

Corporate Governance Mechanism and Financial Risk Management of Health Care Firms in Nigeria

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Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

The study was carried out to examine the relationship which exists between the corporate governance mechanisms and financial risk management. The study is crucial as it shows the extent to which the corporate governance mechanism ensures effective financial risk management practices. To determine the relation which exists between the corporate governance mechanisms (CGM) and financial risk management, the main proxy variables of the CGMs were used in the study, namely; Board Independence (BI), Board Diligence (BD) and Female Directorship Presence (FDP), while financial risk management was proxy by liquidity risk (LIQR). Three hypotheses were formulated to guide the investigation and OLS model was applied in the data analysis. The study anchored on the Stewardship Theory adopted an Ex Post Facto Approach and data were collected from the annual reports and financial statements of listed health care firms in Nigeria for the period 2016-2020. The empirical analysis of the research shows that there is a significant and positive association between board independence, board diligence, female directorship and financial risk management of listed health care firms in Nigeria at 5% significant level. Thus, the study concludes that corporate governance mechanisms ensure effective risk management practices among the publicly traded healthcare companies in Nigeria. Thus, the study recommended that companies should review the frequency of board meetings. Attention to be paid to the efficiency and not the frequency of board meetings. Also in composition of corporate board, there shall be independent directors and female directorship presence as thus ensures effective financial risk management practices.

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1. INTRODUCTION

The subject of corporate governance is relevant in both developed and emerging economies. Its importance evolve from the need to protect the investments and interests of shareholders after the collapse of large companies [1,2]. Today, a dynamic business environment is characterized by the emergence of knowledge economies, promoting both global competition and innovative business practices; these are at the core of any competitive advantage today [3]. According to Garengo, Biazzo and Bititci [4], in this modern age, companies strive to satisfy their customers, who are central to the business, and nowadays customers demand high quality product and service from the organization in a professional manner. As a result, an adequate governance mechanism needs to be put in place to ensure adequate risk management practice that can enable the organization to function well, with due regard to the needs of its various stakeholders. The business environment is volatile and uncertain due to many factors. Studies have shown that risk management practice is the main drivers of volatility and uncertainty in today's business environment, hence the need to strengthen organizational corporate governance to meet investors expectation [5].

From the a priori expectations, corporate governance is seen as a risk management tool to improve company performance and protect the interests of stakeholders. Therefore, it is imperative for publicly traded Nigerian companies to employ sound corporate governance practice to protect the interests of stakeholders. This is necessary in view of the role that stock market developments play in economic growth. It was also pointed out that the lack of information on financial risk management can mislead investors in their investment decisions. Investors make their investment or divestment decisions by assessing both the returns associated with a particular investment project and its level of risk. Unless investors identify the actual key risk factors of companies, investors will not be able to assess the real risk levels of those companies. As a result, this would result in investors making the wrong investment decision, which could result in a large loss or catastrophe for investors.

Scholars and regulators recognized risk management information as the key to quality

corporate reporting (Institute of Chartered Accountants in England and Wales (ICAEW), 2017). Previous studies reported that investors agreed that higher disclosure of risk management would aid them in their portfolio investment decisions, which could reduce the risk of investing in the reporting company. Therefore, investors urged companies to improve on risk management information reporting, especially the qualitative aspect of financial risk information, as this is still voluntarily and discretionarily disclosed in many countries (Financial Reporting Council (FRC), 2014). As reported by Okoye [6], general information about the framework for corporate financial risk management is inadequate for investors to assess the level of risk that companies are exposed to. Investors want more detailed information about the main risks a company is exposed to (credit risk, liquidity risk, equity risk, market risk, etc.). Hence, it becomes necessary to examine the relation which exists between corporate governance and financial risk management.

In Nigeria, corporate governance practice is regulated and networked by Nigerian Corporate Governance Code of 2018 issued by the Financial Reporting Council. Financial risk management practices are also governed by the Nigerian Corporate Governance Code of 2018 and the International Financial Reporting Standard (IFRS 7) referred to as disclosure of financial instruments. This accounting standard provides specific guidance on what and how financial risk management information is to be disclosed in company financial statements. However, it has been found that effective risk management practice depends on the governance of the organizations. Therefore, the study needs to examine the relationship between corporate governance and financial risk management.

