

Corporate Governance and Financial Performance: A Moderating Impact of Female Director

¹Umar Bello, ²Adamu Danazumi Hashidu, ²Ibrahim Abubakar Abubakar and ³Ruth Lass
^{1&3}Department of Accounting and Business Administration, Federal University of Kashere
²Department of Accounting, Gombe State University

Abstract

This study is aimed at examining the moderating impact of Female on Board on corporate Governance and financial performance of Deposit Money Banks in Nigeria over a period of 10 years (2008 to 2017). The study employed the use of secondary data collected from annual reports and account of Deposit Money Banks listed in the Nigerian Stock Exchange. The study used panel data from (11) Deposit Money Banks in the Banking Industry which is analyzed using Correlation analysis and Ordinary Least Square-Moderated Multiple Regression (OLS-MMR). Results shows that only board composition is found to have significant impact on financial performance of DMBs in Nigeria, all other variables in the first model are not significantly related with financial performance. But on moderating the relationship with female director, board size, foreign directors and female directors are found to have significant impact on financial performance of Nigerian DMBs. The research concludes that female director had great impact on financial performance of DMBs in Nigeria. Thus, the study recommends that Nigerian Code of Corporate Governance to be amended to require listed firms to disclose, in their annual reports gender diversity of their boards.

Keywords: Female Director, Foreign Director, Board Size, Board Composition, Board Meeting and Financial Performance

Introduction

Good corporate governance (CG) helps firms get better performance, derive growth, manage risks, attract and retain investors, and sit out financial crises. To be actually effective, a board requires a diversity of skills, cultures, and views to make well-dressed decisions with lasting blow (IFC, 2014). The existence of women on corporate boards and their impact on board success is now one of the most controversial issues in corporate governance. This arises from the comparatively low, though increasing, number of female directors on boards around the world, despite an increasing number of well-qualified women in the labour force. Although gender discrimination is unlawful, there is a view that many women still run into undetectable barriers to promotion, in effect facing a 'glass ceiling' where they can see, but not reach, high-level corporate positions (IFC, 2014).

Several studies were conducted in the area of corporate governance and firm's financial performance (FP) in Nigeria (Abdullahi, 2011; Belinda, 2017; Kabir, 2011). Moreover, a number of scientific studies conducted outside Nigeria in respect of CG and FP are studies of Vähämaa (2016); Pasaribu (2017); Maher and Anderson (1999). Other researches were conducted on gender diversity and financial performance (Darmadi (2017); Gallucci, D'Amato, and Santulli (2015a); Ionascu, Ionascu, Sacarin, and Minu (2018b); Lu'ckerath-Rovers (2011); Wellalage (2011)) among others.

Gender diversity was found to have significant positive impact on financial performance of different companies in different studies such as (Lee-Kuen, Sok-Gee, Zainudin, and Chandrasiri (2017); Pasaribu (2017)). However, (Darmadi (2017); Gallucci, D'Amato, and Santulli (2015b); Ionascu, Ionascu, Sacarin, and Minu (2018a); Wellalage (2011)) found out that gender diversity does not have significant impact on financial performance. Board gender diversity researches recorded mixed results.

Moreover, the research of Garba and Bilkisu (2014) concentrated on the relationships of Board diversity and Financial Performance of insurance company in Nigeria. The study of Alabade (2016) was on the corporate governance and financial Performance, incorporate the moderating impact of gender diversity but the study was conducted in UK, this study is a replica of Alabade's study. To the best of our knowledge we have not come across a study in Nigerian context in which put together corporate governance and financial performance, a female director is used to moderate the situation. Therefore, this research serves as a

pioneering effort of assessing the interacting effect of female representation on board and financial performance of Deposit Money Banks in Nigeria.

