
IMPACT OF BOARD CHARACTERISTICS, OWNERSHIP STRUCTURE AND RETURN ON ASSETS OF LISTED HEALTHCARE FIRMS IN NIGERIA

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Abstrak

Studi ini mengkaji dampak karakteristik dewan, struktur kepemilikan, terhadap return on assets (ROA) pada perusahaan kesehatan yang terdaftar. Studi ini menggunakan laporan tahunan dan laporan keuangan perusahaan kesehatan yang terdaftar di Nigeria sebagai sumber data. Data yang dikumpulkan dianalisis menggunakan statistik deskriptif, matriks korelasi, dan analisis regresi berganda. Temuan menunjukkan bahwa struktur kepemilikan memiliki pengaruh positif dan signifikan terhadap ROA perusahaan kesehatan yang terdaftar. Kompensasi dewan tidak berpengaruh signifikan terhadap ROA perusahaan kesehatan yang terdaftar di Nigeria. Sedangkan kedisiplinan dewan, komite audit independen, dan keberagaman dewan memiliki pengaruh negatif dan signifikan terhadap ROA perusahaan kesehatan yang terdaftar di Nigeria. Direksi independen memiliki pengaruh positif namun tidak signifikan terhadap ROA perusahaan kesehatan yang terdaftar di Nigeria. Oleh karena itu, disarankan agar perusahaan kesehatan mendorong kepemilikan yang terkonsentrasi atau investor institusional yang dapat memberikan pengawasan strategis dan meningkatkan kinerja keuangan. Perusahaan sebaiknya menyelaraskan remunerasi eksekutif dengan insentif berbasis kinerja untuk meningkatkan motivasi dan pengambilan keputusan strategis. Selain itu, daripada meningkatkan frekuensi rapat, perusahaan sebaiknya fokus pada peningkatan kualitas rapat dengan memastikan diskusi berjalan secara strategis dan berorientasi pada hasil.

Kata Kunci : *Board Characteristics, Return on Asset, Healthcare Firms Responsibility*

Abstract

This study examined the impact of board characteristics, ownership structure return on assets of listed healthcare firms. This study used annual reports and accounts of listed healthcare firms in Nigeria as sources of data. The data collected was analysed using descriptive statistics, a correlation matrix and multiple regression analysis. The findings show that ownership structure has a positive significant impact on ROA of listed healthcare, Board compensation has no significant impact on the ROA of listed healthcare firms in Nigeria, Board diligence, Independent Audit Committee and Board diversity have negative significant effect on ROA of listed healthcare firms in Nigeria and Independent Directors have positive insignificant impact on the ROA of listed healthcare firms in Nigeria. It is however recommended that Healthcare firms should encourage concentrated ownership or institutional investors who can provide strategic oversight and improve financial performance. Firms should align

executive remuneration with performance-based incentives to enhance motivation and strategic decision-making rather than increasing meeting frequency, firms should focus on improving meeting quality, ensuring discussions are strategic and result-oriented.

Keywords: Board Characteristics, Return on Asset, Healthcare Firms Responsibility

INTRODUCTION

The non-financial sector plays a crucial role in today's world, particularly in driving economic development, creating employment opportunities and contributing to social well-being. For Nigeria's economic growth and national income, a strong, stable, and healthy industry is essential (Ministry of Finance, 2020). Nigeria's non-financial sector plays vital role in the country's economic growth; hence, any expansion and improvement in this area enhances people's quality of life and lowers poverty. The current analysis focuses on healthcare companies that have been among the top-performing businesses for the last 10 years and are listed on the Nigerian Stock Exchange. The primary responsibility of the Board of Directors (BOD) is to represent shareholders in the governance and administration of the company, ensuring alignment with its development orientation.

A joint-stock corporation's governing body, the Board of Directors, has complete ability to act on behalf of the firm in making decisions and carrying out its interests. Generally, the Board of Directors significantly influences both the overall business performance and the operation of the company through its management choices. Consequently, recent studies have focused on enhancing the performance of Boards of Directors and, in turn, improving the business performance of companies.

Nigeria's board size, ownership structure, and financial disclosures have all seen significant changes since the implementation of the current corporate governance laws (Onuorah & Imene, 2016). Similar to this, Di-Biase and Onorato (2021) believe that, in addition to and in combination with other factors that contributed to corporate instability and business collapses in many Nigerian industries, a lack of effective governance caused by weak boards of directors was responsible for previous failures of many industries.