FRC (2014) also reported that many companies in Nigeria are still apathetic about the disclosure of financial risk management information due to the risk of losing control as management (board of directors) claim that the information is commercially sensitive and could endanger their business and economic condition. Also, the controversy over investor perceptions of corporate governance in ensuring effective financial risk management practice brought about the need for the study as it is unclear; the

relationship which existed between organizational corporate governance and financial risk management. Hence the need for the study.

In the developed nations, extant literatures on corporate governance mechanisms have been limited to corporate performance. For example; [7-18] examined the relationship between corporate governance mechanisms (board of directors compensation, board diligence, board independence, female directorship & CEO share ownership) and company performance.

On the other hand, attempts were made in the developing nations as thus, Ilaboya and Obaretin [19]; Abdullah [20]; Braun (2016); Lau and Tong [21]; Darmadi [22], Dezso and Ross [23]; Nwaobia, Kwarbai and Ogundajo [24] etc. examined the relationship between the corporate governance mechanisms (director remuneration, board diligence, board independence, female directorships and CEO share ownership and company performance.

None of literature in the developing and developed countries as shown above related corporate governance mechanisms to financial risk management of listed companies. More importantly, there is no known study that had examined the relationship which existed between the corporate governance mechanism and financial risk management of listed firms on the Health Care Sector of Nigeria Exchange Limited (NEL) based on available literature.

Against this background, the present study attempts to examine the relation between Corporate Governance Mechanisms and Financial Risk Management of Firms listed under Health Care Sector of Nigeria Exchange Limited. To this end, the present study has adapted and modified the models by Shukeri, Shin and Shaari [25] Lawal and Ibrahim [26] with reference to companies listed under the health sector of the NEL.

To achieve this purpose, the following hypotheses were formulated:

H₀₁: There is no significant relationship between Board Independence and Financial Risk Management of Health Care Firms in Nigeria

H₀₂: Board Diligence has no significant relationship with Financial Risk Management of Health Care Firms in Nigeria

H₀₃: Female Directorship Presence has no significant relationship with Financial Risk Management of Health Care Firms in Nigeria

2. REVIEW OF RELATED LITERATURE

2.1 Corporate Governance

Corporate governance is the way an organization is run, managed and controlled. According to Blair [27], corporate governance refers to the set of cultural, legal, and institutional arrangement which determines what organizations could do, who controls them and how the control is done, and how the risks and rewards from the activities they perform are allocated. In addition, the corporate governance structure characterizes the distribution of rights and responsibilities among the various participants in the organization, such as the board of directors, shareholders and other stakeholders, and defines the rules and procedures for decision-making in corporate matters. Corporate governance encompasses a broad spectrum of regulations and aspects, which academics divide into internal and external mechanisms. Fama and Jensen [28] argued that corporate governance is a framework that controls and protects the interests of all stakeholders in a company. Stakeholders include executives, employees, customers, shareholders, management, suppliers and the board of directors. For them, the essence of corporate governance is to protect and safeguard shareholders' investments.

Gompers [29] took the view that corporate governance disclosure is disclosure of the mechanism by which the board of directors enhances the value of shareholders by controlling the actions of managers charged with the day-to-day running of the company. Chua [30] believes that sound corporate governance practices lead companies to better performance; provide sources of investment by increasing shareholder credibility.

2.2 Measurement for Corporate Governance Mechanisms

2.2.1 Board independence

Literature on corporate governance and in particular through experimental research, reflecting on the independence of boards [31]. According to the study, when a board member was independent, they could effectively monitor

the company's executives, preventing them from pursuing activities that were viewed as self-interest. According to Westpal [16], directors who sit on independent boards of directors do not face any obstacles such as the pursuit of personal interests in the company. An independent board of directors is able to perform its function effectively and satisfactorily. The study finds that a board of directors made up of insiders gets the best results for the board of directors as opposed to a board of directors made up of outsiders. For the purposes of this study, board independence was measured in terms of the number of independent directors. This is consistent with the status quo of Shukeri, Shin, and Shaari. [25], Baysinger and Bulter [32], Foo and Zain [33].