Concept of Corporate Governance

Numerous numbers of scholars have viewed corporate governance in a different way from their own Point of view. The well recognized definition of corporate governance is the one formed in the Cadbury Report in 1992, the commission defines corporate governance as the manner by which companies are directed and controlled nature of corporate governance by looking at scopes: direction and control. The direction part of corporate governance emphasizes on the conscientiousness of the board to focus to strategic pose and planning in order to improve the performance and sustainability of the company. On the side, the control part of the definition gives emphasis to the conscientiousness of the board to keep an eye on the managerial activities of the corporation in the implementation of the policies and strategies of the corporation.

Contrary, Maher and Anderson (1999) and Craig (2005) view Corporate Governance from two different directions: the shareholder Model and the stakeholder model. Corporate Governance in its context (i.e. shareholder model) is used to enlighten the recognized method of stewardship of the board to the shareholders. On the contrary, in its expansive sight (i.e. stakeholder model) Corporate Governance is used to elucidate the system of relationships between a corporation and its diverse stakeholders. Nevertheless, it can be argued that, there is no need such dissimilarity since mutually the models have recognized corporate governance as a system of relationships between a corporation and its users of financial information through which the board is held responsible.

Corporate Governance is the body of the rules by which companies or institutions are managed internally and supervised by boards of directors. The focal point of corporate governance is profit-oriented companies. However, these rules can also be adopted by any institution established with a performance goal. The worldwide principles of corporate governance are fairness, accountability, transparency and responsibility. corporate governance aims at high performance, profitability, productivity and competitiveness.

Corporate governance means that the corporation would run its affairs with diligence, transparency, conscientiousness and accountability, and would make best use of shareholders' wealth for this reason and take decisions to enhance organizational Financial Performance and stakeholder value in the long run.

Good corporate governance obliges corporations to implement practices and policies which consist of performance accountability, effectual management control by the Board of Directors, establishment of Board Committees as a part of Internal Control System, reasonable representation of professionally qualified, non-executive and Independence Directors on the Board, the sufficient disclosure of information and the punctual discharge of statutory duties. In fact, corporations are required to have policies and practices in consistency with the requirement stipulated by law.

Concept of Board of Directors

The board of directors, which is the most senior executive body of a company and elected by the company's shareholders, should fairly represent the company within the framework of the relevant legislation, the articles of association and the in-house regulations and policies.

The board of directors is the strategic decision-making, representation and highest management (executive) body of the company. In adopting and applying the decisions, the board of directors should aim to raise the company's market value to the maximum extent possible. While managing the company, the board of directors should ensure that, the shareholders acquire long-term and stable income. In conducting its business, the board should pay special attention to maintaining the balance between the interests of the shareholders and the company's growth prospects ((CMB), 2003)

In Nigeria, Section 279 of the Companies and Allied Matters Act (CAMA) (2004), Cap. C20, LFN, 2004 as codified states that, a director of a company stand in a fiduciary relationship towards the company and shall observe high level of integrity in any transaction with the company or on its behalf. For these

reasons, the stakeholders may hold some reservations about the credibility actions and duties of the director.

Furthermore, section 282 of the CAMA, stipulates that every director of a company shall exercise the powers and discharge the duties of his office honestly, in good faith and in the best interests of the company, and shall exercise that degree of care, diligence and skills, which a reasonably prudent director would exercise in comparable circumstances.

For the stakeholders to be satisfied, and for the directors to be justified, the directors should establish and maintain high level of integrity, honesty, transparency and accountability. Section 334 of the CAMA, also, requires the directors of a company to prepare and present financial statements for the year at the Annual General Meeting to the members of the company. The Board's task is to offer entrepreneurial management of the corporation within a framework of prudent and effectual controls, which facilitates risk to be evaluated and dealt with. The Board should set the corporation's strategic aims, make sure that the necessary financial and human resources are in place for the company to meet its objectives and review management performance. The Board should set the company's values and standards and ensure that its obligations to its shareholders and others are understood and met. All directors must take decisions objectively in the interests of the company.

As part of their role as members of a unitary board, non-executive directors should constructively challenge and help develop proposals on strategies. Nonexecutive directors should scrutinize the performance of management in meeting agreed goals and objectives and monitor the reporting of performance. They should satisfy themselves on the integrity of financial information and that financial controls and systems of risk management are robust and defensible. They are responsible for determining appropriate levels of remuneration of executive directors and have a prime role in appointing, and where necessary removing, executive directors and in succession planning.

