DOI https://doi.org/10.5281/zenodo.10049652#190

TWIST, 2024, Vol. 19, Issue 2, pp. 559-567

TWIST

Journal homepage: www.twistjournal.net

Corporate Governance Effectiveness and the Profitability of Listed Insurance Firms in Nigeria

YUSUFU Ojochenemi Sunday*
Department of Business Administration, Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria
[*Corresponding author]

Caroline Aturu-Aghedo
Department of Business Administration, National Open University of Nigeria (NOUN), Abuja, Nigeria

Prisca Irobewaye Idonije
Department of Business Administration, Auchi Polytechnic, Auchi, Edo State, Nigeria

Abubakar Haruna
Department of Business Administration, Prince Abubakar Audu University, Anyigba, Kogi State, Nigeria

Abstract
The research explored the correlation between profitable insurance firms listed in Nigeria and their strong corporate governance practices. This investigation employed an ex post facto research methodology, utilizing secondary data from ten (10) Nigerian insurance companies that are listed. The information, which covers the years 2012 through 2020, was gathered from the stock market fact book website as well as the annual reports and accounts of Nigeria's listed insurance companies. Descriptive statistics and a random-effect Generalized Least Square (GLS) multiple linear regression technique were used to thoroughly evaluate the gathered data. The research yielded some fascinating findings. First, it discovered a positive (.8370497) and statistically significant (0.005) relationship between board size (BDS) and return on assets (ROA) of the selected listed insurance firms in Nigeria from 2012 to 2020. Furthermore, the findings demonstrated a positive (2432262) but statistically insignificant (0.431) association between board independence and the return on assets of Nigeria's listed insurance firms during the same time period. According to the findings of the study, corporate governance landscape has enhanced the performance of Nigerian insurance industry. Based on these findings, the study puts forward valuable recommendations. Firstly, it recommended that companies should assess their current board compositions and evaluate the potential benefits of increasing board size by including individuals with diverse skill sets and backgrounds. Additionally, it was suggested that insurance companies in Nigeria thoroughly evaluate the independence of their board members, aiming to strike a balance between independence and industry expertise.

Keywords
Corporate governance, Board size, Independence of the board, Profitability, Insurance companies

INTRODUCTION

The growing significance of corporate governance can be attributed to the belief that an effective governance and control system can potentially confer a competitive edge upon individual companies. The system of rules, protocols, and methods by which a corporate organization is governed, regulated, and run is referred to as corporate governance. It includes a set of principles, policies and processes that guide decision-making, establish accountability, and ensure ethical behavior within the business.

The primary goals of corporate governance are to increase transparency, safeguard the interests of stakeholders, and promote the organization's long-term success and sustainability. Corporate governance ensures that all shareholders' rights are maintained. It ensures that all stockholders exercise their rights and that the organization as a whole respects their rights. Corporate Governance promotes trust, morality, as well as corporate ethics. A firm's profitability focuses more on the elements that will directly affect a financial statements or connections of the company (Omondi & Muturi, 2013).

Corporate governance facilitates effective decision-making processes, this is made effective by the size of the board. The quantity and caliber of the company's directors determine and impact the dynamic performance and smooth operation of the board, which ensures the financial success of the business. The number of directors on a company's board of directors is a matter of debate across nations and corporate governance norms, however the board shouldn't be overly large as to become cumbersome (Financial reporting council, 2010).

One of the mechanism that makes up an effective corporate governance system is the mix of directors, both executive and non-executive who make up a company's board. This combination is thought to be critical to its performance. To be effective in carrying out their duties, directors must be independent of both executive management and fellow directors. Olutuyi (2017) mentioned that a recent study, published jointly by the Association of Certified Accountants (ACCA) and KPMG, Nigeria is among the top five African countries in terms of corporate governance compliance.

The paper compares the corporate governance criteria of 15 African listed firms to four corporate governance standards. principles based on OECD principles. Countries have been ranked according to principles that consist of leadership and culture; strategy and performance; compliance and supervision as well as stakeholders involvement.

Profitability is commonly utilized to measure company performance since it evaluates how well the current assets, machinery, and plants produce income (Noredi & Noriza, 2010). The difference between income and expenses is characterized as profit. Encarta (2009) profit is defined as the amount that differs between the price that is paid for goods or services and the cost of producing and selling them. Profitability is a company metric; the profit generated may be sufficient to fund more investments.

