



Corporate Governance and Financial Performance of Listed Healthcare Sector Companies in Nigeria

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Abstract

The Healthcare sector companies are veritable investment companies on the Nigerian Stock Exchange. The study aimed to investigate the effect of corporate governance and financial performance of listed healthcare sector companies in Nigeria. It employed the ex-post facto research design and equally used secondary data generated from the annual report and accounts of all eight (8) sampled listed healthcare sector companies in Nigeria from 2008 to 2019. The sample size was arrived at by using a purposive sampling technique. The study analysed the data using least square, descriptive and covariance techniques. It adopted Tobin-Q as a measure for firm financial performance, whereas corporate governance variables include board size, board independence and managerial ownership. From the empirical results, the study concludes that there are some level of significance between financial performance and two out of the three corporate governance variables (board independence and managerial ownership). However, the correlation result shows no relationship among the variables examined. The study, therefore, recommends that companies in the healthcare sector should as a matter of necessity embrace complete compliance to corporate governance structure in order to attract the tremendous benefits and improve corporate financial performance therein. This could be done simultaneously with the governance structure at the district, state or hospital level to achieve greater performance. More so, further studies could examine other corporate governance variables together with the already examined variables in this study. Other financial performance variable could also be employed to ascertain any relation or significance among them for the healthcare sector companies.

Keywords: Corporate governance; Financial performance; Healthcare sector; Tobin-Q.

1. Introduction

The occurrence of coronavirus, code-named Covid-19 which the World Health Organization (WHO) called a pandemic and the concerted efforts of the governments globally to contain its spread in the first three quarters of the year 2020 have positively confirmed the saying that indeed 'Health is Wealth'. As the health of humans is critical and key to every human's activity so is the health (financial performance) of any company. For any company to fulfil its core mandate, such company must and should always be in good financial health. For such to occur, the day-to-day activities should be under the control and supervision of competent hands to regulating the company's activities. One of the ways by which activities of companies are regulated is through the corporate governance structure.

Corporate governance refers to the relationship which exists among different participants in a company for the attainment of the objectives of the company. Corporate governance mechanisms exist to assist companies to perform better through quality decision making (Shivaani *et al.*, 2017). They are enhanced by transparency and proper disclosure practices. Maier (2005) sees corporate governance as a "set of relationships between a company's management, its board, its shareholders and its stakeholders". To John and Senbet (1998) and as cited in Adewuyi and Olowookere (2008), corporate governance refers to measures involving how all stakeholders in the company attempt to ensure that managers and other insiders adopt mechanisms that safeguard the interest of the stakeholders". It becomes imperative to ensure that good and sound corporate governance exist and is being maintained in listed healthcare sector companies.

Interestingly, in the healthcare sector, governance shows the accountability of the boards and leaders for continuous operational improvement, together with clinical staff and processes, society and improvement in financial performance. The board of directors and executive management in the healthcare are in charge of all aspects of corporate governance; and more-so, financial performance, compliance with laws, and regulations as well as business ethics are all subsets of corporate governance. Corporate governance is necessary because healthcare companies are accountable to their stakeholders and the surrounding communities in which they operate.

Furthermore, financial performance, being an integral part of the study, gives a more exact perspective of the performance of companies both in the healthcare and other sectors of the economy. It measures the financial health of a company and shows how the managers have judiciously utilized the scarce human and physical resources

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entrusted to them to achieve the company's objectives over time. Financial performance of a company is not only a function of quality management but also adherence to the policies and tenets of good corporate governance; hence the implementation of corporate governance standards improves financial performance (Goel, 2018).

However, from the review of extant studies on corporate governance and financial performance of companies, we observed that, truly relationship exists among the several studies examined with a divergent level of significance, which is as a result of corporate governance mechanisms (board size, board composition, audit committee size, ownership structure, and CEO duality, amongst others). We identified mixed findings among these studies with the difference in governance structure for the non-financial and financial sectors (Abor, 2015; Akbar *et al.*, 2019; Enilolobo *et al.*, 2019; Ibrahim and Abdullahi, 2019; Olabisi and Omoyele, 2011; Osundina *et al.*, 2016). This has made it paramount to narrow further studies to examine listed healthcare sector companies in Nigeria. Erin *et al.* (2019); Ujah and Ezechi (2016) are few studies within the Nigerian context that have been able to investigate the healthcare sector of listed companies and the public sector healthcare service delivery using current data. It has become necessary to further expand the frontier of extant literature to ascertain the current position of the effect of corporate governance on the financial performance of healthcare companies quoted on the Nigerian Stock Exchange (NSE). From the objectives of this study, the following null hypotheses were formulated and tested:

