Board Diversity and Firm Performance in Nigeria

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Abstract

The study examines the relationship between board diversity and firm performance in Nigeria. The study adopted the cross-sectional research design using data from all the banks quoted on the Nigerian Stock Exchange from 2010-2015. The multiple regression technique is the basis of the data analysis, specifically the ordinary least square regression (OLS) technique to estimate the coefficients of the variables in the model specified. The study found a negative and insignificant relationship between ethnic diversity and firm performance; in the same vein, a negative and insignificant relationship was observed between nationality diversity and firm performance; Gender diversity exhibit a negative and significant relationship with firm performance. We recommend that since gender diversity is significant but negative, management and regulatory bodies should make policy statements towards the inclusion of more women to attain the optimum number that will enhance the performance of the firm going by the time-tested theory of critical mass.

Keywords: Firm performance, ethnic diversity, nationality diversity, gender diversity.


Introduction

In today’s business world, employees and top management team have become increasingly diverse in terms of age, ethnicity, and gender, in addition to their diversity in terms of tenure, experience, educational background, and socioeconomic status.

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(Jackson & Alvarez, 1992; Sessa & Jackson, 1995). It appears to be a common phenomenon that minority or “lower status” group, such as women and minority ethnic groups, are likely to be marginalised in diverse groups and therefore there are increasing attempts to promote equal opportunity among different groups in the workplace (Ibarra, 1993).

Diversity in a corporate board has the tendency to bring about a robust wealth of experience, skills, different perspectives and other qualities into a single pool which could further enhance quality decision making. The multicultural organisation usually has an edge in the selection and retention of top personnel (Mazur & Bialostocka, 2010). Hambrick and Mason (1984), discovered that top management heterogeneity has a greater tendency to increase firms’ performance. Therefore, heterogeneity has become imperative for complex, large business operations in terms of quality decision making. They also observed that homogeneity in top management is more effective in smaller organisations which are faced with unstructured decision-making processes.

Board diversity is a broad concept which cuts across expertise, managerial backgrounds, age, learning style, gender, language, education, ethnicity, culture. (Swartz, & Firer, 2005). Directors of firms have different varying important characteristics, personality and background, like the functional and educational background, varying skills, experience in industry, insider status race, gender, (Ferreira, 2010). These attributes are necessary in order to maintain objectivity and independence among the board members. In addition, this quality enables various; perception, interpretations, vast skills, knowledge, and experience to be rough to the table as a result of various background (Nederveen, Van Knippenberg, & Van Diererdonck, 2013).

The board of directors is entrusted with crucial economic decisions. The quality of decision-making is likely to depend on skills, reputation and other characteristics of the directors as on the interaction between the directors.

Theory of social psychology and organisational behaviour research suggest that diversity can result in either positive or negative consequence, depending on the task at hand. In general, two theories explain the impact of diversity on firm performance. One group of research, based on cultural identity theory, argues that members of a common cultural identity are better to share cultural phenomena, such as worldviews, norms, values, and common heritage through a common language and rules of the same cultural group (Alderfer & Smith, 1982, Cox, 1993, and Ely & Thomas, 2001). This group of research supports the positive impact of diversity on firm performance.

The second group of theory is based on status and power. This group of people argue that status and power differentials in work groups explain why majority and minority employee behave in different ways at work (Nkomo, 1992 and Ragins, 1997). Individuals see and evaluate the power of other people on the basis of ethnicity such that diverse group behaves differently compared to less diverse group (Ridgeway, 1991). A negative relationship between firm performance and diversity is expected from the perspective of differences in power and status. Many empirical studies attempt to support the positive link between diversity and firm performance. Firms may have a marketing advantage
using a diverse sales force (Edelman, Fuller, & Drita, 2001, Martin, 2005, and Pandey, Shanahan, & Hansen, 2005). Human skills and the knowledge of individual employees are some of the advantages that firms adopting diversity possess (Hunt & Morgan, 1995). Some other studies report that firms, with better decision making by culturally diverse groups and increased problem-solving capabilities, may achieve a comparative advantage over other peer groups (Cox & Blake, 1991 and McLeod, Lobel, & Cox, 1996).