The National Insurance Commission regulates the insurance business in Nigeria (NAICOM), this guarantees adherence to legal standards and supervises the activities of insurance businesses. Nigerian insurance companies provide health, life, and non-life (generic) insurance, among other kinds of insurance. There are several insurance companies operating in Nigeria, both indigenous and multinational. Nigeria's regulatory framework has developed over time, with NAICOM implementing reforms to improve the industry's efficiency and accountability.

There is much discussion about how board independence and size affect the bottom line of listed insurance companies in Nigeria. There is a need to explore if board size has any meaningful effect on the financial success of these enterprises in the context of the Nigerian insurance sector. Similarly, determining whether Board independence has a significant effect on the financial success of Nigerian listed insurance businesses is critical.

The goal of this study is to provide answers to these questions and insight into the relationship between corporate governance effectiveness and profitability in the Nigerian insurance industry. The Nigerian insurance business confronts a number of obstacles, including poor insurance penetration, a lack of information about insurance products, and trust and credibility issues. Insurance fraud is also a major issue in Nigeria. Nevertheless, Pareek et al. (2019) discovered that board independence had a negative influence on profitability. It is worth noting that Kyere and Ausloos (2020) conducted their research in London, which differed in terms of geographical focus from the present study. Additionally, Enilolobo (2019) conducted a study within the food and petroleum industry. However, it is important to highlight that none of these studies specifically addressed the insurance sector in Nigeria, and this research endeavors to fill that gap.

The study's broad objective is to analyze the impact of corporate governance effectiveness on the profitability of Nigerian listed insurance firms. The study's specific objective is to: (i) investigate the influence of board size on the profitability of listed insurance firms in Nigeria. (ii) Examine the effect of board independence on the profitability of Nigerian listed insurance firms. The formulated research hypotheses are: (Ho_1) Board size has no significant effect on the profitability of listed insurance firms in Nigeria. (Ho_2) Board independence has no significant effect on the profitability of Nigerian listed insurance firms.

The findings of this study contribute significantly to understanding the mechanisms of corporate governance within the insurance sector. Additionally, policymakers and regulators can utilize these findings to strengthen existing laws and establish institutional frameworks that foster more effective corporate governance mechanisms.

MATERIALS

Corporate Governance

The realm of corporate governance encompasses a set of regulations, protocols, and methodologies that govern and oversee the operations of a corporation. This complex web of regulations aims to reconcile the conflicting interests of the business's numerous stakeholders, such as shareholders, management, and clients, suppliers, investors, government entities, and the wider community.

Corporate governance guarantees that management continues to be transparent, accountable, and dedicated to operating in the best interests of all parties concerned. Corporate governance, according to Smith (2020), is the collection of policies, procedures, and organizational frameworks that direct and oversee a company. It covers the exchanges between the management, shareholders, board of directors, and other stakeholders of a business.

Atty and Gonzalez (2016) defined corporate governance as a complex system that includes methods for direction, oversight, and enforcement. This multifaceted system combines regulatory frameworks, performance benchmarks, and ethical principles to create a framework for holding the board of directors and senior management accountable for their ethical behavior, all while balancing long-term customer satisfaction and shareholder value. This harmonization ultimately serves the greater good of all stakeholders and society as a whole.

The framework for corporate governance meticulously outlines various rights and responsibilities of diverse shareholders within the organization, encompassing the management, board of directors, shareholders, clients, and workers. Additionally, it delineates the rules and protocols governing the formulation of business decisions.

Corporate governance, as defined by Tukur and Bilkisu (2014), revolves around the legal formalities and procedures employed to judiciously utilize the financial resources at an organization's disposal to realize its corporate objectives. This encompasses a spectrum of procedures, norms, policies, laws and regulations that exert influence on the direction, administration, and oversight of a corporation or company (Owolabi & Dada, 2011).

Furthermore, corporate governance serves as the framework within which a company establishes its objectives, devises strategies to attain them, and monitors its performance, echoing the perspectives of (Wolfensohn, 1999; Uche, 2004; Akinsulire, 2006). Beyond these aspects, corporate governance encompasses the stewardship and control mechanisms that guide organizations in fulfilling their enduring economic, ethical, legal, and societal responsibilities to their stakeholders.

The primary emphasis of corporate governance revolves around the pursuit of effective decision-making in strategic matters. Bashir et al. (2018) have elucidated, the enduring purpose of corporate governance lies in facilitating both efficient and prudent management practices that contribute to the sustained prosperity of a firm. Essentially, corporate governance pertains to the system of oversight governing the operations of a corporation (McGrath & Whitty 2015). It is worth noting, as observed by Wathanga (2016), that corporate governance originates as a response to agency quandaries resulting from the division of ownership and power within an organization. Dosumu et al. (2019) further underscore corporate governance's function in shaping the overall performance of a business.

