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Board Attributes and Corporate Performance: Evidence from Nonfinancial Firms in Nigeria

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Abstract

Corporate board is pressured from all stakeholders for better reporting on corporate health. Meanwhile, effective discharge of the responsibilities of a corporate board is assured by an appropriate balance of skills and diversity without compromising competence, independence, and integrity. This study examines the extent to which corporate board attributes drive the performance of non-financial firms in Nigeria. The study adopted ex post facto research design. Data were extracted through content analysis from the annual report of 93 out of 122 non-financial firms listed on the Nigerian Stock Exchange from 2006 to 2015. Collected data were analysed with pooled ordinary least square regression conducting diagnostic tests to confirm the assumptions of the regression. Analysis revealed that: Board size and board gender diversity have a positive and significant effect on corporate performance. While board independence and board remuneration have a negative and significant effect on corporate performance. Also, directors' shareholding has a negative but insignificant effect on corporate performance. Based on the findings, the study among other things recommends that companies in Nigeria should promote diversity in its membership across a variety of attributes particularly gender diversity considering that it is relevant for enhancing firm performance. Also, Company should remunerate fairly, responsibly and transparently so as to reduce the decreasing effect of board remuneration and promote positive outcomes in the short, medium and long term.

Keywords: Board Attributes, Corporate Performance, Agency Theory, Gender Diversity, Sustainability

1. Introduction

The positive and negative consequences of the separation of ownership and control in modern public companies have rendered the concept of corporate governance in general and corporate board very critical. Incessant corporate scandals across the world have resulted in increased attention on the role which board of directors has to play towards the improvement of financial reporting disclosures for the purpose of reforming the global economy and rebuilding public trust and confidence to business reported information. Succinctly put there has been increased awareness in the business environment and the general public on the need for sound corporate reporting and governance system (Hawkamah, 2014). Thus, the board of directors and managers find themselves in a vastly more complex environment, increasingly accountable to and influenced by multiple stakeholders and pressured from all sides for better reporting on corporate health and behaviours (Thiagarajan & Baul, 2014).

Corporate governance is the way in which companies are managed and controlled. In particular, it focuses on the role of the company's board of directors and their responsibilities to shareholders and other stakeholders. Considering a number of corporate scandals and that basic legal requirement have proved inadequate for protecting shareholders interest, more specific regulations have been introduced to institutionalize best practices that will enhance the integrity of the business environment and thus facilitate trade and investment. The most current effort from Nigeria environment being the issue of Nigeria Code of Corporate Governance 2018 by Financial Reporting Council of Nigeria (FRCN) hereafter referred to as the Code. Companies now adopt "apply and explain" approach which requires firms to explain how specific principles have been applied. It is believed that the quality of corporate governance adopted and the nature of a company's culture and behaviors are having a significant impact on performance and long term sustainability of firms (Roy, 2016; Cleverly, Phillips, & Tilley, 2010). No wonder the Code emphasised that companies with the effective board and competent management that act with integrity are better placed to achieve their goals and contribute positively to society.

Board of directors' play a central role in the management of companies and establishing the culture, values, and ethics of the company. Their roles are usually categorized into monitoring, and supervisory roles all geared towards aligning the interest of the board, the management with the interest of the shareholders and other interest groups to ensure that firms succeed not only in the present but also in the future. Thus board of directors' attributes as a sustainability issue that hinges on enforcement and monitoring is receiving and will continue to receive considerable attention in the literature. It has attracted a great deal of research and attention from regulators, interest groups and academics as can be seen from the considerable growth in the empirical literature across accounting, economics, finance, and management literature from both local and international context.