No doubt a lot have been done in the area of Diversity but the issue of is still open for further research. Thus, the goal of this paper is to examine the impact of the Company directors demographics on it corporate financial performance. More specifically, this paper explores the impact of different levels of diversity (ethnicity, nationality and gender diversity), on financial performance. Using return on asset (ROA) as a measure of financial performance.

Against the above backdrop, the fundamental objective of this study is to investigate the relationship between board diversity and firm performance with Nigeria as a reference point.

Following the preamble, the rest of the paper is divided into five sections. Section two addresses the literature review and hypotheses development, section three focuses on the methodology. Section four, adverses estimation result and discussion of findings, and Section five, focuses on conclusion and recommendation.

**Literature review and hypothesis development**

**Firm Performance**

The performance of an organisation is motivated both by the economic and organisational factors which are specific to the company or the region and is of great importance to financial management. The maximisation of a firm’s value brought forward by modern finance theory has been seen as the reason for managerial decision making. Most practitioners and managers have critiqued this above reason and said that another reason such as the interests of all the stakeholders and other aspects of corporate strategy has been ignored (Shah, Haldar & Rao, 2015). Over the period, however, these same managers have acknowledged that the maximisation of shareholders wealth is the major objective of the firm. The concept of performance cuts across all spheres of operation within and outside the organisation. In business, the analysis of performance whether financial, production, marketing, managerial, or in general activities, is very necessary because the outcome of the present decisions lie in the projection of the future (Oparanma, 2010).

**Ethnic Diversity and Firm Performance**

Ethnic groups can be defined as people of other countries that share a sense of mutual political or cultural grounds (Yin, 1973). Ethnic also refers to a large group of people sharing the same custom, heritage, origin, race and religion. This implies that culture can be learnt while ethnicity is inherited. Extant literature has reported contradictory findings
on ethnic diversity and firm performance. First, a positive relationship has been established between ethnic diversity and firm performance (Biggins 1999; Carter, Simkins & Simpson 2003; Erhardt et al., 2003; Ujunwa, et al., 2012). The proponent of the positive relationship believed that ethnicity can be used as an effective way to improve on corporate performance.

The second group of studies reported that a heterogeneous board resulted in an emotional conflict that ultimately harmed firm performance and it is better in the short term. Hence, they found a negative relationship between ethnic diversity and firm performance (Carter et al., 2010; Omoye & Eriki 2013). Yet, other find no significant relationship between ethnic diversity and firm performance (Garba & Abubarkar 2014; Marimuthu & Koladaisamy, 2009b; 2009c; Zahra & Stanton 1988).

Against the backdrop of the above empirical inconsistency, the first hypothesis of this study: **There is no significant relationship between ethnicity and firm performance.**

**Board Nationality and Firm Performance**

Nationality diversity may increase the likelihood of cross-cultural communication problem and interpersonal conflicts (Cox, Jr., 1991 and Lehman & Dufrene, 2008). On the other hand, the presence of foreign nationals on the team is expected confer competitive advantage on the firm in the form of; international networks, commitment to shareholder rights, and managerial entrenchment avoidance (Oxelheim & Randøy, 2003). Board nationality can be seen as the proportion of foreign board members to the overall size of the board in an organisation. The possible benefit of foreign board membership has received an undivided attention in corporate governance studies (Griscombe & Mattis, 2002; Kose & Senbei, 1998; Marimuthu & Kolandaisamy, 2009c). First, it is believed that a large number of qualified foreigners with broader industry experience are available for the board and secondly, due to their different background, they are believed to add valuable and varied expertise to the board (Lee & Farh, 2004). Darmadi (2011) and Oxelheim and Randoy (2003) believe that a team comprising of nationals and foreigners are advantageous to a firm. They bring about the international network, managerial entrenchment avoidance and commitment to shareholder rights. But on the other hand, Lehman and Dufrene (2008) are of the opinion that diversity of nationality and culture of the team members in management bring about cross-cultural communication problems.