Corporate governance entails the vigilant monitoring of the interests of owners, senior management, and the board of directors, particularly in cases of conflicts of interest related to factors such as corporate structure, strategic direction, and the compensation of chief executives. As noted by Juneja (2015), corporate governance is orchestrated by the board of directors and relevant committees, all with the aim of benefiting the company's stakeholders. It fundamentally revolves around the delicate equilibrium between individual and societal objectives, as well as economic and social aspirations. Osundina *et al*. (2016) contend that corporate governance is the framework within which a corporation determines its goals and establishes systems for performance monitoring.

Board Size

The topic of board size is frequently brought up in relation to corporate governance. The board of directors is in charge of managing the business and making crucial choices on behalf of the owners (Smith, 2018). Board size can have significant implications for the effectiveness and efficiency of a board's functioning. The number of directors on a company's board of directors is referred to as its board size (Ciftci et al., 2019). It can vary depending on the company's bylaws and corporate structure. In the study conducted by Odiwo et al. (2016), board size is characterized as the collective count of directors actively serving on the corporate governance board. It is imperative for the board to diligently exploit available opportunities and enhance the market value of the organization. Furthermore, the dimensions and makeup of the board are often utilized as indicators reflecting the diversity of expertise, a valuable component of the board's intellectual capital, as highlighted in the research (Narwal & Jindal, 2015).

A board constitutes a group of directors and duly designated proxies entrusted with the task of representing the interests of owners, serving as a conduit for overseeing management activities and exercising control on behalf of these stakeholders (Crow & Lockhart, 2014). The Board of Directors comprises a cadre of elected officials whose principal duty is to formally supervise and govern the top-level executives of the corporation in alignment with the owners' best interests (Hitt et al., 2012).

Board Independence

The independence of directors is an important feature of corporate governance. Signifying the autonomy and impartiality of directors in making decisions that are best for the firm and its shareholders (Bebchuk & Hamdani, 2009). Independent directors are typically individuals who do not have significant financial or familial ties to the company, which helps ensure that their decisions are not influenced by conflicts of interest (Fama & Jensen, 1983).

Members of an enterprise's board of directors can be categorized into two groups: insiders and outsiders. Insiders play an active role in the company's high-level management and are chosen for their ability to provide useful insights into the firm's day-to-day operations. Outsiders, on the other hand, are persons chosen for their ability to provide impartial advice and an independent perspective to the firm (Fuzia et al., 2015).

In many nations around the world, rules or regulations require that a percentage of the board of directors be comprised of independent directors. This need is based on the assumption that independent directors' interests are more closely aligned with those of minority shareholders than internal directors'. The current argument is whether board members should be recruited from within the organization or from outside sources. Nonetheless, some scholarly works argue that a balanced composition, with members from both within and outside the organization, is preferable.

Directors are expected to demonstrate a significant level of independence, allowing them to formulate their own perspectives and judgments. It is crucial for them to confidently articulate their personal opinions, emphasizing that independence entails the capacity to form and express opinions, even if they differ from the viewpoints of fellow directors (Emile Wolf International, 2013).

Profitability

Profitability and Return on Assets (ROA) are essential financial measures that help businesses and investors analyze a company's operational performance and capacity to create profits from its assets. Profitability involves a business or firms means of generating earnings relative to its expenditures and investments. It serves as a crucial factor in assessing a company's financial well-being and long-term sustainability. Elevated profitability is commonly seen as a favorable sign, suggesting that a company is efficiently deploying its resources to generate profits.

Return on Assets (ROA)

Return on Assets (ROA) is a profitability metric that measures a company's ability to create profits from its total assets. It reveals how successfully a corporation uses its assets to produce revenues. The following is how ROA is calculated:

= (Net IncomeTotal Assets)×100 *ROA*=(Total Assets Net Income)×100

Theoretical Framework

Stewardship Theory

The Stewardship theory serves as the foundational theory for this investigation. Donaldson and Davis' concept of stewardship theory (1991 & 1993), posits that when managers are granted autonomy, they are inclined to act as accountable stewards of the assets under their control. This theory provides a fresh perspective for understanding the intricate dynamics between ownership and corporate management. In this context, theorists assume that when presented with a choice between self-serving behavior and actions that benefit the organization, stewards prioritize cooperation over defection.

