# Corporate Board Gender Diversity and Financial Performance of Listed Building Materials Companies in Nigeria

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***Abstract:* - The study examines the impact of corporate board gender diversity on financial performance of listed building materials companies in Nigeria. The population of the study comprises of 12 listed building materials companies in Nigeria out of which 9 companies are selected to be the sample of the study. The multivariate regression is used in analyzing the data. The findings of the study disclose that board gender has negative and insignificant impact on financial performance. The age of the companies which is the control variable has positive and significant impact on financial performance. The study recommends that the listed building materials companies in Nigeria should appoint more than one (1) female in the board of directors. These recommendations could be implemented by issuing an improved code of corporate governance by the Central Bank of Nigeria and Nigeria Security and Exchange Commission.**

***Keywords:* Board Gender, Financial performance, Building Materials, Nigeria, Central Bank of Nigeria, Nigeria Security and Exchange Commission.**

## I. INTRODUCTION

As women become increasingly present in areas and domains traditionally dominated by men, attention focuses on the relatively small proportion of women in senior management positions of companies. The global debate on this matter is intensifying and there is not an easy way to explain why gender diversity matters. Scholars and professionals have long argued that women have distinctive and particularly effective management skills. Several public institutions have become more vocal in supporting increase participation of women in leadership roles in organizations (Bianchi & Latridis, 2014).

In the same vein, the presence of women on the board of directors promotes the performance of the firms because there must be a new approach to issues brought before the board of directors (Matlala, 2011). The gender diversity provides new ways of thinking, skills, ideas, and motives and promotes independent of the board of directors.

Again, the financial regulatory authority in Africa such as central bank of Nigeria has being issuing directives from the last two decades requiring corporate entities to disclose gender diversity concern in their financial reports. Further, CBN in Nigeria went ahead to give deadline to financial institutions for compliance. The CBN also states that there is a sense of agreement that women on boards should be increased for sustainable economic growth. Unless social concerns such as gender disparity and women economic empowerment are addressed, economic and environmental goals and overall sustainable development will be difficult to achieve (CBN, 2012).

The CBN also went ahead to state that there are certain limitations placed on women, for instance, in banking, they are usually not allowed going beyond a certain level. Furthermore, CBN also issued a regulatory directive requiring all banks in Nigeria to appoint at least 30 per cent female board members and 40 per cent management staff by the end of 2014. Stating that it is on record that there are limitations placed on women, for instance, in banking industry they are usually not allowed to go beyond a certain level. The issue of lack of women on the board is indeed a global issue and it is also true that some countries have addressed the problem (CBN, 2012).

On global scene, moreover, despite the large proportion of women joining the labour force in European countries, few senior positions are held by women. The women on average only occupy 19% corporate board membership and 14% senior executive positions of top 600 companies in Europe. And, another source of concern is that only 4% of chief executive positions of these companies are held by women. As a result, however, almost all European countries now are enacting laws that give quotas to corporate entities on the proportion of women that most be found on their board of directors and senior executive positions (IMF, 2016).

None of the related researches conducted on this area of study used the financial performance of building materials subsector of manufacturing industry as dependent variable. Similarly, none of the related researches used the period of the study of up to eleven (11) years.

Therefore, this study is set to fill the gap located in the above revelation by using the financial performance of building materials subsector in Nigeria as dependent variables and used the study period of up to eleven (11) years. Furthermore, due to cultural, legal, economic and political differences across the world, the findings of the researches previously conducted on this area of study and the findings of this research might be different.

In line with the gap reveals above one can ask such question as what is the impact of corporate board gender on financial

performance of listed building materials companies in Nigeria.

The objective of this study is to examine the impact of corporate board gender on financial performance of listed building materials companies in Nigeria.

## II. LITERATURE REVIEW

### *2.1 Conceptual Framework*

It is on record that better performing firms are incorporating women in their board of directors and other senior management positions. The firms with high percentage of women in their board record high returns on investment. It is also found that intensity and high technology firms that need creativity and critical thinking, diversity seems to bring, look to benefit more from significant proportion of women in their board of directors (IMF, 2016). IMF also went ahead to state that the existing of differences in preferences and behaviors that exist between men and women give important complement to the maturity and ability of the board of directors in monitoring and ratification of decision of the management.

In the same vein, the board of directors that is more diverse improves firm performance. However, if business organization commit gender discrimination in such a way that more men are appointed into the board at the expense of more talented women this action often used to be at the detriment to the organization that implement the policy. A firm is always better off if it maintain more balanced board of directors. Similarly, it is argued that educated females are able to perform better in a board of directors than uneducated women. And so, it is found that female who happens to be executive board member performs better than non executive board member (N. Smith, V. Smith & Verner, 2012).