On the other hand, Hassan, Samian and Silong (2006), Jhunjhunwala and Mishra (2012) and Randoy and Oxelheim (2006) reported a negative relationship between nationality and firm performance. They argue that foreign board members may be less informed about domestic affairs and therefore, less effective. Kilduff, Angelmar, and Mehra (2000) and Rose (2007) found no significant relationship between board
nationality and firm performance. Hence, we hypothesise that: There is no significant relationship between board nationality and firm performance.

**Gender Diversity and Firm Performance**

Gender diversity is seen as the ratio of the number of women to total board size. Boards are predominantly composed of only male members. The presence of women on the board leads to gender diversity. It is generally accepted that female board members are more independent because they are not part of the “old boys” network (Carter et al. 2003). Rynan and Haslam (2005) argue that women are more likely to be placed in positions of leadership in circumstances of the down turn. The implication is that the presence of women on the board could be perceived by shareholders that significant change is on the way, thereby making them more confident in the company’s success, which results in an increase in share price. According to critical mass theory, a critical mass of at least three minority group members is needed in order to have an influence in the board (Kanter, 1977). Therefore, the effects of gender diversity are expected to be larger when a critical mass is present.

The findings on the relationships between gender diversity and performance are inconclusive. Adams and Ferreira (2004), Farrell and Hersch (2005), Nishii, Gotte and Raver, (2007), Williams (2000), find a significant positive relationship between gender diversity and firms’ performance. On the other hand, Dutta and Bose (2006) and Eklund, Palmberg and Wiberg (2009), reported a negative relationship between gender diversity and firms’ performance. However, the findings of Adams and Ferreira (2009), provide a mixed result, in the sense that, though diversity has a negative relationship with firms’ performance in firms with strong governance, such relationship turns to be positive in firms with weak governance.

Swartz and Firer, (2005), Francoeur, Labelle and Sinclair-Desgagne (2008) and Marimuthu and Koladaisamy (2009a), find no significant relationship between gender diversity and firms’ performance. Hence, we hypothesise that: There is no significant relationship between gender diversity and firm performance.

**Methodology**

*Theoretical Framework and Model Specification*

Resource dependence theory provides a theoretical foundation for the role of the board of directors as a resource to the firm (Johnson, Daily, & Ellstrand, 1996). A key argument of the resource dependence theory is that organisations attempt to exert control over their environment by co-opting the resources needed to survive (Pfeffer & Salancik, 1978). Accordingly, boards are considered a link between the firm and the essential resources that a firm needs from the external environment for superior performance. Appointment of outsiders on the board helps in gaining access to resources critical to firm success (Johnson et al., 1996). Firms have to secure resources from the environment, this reduces uncertainty and enhances firm performance (Pfeffer, 1972; Taljaard, Ward, & Muller, 2015). Board diversity, created by diverse board capital, supports the ability to secure
resources from the environment, which reduces uncertainty and increases firm performance (Hillman & Dalziel, 2003; Pfeffer, 1972). A diverse board is better in securing resources from the environment than less diverse boards because diverse boards have better access to information and networks (Bryant & Davis, 2012; Taljaard et al., 2015).

Resource dependency theorists extended the argument by positing that board members with different skills, different cultural background, different gender, among others, will act as a strategic resource to the firm which may result in superior performance. This postulation laid the theoretical foundation for corporate governance research on board diversity.

In addition to the resource dependency theory, the group diversity theory also help to explain issues of board diversity. Dobbin and Jung (2011), contend that teams with functional diversity tend to solve problems faster and more effectively than those of like-minded people working individually. On the same note, teams that have demographic diversity, bring different perspectives to the decision-making processes, hence increasing the quality of the decisions. The authors argue that diversity confers increased network connections to the team, varied creativity and innovation, leading to synergistic benefits.