The primary responsibilities of the board of directors, the company's highest governing body, include protecting the interests of shareholders, ensuring sustainable growth, overseeing business operations, and preventing financial crises. In practice, the board of directors actively participates in strategy development and has complete access to the information required to carry out its oversight duties (Haris et al., 2019). Recently, boards have placed greater emphasis on showcasing value-adding initiatives, particularly in the banking sector. An organisation is considered incomplete or lacking in effective governance without a functional board of directors.

They ensure that the business remains financially sustainable and able to continue as a going concern while fulfilling their duties on behalf of the shareholders. As a result, they are concerned

with all aspects of the organisation's governance and seek to ensure that the needs of stakeholders, including shareholders, are met. One of the things they deal with is making sure that the company performs well by keeping an eye on things and offering guidance when needed. For shareholders, the returns on their investments are just as important as their dividends (Ehiedu, et al, 2020). The company's success may be impacted by a number of board-related characteristics, including size, independence, ownership, gender, age ratio of executive to non-executive directors, directors' education, and others (Okolie and Uwejeyan, 2022).

It is widely accepted that the qualities of the corporate board can have a significant impact on firm performance. For the past 20 years, scholars, accounting professional associations, practitioners, and policymakers have recognized and emphasized the role of boards of directors as one of the primary pillars of corporate governance. Some scholars (Assenga, Aly, & Hussainey, 2018) contend that the diverse orientations of boards of directors influence the effectiveness of the organisation. Board independence has recently drawn more attention in corporate governance practice and study. Recently, there has been increased interest in studies on board composition, including board size and independence (Ganbo, et al, 2018; Furhan et al , 2020). Numerous studies have found a correlation between board diversity and organisational effectiveness (Okiro, 2016; Mohammed, et al, 2018). Racial diversity on the board of directors may lead to better corporate governance, which raises company revenues, according to Adegboyegun and Igbekoyi (2022).

Some inequality in societal power and governance seems to be supported by Nigeria's cultural heritage (Okeyide, 2018). Therefore, the diversity of the African landscape remains largely in its infancy. Some progress has been made, as the Securities and Exchange Commission recommended board diversity as the second principle in the second section in its corporate governance code. However, this can only be regarded as a recommendation, as no quotas or explicit guidelines have been established to ensure the implementation of board diversity in Nigeria (Ehiedu & Brume-Ezewu, 2022).

According to (Hariyanto et al., 2024), ownership denotes the condition or reality to the exclusive rights and authority over property, which may include objects, land or real estate, as well as intellectual property. Proprietorship Ownership in common encompasses a range of rights collectively referred to as title, which can be distinct and possessed by different parties (Mackin, 2024). The decision regarding capital structure holds significant importance as it has a direct impact on a company's profitability. The ownership structure serves as a significant factor influencing corporate governance, providing valuable insights for policymakers aiming to enhance the corporate governance framework. The paper investigates the impact of board characteristics and ownership structure and the Return on assets of listed healthcare firms in the context of Nigeria.

Larger boards are seen to offer more monitoring and a range of viewpoints, which can improve decision-making and, ultimately, financial performance. Boards that are too big,

however, could experience inefficiencies and coordination issues. According to a study by Ogege and Boloupremo (2014), there is a perfect board size in Nigeria that has a good relationship with financial success, especially when it comes to ROA and ROE. An important consideration is the proportion of executive to non-executive directors. It is believed that non-executive directors oversee the company's operations and exercise independent judgment.

According to Adegbe and Adeniji (2020), companies in Nigeria that have a larger percentage of non-executive directors typically have better financial results because of improved oversight and fewer agency conflicts. Diverse viewpoints and creative solutions can result from differences in gender, race, and professional experience. According to research by Adebayo et. al. (2021), gender diversity in particular has a good correlation with financial success in Nigerian healthcare companies because it improves problem-solving skills and brings a variety of perspectives. To make objective decisions and safeguard the interests of shareholders, independent directors are essential.

According to a 2018 study by Egbunike and Odum, Nigerian healthcare companies with a larger percentage of independent directors typically have better financial results, highlighting the significance of independence in corporate governance. Nigeria doesn't seem to have good corporate governance. This was corroborated by the claim that most businesses face financial trouble because board members' prioritized personal interests over corporate governance procedures, leading to conflict and poor decisions (Olatunji and Adeleke, 2019).