- i. Board size has no significant impact on the financial performance of Listed Healthcare Sector Companies in Nigeria.
- ii. Board independence has no significant effect on the financial performance of Listed Healthcare Sector Companies in Nigeria.
- iii. Managerial ownership has no significant influence on the financial performance of Listed Healthcare Sector Companies in Nigeria.

2. Review of Extant Literature

2.1. Corporate Governance

Corporate governance is an important variable in the growth and financial performance of companies as it is an avenue for increased external financing, improved management and operational performance. It is an arrangement which adopts various ethical standards drawn from the fields of accounting, management, and legal framework, amongst others, for the effective and efficient management of companies. Pandey (2010) observes that diligence, transparency, responsibility and accountability are the hallmarks of corporate governance. To Adedokun (2003), corporate governance forms the accounting framework for decision making. While Akinsulire (2006) views corporate governance as the general mechanisms by which management acts in the best interest of the owners of companies. It is an institutional arrangement put in place to curtail the excesses of controlling managers (Demaki, 2011).

Corporate governance comes in various structures. Corporate governance, as posited by Yusuf *et al.* (2016) is proxied by board size, board composition and audit committee. Ownership structure is also an extension of corporate governance mechanism. It can take the form of managerial ownership, institutional ownership, foreign ownership amongst others (Ekpulu and Omoye, 2018). The implication is that well-structured corporate governance mechanisms are expected to improve firm performance. Nevertheless, the board is responsible for the strategic direction of the companies and it provides oversight, monitoring and control of the day-to-day activities of companies. Board size refers to the number of existing directors on the board. The board composition is depicted by a mixture of both executive and non-executive (independent) directors. It is a key variable to determine the performance of companies. The acceptable number on the board is country and culture-specific (Zabri *et al.*, 2016). When the focus is on efficiency, quicker and faster decisions, a preference for small board, whereas, preference is accorded to large board, when the aim is qualitative decisions, greater monitoring and good advice. Ahmed and Hamdan (as cited in Enilolobo *et al.* (2019)) and Effiok *et al.* (2012) studies significantly supported a-12 member board for effectiveness, while the study of Xavier *et al.* (2015) corroborated a-9 member board for timely decisions.

Board composition is one key element in the corporate governance structure. It talks of the respective representation of executive and non-executive directors on the board. Relevant theories for corporate governance such as agency and stewardship lend credence to board composition. Proponents of Agency Theory prefer a larger non-executive board for exchange of ideas while supporters of Stewardship Theory desire a more entrenched executive director board based on the belief that managers are good stewards of companies' scarce resources. However, in the views of Dalton *et al.* (1999), an effective board should consist of majority of non-executive directors. Be that as it may, the day to day operations of the companies are performed by persons who have good background and knowledge of the companies.

2.2. Financial Performance

In the healthcare sector, there are non-financial performance determinants within the governance perspectives that have been identified by the WHO (as cited in Savedoff (2011)). These number of associated governance performance measures include; ownership, decentralization, formal procedure, stakeholder participation, amongst others. However, this study shifts focus from non-financial measures to look into the financial performance of listed companies in the healthcare sector in order to x-ray the outcome of the relationship that exists between management of the healthcare sector and ownership. This is necessitated as a result of the view that the survival of the company is anchored on the financial outcomes observed.

Interestingly, companies have to grow and survive over a long period of time basically as a result of their financial results or performances. More so, financial performance represents the outcome of the various decisions

taken by the corporate governance mechanism. It is the reflection of the end product of the day to day decisions, whether positively or negatively impacted the companies. It assesses the wellness of such actions.

2.3. Theoretical Framework

In developing the model for understanding the impact of corporate governance on the financial performance of Listed Healthcare Sector Companies in Nigeria, it is imperative to examine the relevance and limitations of existing theories. The theory considered appropriate for this study is the Agency Theory.