Similarly, Campbell and Bohdanowicz (2015) stress that the appointment of women in corporate board of directors usually meets with difficulty of invisible berries to promotion, in a nutshell, facing a glass ceiling where they can see but cannot raise to the top position of the management and board of directors. The companies that fail to appoint women in their board usually suffer from inferior performance and thus, cannot utilize the intellectual and social capital that women posses. The advocates of gender diversity recognized the added economic value that inclusion of women in the board can bring. There is also the ethical consideration to promote social justice of equality of opportunity, non discrimination and empowerment. Some scholars even argued that it is immoral not to include women in the board of directors because increasing gender diversity achieves more equitable outcome for society.

Again, Qian (2016) states that board gender diversity refers to the balance of gender composition of corporate board. The gender diversity promotes social justice and, it is particularly important if men and women differ in their skills, preferences, risk appetite or value system. Similarly, as the corporate leaders have the responsibility of investment decision that open up a bright future, gender imbalance in corporate entities has the potentials to cause inefficient allocation of human resources and distort the fortune of the business world. Firms that discriminate based on non-talent factors in their appointment to the board will usually underperform in their operation.

### *2.2 Review of Empirical Studies*

In his study Carter *et al*. (2007) examine the relationship between gender and ethnic minority diversity of board of directors and financial performance in United States listed companies. The sample of the study consists of all firms listed in the fortune 500 firms over the period of 1998-2002 using three-stage least-squares estimation in analyzing the data. The results conclude that both gender diversity and ethnic diversity have a positive effect on financial performance as measured by Tobin's *q*.

However, Ekadah, Wachudi and Mboya (2009) empirically disagree with these findings in their study which found that board gender diversity has no effect on performance of banks in Kenya. Stepwise regression was used to analyze the effect of board diversity on performance. The research also reveals that boards of commercial banks in Kenya have been largely male-dominated. On average, out of a typical board size of eight members, only one was a female director.

In the study conducted by Oba and Fodio (2012) found that both female director presence and proportion of female directors have positive impact on financial performance while the board size, a control variable has a neutral effect. The research investigates the predicting power of a board's gender mix on financial performance in Nigeria using a cross sectional data analysis. Return on capital employed was utilized as a measure of financial performance while female director presence and proportion of female directors were proxies for gender mix. The study emphasizes the need for managerial and legislative efforts in order to strike a fair gender balance in board of directors.

In contrast to this study, Prihatiningtias (2012) found mixed results which show that gender diversity has both positive and negative influence on firm's financial performance in Indonesia using ROA and Tobin's Q as performance indicators. However, Sven-Olov, Daunfeldt and Rudholm (2012) found a negative relation between gender diversity and firm performance when investigating whether increasing gender diversity on the board of directors improves firm performance in Sweden. The study used a random-effects coefficients model to account for unobserved firm heterogeneity. The study suggests for more legal actions in order to increase gender diversity on the board of directors.

The literature being reviewed contributes significantly in exposing and examining the facts on the relationship between corporate board gender and financial performance. Thus,

justifying that gender diversity can enhance or undermine the financial performance of companies.

*2.3 Theoretical Framework*

*2.3.1Agency Theory*

Agency theory is built based on the contract undertaken between the principal and the agent in which the principal (shareholder) whose wealth is entrusted to the agent (manager) under the supervision of the principal. Braendle (2008) discloses that the diversity and large number of shareholders in a typical public company cannot or will not exert effective control over the management for various reasons such as the existence of a coordination problem. This includes problems of different interests of shareholders as well as bringing shareholders with the same beliefs together. This is referred to as collective action problem, where it might be rational for each of the shareholders not to engage in control. The incentive of the shareholder for attending the general meeting of the company or exercising control in any other way is minimized as the transaction costs of control may exceed the benefits. Here the company may experience the imminent problem of free riding i.e. each shareholder wants to avoid the costs of control by hoping that other shareholders are exercising the necessary control.

Agency theory advocates that Shareholders (principals) hire managers (agents) to make decisions that are in the best interest of the shareholders. The separation of ownership from control implies that the principal (shareholders) cannot exercise full control over managerial actions. Opportunistic behavior is central in agency theory, and there exists information asymmetry between the principals and agents (managers). Information asymmetry occurs where management has competitive advantage of information within the company over that of the owners. These lead to two important conflicts between management and shareholders. One of the conflicts is in terms of different objectives (Abidin, Kamal & Jusoff, 2009).

*2.3.2 Stakeholder Theory*

According to Jensen (2001) managers should make decisions so as to take account of the interests of all stakeholders in a firm (including not only financial claimants, but also employees, customers, communities, government officials, and under some interpretations the environment, terrorists, and blackmailers).