The poor performance of certain Nigerian healthcare companies may be connected to all of these shortcomings. Previous empirical studies have shown inconsistent use of variables, sectors, and economies, leading to mixed findings. The controls in Yilmaz's (2018) study of corporate governance in Oman were leverage, sales growth, and firm size. Measures of corporate governance and performance included block shareholding, institutional ownership, number of meetings, board size, and board independence. Leverage is used as a control variable in Kyere and Ausloos's (2021) UK study, which uses ROA and TobinQ as financial performance indicators and insider shareholding, board size, board independence, CEO duality, audit committee meetings, and business size as corporate governance metrics. Additionally, many Nigerian company boards may be devoid of gender and ethnic diversity, which results in a dearth of diverse viewpoints and experiences. This may make it more difficult for the board to evaluate possible risks and possibilities risks and opportunities, which may affect the stability of the finances. Based on the aforementioned, the study aims to investigate how board composition and ownership structure affect the return on assets of Nigerian-listed healthcare companies.

The main objective of this study is to examine the impact of board characteristics, ownership structure, and return on assets (ROA) of listed healthcare firms in Nigeria. Specifically, the study seeks to investigate the impact of ownership structure on ROA; examine the impact of board compensation on ROA; assess the effect of board diligence on ROA; determine the effect of an independent audit committee on ROA; explore the effect of

independent directors on ROA; and identify the impact of board diversity on the return on assets of listed healthcare firms in Nigeria.

LITERATURE REVIEW

Theoretical Framework

Agency Theory

Agency theory was selected because it has been widely applied in corporate board research and debates (Zahra & Pearce, 1989), following its foundational development by Jensen and Meckling (1976). The idea holds that business owners are principals and management are agents. Directors in corporate organisations have oversight and monitoring duties because ownership and control are not the same thing. Under this kind of arrangement, managers are expected to manage the company on behalf of the owners.

The traditional agency theory serves as the foundation for our investigation. Berle and Means (1932) proposal to distinguish between ownership and control is associated with the evolution of agency theory. However, in the absence of a strong board structure and efficient governance, corporate managers may attempt to maximise their interests at the expense of the interests of the corporate owners (for instance, by pursuing policies that may not improve firm performance but will maximize their personal benefits). Based on the aforementioned reasoning, it is expected that financial performance will benefit from independent directors, board diversity, board diligence, an independent audit committee, and performance-based board compensation.

Concept of Board Characteristics (BC)

A board of directors is a group of individuals chosen to represent shareholders. Every publicly traded company is required by law to have a board of directors. The board acts as the governing body of the company. These companies are better positioned to accomplish their objectives and support the economy when the interests of the board and management are aligned with those of the shareholders and other stakeholders (Okolie & Uwejean, 2022). To effectively perform its obligations, the board of directors needs a diverse range of abilities without sacrificing competence, independence, or integrity (Okolie et al., 2022). These traits are important when investigating the relationship between board characteristics and firm performance. Conversely, the qualitative or intangible components include developing positive values and making wise decisions (Kamaludin, et al., 2020).

A corporation's board of directors is a key governing body that oversees the management of the company and the implementation of sound corporate governance practices (Emeka-Nwokeji & Agubata, 2019). The effectiveness or success of the board is evaluated using both quantitative and qualitative criteria. Board size, independence, shareholdings, frequency of meetings, gender

diversity, and membership expertise are among the quantitative aspects. A company's board of directors is chosen by its shareholders to oversee its operations and allocate its resources. Lin, Luo, and Tang (2015) believe that this arrangement is similar to an agency contract since the investors are the principals who hire the directors to make choices in their best interests. In addition to ensuring the company's survival, the investors want to boost profits. Due to common challenges arising at different levels in businesses and having the potential to impact their performance, board characteristics such as size and independence are crucial to examine. In most developed markets, the corporate ownership structure typically serves as a governance mechanism at the company level rather than advancing the nations or markets (Buchuk et al., 2014; De Jong et al., 2010).

Ownership Structure

The percentage of equity capital shares held by the various stakeholders is known as the ownership structure. A company's governance, strategic decision-making, and financial success are all greatly impacted by its ownership structure. Ownership structure refers to the way equity is distributed among different types of owners in a business, including managerial and non-managerial shareholders, institutional investors, foreign (international) investors, and whether ownership is concentrated or dispersed (Fauzi & Locke, 2023). The financial results, risk tolerance, and shareholder interests of a company are all impacted differently by the kind of ownership. Institutional ownership, which includes shares held by mutual funds, insurance firms, and pension funds, is increasingly linked to better corporate governance and performance due to the active scrutiny these organisations provide (Clark & Hebb, 2023). However, some research suggests that institutional investors might put short-term profits over long-term performance, which could result in riskier strategies (Lazonick, 2023).