Against the above backdrop and leaning on Ujunwa et al., (2012), we expect functional relationship between board diversity and firm performance:

A linear regression model used by Ujunwa et al., (2012) was adopted. The model is, therefore, express as

\[ PERF_{it} = \beta_0 + \beta_1 ETHNDIV_{it} + \beta_2 NATDIV_{it} + \beta_3 GENDIV_{it} + \beta_4FSIZE_{it} + U_{it} \]

Where;

\( PERF_{it} = \) Firm Performance

\( \beta_0 = \) Intercept at time 0.

\( ETHNDIV_{it} = \) Ethnic Diversity

\( NATDIV_{it} = \) Nationality Diversity

\( GENDIV_{it} = \) Gender diversity

\( FSIZE_{it} = \) Firm size

\( U_{it} = \) Error term.

The apriori signs are: \( \beta_1 > 0, \beta_2 > 0, \beta_3 > 0, \beta_4 > 0. \)
Data Analysis Technique

The study investigates the relationship between diversity and firm performance among firms in the banking sector that are listed on the Nigerian Stock Exchange. In order to achieve this, the study used cross-sectional research design. The population for the study consisted of all firms in the banking sector quoted on the Nigerian Stock Exchange. The study however utilised a total of 15 companies for the period between 2010 and 2015.

The method of data analysis that would be used for this study is regression analysis. This method will enable the researcher to access the impact or effect of the independent variables on the dependent variable. Therefore, the multivariate regression analysis was employed in this study. More so, other diagnostic tests that were conducted on the data gathered in the study include multicollinearity, heteroskedasticity and autocorrelation tests.

Operationalization of Variables

The variables used in this study is operationalized as shown in Table 1

<table>
<thead>
<tr>
<th>S/N</th>
<th>Variable</th>
<th>Measurement</th>
<th>Used by</th>
<th>Apriori</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Dependent</strong> Firm Performance</td>
<td>Measured using the ratio of profit after tax to total asset</td>
<td>Ujumwa, Okoyeuzu, &amp; Nwakoby, (2012).</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Independent</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Ethnic Diversity</td>
<td>If there is a presence of a minority ethnic group we assign 1 otherwise 0.</td>
<td>Garba &amp; Abubakar, (2014)</td>
<td>+/-</td>
</tr>
<tr>
<td>3</td>
<td>Nationality Diversity</td>
<td>The number of foreign national on the board.</td>
<td>Marimuthu (2008)</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Gender Diversity</td>
<td>Measured using the numbers of female on the board.</td>
<td>Ujunwa (2012)</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td><strong>Control Variable</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Firm Size</td>
<td>Using the natural log of Total Asset</td>
<td>Omoye &amp; Eriki, (2013)</td>
<td>+</td>
</tr>
<tr>
<td>6</td>
<td>Board Size</td>
<td>Measure using the total number of members on the board</td>
<td>Ujunwa (2012)</td>
<td>+</td>
</tr>
</tbody>
</table>

Estimation results and discussion of findings

Univariate analyses
The result of the descriptive statistics is presented in Table 1. The mean return on assets (a measure of the profitability of the Banks) is 1.45%. The maximum value is 9.54%, with a minimum value of -7.83%. The variable of gender diversity reported a mean female director of 2, a maximum of five (5) directors and minimum of 0. The descriptive statistics reported a mean nationality of 0.715909 with a mean board size of 14 directors. The mean size of the selected banks is approximately #7.4666916 Billion. The dispersion of the variables from their respective means is relatively low given the very small values of the standard deviations. The Jarque-Bera values are relatively large and the associated probability values are significant at the 5% level, which indicates that the variables follow the Gaussian standard distribution. The normality of the data is further attested by the result of the histogram normality test.
Figure 1 represents the bell-shaped histogram of the regression variables. The figure is a further test of the normality of the data which helps to strengthen the result of the descriptive statistics. The JB statistic is 893.0265 with a significant probability value of 0.000000. The mean Kurtosis of 17.38820 is above the benchmark of three and indicative of Leptokurtic residual. The mean Skewness of 3.022101 means the histogram is positive and rightward skewed as visible in Figure 1.