2.2.2 Female directorship presence

The representation of women in corporate management has been at the center of open debates by the masses in the recent past decade. The workforce of the 21st century is characterized by more women and employees with different ethnic backgrounds, alternative lifestyles and cross-generational differences than in the past. According to Adams and Ferreira [34], female directors should have a higher level of consciousness and demonstrate this behavior more easily. The study finds that the presence of female directors is an active participation of the female representatives on the organization's board of directors. For the purposes of the study, female directorship presence was representative of the proportion of female directors in the total number of directors. This is in line with the position of Adams and Ferreira [34], Smith, Smith and Verner [35] on the relevance of female director representatives in corporate organizations.

2.2.3 Board diligence

The study by Foo and Zain [33] found that the board of directors charged with overseeing the organization must have the knowledge that will enable them to do their jobs perfectly. Board diligence assumes that those directors who sit on the board for a long time are less likely to be involved in accounting errors. This means that all board members can make a positive contribution to the decision-making process [36]. For the study, the duty of care of the board of directors was measured as the number of board meetings. This is in line with the a priori expectation of

Conger and Ready [37], Hambrick and Manson [38], Johl, Kaur and Cooper [39].

2.3 Financial Risk Management

Financial risk reporting has grown and occupied a significant place in the top list of investor priorities. Several studies have highlighted the importance of financial risks in all areas, especially qualitative aspects. Financial risk refers to a direct impact on the monetary depreciation of assets and liabilities. It consists of market risk, credit risk, liquidity risk, and operational and legal risks [40]. Dowd [41] defined financial risk as the risk of loss (or gain) resulting from unforeseen events in market prices or rates. He went on to classify financial risk into market risk, interest rate risk, equity risk, currency risk, and commodity price risk. PWC [42] found that success depends on management's ability to determine risk, implement a risk acceptance culture, and contain risks and uncertainties. In particular, the introduction of market risk management at banks is very important with a view to securing the continued existence of the business of financial institutions. Market Risk Management is responsible for providing top executives with a clear and complete picture of banks' trading risks.

2.4 Liquidity Risk

According to Ahmed and Ahmed [43], liquidity risk is the potential loss of an institution that either results from failure to meet its obligations or from being able to finance asset appreciation as it falls due without unacceptable costs or losses. It is a risk of not being able to liquidate a position in good time at a reasonable price. Liquidity risk is one of the main risks faced by financial intermediaries in Nigeria, and commercial banks in particular. Liquidity risk is the probability of negative effect on customers, owners interests and other stakeholders of the financial institution resulting from the debility to meet up with short-term and cost-effective payment obligations. Liquidity risk usually arises from the debility of management to envisage and map out plans for changes in funding sources and liquidity needs. According to Owojori, Akintoye and Adidu (2011), liquidity risk focuses on liquidity facilities and the structure of portfolio. Recognizing liquidity risk leads companies to recognize liquidity itself as an asset and portfolio design is challenging in the face of illiquidity concerns.

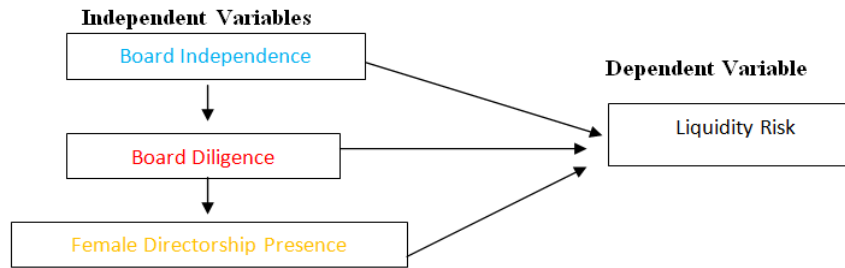


Fig. 1. The diagram of conceptual framework
 Source: Researcher's Concept (2021)