Additionally, foreign ownership has a significant impact on business performance, particularly in developing nations. According to research, foreign-owned businesses frequently gain from easier access to international markets, cash, and technology, all of which can improve overall performance (Nguyen & Tran, 2023). However, foreign ownership may bring with it complications that could affect corporate strategy, such as cultural misalignment and cross-border regulatory compliance (Gaur et al., 2023).

Concentrated owners are often better positioned to influence management and improve performance, when they have greater direct oversight. Concentrated ownership, however, may result in conflicts of interest, especially if dominant shareholders abuse their power at the expense of minority shareholders, which could eventually lower the firm's value (Pham et al., 2022). Each shareholder group has distinct financial goals and strategies for increasing its investment (Kao et al., 2019). According to Ahmad (2018), the success of an organisation may be impacted by the varying strategic decision-making authority of its shareholders.

Return on Assets

Return on Assets (ROA) is a key financial metric used to evaluate how efficiently a company utilises its assets to generate profit. It is calculated by dividing a company's net income by its total assets. This ratio is vital for assessing a company's operational efficiency and financial performance, reflecting how well it can convert assets into profit. The metric gives an indication of how effectively a company is utilising its assets to produce net income. A higher ROA suggests that the company is efficiently managing its assets, whereas a lower ROA may indicate inefficiencies. According to Matzler et al. (2022), ROA is crucial for investors as it helps determine the financial health of a company and its ability to generate profit from its investments in assets. This makes ROA a significant indicator for stakeholders assessing potential returns. The importance of ROA in financial decision-making is substantial, both for internal management and external investors. Internally, management can use ROA to benchmark their company's performance over time, assess the effectiveness of capital allocation, and adjust strategies to improve profitability (Garrison et al., 2021). Externally, investors rely on ROA to compare firms within the same industry, as it reveals how well companies are utilising their assets to create value for shareholders (Kaplan & Atkinson, 2020). ROA also serves as a tool for identifying the potential risk associated with a company's asset utilisation. Companies with a low ROA may be at risk of underperforming in competitive markets, as their assets are not being leveraged effectively. Conversely, companies with high ROA tend to have better profitability ratios, making them more attractive to investors and creditors. In recent years, scholars have expanded the analysis of ROA beyond simple asset utilisation. Researchers have examined how corporate strategies, technological advancements, and environmental factors influence ROA. For example, the role of innovation and digital transformation in improving ROA has been explored by researchers like Boudreaux and Lasserre (2021). They argue that firms adopting new technologies tend to show improved asset efficiency, leading to better financial performance. This is particularly relevant for industries such as technology and manufacturing, where the efficient use of assets is central to maintaining a competitive edge. Moreover, recent literature has pointed out that ROA may not always be a perfect indicator of performance, especially in industries with heavy capital investments such as oil and gas. In these sectors, companies often have substantial assets but may not generate significant profits in the short term due to market fluctuations. As a result, some scholars suggest using ROA in conjunction with other financial ratios, such as Return on Equity (ROE) or Return on Investment (ROI), to obtain a more comprehensive view of a company's performance.

Empirical Review

Appah and Tebepah (2023) examined the relationship between listed consumer products manufacturing companies' financial performance and corporate governance in Nigeria between 2011 and 2020. The specific goals were to examine the impact of board size on return on equity (ROE) and assess the relationship between board independence, compensation, and diligence with

return on equity of Nigerian consumer goods manufacturing companies that were listed. Ex post facto and correlational research designs were used in the study. The study population consisted of 21 publicly traded consumer products manufacturing companies as of 2020. The enterprises were selected as the study's sample size using a census approach. Data analysis was conducted using secondary data from the sampled firms' published annual financial reports. Multivariate analysis, correlation coefficients, and descriptive statistics were employed. The findings showed that the return on equity of listed consumer goods manufacturing firms in Nigeria is negatively and insignificantly correlated with board size; negatively and significantly correlated with board independence; positively and significantly correlated with board compensation; and negatively and significantly correlated with board diligence.

Appah (2023) looked into how corporate governance practices affected Nigerian deposit money banks' worth. All deposit money banks made up the study population, and the Taro Yamane technique of determining sample size was used. The public financial statements of the selected banks for the period after the data's validity and reliability tests provided the study's secondary data. Univariate, bivariate, and multivariate analyses were used to test the collected data. The multiple regression analysis revealed that the value of deposit money banks in Nigeria is favourably and significantly influenced by the board's independence, size, ownership structure, gender diversity, and board meetings. The study concluded that the value of deposit money banks in Nigeria is favourably and significantly impacted by corporate governance features.