2.3.1. Agency Theory

The Agency Theory is developed from the principal-agent relationship in a typical neo-classical firm where the owners, the shareholders, (the principals), rely on the managers (the agents) to run the affairs of the firm in order to get return on their investments. The theory posits that due to information asymmetry the agent (manager) is likely to pursue interests that may hurt the shareholders (principals). According to [Laeven and Levine \(2009\)](#), the agency theory suggests that regulatory and legal systems provide a framework in which a complex nexus of agency problem and conflicting interests among owners and managers shape company's behaviour. In the model, the principal (the shareholder) owns the assets that the agent manages on his or her behalf.

The widening gap between management policies and actions has made it necessary to develop a series of controls by means of which the company may be administered efficiently. In sum, the collective effect of growing transaction complexity and volume, the owner/manager's ("principals") remoteness from the source of transactions and potential bias of reporting parties ("agents"), technical (accounting) expertise is required to review and summarize business activities in a meaningful way. There is need for company status to ensure independence and objectivity, as well as the procedural discipline necessary for being the "eyes and ears" of management.

According to [Sanda et al. \(2005\)](#), the main strength of the agency theory is that it establishes the relationship between the owners of the firm and the managers, defining corporate objectives. On the other hand, its major drawbacks are the failure to recognize other stakeholders in the agency relationship and the assumption that all companies operate under the same structure.

In relation to this study, we expect that the agency relationship would be a mutual one where the interest of the managers in the healthcare sector companies would also house the interest of the shareholders which is expected to yield positive performance of the companies.

2.4. Empirical Review

Empirical studies on corporate governance and financial performance of companies have grown over the years, but the outcomes have been diverse. Nevertheless, for the healthcare sector companies, it is rare seeing studies in this area mostly within the Nigerian studies. Below are some of the studies reviewed and their findings.

2.5. Corporate Governance and Firm Performance

[Akbar et al. \(2019\)](#), analyzed corporate governance and firm performance in Parkisan: Dynamic Panel Estimation. The study covered 191 listed non-financial firms over the period 2004-2014. Board size, CEO duality, board independence, board meetings and owners-structure represented corporate governance mechanism, while return on equity proxied firm performance. Descriptive statistics, correlation and regression analyses were data analysis techniques. The outcome of the study revealed that the effect of corporate governance on firm performance varied for large and small size firms.

[Dosunmu et al. \(2018\)](#) assessed corporate governance and banking sector performance in Nigeria. The study considered the explanatory variable, corporate governance to consist of board size, executive and non-executive members and the explained variable, performance which was represented by profit level and return on assets (ROA). The results indicated that there is no significant impact of the corporate governance variables on the performance of banks. Similarly, board size and non-executive board members have a negative effect on return on assets while there exists a positive relationship between executive board members and bank performance. This means an improvement in the performance of banks could result from the increase in executive members.

[Enilolobo et al. \(2019\)](#), x-rayed corporate governance and financial performance of listed firms in Nigeria: comparing the food and petroleum product industries. The study which involved ten (10) companies covered seven (7) years (2011-2017). Audit committee members, board independence, board size and ownership structure represented corporate governance mechanisms and return on asset stood in for financial performance. Descriptive statistics, correlation and regression analyses were used as data analysis techniques. The study showed that corporate governance mechanism of board size has negative but significant effect on financial performance of sampled companies and that board independence is positively correlated with financial performance. Also, it revealed that audit committee and ownership structure have significant positive impact on financial performance of the sampled companies.

However, [Naz et al. \(2016\)](#) investigated the financial performance of firms: evidence from Parkistan Cement Industry over a nine-year period 2006-2014. It used descriptive statistics and correlation analysis as data analysis techniques. It adopted profitability ratios, asset utilization ratios, leverage ratios, and liquidity ratios as financial ratios (predictor variables) and return on investment as the predicted variable. The result found out that all parameters have positive relationship with the dependent variable except leverage ratios which have insignificant relationship. The result is also supported by [\(Selvam et al., 2004\)](#).

Ibrahim and Abdullahi (2019) examined the impact of corporate governance on the financial performance of listed non-financial services companies in Nigeria. Ex-post facto research design was used. It utilized secondary data collected from the annual report and accounts of twenty-three (23) sampled listed non-financial companies for a ten-year period, covering 2008 to 2017. Corporate governance, being the independent variable, was represented by board size, board independence and board gender diversity while the dependent variable, financial performance was proxied by return on assets (ROA). The findings of the study revealed that all the corporate governance variables (board size, board independence and board gender diversity) have a positive and insignificant impact on the financial performance of listed non-financial services companies in Nigeria. The outcome is consistent with that of (Kiel and Nicholson, 2003).