2.5 Theoretical Framework

2.5.1 Stewardship theory

The stewardship theory was put forward in the 1984 by Freeman. This theory has its origins in both psychology and sociology. It disapproves of agency theory that the manager's role is not relevant. The theory regards a manager as a follower or servant, as opposed to a leader of a company who is persistent and works towards achieving and maximizing shareholder value. The stewardship theory is relevant to the study as the manager is responsible for running a business on behalf of the principal (the owner). Achieving corporate goals should be paramount for business owners and managers. The stewardship theory is based on the idea that managers, including non-executive directors, are driven solely by their performance. The theory advocates combining the roles of the chairman and chief executive officer in financial risk management, thereby ensuring improved performance as administrators to protect investor interests. However, corporate governance ensures an effective risk management practice that's aimed at improving the company's performance by helping to reduce fraud, manage potential threats, and use resources more efficiently.

The relevance of the stewardship theory is evident as a steward (MD and CEO) can abuse the power that has been entrusted to them but corporate governance attempts to avoid a gross abuse of power by the MD / CEO and also to reduce the risk of an MD / CEO having too dominant and overpowering influence on the board of directors. The study is therefore based on the stewardship theory.

2.6 Empirical Review

Olalekan, Mustapha, Irom and Emily [44] examined board size, financial performance and

risk management of listed deposit banks in Nigeria. There are (15) listed deposit banks in Nigeria, fourteen (14) sample sizes of which were used in the study based on availability of data. Board size and risk control as an independent variable were used to represent number of directors, liquidity risk, default risk, and operational risk, while the financial results proxy was return on equity (ROE) and earnings per share (EPS). The data for the reporting period were obtained from secondary sources, through the annual report and bank accounts, and the data were analyzed using various panel regression techniques. The results revealed that both operational risk and credit risk have a significant and negative impact on return on equity and earnings per share at board level. The analysis also shows that the liquidity risk has the least significant influence on the ROE & EPS of the study of the Nigerian banks. From the argument between multiple studies of banks legislating their risk management system to ensure that the bad loan is mitigated as it has been empirically proven to minimize corporate financial performance.

Fadun [45] on risk management and corporate governance; the impact on bank performance in Nigeria was examined using Chi-Square's test tool and found that good corporate governance is beneficial as it ensures effective risk management, which in turn increases public confidence in Nigerian banks. Banks' financial performance can be improved through good corporate governance practices; Directors and shareholders can pressure bank management to act on their behalf, and good corporate governance practice can improve the competitiveness of banks in Nigeria. Panel methodology and other econometric instruments were used. The results of the panel regression show a positive correlation between risk control and the financial success of money deposit banks. The study advises that banks in Nigeria

should expand their liquidity risk analysis, credit risk analysis and credit management skills, while regulators should pay more attention to compliance with the regulatory guidelines of banks and other financial institutions.

Ashenafi, Kalifa and Yodit [46] examined bank performance and corporate governance in Ethiopia. Descriptive statistics were used to analyze the means and standard deviations of the regression variables. In addition, various tests were performed on the assumptions of the classical linear regression model (CLRM) prior to performing the regression analysis. The regression results show that explanatory variables such as equity ratio, board size and existence of an audit committee have a statistically significant negative influence on bank performance.

Ahmad and Mensur [47] examined the corporate governance and financial performance of banks in Nigeria. Data was retrieved from sixty annual reports from 12 banks for the period 2006-2010. The independent sample t test was used to analyze the data collected for the study. Multiple regressions (analysis of variance) were used to further analyze hypotheses two and three. The results showed that the shared ownership stake had an impact on banks' earnings and dividends. The size of the board of directors also has no influence on the profitability of the banks. The existence of chief compliance does not significantly improve the profitability of healthy banks in Nigeria. The study recommends adhering to the practice of restrictive participation in banks. Second, it is important to strengthen management policies so that financial performance can be improved as the stress test conducted by CBN and NDIC only showed positive operational performance. In addition, the compliance status of banks that do not yet meet this requirement must be determined so that the efficiency and effectiveness of management can be supplemented by other internal controls.