Based on data from Pakistan, Syed et al. (2023) assessed the effect of board attributes, such as the presence of women on the board, the busyness of the directors, blockholder ownership, and the qualifications of the directors, on the financial performance of the company. Previous studies on how board characteristics affect a company's financial success are based on conflicting theoretical perspectives and ambiguous empirical findings that are mostly based on regression. This study addresses previously unclear conclusions regarding the relationship between board features and firm financial success using configurational analysis. This study makes use of theories such as agency theory and resource dependence. The study examined a sample of 60 non-financial companies listed on the Pakistan Stock Exchange (PSX) using fuzzy-set qualitative comparative analysis. The data was from before the crisis. The study indicated that a firm's profitability, or return on equity (ROE) and return on assets (ROA), can be greatly impacted by various combinations of board qualities. The practical consequences emphasise that to plan strategies appropriately, policymakers must assess the current degree of regulatory and competitive development of firms. The impact of board diversity and audit committee composition on Indonesian companies' performance was investigated by Zarefar & Narsa (2023). Furthermore, this study investigated how the diversity of the board and the audit committee affect the company's performance across a range of age groups. Data panel regression analysis was used to examine a sample of 170 of primary and secondary sector companies that were listed on the Indonesian Stock Exchange between 2014 and 2020. The primary conclusions of the study revealed that the performance of market-based firms

was positively impacted by the size and proficiency of the audit committee. The frequency of the audit committee's meetings had no significant effect on market-based outstanding performance. The study also reveals that market-based firm performance is positively impacted by foreign and board gender. These results assist policymakers in creating suitable governance frameworks for the emerging Indonesian market. Additionally, no other study in the Indonesian context has conducted analyses based on firm age.

Obaje and Ogirima (2022) examined the financial performance of quoted deposit money banks in Nigeria between 2014 and 2020, as well as the size and gender diversity of the board. The sample size of eight quoted deposit money banks in Nigeria was determined using a simple random sampling technique, whereas the population consists of all 11 quoted deposit money banks in Nigeria. Following some diagnostic testing, the Ordinary Least Squares regression model was used to assess the hypotheses. The results showed that board gender diversity (BGDIV) has significant negative impact on the return on assets of Nigerian deposit money banks, board size (BSIZE) has an insignificantly negative impact. It was determined that a large board size lowers the quality of return on assets for Nigerian deposit money banks, and that to improve the quality of return on assets for Nigerian deposit money banks, the number of female and male board members must remain equal.

The impact of board characteristics (size, independence, gender diversity, and audit committee size) on the performance of FTSE 100 Index Companies as determined by return on equity, return on assets, Tobin's Q, and share price was examined by Adeyemi, Olaoye, and Oluwasegun (2022). The period of secondary data collection was 2010–2019. Panel data regression analysis using Fixed and Random Effects, OLS, and FGLS estimation techniques was used to examine the gathered data. The findings showed that while board gender diversity significantly improves firm performance as measured by share price, audit committee size and board gender diversity improve financial performance as measured by return on equity (ROE) and Tobin's Q.

Research Hypotheses

The following null hypotheses will be tested to achieve the stated objectives of this study:

H₀₁ : Ownership structure has no significant effect on the return on assets of listed healthcare firms in Nigeria.

H₀₂ : Board compensation has no significant effect on the return on assets of listed healthcare firms in Nigeria.

H₀₃ : Board diligence has no significant effect on the return on assets of listed healthcare firms in Nigeria.

H₀₄ : The Independent Audit Committee has no significant effect on the return on assets of listed healthcare firms in Nigeria.

H₀₅ : Independent Directors have no significant effect on the return on assets of listed healthcare firms in Nigeria.

H₀₆ : Board diversity has no significant effect on the return on assets of listed healthcare firms in Nigeria.

METHODOLOGY

An ex-post facto approach was chosen because this study is based on secondary data collected in prior years. The information was taken from previous years' audited financial accounts of the various healthcare institutions. The population of this study consists of all ten healthcare firms listed on the Nigerian exchange Group (NGX). All ten healthcare firms were included in the sample. The study employed the secondary data, with annual report of healthcare companies covering the period 2014–2023 serving as the main source.