Stewards are characterized as individuals with collective orientations, displaying a pro-organizational ethos and a sense of trustworthiness. Essentially, stewardship theory serves as a framework that suggests intrinsic motivation drives individuals to work on behalf of others or organizations, enabling them to fulfill entrusted tasks and responsibilities. One of the core tenets of stewardship theory is the belief that managers are intrinsically motivated by a sense of accomplishment. Managers are expected to act as diligent stewards, dedicating their time and effort to achieve high levels of profitability and returns for shareholders (Akingunola *et al*., 2013).

However, in the Nigerian corporate context, AGMs often seem to be mere formalities, primarily attended by a select few who cast affirmative votes. From the standpoint of the theory of stakeholders, the interests in a corporation extend far beyond the narrow focus emphasized by agency theory.

Stewardship theory operates on the premise that managers are primarily driven by a desire for accomplishment. Furthermore, the theory posits that long-term contractual relationships are cultivated through the foundations of trust, reputation, shared objectives, and active participation, ultimately leading to alignment as a product of reciprocal relationships.

Empirical Review

Kyere and Ausloos (2020) investigated the relationship between financial success and ideal corporate governance for non-financial companies listed on the London Stock Exchange. The study used a cross-sectional regression model to analyze data from 252 publicly traded companies on the 2014 London Stock Exchange. An in-depth empirical survey conducted on the 252 enterprises listed on the London Stock Exchange in 2014 revealed a positive connection between financial prosperity and stock market performance. The study highlighted that both board size and independent board members possess predictive capabilities for both financial performance metrics (ROA) and Tobin's Q. However, CEO duality and audit committee meetings demonstrated no discernible influence on either ROA or Tobin's Q. The research also concluded that implementing appropriate corporate governance mechanisms can potentially enhance the financial health of a company.

Enilolobo et al. (2019) investigated in the realm of corporate governance and financial performance, the food and petroleum industries were scrutinized and compared. Over the span of 2011 to 2017, data from ten (10) publicly traded companies in the food and energy sectors were analyzed. Corporate governance was indicated by elements including ownership structure, audit committees, board independence, and size, while financial performance was shown by return on assets (ROA). The data were analyzed using panel regression. The findings showed that ownership structure, audit committees, and board independence are three corporate governance practices that positively affect the financial performance of Nigerian food and petroleum companies. The study did, however, also demonstrate that the board size corporate governance mechanism had a negative impact on these companies' financial performance in Nigeria.

Pareek and colleagues (2019) studied the intricate linkages between corporate governance, firm attributes, and regulations regarding the disclosure of environmental performance in the context of Indian business profitability. The analysis utilized data from 38 non-financial Indian companies listed on the National Stock Exchange (NSE) during the period of 2013 to 2017. Through the implementation of panel data analysis techniques, the investigation unearthed notable findings. Specifically, it revealed that both board size and firm age demonstrated a positive impact on Indian firms' disclosure of environmental performance and financial success. Moreover, the study exposed a considerable negative influence of board independence on these firms' disclosure of environmental performance. As a result, it put forth the proposal that the role of independent directors be expanded to encompass not only internal regulatory bodies but also external regulatory mandates.

In a study by Prusty and Al-ahdal (2018), the assessment of corporate governance and profitability in Indian information technology enterprises was conducted. The Indian stock exchange provided the information for listed IT companies. The focus of the study was on corporate governance practices, specifically board size (BS) and board independence (BI). Return on equity (ROE) and return on assets (ROA) were the dependent variables, and company size was the control variable. The data was analyzed using regression using ordinary least squares. The results showed a significant relationship between business size as determined by return on assets and profitability and corporate governance factors such committee meetings, board size, and board independence. On the other hand, return on equity (ROE) indicated that committee meetings and board size had minimal effect on profitability. However, there was a notable impact from business size and board independence.

METHODS

An ex post facto research design utilizing panel data was employed in this study. This method was selected due to its ability to consider the influence of predictor variables on the response variable. By utilizing panel data, a vast array of multidimensional secondary data sources was collected, enabling a comprehensive analysis. With careful consideration of available data, the study's chosen scope concentrated on the ten (10) insurance companies that were listed as of 2020 on the Nigeria Stock Exchange market website. The study adopted a convenience sample size approach, encompassing the population of relevant companies operating in Nigeria from 2012 to 2020.

Data for the investigation was sourced from secondary materials, specifically, the examination of selected insurance companies in Nigeria and the Stock Exchange Fact Book website involved a thorough review of their annual reports and accounts. In order to evaluate the correlation between corporate governance effectiveness and profitability within these insurance firms, a comprehensive data analysis was undertaken employing the multiple linear panel regression technique. Based on the Hausman test results, the choice of using the fixed-effect or random-effect model in regression was made. The analysis was performed using STATA 13 software. Additionally, descriptive statistics were employed as part of the investigative process.