Ayorinde, Toyin and Leye [48] examined the impact of corporate governance on the performance of the Nigerian banking sector. In selecting the 15 listed banks from 24 banks that met the 2005 consolidation deadline, the judgment-based sampling procedure was used. These banks have been included as they are listed on the Nigerian Stock Exchange and therefore have easy access to their annual reports which are the main source of their secondary data. A positive correlation was

observed between the level of corporate governance positions disclosed by banks and the return on equity that represents performance. This means that banks that disclose more about corporate governance issues are more likely to perform better than those that disclose less. In addition, a positive correlation was observed between the equity component of the board of directors and the disclosure index on corporate governance. This suggests that people who are part of the management of banks in which they also have equity have an overriding business interest in running them well. This is invariably designed to improve performance. The size of the board of directors, however, has a strongly negative correlation with the return on equity. Thus implies that board size has no positive effect on commercial banks performance in Nigeria.

Uwuigbe [49] conducts research on corporate governance and financial performance of banks in Nigeria. Secondary source of data were used and data analysis was done using Regression model and Pearson correlation. From the analysis: 1. An inverse correlation between board size and ROE was found. 2. External director has a significant but negative impact on the bank's performance (regression result showed a negative association between the variables). 3. The more the equity owned by the directors, the higher the banks performance. 4. Banks that disclose more corporate of governance issues are more likely to perform better than banks that disclose less.

3. METHODOLOGY

An ex post facto design was used in the study as secondary data was used which cannot be tampered with or controlled. The study population consists of the entire 10 healthcare companies listed on the Nigerian Exchange Limited. Out of 10 companies that made up our sample size, 2 companies have blank financial information (Evans Plc and Nigerian German Chemical Industries Plc) which was removed during the investigation period. On this basis, a total of 8 companies formed our sample size with 40 observations. These companies include Fidosn Plc, Morrison Plc, Glaxosmithline Plc, Pharma Deko Plc, Union Diagnostic Plc, Ekocorp Plc, May & Baker Plc, and Neimeth Plc. The study encompasses the period 2016-2020.

The collected data were analyzed using the OLS model using STATA V. 15. The study applied this

method to examine the relation which exists between corporate governance mechanism (BI, BD & FDP) and financial risk management (LIQR) among the listed health care companies in Nigeria. In order to improve the validity of the results obtained, various robustness tests such as the test for multicollinearity between the independent variables were carried out.

3.1 Operationalization and Measurement of Variables

The measurements for independent variables for the study include, board diligence, board independence and female directorship while the dependent variable of financial risk management was proxy by liquidity risk. This is shown on Table 1.

3.2 Model Specification

In line with the previous researches, the researcher adapted and modified the models of Shukeri, Shin and Shaari [25] and Lawal and Ibrahim [26] in examining the relation which exists between corporate governance mechanism and financial risk management. This is shown below as thus:

$$\text{Shukeri, Shin and Shaari [25]:} \\ \text{ROE} = \beta_0 + \beta_1 \text{BI} + \beta_2 \text{BD} + \beta_3 \text{DR} + \mu \quad (1)$$

$$\text{Lawal and Ibrahim [26]:} \\ \text{NAPS}_t = \beta_0 + \beta_1 \text{CRDR}_t + \beta_2 \text{LIQR}_t + \mu \quad (2)$$

The modified functional model is shown below as thus:

$$\text{LIQR} = F(\text{BI, BD \& FDP}) \quad (3)$$

The econometric form of the regression modified for the study is expressed as thus:

$$\text{MODEL: LIQR} = \beta_0 + \beta_1 \text{BI} + \beta_2 \text{BD} + \beta_3 \text{FDP} + \mu \quad (4)$$

Where:

LIQR = Liquidity Risk
BI = Board Independence
BD = Board Diligence
FDP = Female Directorship Presence

3.3 Data Analysis

Table 2 gives an insight into the nature of the selected listed healthcare companies in Nigeria.

First of all, it can be observed that the listed healthcare companies in Nigeria had a positive Liquidity Risk (LIQR) value = 1.488 on average over a 5-year period (2016-2020). This is an indication that all healthcare companies in Nigeria have a positive LIQR with a standard deviation value of 0.9593967. The average board independence (BI) for the sampled companies was 0.275 with a standard deviation of 0.4522026. This means that companies with BI values of 0.275 are moderately involved in liquidity risk management. There is also a large variation in the maximum and minimum values of BI, which were 1 and 0, respectively. This large variation in BI scores among the sampled companies justifies the need for this study because the researcher assumes that companies with higher BI scores are companies with effective financial risk management practices than companies with low BI scores.

