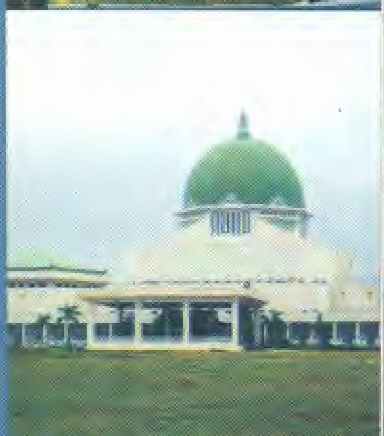
NIGERIAN STUDIES

Readings in History, Politics, Society and Culture



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GENDER DIVERSITY AND CORPORATE FIRM CHARACTERISTICS IN NIGERIA

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EVANS STEPHEN OSABUOHIEN

INTRODUCTION

Gender discrimination is one of the major issues faced by women in their quest for rising up on the corporate cadre of firms. This issue has been debated from various perspectives in business, management as well as in political fora; hence, becoming a sensitive and critical subject matter in modern society.[1] Gender diversity entails the proportion of male and female gender that is represented in a setting, i.e. the gender composition on the corporate boards of firms. In Nigeria, gender diversity has become a critical issue because of traditions and customs that has further fuelled the phenomenon.[2] Most tradition and cultures in Nigeria place more value to the masculine gender than the feminine counterpart. This is expressed in the traditional rights like inheritance rights, land sharing right, traditional leadership right, and so on.

The subject of gender diversity is of importance as the female gender can play important roles for the development of nations. For instance, it has been noted that the English and Dutch nations were the first to experience consumer revolution and industrious revolution that latter translated to the industrial revolution as a result of less restrictive economic roles women had compared to other nations.[3] Making reference to Ministry of Women Affairs and Social Development in Nigeria, Adewumi, Mokuolu and Longe.[4] noted that any 2 percent under-representation of women in the nation's development processes in finance, business and investment fronts will make 40% of the population inadequately positioned to contribute to the economic growth of the country.

The issue of corporate gender diversity has become a growing area of social science research especially in developed countries.[5] However, not much research has been carried out in Nigeria with respect to the subject particularly relating to firms' characteristics. Other studies carried out in developed countries have focused on the relationship between firm characteristics and gender diversity, but focus has not been placed on the effect of the firms' characteristics on gender diversity on corporate board room.[6] This study becomes germane by examining the effects of the firms' characteristics on gender diversity on corporate board of firms in Nigeria. The remaining of the paper is structured as follows: the second section provides a review of the extant literature; the third explains the method of analysis; the empirical results and discussions are presented in the fourth section while the last section concludes.

OVERVIEW OF LITERATURE

In modern societies, the population of female represented on corporate boards is low as most corporate boards have more male representation.[7] A gender diversity problem arises as a result of the low proportion of females represented on corporate boards and there appears to be 'glass ceiling' on career progress of females in these companies. In defining the concept, Heinfeldt used the term "glass ceiling" as those restrictions hindering women from advancing on corporate ladders.[8] This has been related in some other societies like early European countries (with the exception of Sweden) that female folks were not restricted in the workforce but from attaining position of authority.[9] Relating this to the Nigerian corporate environment, there seems to be high gender discrimination on corporate boards of firms. This may be traced to the values, norms and beliefs of the traditions and customs of the society which hampers women privileges.[10]

Firms' characteristics have been identified as a great influence of gender diversity on corporate board.[11] The extant literature identified the main firm characteristics that affect female representation on the board to include the profitability of the firm; the risk faced by the firm, the size of the firm and the growth of the firm. However, empirical results on the relationship between corporate board gender diversity and firm characteristics involving the firm characteristics are varying and not conclusive.