Corporate Governance and Financial Performance of Companies in Nigeria

Nowadays, investors appreciate the impact of corporate governance on the Financial Performance of business more than ever before and whilst take on investment decisions, investors are more ready to give high premium for companies with a sound corporate governance practices ((CMB), 2003). Corporate governance is about constructing credibility, guaranteeing transparency and accountability in addition to preserving a successful management of information disclosure that would promote an outstanding corporate performance. Transparency, disclosure and confidence make up the fundamental component of corporate governance, can grant pressure for better Financial Performance. Financial Performance, present and potential is a yardstick for investment decision.

There is clear correlation between corporate governance implementation and firm level of Financial Performance. The performance of a firm is completely connected to good corporate governance. Companies with good corporate governance have greater operating performance than those companies with poor corporate governance (Black, Jang, & Kim, 2003) corporate governance structure can create a considerable important not only to separate corporate performance, but also to national economic performance. Good corporate governance systems produce positive reward for business enterprises and countries. With regard to business enterprises, very well standing of corporate governance means low capital cost, increase in financial capabilities and liquidity, ability of overcoming crises more easily and prevention of the exclusion of soundly managed companies from the capital market ((CMB), 2003).

Furthermore, looking at the effect of good corporate governance on the country, one could authoritatively say that, it has a positive impacts on the country at large, which result into upgrading the picture of the country, preventing loss of domestic funds, raising foreign capital investments, increasing the competitive power of the economy and capital markets, and maintaining a higher level of prosperity ((CMB), 2003). Also, good corporate governance has the prospect of lifting up the standard of performance and motivating improvement for corporate development and attainment. It actively grants an evaluation outline for businesses, in which it facilitates rake and divisional comparison and analysis.

Women and Corporate Governance

International Finance Corporation (IFC) as part of its overall corporate governance work, it is building capacity, raising awareness, and increasing the discussion about gender diversity on boards in developing countries. For instance in Bangladesh, IFC organized a workshop with women entrepreneurs, together with the small and medium enterprises (SMEs) division of the central bank. Data from a survey of 200 women entrepreneurs helped to identify their business sector, their role, challenges they face, and the type of support needed. This event also helped establish social media network support groups in Facebook and group e-mail. A follow-up workshop with the leaders of each support group provided training in corporate governance, specifically on basic principles of corporate governance, board effectiveness, and the control environment, among others. Similarly in Bosnia and Herzegovina, Macedonia, and Serbia, IFC has been working with researchers to identify the real reasons why there are so few women on boards and has developed policy recommendations on what could be done by the various market players to empower women and improve board diversity. It also organized a series of training activities for women on boards in order to improve their skills in risk governance, financial literacy, and board strategizing (IFC 2014).

Moreover, in Kosovo, together with RTC Consulting, one of IFC's local partners led by a female entrepreneur, IFC is implementing a comprehensive program to empower young women from non-financial SMEs. The program comprises three days of training and six months of mentoring through which participants design and implement personal development plans that also address corporate governance improvements in the companies in which they work. IFC has organized a training-of-trainers workshop for the mentors, who allocate their time, for free, as part of the corporate social responsibility efforts of their institutions. Similar program is organized with the Indonesia Chapter of Women Corporate Directors, the Center for the Study of Governance of the University of Indonesia and IPMI International Business School, the country's first roundtable discussion on the role of women on boards. The event addressed the cultural, social, and economic burdens preventing women from reaching the boardroom and is the first in a series of awareness-raising and capacity-building initiatives slated to be organized with IFC's partners in the future. Such programs are organised world over, among the few countries benefited from it are Jordan, Morocco, Pakistan, Vietnam, Yemen, and a host of other countries. IFC has also been involved in supporting founding participants in Women Corporate Director chapters in South Africa, Nigeria, Kenya, and Vietnam. Their major aim is to fill at least 30 percent of IFC-nominated director positions with women, up from a current 24 percent in 2015 (IFC 2014).