The impact of certain CG mechanisms on the performance of 93 firms listed on the Nigerian Stock Exchange for the period 1996-1999 was examined by Sanda *et al.* (2010). Variables such as insider shareholding, outside directors, size of the board, ownership concentration, CEO duality and foreign CEOs were used as CG variables, while Profit/earning (P/E) ratio, Return on assets (ROA), Return on equity (ROE) and modified Tobin's Q were used as proxies for financial performance, while firm size, leverage were used as control variables. Findings from the study revealed that an optimal board size of ten is commendable. Also, shareholding by director is having an insignificant effect on firm performance, while expatriate CEOs are performing better than their local counterparts. More so, Effio *et al.* (2012) examined the relationship among corporate governance, corporate strategy and financial performance of 33 financial sector firms listed on the Nigerian Stock Exchange Fact Book 2010/2011. The study proxied four corporate governance mechanisms encompassing the board size, board composition, CEO duality and audit committee, while ROE and Net profit margin (NPM) were used to measure financial performance. The sourced data were analyzed using descriptive statistics, correlation and multiple regression analysis. Findings from the study provided sufficient evidence of the positive and significant relationship between corporate governance and financial performance.

Abu Haija and Alrabba (2017), investigated the relationship between ownership structure (i.e. family, foreign, managerial and institutional ownership) and Jordanian companies' financial performance. The study used a sample consisted of 114 companies listed on ASE from 2009 to 2015 (seven years). Using multiple regression to test whether there are relationships between ownership structure and firms' financial performance, the results showed a positive relationship among managerial, institutional and family ownership and financial performance, while there is no significant relationship between foreign ownership and firm's financial performance.

Abubakar (2015) reviewed the relationship between financial leverage and financial performance of Deposit Money Banks (DMB) in Nigeria. The study covered eleven selected banks over a period of nine years 2005-2013. It adopted descriptive statistics and correlation analysis as data analysis techniques, having debit-equity ratio and debt ratio as proxies for financial leverage and return on equity (ROE) stood for financial performance. It concluded that there exists a significant negative relationship between debt equity and financial performance and no significant relationship between debt ratio and return on equity. As a moderating effect, corporate governance through a good ownership structure could possibly have engineered the significant relationship by creating better capital structure for the firm.

Adekunle and Aghedo (2014), investigated corporate governance and financial performance of selected quoted companies in Nigeria. They analyzed 263 listed companies on the Nigerian Stock Exchange. Corporate governance mechanism was represented by board composition, board size, chief executive officer (CEO) status and ownership concentration while profit margin and return on asset were used as financial performance variables. Descriptive statistics, correlation and regression analyses were used as techniques for data analysis. The findings of the study revealed that corporate governance mechanism (board size, board composition) have significant influence on the financial performance of companies. And that chief executive officer status and ownership concentration do not have significant relationship with financial performance of companies.

Kolawole and Tanko (2008), studied the relationship between corporate governance and firms' performance in Nigeria. The concept of corporate governance was proxied by board independence, board size, audit independence and ownership structure while firms' performance was represented by return on equity (ROE), net profit margin (NPM), sales growth, dividend yield and stock prices. Descriptive statistics and regression analysis were used as data analysis techniques. They concluded in reference to the sampled companies, that a moderate board size that ranges between 4 and 14 members enhances performance. It also revealed that a board that has a mixture of more executive directors to non-executive directors portrays less board independence and negatively impact firms' performance. But the positions of John and Senbet (1998) and that of Anthony *et al.*, (as cited in Kolawole and Tanko (2008) is that, more of non-executive directors on the board shows more independence. Surprisingly, Kolawole and Tanko (2008) did not report their findings on ownership structure. This has necessitated further research.