Traditionally, the board of directors is charged with the responsibility of managing the firm and its operation.[12] The inclusion of women on the board can enhance the performance of the board as a result of a more broad-based decision-making process, which can lead to a better performance of the firm. This is evidenced in the findings of Kotiranta, Kovalainen and Rouvinen that the average profitability of firms with a female chief executive officer (CEO) was 14% compared to firms with male CEOs at an average of 12.2%. It was also noted that a firm with a gender-balanced board was on the average 10% more profitable than a similar firm that are male dominated.[13]

In a similar fashion, Campbell and Minguez-Vera (2007) and Jurkus, Park and Woodard (2008) found a positive and significant relationship between the percentage of female on the board and the firms' value.[14] This can be traced to the psychological and the intuitive benefit derived from a diverse board. Board with good representation of both genders, would have decisions made with a concentrated reasoning bias, which would enhance the quality of decisions made. This does not connote the fact that the company governed by male CEOs are not profitable as all the firms are distinguished in other diverse respects.

Apart from profit, gender diversity on board also ensures a good corporate governance system in the firm. Corporate governance involves a set of institutional and market based mechanism that induces self-interested managers to maximise the value of the firms on behalf of its stakeholders. The benefit of gender diversity on corporate governance of the firm can be explained by the disparity existing in the approach the male and the female gender view issues.[15] Gender diversity may therefore be included as part of the corporate strategy of a company as this would give the company a competitive edge. This is because of the benefit of gender diversity in strengthening the corporate culture, enhance corporate reputation, act as a recruitment and retention tool, lower absenteeism rate and improve a companies' global management capacity.[16] Adams and Ferreira[17] also found out that female directors have less attendance problems at board meetings, which implies that a diverse board will be more effective than a masculine homogenous board in corporate planning and strategy.

Despite the immense benefit of diversified board, there is still a low representation of women on corporate boards. Hebble traced this to the characteristics of the firm.[18] This implies that different firms adopt their board, based on the prevailing peculiarity at any point in time. This includes risk of the firm, size of the firm, profitability of the firm and growth of the firm, amongst others. Francoer, Labelle and Sinclair-Desgagne argue that the environment in which a firm operates in has an effect on their board diversity. [19] For example, the industry risk affects the rate of recruiting female into the board.[20] Industries like oil and gas, information technology, engineering and scientific industries experience low female representation on their corporate boards. This is especially in locations where the risk in doing business is so high and the risk inherent in financing the company is also high. This disparity of gender equality in high risk industry can be traced to the fact that only few trained female personnel are found in these industries and hence, the representation on corporate board becomes low. In conclusion, Adams and Ferreira (2004), found an insignificant effect of the firms profitability on board diversity.

The board size could influence gender diversities on corporate boards. Adams and Ferreira (2004) and Randoy, Thomsen and Oxelheim (2006) identified that the board size could be a good control for measuring the effect of other variables on corporate board diversity.[21] This implies that the larger the board, the higher the probability of having more female represented on the board. Likewise the growth of the firm can also be a factor in influencing gender diversity on corporate boards.

METHOD OF DATA ANALYSIS

Sample and Research Design

The sample for the study was selected using a non-probability sampling technique based on accessibility to financial statements and a stratified random technique of firms in the real sector in Nigeria. The real sector was made the focus given the important roles played in the economy especially with regards to employment generation and linkage effects. A total of 37 firms were selected for the study. The firms studied were representative of the non-financial sectors of the Nigerian Stock Exchange. The companies included in the study were: ACADEMIC RESS, ADS, AFPRINT, APEX, BETA GLASS, BRISCOE, CARDBURY NIG. PLC, CFAO, CONOIL, CUTIX, DUNLOP, EKOCORP, ETERNA OIL, EVANS, FLOUR MILLS OF NIG, GLAXO, SMITHKLINE, INTERNATIONAL BREWERIES PLC, MOBIL, MORRISSON, NAMPAK, NBC, NEIMETH, NESTLE NIGERIA PLC, INTERLINK PLC, NORTHERN NIG. FLOUR, OANDO, OKOMU OIL, POLY PRODUCTS, SCOA, NIG 7 UP, TEXACO, TOTAL, UAC, UNILEVER, UNTL, WEST AFRICAN GLASS and WEST AFRICAN PORTLAND CEMENT. The study period was 2004-2005. This period is significant because it was the year set by the United Nations for the attainment of its first phase of gender equality around the globe.[22]

The variables used for the study were obtained from the financial statements of the sampled firms. Regression analysis was used in determining the effects of the explanatory variables on the dependent variable. To have reliable estimates, a multicollinearity test was carried out using variance inflation factor, collinearity diagnostic and tolerance test. Furthermore, the fixed effect and random effect were employed as complements.