Corporate Governance and Financial Performance

Belinda (2017) Ascertain whether corporate governance practices do influence financial performance of commercial banks in Kenya. The study found out that board gender diversity, board size, board independence, and board-director duality were all positively enhancing financial performance of commercial banks. Also on code of corporate governance the result shows that there exists a statistical significant positive relationship between code of corporate governance and financial performance of commercial banks in Kenya.

Onuorah, Chi-Chi, and Friday (2016) Evaluate the level of performance of some selected companies ranging from commodities, brewery, banking, oil and gas and beverages in terms of corporate governance measure indicators on the firm quality of financial reporting in Nigeria. The data were collected from 2006 to 2015. Econometric analysis was conducted and the result suggests that the explanatory variables (Board structure, Board experience and the quality of external audit) have significant positive impact of the explained variable (financial reporting quality). However, independent directors on the board of firm and audit committee size negatively affect financial reporting quality.

Corporate Governance and Female Director

Vähämaa (2016) Examine whether the gender of the top executives is associated with the strength of corporate governance mechanisms within a firm. The study uses panel and instrumental variable regressions on an eight-year sample of the S&P 1500 firms. The results established that firms with female Chief Executive Officers (CEOs) and Chief Financial Officers (CFOs) have higher quality governance practices.

Moreover, female CEOs are acknowledged to have the most significant influence on the governance attributes related to the board of directors and capture defenses mechanisms.

Female Director and Financial Performance

Lee-Kuen et al. (2017) Investigate the relationship between gender diversity in a firm's board of directors and financial performance of firms listed on Bursa Malaysia for the period between 2009 and 2013. Using unbalanced panel data analysis, and tested whether gender diversity in the boardroom may influence the firm's performance, as measured by Tobin's Q. four different proxies for gender diversity (the dummy variable for women, the percentage of women on the board, the Blau index, and the Shannon index) were employed to provide a more comprehensive measure of gender diversity. The research suggests that a higher degree of female representation on the board increases a firm's financial performance.

Moreover, Pasaribu (2017) established that Previous studies indicate that there are mixed results in the relationship between female directors and firm performance. The result of the study shows that there is a little evidence that female (executive and non-executive) directors significantly influence firm performance. The research indicated that the presence of females on the boards encounters tokenism problems. Moreover, the study reports that the relationship between female directors and firm performance may depend on certain firm characteristics such as firm size. Therefore, UK small listed firms may experience more benefits of appointing female directors because they have more flexibility in creating an optimal board structure.

However, Darmadi (2017) Consider the relationship between gender diversity on management boards and financial performance of Indonesian listed companies. A cross-sectional regression analysis was conducted based on a sample comprising 92.4 percent of public firms listed on the Indonesia Stock Exchange (IDX). The study discovered that the representation of female top executives is negatively related to both accounting and market performance, suggesting that female representation is not associated with improved level of performance.

Similarly, Gallucci et al. (2015b) analyses the direct relationship between female directors and firm performance, and to explore the moderating role of female owners on the relationship between females on board of directors and firm performance. The main hypotheses are tested, through a panel regression model with cross section random effects, on a sample of 380 firms over the period 2008-2012. The research found that the presence of women on company board does not affect firm performance. However, the relationship becomes significant when they consider the moderating role of the female presence in ownership.

In Sri Lanka, Wellalage (2011) investigates the link between female board directors and company financial performance and agency costs in Sri Lanka's publicly listed companies, the study finds a significant negative relationship between the percentage of women on boards and firm value while increasing company agency cost. The researchers establish that female board representation is positively related to accounting returns and that the relationship is more positive in countries with stronger shareholder protections - perhaps because shareholder protections motivate boards to use the different knowledge, experience, and values that each member brings to the board. Even though the study point out the relationship between female board representation and market performance is near-zero, the relationship is positive in countries with greater gender equality (and negative in countries with low gender parity) perhaps because societal gender differences in human capital may influence investors' evaluations of the future earning potential of firms that have more female directors. Lastly, the study also found that female board representation is positively related to boards' two primary responsibilities, monitoring and strategy involvement.