3. Methodology

The study employed *ex-post facto* research design and used secondary data generated from the annual report and accounts of all eight (8) sampled listed healthcare sector companies in Nigeria, covering the period 2008-2019. The sample size was arrived at by using a purposive sampling technique. The study adopted Tobin-Q as a measure for firm value or firm performance (explained variable) which has also been used in prior studies (Pattanayak, 2008; Sanda *et al.*, 2010). Tobin-Q is simply the market value of the firm divided by the replacement cost of capital or firm value is measured in number as the market capitalization + Total liabilities-Cash flow/Total assets. Corporate governance being an explanatory variable was proxied using board size, board independence and managerial

ownership. Board size was measured as number of directors on the board (Akbar *et al.*, 2019; Enilolobo *et al.*, 2019). Board independence was measured as the percentage number of non-executive or independent directors on the board to total directors (Akbar *et al.*, 2019; Ibrahim and Abdullahi, 2019). Managerial ownership was measured as the percentage of direct or indirect shareholdings by managers divided by the firm outstanding shares (Abu Haija and Alrabba, 2017; Ekpulu and Omoye, 2018).

The control variables included in the model are firm size and firm age. Firm size was considered as control variable because larger firms may have a better compliance to corporate governance policies in order to protect their image and portray better performance. Moreover, larger firms have more resources and may enjoy economies of scale. Firm size was measured by taking the natural logarithm of total assets (Sanda *et al.*, 2010). Furthermore, it is anticipated that firms with existing extended operations from the date of incorporation are deemed to display better governance practices and leadership in doing business. As noted by Elshabasy (2017), age could drive efficient operations among firms which may consequently enhance their performance and reputation. Firm age, which is also the firm Listing age in number, is the difference between current years minus year of listing on the NSE (Elshabasy, 2017).

The study further employed some analysis techniques such as: descriptive statistics, Ordinary Least Square (OLS) regression and Spearman rank-order covariance analysis. The covariance analysis was done to establish the nature of the relationship between corporate governance and financial performance variable for companies in the healthcare sector companies. This shows the strength of the relationship between the independent variables and the dependent variable. In order to determine the impact of the explanatory variables (board size, board independence, and managerial ownership) on the dependent variable (Tobin-Q), OLS regression was employed for the study based on the econometric model expressing financial performance as a function of the selected corporate governance variables as stated below (Etale and Bingilar, 2016; Etale and Pouzigha, 2020):

$$TOBQ_t = \alpha_0 + \beta_1 BODS_t + \beta_2 BODI_t + \beta_3 MAOW_t + \beta_4 FIRA_t + \beta_5 FSIZ_t + \varepsilon_t$$

A priori expectation: $\alpha_0 > 0$, $\beta_1 - \beta_3 > 0$,

Where:

TOBQ= Tobin-Q

BODS = Board size

BODI = Board independence

MAOW = Managerial ownership

FSIZ = Firm Size

FIRA = Firm Age

β_1 = Beta coefficients

ε = Error term/disturbance

4. Analysis, Observation and Discussion of Findings

Table 4.1 presents the result of the descriptive statistics for the variables. As observed, TOBQ used as the proxy for firm performance has an average value of 1.21. The maximum and minimum values are 6.12 and 0.12 respectively. With an average value of 1.2, it indicates that the market value of firms in the healthcare sector is worth more than the cost of its assets. A maximum of 6.11 indicates that the firms are over-valued at some point, and a minimum of 0.12 which is less than 0.0 indicates that the firms are under-valued at some point. The standard deviation is an indication of the degree of clustering of the distribution from the mean. The standard deviation of 0.86, shows a less dispersion from the mean indicating a less variation of performance among the healthcare firms.

Table-4.1.

Descriptive Statistics for TOBQ, BODS, BODI, MAOW and other Control Variables							
	No. of Obs	Minimum Statistic	Maximum Statistic	Mean Statistic	SD Statistic	Jarque-Bera Statistic	Probability
TOBQ	92	0.124100	6.118800	1.205233	0.862590	529.1235	0.000000
BODS	92	5.000000	15.00000	8.782609	2.063956	3.032695	0.219512
BODI	92	20.00000	91.66670	66.99662	16.54566	3.625633	0.163194
MAOW	92	0.000000	87.36240	31.64799	26.04133	5.912868	0.052004
FIRA	92	1.000000	42.00000	26.47826	11.49914	8.978826	0.011227
FSIZ	92	5.350100	7.496000	6.596874	0.524554	3.687736	0.158204

Source: E-Views 10 output 2020

BODS had a mean value of 8.78, indicating that on the average the number of directors on the board of companies in the distribution is about nine directors. The maximum and minimum values are 15 and 5 respectively indicating that some companies have more directors while some have fewer directors on the board, which probably may affect the level of financial performance. The standard deviation of 2.06, shows a large dispersion from the mean indicate a large variation of the effect of the board size among the healthcare companies.