Variable Measurement and Sources

Tabel 1
Variable Measurement and Sources

Variables	Types of Variables	Symbol	Measurement	Sources
Return on Assets	Dependent	ROA	Profit after tax divided by Total Assets	Kaplan & Atkinson (2020).
Ownership Structure	Independent	OWS	Percentage of directors who have 10% or more shares of a company	Dakhlallah et al. (2019)
Board compensation	Independent	BoC	Natural Log of Salary and Benefits received by the executive during the year	Akewuosha and Saka (2018)
Board diligence	Independent	BoD ₁	Number of directors with ACCA, ICAN or MSc. in finance divided by total directors	Peter et al., (2020)
Independent Audit Committee	Independent	IAC	The number of independent audit committee members divided by the total number of audit committee members	Ahmed and Hamdam (2015)
Independent Directors	Independent	InD	Number of independent directors divided by the total directors.	Buallay et al., (2017)
Board diversity	Independent	BoD ₂	The number of female directors divided by the total directors	Salawu and Adedeji (2017)

Source: Author's Compilation (2024)

Model Specification

This study employs one econometric model. The model used is as follows:

$$SOSP_{it} = \beta_0 + \beta_1 BOS_{it} + \beta_2 BOM_{it} + \beta_3 BOI_{it} + \beta_4 EPS_{it} + \beta_5 ROA_{it} + \mu_{it}$$

Where: $SOSP_{it}$ = Social Sustainability Practice, BOS_{it} = Board Size, BOM_{it} = Board Meetings, BOI_{it} = Board Independence, EPS_{it} = Earnings Per Share, ROA_{it} = Return on Assets. For this study, the model was modified to:

$$ROA_{it} = \beta_0 + \beta_1 OWS_{it} + \beta_2 BoC_{it} + \beta_3 BoD_{1it} + \beta_4 IAC_{it} + \beta_5 InD_{it} + \beta_6 BoD_{2it} + \mu_{it} \dots \dots \dots i$$

ROA = Return on Assets

OWS = Ownership Structure

BoC = Board Compensation.

BoD₁ = Board Diligence

IAC = Independent Audit Committee

InD = Independent Directors.

BoD₂ = Board Diversity

$\beta_1 - \beta_6$ = Regression Coefficients

μ = Error Term

Where, i represents the bank and t the year

The study employed Ordinary least squares multiple regression analysis as the main technique for data analysis.

RESULT AND DISCUSSION

Table 2
Regression Analysis

Dependent Variable: ROA

Method: Least Squares

Date: 02/11/24 Time: 18:39

Sample: 1 100

Included observations: 100

Variable	Coefficient	Std. Error	t-Statistic	Prob.
OWS	0.103546	0.038928	2.659903	0.0092
BOC	-0.009981	0.022642	-0.440805	0.6604
BOD1	-0.166058	0.079608	-2.085949	0.0397
BOD2	-0.254977	0.093916	-2.714949	0.0079
IAC	-0.113891	0.065497	-1.738875	0.0254
IND	0.018269	0.045465	0.401815	0.6887
C	0.063700	0.016274	3.914196	0.0002
R-squared	0.245864	Mean dependent var	0.040077	
Adjusted R-squared	0.197210	S.D. dependent var	0.041659	
S.E. of regression	0.037326	Akaike info criterion	-3.670816	
Sum squared resid	0.129572	Schwarz criterion	-3.488454	
		Hannan-Quinn		
Log likelihood	190.5408	Log likelihood criterion.	-3.597010	
F-statistic	5.053323	Durbin-Watson stat	0.639727	
Prob(F-statistic)	0.000159			

Source: Researcher's Computation Using E-Views 10.0, 2024

H₀₁: Ownership structure has no significant impact on the Return on Assets of listed healthcare firms in Nigeria.

According to the regression analysis, the Ownership Structure (OWS) coefficient has a positive and significant impact on the Return on Assets of listed healthcare firms in Nigeria. The ROA = 0.06 + 0.10OWS. Coefficient (0.10) indicates that for every unit increase in the Ownership Structure, the financial performance of listed healthcare firms in Nigeria is expected to

increase by 0.10 units, holding other factors constant. The positive coefficient suggests a direct relationship between the independent and dependent variables. A smaller standard error 0.038928 (~0.04) indicates that the coefficient estimate is relatively precise. This means there is a low variability in the estimate of the coefficient, which gives more confidence in the reliability of the result. A t-statistic of 2.65 suggests that the coefficient is significantly different from zero. Typically, a t-statistic greater than 2 (in absolute terms) indicates statistical significance at common levels (e.g., 5%). A p-value of 0.00 (typically interpreted as less than 0.01) suggests that the coefficient is statistically significant at the 1% level. This means there is a very low probability that the observed relationship occurred by chance, and we can confidently reject the null hypothesis that the coefficient is zero and conclude that Ownership structure has a positive and significant impact on the financial performance of listed healthcare firms in Nigeria.