Board Diligence (BD), on the other hand, was characterized by a mean value of 4.7 with a standard deviation of 1.114013. This means that companies with BD values of 4.7 are heavily involved in liquidity risk management. In addition, there is also a large variation in the maximum and minimum values of BD, which were 7 and 3, respectively. This large variation in BD scores among the sampled companies warrants the need for this study because the researcher assumes that companies with higher BD scores are companies with effective financial risk management practices than companies with low BD scores.

Similarly, the female directorship presence (FDP) was characterized by a mean of 0.13525 with a standard deviation of 0.1567292. This means that companies with FDP values of 0.13525 are moderately involved in liquidity risk management. In addition, there is also a large variation in the maximum and minimum values of FDP, which were 0.41 and 0, respectively. This large variation in FDP values among the sampled companies justifies the need for this study, since the researcher assumes that companies with higher FDP values are companies with effective financial risk management practices than companies with low FDP values.

4. DATA ANALYSIS AND RESULTS

Variance Inflation Factor (VIF), Tolerance Value (TV), Breusch Pagan and Cook-Weisberg Heteroskedasticity Test, Ramsey Reset Test (RRT) were examined to test the existence of

multicollinearity and autocorrelation of the regressors. The OLS model, on the other hand, was used to test the linear relationship between the dependent and independent variables. It was operated with STATA version 15, as shown in the following tables.

Table 1. Measurement for dependent and independent variable

Variables	Measurement	A priori Expectations
Dependent Variable		
Liquidity Risk	Liquid Assets/Current Liabilities (LA/CL)	Lawal and Ibrahim [26]
Independent Variable		
Board Independence	Number of independent director on the board	Shukeri, Shin and Shaari. [25], Baysinger and Bulter [32], Foo and Zain [33]
Board Diligence	Number of board meetings	Conger and Ready [37], Hambrick and Manson [38], Johl, Kaur and Cooper [39]
Female Directorship Presence	Proportion of women in management to total number of board	Adams and Ferreira [34], Smith, Smith and Verner [35]

Source: Empirical Survey (2021)

Table 2. Descriptive statistics of our variables from health care firms in Nigeria

	BI	BD	FDP	LIQR
Mean	.275	4.7	.13525	1.488
Std. Dev.	.4522026	1.114013	.1567292	.9593967
Maximum	1	7	.41	4.26
Minimum	0	3	0	.15
Observations	40	40	40	40

Source: Researcher's Computation (2021)

Table 3. Collinearity statistics

Variable	VIF	1/VIF
BI	1.04	0.965659
FDP	1.03	0.971593
BD	1.01	0.991406

Mean: VIF/1.02

From the table above, the TV ranges from 0.965659 to 0.991406 which suggests non multi-collinearity feature. The VIF which is simply the reciprocal of TV ranges from 1.01 to 1.04 also indicates non multi-collinearity feature.

Table 4. Breusch Pagan/Cook Weisberg Heteroscedasticity for the Model

. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroscedasticity

Ho: Constant variance

Variables: fitted values of LIQR

chi2(1) = 0.57

Prob > chi2 = 0.4484

The above result was obtained from the heteroscedasticity test. The probability value of 0.4484 resulting from the heteroscedasticity test implies that the model is free of unequal variances. This implies that our probability values for drawing inferences about the level of significance are reliable and valid. The lack of heteroscedasticity validates the results of the regression model, which means that no robust or weighted least squares regression is required.

Table 5. Ramsey Reset Test for the Model

Ramsey RESET test using powers of the fitted values of LIQR

Ho: model has no omitted variables

F(3, 33) = 1.32

Prob > F = 0.2846

The above result was obtained from the test for miss-specification or omitted variables using Ramsey RESET Test. The probability value of 0.2846 resulting from the test implies that the model has no omitted variables.