Traditionally, business organizations in all respect have been seen as property of their owners (shareholders) therefore, they are limited in their liability for their effects upon others. This is primarily the case in a world where concern remains domestic as the government in such situation can abrogate any adverse effects of the business in a way that is fair to all. The apparent increase in societal aspiration toward business organization leads business community and scholars alike to revise their understanding of a business. Therefore, to find the true state of the firm in the business world of today stakeholders theory suggest that business organization most focus not only on their stockholders but other groups and individuals who can effect or are being affected by the action of the firm (Freeman, Harrison, Wicks, Parmer & Decolle, 2010).

The employees used their experience for the benefit of the firm, customers provide market to the product of the firm, and supplies remain the sources of raw materials. The host community provides environment, security and markets to the firm's product so, in return a business organization is expected behave as any other good citizen. The business organization is expected to reciprocate by providing incentives to its employees in form of pension, bonus, allowances, vacation, and promotion and so on. Supplies as a source of raw materials when treated like member of stakeholder network the supplier will respond when the firm is in need. On the other hand, the host community expects the firm to provide social expenditures and meaningful employment (Freeman, 1988).

The agency theory explains that effective gender diversity influences the financial performance of listed building materials companies in Nigeria. Stakeholders theory provide theoretical underpinning to agency theory so this research is explain by these two theories as used by Yermack (1996); Bathula (2008); Abidin, Kamal and Jesuff (2009); Sanda, Garba and Mikailu (2011); Ghabayen (2012); Albert (2013); and Ali and Bin Nasir (2014).

## III. METHODOLOGY OF THE STUDY

*3.1 The Population and Sample Selection*

The population of this study is made up of all twelve 12 listed companies in the building materials subsector in Nigeria out of which nine (9) sample has been drawn. A criterion has been used to select the eligible companies for the study. Any company that have comprehensive financial statement reported within the period 2005 to 2015 have been selected and, secondly, a company most have been listed without been delisted within the period of the study. The following three (3) companies failed to have made it into the sample: Dangote Cement PLC, Paints and Coating Manufacturers Nigeria PLC, Portland Paints and Products Nigeria PLC which were quoted in the Nigeria Stock Exchange in 2009 and 2010 respectively.

Table 3.1 the Sample Size of the Study

| S/N | Listed Firms | Date of Incorporation | Date of Listing |
|---|---|---|---|
| 1 | Ashaka Cement PLC | 1974 | 1990 |
| 2 | Lafarge Africa PLC | 1959 | 1979 |
| 3 | Cement Company of Northern Nigeria PLC | 1962 | 1993 |
| 4 | Berger Paints PLC | 1959 | 1974 |
| 5 | CAP PLC | 1965 | 1978 |
| 6 | DN Meyer PLC | 1960 | 1979 |
| 7 | Premier Paints PLC | 1982 | 1995 |

| | | | |
|---|---|---|---|
| 8 | IPWA PLC | 1961 | 1978 |
| 9 | Africa Paints Nigeria PLC | 1974 | 1996 |

Source: Generated by the Author NSE Fact Book 2015

Table 3.1 represents the sample size of the study. Column one (1) introduce the serial number, while column two presents selected listed building materials companies in Nigeria. Column three (3) is the date of incorporation and column four (4) represents the date of listing of the companies.

*3.2 Models of the Study*

To examine the impact of the independent variables on the dependent variables a model has been used and it has been adopted with modification from (Sanda, Garba & Mikailu 2011; Thi Ho 2014; Müller *et al*. 2014). The variables that are not captured in this model but would have had effect on this study are represented by an error term, μ. The functional relationship among these variables can be defined thus:

$BG_{it} = f(BGEN, AGE)_{it} + \mu_{it}$.....1

$FP_{it} = f\,(ROA, ROE)_{it} + \mu_{it}$…….....2

From these regression equations two models will be developed each to test the hypothesis.

ROA i,t = β0 + β1BGEN i,t + β2AGE i,t + μit ---------- 1

ROE i,t = β0 + β1BGEN i,t + β2AGE i,t + μ i,t----------2

Where,

ROA i,t is return on assets for firm i in year t.

ROE i,t is return on equity for firm i in year t.

β0 is the intercept of the regression model.

BGEN I,t: Is Board gender which denotes the presence of female directors in the board taking a value of one if the firm has at least one female director and zero otherwise.

AGE i,t: Is age of the firm which denotes the date of listing for firm i in year t.

μ i,t: is the error term.

i = firm

t = year

## IV. RESULTS AND DISCUSSION

This chapter presents and interprets the results obtained from regression models derived from Multivariate regression. All the inferences drawn from the hypotheses tested are presented. The findings of the study are discussed in the chapter exhaustively.

*4.1 Multivariate Regression Results of Model 1 and 2*

Table 4.1 Present the multivariate regression results for dependent and explanatory variables of the study.