The research conducted an extensive data analysis, encompassing various statistical techniques and tests. These included descriptive statistics, a Pearson correlation matrix, the Breusch-Pagan/Cook-Weisberg Test for Heteroskedasticity, the Variance Inflation Factor (VIF), the Ramsey regression equation specification error test (RESET), the Shapiro-Wilk Normality Test, the Hausman Specification Test, and Random Effects Regression.

Table 1 Variables Justification and Measurement

Variables	Acronyms	Types of Variables	Measurement	Justifications
Return on Asset	ROA	Dependent	Net income is divided by total assets and multiplied by 100 to calculate return on assets.	Enilolobo et al. (2019)
Board size	BDS	Independent	Board size is the total number of directors on a company's board.	Kyere and Ausloos (2020); Pareek et al. (2019)
Board independence	BID	Independent	The percentage of non-executive directors on a company's board divided by the total number of directors is known as the independent board.	Prusty and Al-ahdal (2018)

Source: Researchers' Variable Definition and Measurement (2023)

Model Specification

The study looked into corporate governance and the profitability of Nigerian listed insurance companies. The estimation regression model was presented using the dependent variable (profitability) proxied by return on asset (ROA) and the independent variable (Board structure) proxied by the following proxies: Board independence (BID) and board size (BDS).

$$ROA = (BDS+BID)\ f \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots 1$$

When we put the above equation into an econometric model, we get;

$$ROAit=\beta 0+\beta 1BDSit+\beta 2BIDit+\mu it \ldots\ldots\ldots 2$$

where:

ROA is an abbreviation for Return on Asset (an indicator that represents the dependant variable).
BDS stands for board size (the predictor represents the independent variable).
BID stands for Board Independence (the predictor represents the independent variable).
$\beta 1$ to $\beta 2$ = The coefficients of the variables to be estimated;
$\beta 1$= Coefficient of Board size
$\beta 2$= Coefficient Board independence
μ = Stochastic error term;
i= Firms (cross sectional units)
t= time periods; and
f= Functional relationship.

RESULTS AND DISCUSSION

Table 2 provides an overview of the variables through descriptive statistics, showcasing the mean, standard deviation, minimum, and maximum values. These statistics are instrumental in characterizing the inherent nature and patterns within the dataset under investigation.

Table 2 Descriptive Statistics of the Variables

Variable	Obs	Mean	Std. Dev.	Min	Max
roa	90	.0250115	.0695862	-.2271495	.1629623
bs	90	9.611111	2.425031	5	17
bi	90	4.436444	2.180257	1.67	9

Source: STATA Software output, 2023

Firstly, examining the return on asset (ROA), we find that it ranges from a minimum of -.2271495 to a maximum of .1629623 with a mean value of .0250115**.** This mean value falls within the minimum and maximum range, indicating a reasonable spread over the study period. Notably, the standard deviation for ROE is .0695862. This suggests a relatively modest growth trend during the review period.

The variable Board size (BS) has a minimum value of 5, a maximum value of 17, and a mean value of 9.611111, all of which fall within the minimum-maximum range, demonstrating a diversified distribution during the study period. Board size (BS) has a standard deviation of 2.425031, which is likewise less than the mean, indicating a relatively slow rate of increase over time.

Following that, we look at board independence (BI), which has a minimum of 1.67, a maximum of 9, and a mean of 4.436444.These data are all within the minimum-to-maximum range, indicating a spread across the course of the study. The standard deviation for board independence (BI) is 2.180257, which is less than the mean, indicating modest increase during the study period.

Pearson Correlation Matrix for Multi- Collinearity

Table 3 presents the outcomes of the Pearson correlation matrix, serving as both an indicator of the relationship's strength within the model and a diagnostic tool for assessing potential issues within the model.

Table 3

	roa	bs	bi
roa	1.0000		
bs	0.3025	1.0000	
bi	0.1308	0.1976	1.0000

STATA Software output for 2023

We see a 30% negative and weak link between board size and return on asset (ROA) in Table 3, denoted by a coefficient of 0.3025. Furthermore, the table shows a small but positive relationship between board independence and the return on asset (ROA) of Nigerian listed insurance businesses, with a correlation coefficient of 0.1308.