Table 2: Results of the Descriptive Statistics

<table>
<thead>
<tr>
<th>Covariance Analysis: Ordinary</th>
<th>Date: 05/29/17  Time: 11:43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: 190</td>
<td>Included observations: 88</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balanced sample (listwise missing value deletion)</th>
<th>Covariance Analysis: Ordinary</th>
<th>Date: 05/29/17  Time: 11:43</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample: 190</td>
<td>Included observations: 88</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ROA</th>
<th>1.000000</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDIVERSITY</td>
<td>0.054697 1.000000</td>
</tr>
<tr>
<td></td>
<td>0.508003 -----</td>
</tr>
<tr>
<td></td>
<td>0.6128    -----</td>
</tr>
<tr>
<td>EDIVERSITY</td>
<td>-0.08234 0.215950 1.000000</td>
</tr>
<tr>
<td></td>
<td>-0.76623 2.051036 -----</td>
</tr>
<tr>
<td></td>
<td>0.4456    0.0433 -----</td>
</tr>
<tr>
<td>NDIVERSITY</td>
<td>-0.08222 -0.09726 0.332924 1.000000</td>
</tr>
<tr>
<td></td>
<td>-0.76511 -0.90630 3.274187 -----</td>
</tr>
<tr>
<td></td>
<td>0.4463    0.3673 0.0015 -----</td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.070816 -0.05100 0.005431 -0.09753 1.000000</td>
</tr>
<tr>
<td></td>
<td>0.658373 -0.47358 0.050366 -0.90887 -----</td>
</tr>
<tr>
<td></td>
<td>0.5121    0.6370 0.9599 0.3660 -----</td>
</tr>
<tr>
<td>BSIZE</td>
<td>-0.154786 0.513248 0.095030 0.062432 0.012351 1.000000</td>
</tr>
<tr>
<td></td>
<td>-1.452934 5.545850 0.885277 0.580099 0.114546 -----</td>
</tr>
<tr>
<td></td>
<td>0.1499    0.0000 0.3785 0.5634 0.9091 -----</td>
</tr>
</tbody>
</table>

The result of the correlation coefficient showed mixed correlation. The variables of ethnic diversity, nationality diversity, and board size are negative (-0.082345, -0.082225 and .1.54786 respectively). The variables of gender diversity and firm size, reported positive correlation coefficients (0.054697 and 0.070816 respectively). The values of the correlation coefficients are relatively low and indicative of the absence of the problem of multicollinearity. The highest correlation coefficient of 0.513248, between gender diversity and board size is below the benchmark of 0.80 above which shows the presence of the problem of multicollinearity.
Table 3: Results of the Variance Inflation Factor

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Uncentered Variance</th>
<th>Uncentered VIF</th>
<th>Centered Variance</th>
<th>Centered VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.27E-05</td>
<td>38.14580</td>
<td>NA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDIVERSITY</td>
<td>2.01E-07</td>
<td>4.553634</td>
<td>1.116900</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDIVERSITY</td>
<td>1.99E-06</td>
<td>4.280200</td>
<td>1.215966</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NDIVERSITY</td>
<td>1.23E-07</td>
<td>1.974383</td>
<td>1.181686</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FSIZE</td>
<td>1.84E-07</td>
<td>31.78870</td>
<td>1.021196</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSIZE*ROA</td>
<td>3.36E-06</td>
<td>1.424407</td>
<td>1.031990</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of the variance inflation factor in Table 3 further strengthens the result of the correlation coefficient. The centered variance inflation factor of the variables are not substantially different from 1.00 and below the benchmark of 10, above which is an indication of the problem of multicollinearity.