Ho2: Board compensation has no significant impact on the Return on assets of listed healthcare firms in Nigeria.

According to the regression analysis, the Board Composition (BoC) coefficient has a negative and insignificant impact on the Return on Asset of listed healthcare firms in Nigeria. $ROA = 0.06 - 0.009981BoC$. The coefficient -0.009981 suggests a very small negative relationship between the Board Composition and the financial performance of listed healthcare firms in Nigeria. The effect size is almost negligible. A larger standard error relative to the coefficient indicates less precision in the estimate. A t-statistic of -0.44 indicates no significant effect since the absolute value is far below 2. A p-value of 0.66 is quite high, indicating that there is no statistically significant evidence to reject the null hypothesis. In other words, the effect of the Board Composition on the financial performance of listed healthcare firms in Nigeria is not significant at the 5% level. This means we accept the null hypothesis and conclude that Board compensation has no significant impact on the financial performance of listed healthcare firms in Nigeria.

Ho3: Board diligence has no significant effect on the Return on assets of listed healthcare firms in Nigeria.

According to the regression analysis, the Board diligence (BoD₁) coefficient has a negative and significant impact on the Return on Asset of listed healthcare firms in Nigeria. The $ROA = 0.06 - 0.166058BoD_1$. A coefficient of -0.166058 suggests a negative relationship between the Board's diligence and the financial performance of listed healthcare firms in Nigeria. The standard error of 0.07 indicates that the coefficient estimate is fairly precise, and the t-statistic of -2.08 suggests that the coefficient is significantly different from zero. P-value of 0.03 indicates that the coefficient is statistically significant at the 5% level. This means you can reject the null hypothesis and conclude that Board diligence has a significant negative effect on the financial performance of listed healthcare firms in Nigeria.

Ho4: Independent Audit Committee has no significant effect on the Return on Asset of listed healthcare firms in Nigeria.

According to the regression analysis, the Independent Audit Committee (IAC) coefficient

has a negative and significant effect on the Return on Asset of listed healthcare firms in Nigeria. The $ROA = 0.06 - 0.113891IAC$. The coefficient of -0.113891 shows that for one-unit increase in the independent variable is associated with a decrease of about 0.114 units in the dependent variable. A smaller standard error indicates a more precise estimate of the coefficient, and the t-statistic of -1.73 suggests that the coefficient is relatively clear to zero, but it is important to consider its significance. A p-value of 0.02 is typically considered statistically significant at the 5% level ($\alpha = 0.05$), suggesting that you can reject the null hypothesis. In other words, there is evidence to suggest that the Independent Audit Committee has a significant effect on the financial performance of listed healthcare firms in Nigeria.

Ho5: Independent Directors have no significant effect on the Return on Asset of listed healthcare firms in Nigeria.

According to the regression analysis, the Independent Directors (IND) coefficient has a positive and insignificant effect on the Return on Asset of listed healthcare firms in Nigeria. The $ROA = 0.06 + 0.018269IND$. A coefficient of 0.018269 suggests a very small positive impact. For each unit increase in the independent variable, the dependent variable is expected to increase by 0.018269 units, holding other variables constant, and the standard error is relatively large compared to the coefficient, which suggests a higher level of uncertainty about the exact value of the coefficient. A t-statistic of 0.40 indicates that the coefficient is not significantly different from zero. Generally, a t-statistic greater than 2 or less than -2 is considered significant, so a value of 0.40 suggests that the coefficient is not statistically significant, and a high p-value (0.68) indicates that this effect is not statistically significant. In other words, the data does not provide strong evidence that Independent Directors have no significant effect on the financial performance of listed healthcare firms in Nigeria.

Ho6: Board diversity has no significant effect on the Return on assets of listed healthcare firms in Nigeria.

According to the regression analysis, the Independent Directors (IND) coefficient has a positive and insignificant effect on the Return on Asset of listed healthcare firms in Nigeria. The $ROA = 0.06 - 0.254977BOD2$. A negative coefficient of -0.254977 means that for every one-unit increase in the independent variable, the dependent variable decreases by 0.254977 units. This suggests an inverse relationship between the two variables, and a standard error of 0.09 shows that the coefficient estimate has a reasonable level of precision. The value of -2.71 suggests the coefficient is statistically significant. A p-value below 0.05 (such as 0.007) indicates that the coefficient is statistically significant at the 5% significance level. Therefore, you can reject the null hypothesis, implying that Board diversity has a significant effect on the financial performance of listed healthcare firms in Nigeria. With a coefficient of determination (r^2) of 0.24, board characteristics and ownership structure can account for 24% of the variation in the financial performance of listed healthcare firms in Nigeria. Other relevant factors that were overlooked in

the regression model can account for the remaining 76%.

