhelmingly indicates that adding to the board beyond the functional requirement is not adding value, but destroying it.
- (ii) Rather than tokenism, boards need to implement gender diversity strategies. Nomination and governance committees should seek out strong female actuarial, risk management, legal and finance specialists to serve on their boards. ROE improvement is a financial benefit that can be measured from this commitment.
- (iii) FRCN and NAICOM ought to examine the existing compliance driven method to board independence. It is recommended that the regulatory requirement be changed from minimum number of independent directors to the quality criteria to be met by the independent directors, such as competency criteria for particular sectors, active engagement criteria and criteria for independent judgement.

The study suggests that further research is needed in this area. The study recommends more research in this area, specifically stating that the study can only be applied to 10 NGX listed insurance companies and may not be generalisable to smaller unlisted insurance companies. The governance variables are structural characteristics and do not necessarily reflect the quality of

board deliberation or the extent of real independence practiced. Future studies are recommended to: (i) take a look into the non-linear inflection point at which board size switches from being value neutral to value-destructive in the Nigerian insurance sector; (ii) use mixed-method designs using board meeting minutes, qualitative board room assessment and quantitative analysis; and (iii) expand comparative analysis to the banking sector to determine if the null effect of board independence on ROE is sector-specific or systemic in the Nigerian financial sector.

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