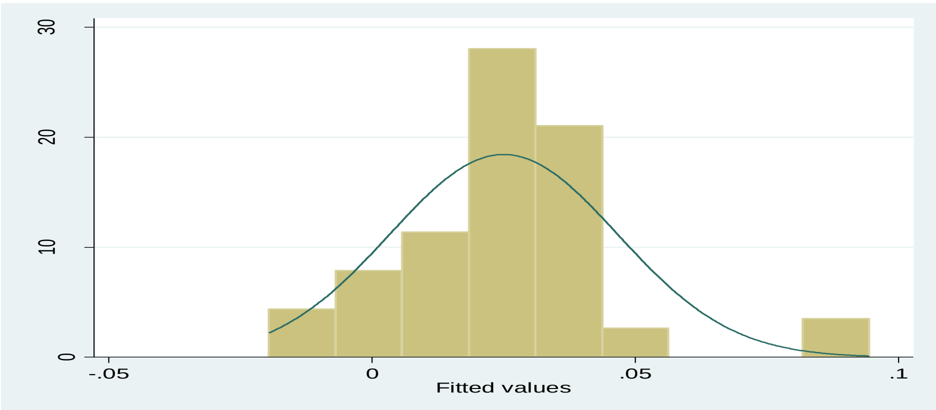
Shapiro-Wilk W test for normal data

Table 4

Variable	Obs	W	V	z	Prob>z
resid	90	0.92119	5.961	3.938	0.00004

The Probz value of 0.00004, which is less than the significant level of 0.05, indicates that the data is not regularly distributed.

Table 4 and Figure 1 below collectively display the outcomes of the normality assessment, carried out through the Shapiro-Wilk test and represented visually by a normal distribution curve.



The findings presented in Table 4 are corroborated by the normal distribution curve depicted in Figure 1 above. These results suggest a breach of one of the fundamental assumptions in linear regression—the normal distribution of residuals, thereby prompting the adoption of robust regression techniques.

Hausman Specification Test

Following the estimate of fixed and random effects, the Hausman specification test was used to execute the generalized linear regression technique. Table 5 shows the results of the Hausman test.

Table 5

	Coefficients			
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
fe	re	Difference	S.E.	
bs |	.0024282	.0051558	-.0027276	.0019071
bi |	-.0058275	.0000426	-.0058701	.0048786

Test: Ho: difference in coefficients not systematic

chi2(2) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 4.37
Prob>chi2 = 0.1125

The result of the Hausman specification test, as indicated in table 5, reveals a Prob>chi2 value of 0.1125. This signifies the acceptance of the null hypothesis, suggesting that systematic differences in coefficients are not present. When variations in coefficients are systematic, it implies the existence of a structural issue, indicating that the causes of these coefficient differences are random across the analyzed companies. Consequently, this result implies that the random effect estimator, which remains consistent under both the alternate hypothesis (Ha) and null hypothesis (Ho), is the more suitable choice for estimating this model.

Table 6 Random-Effects GLS Regression (Robust)

roa	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]	
bs	.8370497	.2950623	2.84	0.005	.2587381	1.415361
bi	.2432262	.3087532	0.79	0.431	-.3619189	.8483712
_cons	1.962755	3.163999	0.62	0.535	-4.238568	8.164078
R-sq: overall = 0.5119						
Wald chi2(2) = 110.79						
Prob > chi2 = 0.0045						

Based on the information provided in Table 6, the overall coefficient of determination, R-square, at 0.5119.The Wald chi-square statistic, with a value of 110.79 and a corresponding Prob > chi2 of 0.0045, indicates that the model is well-fitted and reliable for making informed decisions.

Furthermore, the results from Table 6 reveal that board size, with a coefficient of .8370497 and a p-value of 0.005, exhibits a positive relationship and statistical significant effect. This result indicates that the null hypothesis be rejected. Similarly, board independence, with a coefficient of 2432262 and a p-value of 0.431, also displays a positive relationship and insignificance across all levels. This result indicates that the null hypothesis be accepted.

Discussion of Findings

The findings from this study underscore a strong and positive correlation between boards size (BDS) and return on assets (ROA), as illustrated in Table 6. In essence, a mere 1% increment in board size can yield a significant uptick of 83.7% in the profitability (ROA) of publicly listed of listed insurance firms operating in Nigeria during the study period. As a result, increasing the number of individuals serving on the boards of directors of these listed organizations has the potential to significantly increase the profitability of Nigerian consumer product enterprises. This observation is consistent with stewardship theory ideas. The policy ramifications of these findings are twofold. For starters, a larger board size may promote board independence and diversity, ultimately leading to increased productivity and profitability.