The percentage of BODI for the distribution stood at approximately at 66.99% mean, with maximum and minimum values of 91% and 20% respectively. This shows that on average, 66% of the directors are non-executive directors on the board, which is within the Nigerian corporate governance code recommendation. For companies with 91% value indicates that a particular company has almost its entire board members as non-executive directors within the period reviewed. This reveals a high level of dual position of chairman and CEO in some companies

despite the presence of corporate governance guidelines in Nigeria. In comparison, 20% minimum indicates that minimum percentage of non-executive directors on the board is 20% for the period reviewed. This indicates a high variation in the percentage of board members among the healthcare companies as depicted by the value of standard deviation of 16.54 with respect to the mean value.

The number of MAOW for the distribution stood at approximately at 31.64 per cent on average with maximum and minimum values of 87.36 and 0.00 respectively. This suggests that on average, 31 per cent of shares are held by the directors or managers. The maximum value of 87.36 indicates that companies in the healthcare sector have about 87% of shares own by managers of the firm under the period reviewed. The standard deviation value which stood at 26.04 percent depict a little dispersion from the mean, indicating that the healthcare companies have managers or executive directors with shares below average of the outstanding shares.

For the control variables, FIRA and FSIZE have a mean of 26.47 and 6.59. This suggests that on average, firms in the healthcare sector is about 26 years of age from the date of incorporation, while on average the natural logarithm of their total assets is approximately 7 with a minimum and maximum of 1 and 42 for FIRA and 5 and 7 for FSIZE respectively. The standard deviation value which stood at 11 for FIRA is not too dispersed from the average age of the firms in the healthcare sector. While that of FSIZE has its standard deviation value of 0.52 which is in high variation from the mean of 6.59.

4.1. Regression Analysis

4.1.1. Regression Result using Least Square (OLS)

Table 4.2 above displays the regression output using OLS technique. With the explained variable being TOBQ, the result shows that the explanatory variable; BODS has a positive coefficient of 0.063 with a corresponding probability value of 0.15 which is more than 5% significant level depicting that the size of the board of firms in the healthcare sector does not significantly influence the financial performance of the firm. This further means that a unit increase in the board size will lead to 0.06 increase in the firm performance. In terms of significance, this finding contradicts the findings of Adekunle and Aghedo (2014); Enilolobo *et al.* (2019), but support the findings of Ibrahim and Abdullahi (2019).

BODI also exhibits a positive coefficient and with a significant probability value of 0.00 which is less than 5% significant level. Going by the coefficient, this further means that an increase in non-executive directors on the board will lead to about 0.01 increase in the financial performance of the companies in the healthcare sector. Findings from this study is in line with that of Kolawole and Tanko (2008); Enilolobo *et al.* (2019), but in contrast with the findings of Dosunmu *et al.* (2018).

Table-4.2.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TOBQ: Dependent Variable				
BODS	0.063973	0.045112	1.418099	0.1598
BODI	0.019091	0.005848	3.264689	0.0016
MAOW	-0.014234	0.003197	-4.451844	0.0000
FIRA	-0.015735	0.009766	-1.611226	0.1108
FSIZ	-0.330368	0.175552	-1.881877	0.0632
C	2.410827	1.194662	2.018000	0.0467
R-squared	0.305471	Mean dependent var		1.205233
Adjusted R-squared	0.265092	S.D. dependent var		0.862590
Log likelihood	-99.67254			
F-statistic	7.564996			
Prob(F-statistic)	0.000006			

Source: E-Views 10 output 2020

For MAOW, the coefficient tends toward negative of -0.01 with a significant probability value of 0.00 which is also less than 5%. The coefficient suggests that a unit increase in the percentage of managerial ownership will cause the financial performance of the healthcare sector firms decrease by 0.01 unit. More so, the two control variables were observed to be negative with -0.01 and -0.33 as their respective coefficient values. Their respective probability value did not also meet the significant level as the result shows 0.11 for FIRA and 0.06 for FSIZE.