Table 4: Results of the Regression Diagnostics

<table>
<thead>
<tr>
<th>Diagnostic Test</th>
<th>Test type</th>
<th>F-Value (probability)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial correlation</td>
<td>Breusch- Godffrey</td>
<td>1.162655 (0.3179)</td>
<td>Not serially correlated</td>
</tr>
<tr>
<td>Heteroskedasticity</td>
<td>Breusch-Pagan-Godffrey</td>
<td>1.252651 (0.2924)</td>
<td>Homoskedasticity</td>
</tr>
<tr>
<td>Model specification</td>
<td>Ramsey RESET</td>
<td>1.012848 (0.3172)</td>
<td>Not MI specified</td>
</tr>
</tbody>
</table>

The results of the classical regression assumption tests are presented in Table 4. The result of the serial correlation test using the Breusch-Godffrey test, reported a probability value of 0.3179 and F-statistic of 1.162655. The result is insignificant and could not sustain the null hypothesis of seriality correlated variables, and the alternate hypothesis of the absence of serial correlation was accepted. The null hypothesis of heteroskedastic residuals was rejected based on the insignificant value of the probability of 0.2924. The alternate hypothesis of homoskedastic residuals was accepted. The result of the Ramsey RESET test of model misspecification could not sustain the null hypothesis of specified model with F-statistic of 1.012848 and insignificant probability value of 0.3172.

Multivariate analysis
Table 5: Results of the Regression analyses

<table>
<thead>
<tr>
<th>Method: Least Squares</th>
<th>Date: 05/29/17</th>
<th>Time: 11:46</th>
<th>Sample: 190</th>
<th>Included observations: 88</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Coefficient</td>
<td>Std. Error</td>
<td>t-Statistic</td>
<td>Prob.</td>
</tr>
<tr>
<td>C</td>
<td>0.003898</td>
<td>0.003567</td>
<td>1.092938</td>
<td>0.2776</td>
</tr>
<tr>
<td>GDIVERSITY</td>
<td>-0.001409</td>
<td>0.000449</td>
<td>-3.140366</td>
<td>0.0023</td>
</tr>
<tr>
<td>EDIVERSITY</td>
<td>-0.001972</td>
<td>0.001412</td>
<td>-1.396397</td>
<td>0.1664</td>
</tr>
<tr>
<td>NDIVERSITY</td>
<td>-3.39E-05</td>
<td>0.000351</td>
<td>-0.096727</td>
<td>0.9232</td>
</tr>
<tr>
<td>FSIZE</td>
<td>0.000136</td>
<td>0.000429</td>
<td>0.316803</td>
<td>0.7522</td>
</tr>
<tr>
<td>BSIZE*ROA</td>
<td>0.072822</td>
<td>0.001834</td>
<td>39.71553</td>
<td>0.0000</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.951537</td>
<td>Mean dependent var</td>
<td>0.014458</td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.948582</td>
<td>S.D. dependent var</td>
<td>0.023892</td>
<td></td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>0.005418</td>
<td>Akaike info criterion</td>
<td>-7.532578</td>
<td></td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>0.002407</td>
<td>Schwarz criterion</td>
<td>-7.363669</td>
<td></td>
</tr>
<tr>
<td>Log likelihood</td>
<td>337.4334</td>
<td>Hannan-Quinn criter.</td>
<td>-7.464529</td>
<td></td>
</tr>
<tr>
<td>F-statistic</td>
<td>321.9997</td>
<td>Durbin-Watson stat</td>
<td>1.730968</td>
<td></td>
</tr>
<tr>
<td>Prob(F-statistic)</td>
<td>0.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The regression result is presented in Table 5. The Adjusted R-squared value of 0.948582 indicates that about 95% systematic cross-sectional variation in return on assets is accounted for by the independent variables of gender diversity, ethnic diversity and national diversity. The robust F-statistic of 321.997 and the associated probability value of 0.000000 indicates a significant linear relationship between the dependent variable and the explanatory variables. The Durbin-Watson statistic of 1.730968 is not substantially different from the 2.00 benchmark and indicative of the absence of the problem of multicollinearity.