Secondly, these results should serve as an incentive for corporate executives and investors to anticipate superior performance. Additionally, they should motivate lawmakers and regulators to enact legislation and establish institutional support mechanisms aimed at bolstering the effectiveness of corporate boards. It is noteworthy that these findings are consistent with recent research by Kyere and Ausloos (2020). Similarly, table 6 shows evidence of a positive association (.2432262) between board independence and the profitability of Nigerian listed insurance firms, which is statistically insignificant (p = 0.431).

This research suggests that board independence has a positive but statistically negligible impact on the profitability of publicly traded insurance companies, as evidenced by a beta value of.2432262. In practice, increasing board independence increases the probability of obtaining a positive return on assets (ROA) by .2432262 units. In essence, having a higher share of independent directors on a board increases the profitability of Nigerian listed insurance firms. The study contradicts the conclusions of Pareek et al. (2019).

CONCLUSION AND RECOMMENDATIONS

The study concluded that the effectiveness of corporate governance significantly impacts the profitability of listed insurance firms in Nigeria. By implementing robust governance practices, such as transparent decision-making processes and accountability mechanisms, firms can enhance their financial performance and mitigate risks. Moreover, findings suggest that board size and independence play crucial roles in shaping governance effectiveness. A balanced board size, coupled with a higher degree of board independence, fosters better oversight, strategic decision-making, and ultimately, improved profitability for insurance firms in the Nigerian market.

The study has the following recommendations:

i. Insurance companies in Nigeria should carefully consider extending their boards of directors. Companies should specifically analyze their current board compositions and the possible benefits of increasing board size by include persons with various skill sets and backgrounds.
ii. Companies should realize the potential benefits of increasing the proportion of independent directors on their boards. Therefore, we recommend that insurance firms in Nigeria carefully assess the independence of their board members, aiming to strike a balance between independence and industry expertise.

ACKNOWLEDGMENTS

We would like to extend our heartfelt gratitude to co-authors for their invaluable contributions and unwavering support throughout the writing process. Special thanks are also due to our dedicated data analyst for their meticulous work and analysis. Additionally, we are deeply appreciative of the institutions that provided the necessary data in support for this article, enabling us to bring our research to fruition.

FUNDING INFORMATION

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

DECLARATION OF CONFLICT

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

1. Akingunola, R. O., Adesoji, O. D., & Ajibade, Y. A. (2013). Corporate governance and the crisis of underdevelopment in Nigeria: An empirical analysis. *European Scientific Journal*, 9(5), 97-114.
2. Akinsulire, O. (2011). *Financial management* (7th ed.). Lagos: El-Toda Ventures Ltd. and firm performance in emerging markets: Evidence from Turkey. *International Business Review.* 28: 90–103.
3. Atty,R.C. B & Gonzalez, A.(2016). Code of corporate governance for publicly listed companies in Philippines. Securities and exchange commission. Asean conference on Code of corporate governance.
4. Bashir, U., Ummara, F., Sohaib, S., Rasul, F., & Mehboob, R. (2018). Internal corporate governance and financial performance nexux: A case of banks of Pakistan. *Journal of Finance and Accounting*, 6(1), 11-17.
5. Bebchuk, L. A., & Hamdani, A. (2009). The elusive quest for global governance standards. *University of Pennsylvania Law Review*, 157(5), 1263-1317.
6. Ciftci, I., Ekrem, T., Geo, R., Mehmet, D., & Selim, Z. (2019). *Corporate governance*: A comprehensive analysis of principles, practices, and implications.
7. Crow, P. R., & Lockhart, J. C. (2014). *On The Use of Critical Realism to Advance Governance Research Beyond Correlations*. Proceedings of the British Academy of Management Conference 2014. London: British Academy of Management. URL=https:www.petercrow.com/research.
8. Donaldson, L., Davis, J. H. & Schoorman, F. D., (1991). Toward a stewardship theory of management. *Academy of Management Review, 22*(1), 20-47.
9. Dosunmu, A., Onuchukwu, O., & Nteegah ,A. (2019). Corporate governance and banking sector performance in Nigeria. *Journal of Applied Economics and Business*. 6(4), 35-50. URL=http//www.aebjournal.org/articles/0604/060403.
10. Encarta, (2009). Microsoft encarta. wikipedia the free encyclopedia. enwikipedia.org/wiki/Encarta.
11. Enilolobo, O.S., Adesanmi, A.D. & Aigbe Z.E . (2019). Corporate governance and financial Performance of Firms: A comparative study of food and petroleum products industries in Nigeria . *International Journal of Advancements in Research & Technology 8* (5) ISSN 2278-7763.
12. Enilolobo, O.S., Adesanmi, A.D. & Aigbe Z.E . (2019). Corporate governance and financial Performance of Firms: A comparative study of food and petroleum products industries in Nigeria . *International Journal of Advancements in Research & Technology 8* (5) ISSN 2278-7763.
13. Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The Journal of Law and Economics*, 26(2), 301-325.