Ionascu et al. (2018b) Examine the association between gender diversity on corporate boards and firm performance for a European emerging market, which lags behind in terms of both corporate governance quality and social cohesion indicators. In a sample of Romanian companies listed on Bucharest Stock Exchange during 2012-2016, the study confirms previous concerns related to the endogeneity of gender diversity variables in firm performance regression analysis and shows that, on average, diversity has no

significant impact on firm-performance. However, based on a sub-sample analysis, results show a robust association in the case of profit-firms and those listed on the Standard tier. As losses can be construed as a distortion factor and Standard tier companies are the smallest and less well governed on the market, the results could be taken to suggest that Romanian listed companies do benefit from increasing gender diversity in the boardrooms, which could complement their rather poor corporate governance practices. Overall, the paper concludes that, in the context of an emerging market, policies aimed at increasing gender diversity in the boards appear to be financially viable and even beneficial for the major part of listed companies, balancing successfully the social cohesion and economic components of sustainable development.

Puthenpurackal and Upandhyay (2012) Assume and find that the routine impact of women directors depends on firms' information environments as well as their prior experience. Exclusively, women directors appear to be more beneficial in less difficult firms. Women directors with senior corporate experience are associated with higher firm performance relative to women directors with lower level corporate and non-corporate experience. Consistent with these valuation effects, the research found that firms appear to take into account their information environment while deciding on appointing women directors.

Valsan (2015) Investigate the effects of board gender diversity across the three main functions of the board: monitoring, strategic direction, and the relational function. It will be shown that, in a gender-balanced board, the perceptions associated with female leadership style help improve the effectiveness of the board across its three main roles. The core argument is that board gender diversity plays an important role due to certain signals it sends to long-term, risk-averse corporate stakeholders. These signals are based on certain features associated with the female leadership style. More specifically, women are perceived to be more conscientious in performing their tasks, more risk-averse both in investing their own assets and in investing on behalf of others, and more other-oriented. These perceptions are particularly relevant to long term stakeholders, who are generally more risk-averse, especially in turbulent economic times, or as the company is approaching insolvency.

Mahalakshmi and Reddy (2017) Attempt to find answer for the question, "Are there enough qualified, competent and skilled women directors available to substantially increase the representation of women on boards?" The research found out that women have proved competence, appropriateness and trust around the world.

Alabede (2016) Expands the model of corporate governance to incorporate moderating effect of board diversity and investigates the relationship between internal corporate governance structures and firm performance and how this relationship is moderated by the influence of board diversity. The researcher extracted the data from annual reports of the UK FTSE 350 firms, using OLS-moderating multiple regression analysis the data were treated statistically. The result indicated that, the proportion of outside directors, board size, board diversity are significantly positively related to operating performance (ROA). The empirical evidence also indicates that the moderating effect of board diversity strengthens the relationship between outside directors and operating performance as well as between board size and operating performance.

Oludele, Magret, and Tobiah (2016) Examine impact of board gender diversity on the financial performance of listed manufacturing companies in Nigeria. The researchers selected 34 companies within the manufacturing sector in Nigeria out of 74 companies. The study was carried out using both secondary and primary data; secondary data was extracted from the published financial statement of the selected companies while primary data was collected with the use of questionnaire from the 170 respondents drawn from the selected 34 companies. The result confirms that there is a significant positive linear relationship between board gender diversity and financial performance of listed manufacturing companies in Nigeria. The study thus recommends that manufacturing companies in Nigeria should increase the ration of women to men in their board of directors.