Table 4.1 Multivariate Regression Results of Model 1 and 2

| **EXPLANATORY VARIABLES** | **ROA** | | | | **ROE** | |
|---|---|---|---|---|---|---|
| | **(Robust OLS)** | | **FIXED EFFECT** | | **(Robust OLS)** | |
| | **COEF.** | **P > [t]** | **COEF.** | **P>[t]** | **COEF.** | **P > [t]** |
| BGEN | -0.0141 | 0.701 | -0.2153** | 0.027 | -0.0434 | 0.491 |
| AGE | 0.0033* | 0.079 | 0.0091 | 0.371 | 0.0007 | 0.845 |
| CONSTANT | 0.1533 | 0.503 | 0.3798 | 0.512 | 1.1398 | 0.002 |
| Rho | | | | | | |
| Sign | 0.0000 | | 0.0000 | | 0.0000 | |
| F - value | 9.49 | | | | 6.49 | |
| $R^2$ | 0.214 | | 0.0461 | | 0.2755 | |
| Ajd $R^2$ | 0.163 | | | | 0.2282 | |

Source: Annual Report and Account Data of Listed Nigeria Building Materials Companies legend: * p<.1; ** p<.05; *** p<.001. Indicate 10%, 5% and 1% significant level.

Table 4.1 presents the regression results of the dependent variables ROA, ROE and the explanatory variables BGEN and AGE of listed building materials companies in Nigeria.

The least square regressions (OLS) of models 1 and 2 results reveal the $R^2$ of 0.214, 0.2755 which are the coefficients of determination. They reveal the proportion of the total variation of the dependent variables explained by the explanatory variables altogether. Thus, BGEN and AGE of the companies have explained 21% and 28% of the total variation of ROA and ROE of the listed Nigeria building materials companies. The remaining variation of 16% and 22% of ROA and ROE of the listed building materials companies in Nigeria are not explained by the models.

The hypothesis states that board gender (BGEN) has no significant impact on financial performance (ROA, ROE) of listed building materials companies in Nigeria is tested in this section.

The results of table 4.1 shows that board gender is negatively and insignificantly related to ROA using OLS regression in

model 1 as given by the p – value of 0.701 and coefficient of -0.0141 and negatively and significantly related to ROA using fixed effect regression as given by the p – value of 0.027 and coefficient of -0.2153. The board gender is also negatively and insignificantly related to ROE using OLS regression in model 2 as given by p – value of 0.491 and coefficients of -0.0434. This means that an increase in women representation in the board of directors of listed building materials companies in Nigeria could have little impact on financial performance of these companies. Therefore, we accept the null hypothesis which says that BGEN has no significant impact on the financial performance of listed building materials companies in Nigeria.

These findings are consistent with the results of Robertson and Park (2006); Ekadah, Wachudi and Mboya (2009); Herdhayinta (2014); Okon, Akpan, and Amran (2014) and Akpan (2015). However, these results contradict the findings of Carter et al. (2007); Bathula (2008); Van Ness, Miesing and Kang (2010); Albert (2013); Chiedu, Oba and Fodio (2013); Thi ho (2014); Ongore et al. (2015) which reveal that BGEN has significant influence on financial performance of companies.

The age of the companies is positively and significantly related at 10% level of significant to ROA using OLS regression in model 1 as given by the p – value of 0.079 and coefficient of 0.0033 and it has positive and insignificant relationship with ROA using fixed effect as given by the p – value of 0.371 and coefficient of 0.0091. The AGE of the companies also is positively and insignificantly related to ROE in model 2 as reveal by the p – value of 0.845 and coefficient of 0.0007. The results also indicate that AGE of listed building materials companies in Nigeria has insignificant impact on financial performance. The result also corroborates the findings of Akpan (2015) which found that the age of the company has insignificant relationship with financial performance. The findings also contradict the results reveal by Rodiel et al. (2012); Iftekhar and Qiang (2012) which found that board AGE has positive and significant relationship with financial performance.

## V. CONCLUSIONS

In line with the findings of the study the following conclusion has been drawn:

i. Board gender has negative and insignificant impact on ROA and ROE in the building materials industry in Nigeria. Therefore the board gender has little impact on the financial performance of such companies.

ii. The AGE of the companies is positively and significantly related with ROA but positive and insignificant impact exist between the AGE of the listed building materials companies in Nigeria and ROE**.**

*Recommendations*

Based on the above conclusion the following recommendations have been spelt out:

**i.** Given the fact that women contribute significantly in promoting the independent of the board of directors of public companies. It is therefore, recommended that the listed building materials companies in Nigeria should endeavor to appoint more than one female into their board of directors. It is also imperative that qualified and well trained females are appointed into the boards.

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