14. Feng, Y., Hassan, A., & Elamer, A. A. (2020). Corporate governance, ownership structure and capital structure: Evidence from Chinese real estate listed companies. *International Journal of Accounting & Information Management*. https://doi.org/10.1108/IJAIM-04-2020-0042.
15. Financial Reporting Council of Nigeria (2010). National code of corporate governance. available at http/financialreportingcouncil.gov.ng (Retrieved January 10, 2021).
16. Hitt, M. A., Ireland, R. D., & Hoskisson, R. E. (2012). *Strategic Management: Concepts: Competitiveness and Globalization* (11^{th} ed.). Cengage Learning.URL=http://scholar.google.com/citations.
17. Junjeja, P. (2015). Corporate governance passing fashion. *Ep Journal of Business Management, 2*(1). Small-Sample Techniques. *The NEA Research Bulletin*, 38(2) (December, 1960), p. 99.
18. Kyere ,M. & Ausloos, M .(2020). Corporate governance and firms financial performance in the United Kingdom. *International Journal of Finance and Economics,26* (2) pp 1871-1885.
19. McGrath, S. K., & Whitty, S. J. (2015). Redefining governance: from confusion to certainty and clarity. *International Journal of Managing Projects in Business, 8*(4), 755-787.
20. Narwal, K.P., & Jindal, S. (2015). The impact of corporate governance on the profitability: An empirical study of Indian textile industry. *International Journal of Research in Management, Science & Technology. 3* (2), April 2015 Available at www.ijrmst.org . (E-ISSN: 2321-3264).
21. Noredi, A. B. M. & Noriza, B. M. S. (2010). Working capital management: The Effect of Market Valuation and Profitability in Malaysia. *International Journal of Business and Management,* 5 (11), pp. 140-147.
22. Odiwo, W. O., Chukwuma, C.S., & Kifordu, A.A.(2016). The impact of corporate governance on the performance of manufacturing firms in Nigeria. *International Journal of Science and Research (IJSR)* 5 (9) ISSN (Online): 2319-706. DOI:10.21275/ART20161412.
23. Olutuyi, O. (2017). How corporate governance can affect Nigeria's development. *Financial Development and Finance Review in Nigeria***.**
24. Omondi, O. M. & Muturi, W. (2013). Factors Affecting the Financial Performance of Listed Companies at the Nairobi Securities Exchange in Kenya. *Research Journal of Finance and Accounting*, 4 (15), pp. 99 – 104.
25. Osundina, J. A., Olayinka, I. M. & Chukwuma, J. U. (2016). Corporate governance and financial performance of selected manufacturing companies in Nigeria. *International Journal of Advanced Academic Research Social & Management Sciences .2, (10)*. ISSN: 2488-9849.
26. Owolabi, S.A. & Dada, S.O. (2011). The role of shareholders and directors in corporate governance: An appraisal of Babcock University. *Journal of Economics, Banking and Finance*, 101-109.
27. Pareek, R., Pandey, K. D., & Sahu, T. N. (2019). Corporate Governance, Firms' Characteristics and Environmental Performance Disclosure Practices of Indian Companies. *Indian Journal of Corporate Governance,12*(2).
28. Prusty, T. & Al-ahdal, W.M. (2018) .Corporate governance and profitability: Evidence fromIndian IT companies. *Financial Markets, Institutions and Risks, 2*,(3), http://dx.doi.org/10.21272/fmir.2(3).68-75.2018 .
29. Smith, J. (2018). The impact of board size on corporate governance. *Journal of Corporate Governance,* 42(3), 345-362.
30. Smith, J. (2020). *Corporate governance*: *Principles and Practices*. Publisher XYZ.
31. Tukur, G & Bilkisu, A. B. (2014). Corporate board diversity and financial performance of insurance companies in Nigeria: An application of panel data approach, *Asian and Economic Review,4*(2), 257-277.
32. Uche, C. (2004). Corporate governance in Nigerian financial industry. *Chartered Institute of Bankers of Nigeria Journal, 2(1)*, 11-23.
33. Wathanga, J. (2016). The effect of corporate governance on the organizational performance of diary co-operatives in Kenya. A dissertation report submitted to the Chandaria school of Business United state international university- Africa.
34. Wolfensohn, (1999). Corporate governance is about promoting corporate fairness, transparency and accountability. *Financial Times,* 21st June.