Garba and Bilkisu (2014) Investigate the relationship between board diversity and financial performance of insurance companies in Nigeria, with specific reference to how gender diversity, ethnic diversity, board size, board composition and foreign directorship affect financial performance of insurance companies listed on the Nigerian Stock Exchange. The Researchers selects 12 listed insurance companies using non-probability sampling method in the form of availability sampling technique for a period of 6 years i.e. 2004 to 2009. Using ROA, ROE and TOBIN's Q as measures of firm performance and applying Feasible Generalised Least Squares (FGLS) and random effects estimators, the researchers found that gender diversity and foreign directors have a positive influence on insurance companies' performance. However the findings indicate a negative and significant relationship between board composition and performance of insurance companies in Nigeria. The study suggests that increase in the number of female directors and foreign directors on the boards of insurance companies in Nigeria will enhance their performance conversely, an increase in the ratio of outside directors on the board will reduce the performance.

Theoretical framework

The theoretical underpinnings for this study include Agency Theory and Stakeholders Theory.

Agency Theory is concerned with the relationship between the principals and the agents. The principals are the shareholders while the agents are the company's executives and managers. In agency theory, shareholders who are the owners or principals of the company, delegate the running of the business to the executives (Abdullah & Valentine, 2009). Therefore, on the basis of Agency Theory, shareholders expect the agents to act and make decisions in the principals' interest.

On the contrary, due to information asymmetry, the agents may not necessarily make decisions in the best interests of the principal, leading to agency problem (Jensen and Meckling, 2004). There is therefore a need for protecting the interests of owners in order to minimize agency problem. This may be done by monitoring the activities of Chief Executive Officer (CEO) through effective board of directors (Donaldso & Davis., 1991). Meanwhile, the composition of the board of directors has an important function here and in particular, diversity on the board may matter a lot.

However, Stakeholders Theory, incorporates corporate accountability to a broad range of stakeholders not necessarily shareholders per se (Freeman et al., 2004). These groups include the women and other minorities, customers, governmental bodies etc., (Brunk, 2010). Nevertheless, stakeholders approach to corporate governance implies a shift in the traditional role of the board of directors, as a defender of shareholders interest alone, to a defender of all stakeholders' interest.

Therefore, one can infer from the stakeholder theory that, it is not the interest of the shareholders alone that should be protected, but also that of women and other minority groups (racial, cultural, and ethnic minorities). In this regard however, a board is expected to use more diversified mechanisms to control and motivate the executives (Pige, 2002). The use of diversified mechanism to control the excesses of CEO may include gender diversity and diversity in other related variables.

Methodology

The data used in this study were extracted from annual reports of Deposit Money Banks (DMBs) listed on Nigerian Stock Exchange. Given that the study covers period from 2008-2017, the samples were chosen based on the population of 18 DMBs listed on the NSE. In selecting the samples, only banks with available data (for the study variables) for the period 2008 to 2017 are used. Therefore, 11 DMBs were found to satisfy the above condition hence they are used to represent the population. Multiple regression analysis is used to analyses the data collected in order the test the moderating impact of female director on the relationship between corporate governance and financial performance of Nigerian DMBs.

Model and measurement of variables

In addition to ascertain the relationship between dependent variable (financial performance) and independent variable (Corporate Governance), this study also determined the moderating effect of Female director. For this purpose, there is consensus in the statistics literature that the appropriate statistical technique to assess the presence of moderating effects in the relationship between two variables is Ordinary Least Square-Moderated

Multiple Regression (OLS-MM) (Aguinis & Gottfredson, 2010; Aiken & West, 1991). The direct relationship between the corporate governance structures (measured by Board Size, Composition, Meetings, Ownership and foreign Director) and financial performance (measured by Return on Asset (ROA)) was estimated using the model 1 while the interacting effect of female director on the relationship was estimated in model 2.

$$ROA_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BCOMP_{it} + \beta_3 BMET_{it} + \beta_4 BOWN_{it} + \beta_5 BFRGD_{it} + e_{it} \dots\dots\dots 1$$

$$ROA_{it} = \beta_0 + \beta_1 BSIZE_{it} * FDR_{it} + \beta_2 BCOMP_{it} * FDR_{it} + \beta_3 BMET_{it} * FDR_{it} + \beta_4 BOWN_{it} * FDR_{it} + \beta_5 BFRGD_{it} * FDR_{it} + e_{it} \dots\dots 2$$

Where: i = firm, t = time (that is 2008-2017), β_0 is the intercept, $\beta_1 - \beta_4$ are coefficient and e is the error term. Financial performance is proxy for return on assets (ROA), BSIZE for board size, BCOM for board composition, BMET is board meeting, BOWN is for board ownership, while FRGD is for foreign director and FDR for Female Director.