MODEL SPECIFICATION

The study employs a panel data model. The model takes the following form;

$$Y_{it} = F\,(\beta_{0i}, \beta_2 X_{it}, \mu_{it}) \ldots\ldots\ldots\ldots \quad equ1$$

Where: Y is the dependent variable (board gender diversity), β_{0i} is the constant, β_2 is the coefficient of the independent variable (firm characteristics indicators), X_{it} is the explanatory variables and μ_{it} is the stochastic term.

Gender diversity of firms is measured as on the percentage of female board members to the total board members. Thus, a firm with higher value implies a more diversified firm. The information on the number of female represented on the board was obtained from the financial statement by the names ('*Mrs.*' are usually appended to female names). Also the pictures of the board members aided easy identification of females. The firm characteristics measured in this study includes the size of the firm, the risk the firm is opened to, the growth, the profitability of the firm and the size of the board of the firm. The explicit econometric model is stated as:

$$Gendiv_{it} = \beta_0 + \beta_1 Size_{it} + \beta_2 Growth_{it} + \beta_3 Risk_{it} + \beta_4 Profit_{it} + \beta_5 BOS_{it} + \mu_{it} \text{ ------- } eqn2$$

The variables used in the estimation process are described below:

Gendiv: Ratio of female board members to total board members

Size: Log of total asset (Fixed asset plus current asset),

Growth: Growth in the turnover for firm i in period t,

Risk: Standard deviation of the difference between the firm's profitability in time t and the mean profitability for firm i,

Profit: Ratio of profit after tax to the total asset,

BOS: Number of persons on the board of directors.

μ_{it}: Stochastic term.

EMPIRICAL RESULTS AND DISCUSSION

Descriptive Statistics

The descriptive statistics of the variables are presented in Table 1.0. The table shows that the average gender diversity on the board was 5.30%. This indicates that for the corporate firms, the ratio of female representation on the board was about 5 females in 100 board membership, which was very low. Given the figure in the last column of Table 1.0, the average board size was 10. The figures presented in the Table also indicate that size of the firms had a mean value of 6.61 and the average growth of the firms and risk of the firms is -3735.12 and 710239.10. Furthermore, the average profit (loss) of the firms measured as the return on total asset was -0.201%.

Table 1.0: Descriptive Statistics of Variables

	Gendvi	*Size*	*Growth*	*Risk*	*Profit*	*BOS*
Mean	0.0530	6.6132	-3735.12	710239.1	-0.0020	9.7838
Median	0.0000	6.7437	16.0576	132081.8	0.0521	9.5000
Minimum	0.0000	4.6424	-2796.00	96678.03	-1.3074	5.0000
Maximum	0.2500	8.7881	2109.25	2584713	0.3143	15.000
Std Deviation	0.0746	0.8826	3251.00	997281.8	0.2228	2.2224

Source: Authors' computation

COLLINEARITY TEST AND REGRESSION RESULT

To ensure that the effects of the explanatory variables on the dependent variable were reliable, test of multicollinearity was carried out amongst. The result in Table 2.0 shows that there was no problem of multicollinearity amongst the explanatory variables.

Table 2.0: Collinearity Diagnostic Test

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	Size	Growth	Risk	Profit	BoardSize
1	1	3 403	1 000	00	00	00	03	00	.00
	2	1.033	1.815	00	00	42	01	42	00
	3	965	1 878	00	00	54	01	37	.00
	4	561	2 463	00	00	03	88	00	.01
	5	032	10 301	05	08	01	02	02	.96
	6	006	23.071	95	92	.00	06	.19	.03

a Dependent Variable Gender Diversity

Source: Authors' computation

From the proportions of variance of the explanatory variable, no two variables have high proportion on the same Eigen value. This explains the fact that the variances of the regression coefficient of the explanatory variables are independent. Hence, the results obtained from the estimation process can be said to be reliable for making using inference.