Gender diversity reported a mean value of 2 which indicates that on the average, two (2) female directors are represented on the board of the sampled banks (see Table 1). The variable reported a negative coefficient of -0.001409 and a robust t-value of -3.140366 which means the average female representation of 2 directors is not sufficient to improve the profit of the banks.

Ethnic diversity reported a t-value of -1.396397 which means ethnically diverse board has a negative effect on the profitability and by implication the return on assets of the banks.

The result of the explanatory variable of national diversity is negative and statistically insignificant at the 5% level. The variable reported a t-value of -0.096727 and insignificant probability value of 0.9232.

The control variables of firm size and the interaction between board size and return on assets are positive. Which means both variables increase the return on assets of the banks.
even though the degree of increase is statistically insignificant in the case of the variable of firm size.

**Discussion of Findings**

The earlier stated hypotheses were tested based on the result obtained from the ordinary least square (Table 5). The study sets its decision rule for the acceptance of the hypothesis at 5% level of significance; hence, the hypothesis were accepted if the probability is less than 0.05.

From the result in table 5, ethnic diversity show a negative relationship with firm performance. The ordinary least square analysis (table 5), ethnic diversity with a t-value of -1.396397 and a p-value of 0.1664 had an insignificant relationship with firm performance. We therefore accept the null hypothesis, which state that ethnic diversity has no significant relationship with firm performance. The result corroborates the study of Carter et al., 2010; Omoye & Eriki 2013 but inconsistent with the study of Biggins 1999; Carter, Simkins & Simpson 2003; Erhardt et al., 2003; Ujunwa, et al., 2012, which reported a positive relationship.

In the same vain, board nationality diversity exhibited a negative relationship with firm performance. The ordinary least square result as shown in Table 5 shows that nationality diversity with a t-value of -0.096727 probability value of 0.9232 had an insignificant impact on firm performance. We therefore accept the null hypothesis which say that there is no significant relationship between nationality diversity and firm performance and reject the alternative. This study is in consonance with the study of Hassan, et al., (2006), Jhunjhunwala & Mishra (2012) and Randoy & Oixelheim (2006).

Gender diversity exhibited a negative and significant relationship with firm performance with a t-value of -3.140366 and a probability value of 0.0023. We therefore accept the alternate hypothesis and reject the null which say that there is no significant relationship with firm performance. This implies that the average female representation of 2 directors is not sufficient to improve the profit of the banks and it consistent with the theory of critical mass which suggest that that more female in the board tend to be more efficient than compare to few female. This findings is consistent with the study of Dutta and Bose (2006) and Eklund, et al., (2009). While it contradicts the finding of Adams and Ferreira (2004), Farrell and Hersch (2005), Nishii, et al., (2007), and Williams (2000).

**Conclusion and Recommendations**

The study examine the relationship between board diversity and firm performance in Nigeria. The study adapted and improved on the model of Ujunwa et al., (2012). The study observed that ethnic diversity had a negative relationship with firm performance. Nationality diversity was negatively related to firm performance. Also gender diversity had a negative relationship with firm performance. The control variable of firm size and board size had a positive relationship with firm performance. In terms of significance, only gender diversity exhibited a significant relationship with firm performance while ethnic diversity and nationality diversity showed an insignificant relationship. We
therefore recommended that since gender diversity is significant, management and regulatory bodies should employ the theory of critical mass in order to realise the advantages of a more diverse female members, with positive implication on corporate performance. Also in appointing foreign nationals on the board, the different language and culture should be taking into consideration by the management. Despite ethnicity diversity exhibiting a negative relationship with firm performance, management should encourage balancing the ethnic heterogeneous composition of their boards.

References


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