Discussion of Findings

The findings reveal that ownership structure has a significant positive impact on the return on assets (ROA) of listed healthcare firms in Nigeria. This suggests that firms with concentrated ownership, where major shareholders have controlling stakes, tend to perform better due to effective monitoring and decision-making (Al-Fayoumi et al., 2019). This aligns with agency theory, which argues that ownership concentration reduces agency costs and enhances financial performance (Jensen & Meckling, 1976).

Conversely, board compensation has no significant impact on ROA, indicating that financial incentives given to directors do not directly influence firm profitability. This finding contradicts the pay-for-performance hypothesis, which assumes that well-compensated executives are more likely to improve firm performance (Ozkan, 2018). It may imply that board members' remuneration in Nigeria's healthcare sector does not sufficiently motivate them to drive financial success, possibly due to misalignment between pay structures and performance metrics.

Additionally, board diligence has a significant negative effect on ROA, meaning that frequent board meetings do not necessarily translate to better financial performance. This result suggests that excessive meetings may signal inefficiencies or crisis management rather than strategic decision-making (Khan et al., 2020). This contradicts corporate governance best practices, which emphasise that more diligent boards enhance firm performance through active monitoring and decision-making (Fama & Jensen, 1983).

The independent audit committee significantly affects ROA, emphasising the crucial role of audit independence in ensuring financial transparency and performance (Egbunike & Odum, 2018). This supports the argument that a well-structured audit committee improves investor confidence and mitigates financial misstatements, leading to better firm performance.

Similarly, independent directors have no significant effect on ROA, suggesting that their presence does not necessarily lead to improved financial performance. This may be due to the limited influence independent directors have on strategic decision-making in Nigeria's healthcare sector (Adewuyi & Olowookere, 2020). It indicates that independence alone is not enough to enhance firm profitability unless coupled with expertise and industry knowledge.

Finally, board diversity significantly affects ROA, highlighting the importance of diverse perspectives in strategic decision-making. Gender, professional, and ethnic diversity on the board contribute to improved innovation, risk management, and corporate governance, thereby enhancing firm performance (Hassan et al., 2021). This aligns with resource dependence theory, which posits

that diverse boards provide firms with valuable external networks and expertise.

CONCLUSION AND RECOMMENDATIONS

This study concludes that corporate governance mechanisms play a crucial role in influencing the financial performance of listed healthcare firms in Nigeria. The findings indicate that ownership structure has a positive and significant impact on return on assets (ROA), suggesting that firms with concentrated ownership structures benefit from effective monitoring and reduced agency costs, leading to better financial performance.

In contrast, board compensation has no significant impact on ROA, implying that remuneration alone does not drive profitability in the Nigerian healthcare sector. This may be due to ineffective incentive structures that do not align compensation with firm performance. Additionally, board diligence exhibits a significant negative effect on ROA, suggesting that frequent board meetings may be a sign of inefficiencies or reactive decision-making rather than proactive governance.

Furthermore, the independent audit committee has a significant positive effect on ROA, reinforcing its role in enhancing financial transparency and investor confidence. However, independent directors do not significantly impact ROA, indicating that their presence alone may not be sufficient to drive firm performance unless coupled with relevant expertise and influence in decision-making.

Lastly, board diversity positively influences ROA, highlighting the importance of varied perspectives in fostering innovation and sound corporate governance. The study emphasises the need for firms to strengthen corporate governance practices by enhancing ownership structures, promoting effective board diversity, and ensuring the audit committee's independence. These measures can improve financial performance and long-term sustainability in the healthcare sector.

Healthcare firms should encourage concentrated ownership or institutional investors who can provide strategic oversight and improve financial performance. Additionally, firms should align executive remuneration with performance-based incentives to enhance motivation and strategic decision-making. Instead of merely increasing the frequency of board meetings, emphasis should be placed on improving the quality of these meetings to ensure that discussions are strategic and result-oriented. Regulatory bodies should also enforce stringent audit committee independence to enhance transparency and financial accountability. Furthermore, firms are advised to appoint independent directors with relevant industry expertise and strong governance capabilities to strengthen oversight and improve overall corporate performance. Companies should implement policies that encourage gender, professional, and ethnic diversity, leveraging diverse perspectives to enhance decision-making and firm performance.

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