Results and Discussion

Descriptive statistics and correlation

The descriptive statistics for entire firms with 110 observations are presented in Table 3. The descriptive analysis on the financial performance shows the mean percentage of ROA increased progressively from -8% to 10.9% with overall average of 1.74% for the 10 years. The improvement of ROA was indication that Nigerian listed DMBs had recovered from the effect of global financial meltdown and the recent recession faced by the Nigerian economy and this represents a good sign of corporate governance.

With respect to the descriptive analysis of the independent variables, Table 3 indicates that board size (BSIZE) of listed DMBs in Nigeria between 2008 and 2017 ranges from 10 to 20. On the average, this suggests that they maintained board size between 14 and 15.

Board meetings (BMET) held by the samples DMBs indicated an average meeting of 6 annually while the average board compose of about 54% Non executive directors. On board ownership, it is realized that in some situations board owned nothing while a maximum of 89% shares were found to have been owned by board members.

The descriptive analysis also indicates that the mean proportion of foreign directors is found to be about 34% of the board. On the female directors, a maximum of 6womens is found while in some situations no female is on the board. Moreover, women are actively participating in corporate governance of Nigerian DMBs with an average of 2 to 3 women on each board as depicted by a mean score of 2.5364.

Table 1: Descriptive statistics for continuous variables

Variables	Obs	Mean	Std. Dev.	Min	Max
ROA	110	.01737	0.2506	-0.0833	0.10896
BSIZE	110	14.691	2.3334	10	20
BCOM	110	0.54139	0.1815	0	0.92308
BMET	110	6.14679	1.8897	3	12
BOWN	110	0.09778	7400.63	0	0.89086
FRGD	110	0.3456	0.72068	0	4
FDR	110	2.5364	1.53657	0	6

Table 2 presents inter-correlation between various variables of the study and the results indicate that the strength of correlation between most variables are weak hence produced small effect (± 0.1) while association between other variables produced moderate effect (± 0.3) and high effect (± 0.5) respectively. For the independent and moderating variables, ROA is only negatively correlated to BSIZE and BMET.

Table 2: Correlation Analysis

	ROA	BSIZE	BCOMP	BMET	BOWN	FRGD	FMDR
ROA	1.0000						
BSIZE	-0.1385	1.0000					
BCOMP	0.3189	-0.2707	1.0000				
BMET	-0.1321	0.4660	-0.0839	1.0000			
BOWN	0.0428	-0.1279	0.0593	-0.0828	1.0000		
FRGD	0.0572	0.1966	0.0452	0.2924	-0.1445	1.0000	
FMDR	0.0147	0.4238	-0.0364	0.1062	-0.0926	0.2051	1.0000

Regression analysis

Various tests were conducted to confirm whether the assumptions underlying OLS-MM Regression are complied with. The Breusch-Pagan/Cook-Weisberg test for heteroskedasticity as well as kurtosis and skewness indicates that normality assumption was fairly upheld in the first model while in the second model the data was found to be heteroskedastic and it's therefore corrected using a robust OLS regression. Moreover, fixed effect model is found suitable in the first model due to an insignificant p value of greater than 5%. However, one of the main limitations of OLS-MMR is that the presence of high correlation between variables (multicollinearity) may weaken the regression result and it may fail to detect moderating effect. To ensure robustness of the regression result, all the variables were centered as recommended by Aiken and West (1991). Accordingly, VIF and correlation indicate that multicollinearity did not pose problem to the analysis.