Table 6. Result on the relationship between corporate governance mechanism and financial risk management of health care firms in Nigeria

Source	SS	DF	MS	NUMBER OF OBS = 40	
				F(3, 36)	= 5.59
MODEL	11.4052693	3	3.80175643	Prob > F	= 0.0030
RESIDUAL	24.4919717	36	680332547	R-squared	= 0.6177
Total	35.897241	39	920442076	Adj R-squared	= 0.4260
				Root MSE	= 0.82482
LIQR	Coef	Std. Err	t	P> t	95% Conf. Interval]
BI	5042890	1827121	2.76	0.009	1337316 .8748464
BD	.3140693	1206496	2.60	0.013	5587581 .0693805
FDP	1.864384	8463552	2.20	0.034	1478966 3.580872
Cons	2.321144	5777727	4.02	0.000	1.149367 3.492921

Source: Result output from STATA 15

4.1 Discussion of Findings

4.1.1 There is no significant relationship between board independence with financial risk management of health care firms in Nigeria

In view of the above analysis, which is presented in Table 6, the result shows that there is a significant and positive correlation between financial risk management and independence of the board of directors of publicly listed healthcare companies in Nigeria. With a P value of 0.009, the test is considered to be statistically significant at the 1% level. This could be confirmed with the positive correlation coefficient of 0.50%, which indicates that the independence of the board of directors ensures effective financial risk management by 50%. On this basis, we rejected the null hypothesis and accepted the alternative hypothesis, which claims that board independence is significantly related to the financial risk management of healthcare companies in Nigeria. This finding coincides with the a priori expectation by Cybinski and Windsor (2013), Abdul and Mohamed (2016), Abdullahi [20], who found that

board independence determines corporate performance.

4.1.2 Board diligence has no significant effect on financial risk management of health care firms in Nigeria

The result of the analysis, shown in Table 6, shows that there is a significant and positive relation between the financial risk management and board diligence of publicly listed healthcare companies in Nigeria. With a P value of 0.013, the test is considered to be statistically significant at the 5% level. This was confirmed with the positive correlation coefficient of 0.314%, which indicates that the due diligence of the board of the listed health companies in Nigeria ensures effective risk management practices by 31.4%. On that basis, we rejected the null hypothesis and accepted the alternative hypothesis which claims that board due diligence has a significant relationship with the financial risk management of healthcare companies in Nigeria. The above result is consistent with the status quo of DeZoort, Hermanson, Archambeault and Reed [36], Carcello, Hermanson, Neal and Riley (2012), Hambrick and Manson [38].

4.1.3 Female directorship presence has no significant effect on financial risk management of health care firms in Nigeria

The result of the analysis, shown in Table 6, shows that there is a significant and positive association between the presence of female directors and the financial risk management of public health companies in Nigeria. With a P value of 0.034, the test is considered to be statistically significant at the 5% level. This was confirmed with the positive correlation coefficient of 1.86%, which indicates that the presence of female directors at the listed health companies in Nigeria ensures effective risk management practices by 1.86%. On this basis, we rejected the null hypothesis and accepted the alternative hypothesis, which claims that the presence of female directorship has a significant correlation with the financial risk management of healthcare companies in Nigeria. This finding is in line with the findings of Post and Byron (2015), Dezso and Ross [23], Garcia-Mec, Garcia-Sanches and Martinez-Ferrero (2015), who reported that female directorship presence strengthens up organization's corporate governance which in turn ensures performance.

5. CONCLUSION

The study from the statistical analysis concludes that the corporate governance mechanisms ensure effective financial risk management among the publicly traded healthcare companies in Nigeria. Thus implies that corporate governance practices determine the effectiveness of corporate risk management practices.

6. RECOMMENDATIONS

1. The study having established that board independence has significant and positive relationship with firms financial risk management, it was recommended that firms should ensure that there are independent board of directors in board composition as thus ensures effective financial risk management practices.
2. Diligent members are also recommended in the board composition since the study found that board diligence ensures effective financial risk management practices among the quoted firms in Nigeria.
3. Female directorship presence is also required in the board composition as their

presence ensures effective financial risk management practices among the quoted firms in Nigeria.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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