Table 3.0: Estimates from Regression Analysis

	OlS		RE	
Variable	*Coefficients*	*t-sta*	*Coefficients*	*t-stat*
Size	-0.019	-4.61	-0.017	-3.190
Growth	2.5e-0	0.99	5.9e-0	0.360
Risk	1.1e-1	0.40	8.2e-1	0.962
Profit	0.042	1.10	0.019	0.570
BOS	-0.002	-0.64	-0.001	-0.440
Constant	0.376	5.33	0.329	3.690
R^2	0.264		0.255	
F-Stat.	4.870			
(P-value)	0.000			
Wald test			10.87	
Observation	74		74	

Note: *- significant at 1%; OLS –Ordinary Least Squares; RE- Random Effects. The estimates from Fixed Effects were not consistent, hence it is not reported.

Source: Authors' computation

The results presented in Table 3.0 show that the joint significance of the explanatory variables in determining the variation in gender diversity was about 26% both from the Ordinary Least Squares (OLS) and Random Effects (RE) estimation techniques, though it was marginally higher in the former. The values of F-statistics and Wald test confirm that the estimates from both techniques are reliable, thus showing the validity of the estimated model.

A glance at the individual explanatory variable reveal that amongst the firm characteristics indicators only size of the firm had significant influence on the percentage of female representation on corporate boards. However, the size of the firm was negatively signed, which is an indication that an increase in the size of the firm reduces the chance of female representation on the board. Thus, as firms become larger in size, the percentage of females represented on the corporate board tends to decrease. The point estimates gives the implication that about 100% increase in the size of the firm will lead to about 2% reduction in the chance of a female being chosen in a corporate board member in Nigeria. This finding contradicts that of Campbell and Minguez-Vera (2008)[23] where firm's size was found not to have any effects on gender diversity, though theirs was done in a developed country context. This may be due to the fact that traditional and customary beliefs of men being able to handle greater feats than women still exist in the Nigerian society.

The fact that only one variable is significant gives an impression that Nigeria, like most African countries, has some inherent challenges in entrusting women with management responsibilities, which could be traced to cultural influence, societal values and family background and so on. This is also evident in the low variation (R^2) of the model. Further empirical investigation into the aforementioned factors will be worthwhile.

CONCLUSION

Some studies have been conducted on the effect of firm characteristics on gender diversity on corporate boards of firms, but to the best of the authors' knowledge, there has not been any study on this in developing country like Nigeria. This motivated the present study, which examined the effects of firm characteristics on gender diversity in Nigeria. A sample size of 37 non-financial firms listed on the Nigerian stock exchange for the period 2004-2005 was used. Regression analysis was used to determine the effects of some selected firm characteristics on gender diversity. The main conclusion from the study can be highlighted as follows:

I. The growth of the firm has no significant effect on the percentage of women represented on the corporate board;

II. The firm risk, have no significant effect on the percentage of women represented on the corporate board;

III. The size of the board have no significant effect on the percentage of women represented on the corporate board;

IV. The profitability of the firm has no significant effect on the percentage of women represented on the corporate board; and

V. The size of the firm has a negative and significant effect on the percentage of women represented on the corporate board.

The result of the study has shown some insights into the effect of firm characteristics on gender diversity on corporate boards of firms. The issue of the effect of firm characteristics on gender diversity is an ongoing discussion and firms need to be aware of this so as to make women career advancement based on merit and less on biases. However, the result of the study has shown that firm characteristics are able to explain a little for the gender diversity been experienced on corporate boards. More so, all the firm characteristics indices show a non-significant effect on gender diversity except for the size of the firm. The point estimates from the analysis brought out the fact that 100% increase in the size of the firm will result in 2.0% decrease in the likelihood of a female being selected in a corporate board member in Nigeria's non-financial firm.

The finding from the study where only size of firms was seen to be relevant in explaining gender diversity among firms' characteristics calls for further empirical research on some inherent challenges in entrusting women with management responsibilities such as culture , societal values and family background and so on, which are paramount in Nigeria.

NOTES

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