For the analysis of the combined strength of the explanatory variables to influence the explained variable, we observed that the R-squared was below the study expectation as less than 70% (0.30) was observed. This depicts that 30% of the variation in the dependent or explained variable could only be explained by the combined strength of the independent variables. However, the model appears to be a good one as the probability value of the F-statistic appears to be less than 5% ($0.000 < 0.05$) significant level. This finding is not in tandem with the findings of Adekunle and Aghedo (2014); Enilolobo *et al.* (2019) but contradict the findings of Abu Haija and Alrabba (2017) maybe due to the different sector examined.

4.2. Covariance Analysis: Spearman Rank-Order

Table-4.3.

Correlation						
Probability	TOBQ	BODS	BODI	MAOW	FIRA	FSIZ
TOBQ	1.000000					
BODS	0.076207	1.000000				
	0.4703	-----				
BODI	0.340532	0.149277	1.000000			
	0.0009	0.1555	-----			
MAOW	-0.435291	0.317215	-0.221777	1.000000		
	0.0000	0.0021	0.0336	-----		
FIRA	0.155101	0.247989	0.547103	-0.223422	1.000000	
	0.1399	0.0172	0.0000	0.0323	-----	
FSIZ	-0.110014	0.096772	-0.236954	-0.095525	-0.410739	1.000000
	0.2965	0.3588	0.0230	0.3650	0.0000	-----

Source: E-Views 10 output 2020

Table 4.3 above is the covariance result of the dependent and independent variables. The value range of the correlation coefficient is from -1 to 1. The sign of the correlation coefficient depicts either negative or positive direction of the nexus between the variables, and the absolute value of the correlation coefficient indicates the strength, with larger values demonstrating stronger relationships. The correlation coefficients on the main diagonal as indicated in the table above are 1.0, because each variable has a perfect positive linear relationship with itself. In relation of the independent variables to the dependent variable, it shows that BODS and BODI have positive coefficient, but it appears to be weak with no correlation with TOBQ having correlation coefficient values of 0.07 and 0.34 (not within the perfect association values of +1 to -1) followed by its P-values of 0.47 and 0.00 respectively. Though BODI tends to have a significant P-value ($0.00 < 0.5$). The result shows that corporate board structure involving the board size and board independence do not strongly influence the performance of the firms in the healthcare sector as no strong relationship was identified. More so, the correlation coefficient for MAOW tends to be weak with no association with TOBQ as the values remains negative (-0.43) though with a significant P-value of 0.00 at 5% significant level. This further depict that in the healthcare sector for the period reviewed, managerial ownership has no correlation with firm performance.

5. Conclusion and Recommendations

The study investigates the impact of corporate governance structure (Board size, board independence and managerial ownership) on the financial performance of healthcare sector companies listed on the NSE. In the study, regression technique (OLS) was applied in order to ascertain the level of significance among the variables. The outcomes of the findings permit us to conclude that the size of the board in the healthcare sector companies could not significantly influence the financial performance of the companies. However, the number of non-executive directors on the board and the percentage of ownership by the managers have some level of significance in influencing the financial performance of the companies.

Furthermore, from the correlation result, we observed that there exists no correlation between corporate governance mechanism and financial performance which pert the study to conclude that the corporate financial performance of listed companies in the healthcare sector is not affected by the corporate governance mechanisms in place. This could mean that governance at a secondary level, in relation to the resulting rules, institutions, laws and enforcement mechanisms have no bearing on the financial performance of the healthcare sector companies. Rather, governance at the level of particular organizations, such as the governance of a social security institute, a district or state health system or a hospital could be a better measure to enhance corporate financial performance of healthcare companies. It is also possible that owing to the few numbers of listed healthcare companies, the issue of political attraction or cost may not be there which may have further created less concern for corporate governance compliance. This may also permit the conclusion of no relationship between the corporate governance mechanisms and financial performance.

Therefore, this study recommends that companies in the healthcare sector should as a matter of necessity, embrace complete compliance to corporate governance structure in order to attract the tremendous benefits and improve corporate financial performance therein. This could be done simultaneously with the governance structure at the district, state or hospital level to achieve greater performance. More so, further studies could examine other corporate governance variables together with the already examined variables in this study. Other financial performance variables could also be employed to ascertain any relation or significance among them for healthcare sector companies.

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