Table3: Moderated OLS-Regression results

ROA	MODE 1			MODEL 2		
	Coef.	T	p>t	Coef.	T	p>t
BSIZE	-.0001347	-0.09	0.932	-0.0024	-5.78	0.000
BCOMP	.0418306	1.83	0.017	0.02777	5.22	0.000
BMEET	-0.0018	-1.26	0.211	-0.0004	-1.61	0.111
BOWN	0.0310	1.91	0.060	-0.0006	-0.18	0.856
FRGD	-3.600	-0.70	0.485	-0.0002	-2.25	0.027
FMD	0.0022	0.002	0.287	0.08083	10.21	0.000
Constant	-0.0031	-0.11	0.915	0.03364	4.55	0.000
R square		0.1674			0.9349	
Prob > F		0.0665			0.000	

In using OLS-MMR, the dependent variable was regressed on the set of predictor variables (independent variables) in the first stage to obtain the main effect while in the second stage; dependent variable was regressed on the set of predictor variables, moderator and a cross product of the preceding term (the product of each independent variable and moderator). Table 5 which documents the regression results indicates that the value of the F ratios which ranged 2.09 to 177 for the two models is significant at the 10% level. This suggests that the models are statistically fit to predict the financial performance. With R^2 ranging from 0.1674 to 0.9349 respectively for model 1 and 2 of the data, all the variables in each of these two models could offer about 17% and 93% explanation of the variance in the dependent variable (ROA) respectively.

On the contribution of individual variables in each model, Table 5 indicates that only board composition (BCOMP) is found to have significant impact on financial performance of DMBs in Nigeria all other variables in the first model are not significantly related with financial performance. However, on moderating the relationship with female director, board size (BSIZE), foreign directors and female directors are found to have significant impact on financial performance of Nigerian DMBs.

This implies that large board size could bring about decrease in financial performance. The negative relationship between board size and financial performance indicated by regression coefficient confirm the

proposition by the agency theory that increase in agents will bring about less performance. The result is also consistent with findings of some previous studies which also reported negative relationship between the two variables. For instance, the study of (Kilic and Kuzey (2016); Lu'ckerath-Rovers (2011)), and (Vafaei, Ahmed, and Mather (2015)) reported that board size has negative impact on financial performance.

On the proportion of foreign directors (FRGD) on the board it was found to have significant negative impact on financial performance (ROA) in model 2 but not significant in model 1. Female directors are found to be significant and positively related to financial performance of Nigerian DMBs in the 2nd model but not significant in the 1st model. This suggests that the interacting effect of female representation on board strengthens the relationship between foreign directors and ROA.

The regression result suggests that introducing a female director in the regression model as a moderator significantly increase the R² from about 17% to 93%. This is an indication that the predictive capacity of model 2 was strengthened in the presence of moderating effect of female director. This result suggests that the moderating effect of female director had great impact on financial performance of DMBs in Nigeria.

Conclusion and Implications

This study examines the relationship between corporate governance structures and financial performance measured as ROA and how this relationship is moderated by female director. This relationship is as conceptualized by the Agency Theory and supported by the Stakeholders Theory. In line with the proposition of the Agency theory, the results of the study established a significant negative relationship between board size and financial performance. However, this finding reaffirms previous findings on board composition and female inclusion in good corporate governance as well as justify the provision in the Governance Corporate Code world over which recommend that corporate boards should comprises of at least half NEDs.

The findings of this study have some notable implications. First, the finding clearly demonstrates the importance of the interacting influence of women on the relationship between the corporate governance structures and firm performance and such influence cannot be ignored theoretically. Hence, this suggests that Agency Theorists should explicitly support the argument that the presence of women on board enhances good corporate governance.

Furthermore, the findings suggest that policy makers in the Nigeria and elsewhere should be concerned with issues surrounding board structure to include women as well as other related issues which could increase good corporate governance. To this end, this study's findings have a number of practical implications on Nigerian corporate governance and other countries with similar corporate governance principles. First, Nigerian Corporate Governance Code to be amended to require listed firms to disclose in their annual reports diversity of their boards, such requirement would have more meaningful impact on corporate governance practice. However, it should be specific in terms of suggesting minimum number of women that should be on the corporate boards as was done for audit committee size and independent directors.

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