Despite the considerable growth in research on the broad concept of corporate governance, there is limited evidence from the Nigerian context on board of directors' attributes and their effect on performance using data of firms in all sectors other than financial sectors with special consideration on board shareholding and board gender diversity which are important monitoring attributes. Most prior studies focused on just financial sectors with little consideration on these monitoring attributes of the board (Akinyomi & Olutoye, 2015; Obeten & Ocheni, 2014; Danoshana & Ravivathani, 2013). Meanwhile, these attributes are essential for the effective discharge of the responsibilities of the board. Recall that the Code of 2018 emphasised that the board should promote diversity in its membership across a variety of attributes relevant for promoting better decision making and effective governance. Specifically, there should be an established measurable objective for achieving diversity both in gender and other areas. Kren and Kerr, (1997) also suggested that improvements in board monitoring will arise from more independent boards, diversity in board and from increased stock ownership by directors. Hence need to empirically analyse if these attributes taken together will affect corporate performance.

This study, therefore, evaluates the extent to which single indicators of corporate governance (specifically board attributes) disclosed in the annual report affect the accounting-based performance measures of firms in ten (10) sectors of the economy. The sectors are Agriculture, Conglomerate, Construction & Real Estate, Consumer, Healthcare ICT, Industrial, Oil & Gas, Resources and Services Sectors. These sectors were chosen because they contribute immensely to sustainable development in Nigeria. The study is an attempt towards extending the literature on corporate board to relatively unexplored but important sectors in Nigeria economy and using together board attributes which extant research in Nigeria have overlooked. Specifically, the paper examines whether board size, board independence, board gender diversity, directors' shareholding, and board remuneration drive accounting based performance measured with Return on Assets.

As a mechanism to make company's strategies, actions and achievements more transparent, efficient corporate governance framework and board of directors will help in mitigating reoccurrence of global financial crises (Usman & Amran, 2015).

2. Review of Related Literature

2.1 Conceptual and Theoretical Framework

Corporate governance has to do with ensuring that putting structures, processes, and mechanism is established so that firms are directed and managed in such a way that enhances long term shareholder value. By definition,

corporate governance is a system or an arrangement that comprises of a wide range of practices and institutions (legal, economic and social) that protect the interest of corporation's owners (Ofurum and Torbira 2011). There are several well documented guidelines used in regulating firm in different parts of the world. For instance, the Sarbanes-Oxley Act (SOX) 2002 in the USA; The UK Corporate Governance Code 2016 issued by Financial Reporting Council Limited; Nigeria code of corporate governance 2018 issued by Financial Reporting Council of Nigeria. The 2018 Code is an attempt towards harmonizing various codes that existed. For the purpose of this study, the governance is measured using board size, board independence, board gender diversity, directors' shareholding, and directors' remuneration.

A board of directors is a panel of people who are elected to represent shareholders. Every [public company](#) is legally required to have a board of directors. They are the governing body of a Company. Board of directors of a company is an important organ not only responsible for the management of a firm but also for adopting good corporate governance practices. Firms with an effective board and competent management that act with integrity are better placed to achieve the goal of the business and contribute to the economy as the interest of the board and management are made to align with the interest of the shareholders and other stakeholders. For the board of directors to discharge their responsibilities effectively, there is a need for appropriate balance of skills and diversity without compromising competence, independence, and integrity. These are what is referred to as attributes which represent an important part of research on the relationship between the boards and the company performance.

The concept of performance is important in evaluating the achievement of goals; it shows the extent that resources of the firm are used efficiently to achieve their goals. Scholars often agree that performance is a function of time and organizational context and as such posit that there is no universal definition of the concept (Emeka-Nwokeji, 2018; Ekwueme, Egbunike, & Onyali, 2013). Haryono & Iskandar (2015) opined that Corporate Financial Performance is a reflection of the financial condition of a company analyzed by the financial tools. Performance of firms is of extreme importance to shareholders in particular as it helps to maintain a going concern and also increase the value of the business thus study of variables that influence performance is of great relevance both to practice and the academic world (Muller, 2014). This study measures the link between corporate board attributes and corporate performance from accounting based perspective using Return on Assets. Return on assets (ROA) is an accounting-based performance measure which measures profitability and the effectiveness of companies in utilising their assets to generate profit. Usman & Amran (2015), explained that ROA represents a company's profitability accruing from the total asset that the business controls. Commenting on the justification for using ROA, Inoue & Lee (2011), opined that ROA is an accounting-based measure that represents a firm's efficiency of using its assets during a given fiscal year, capturing short-term profitability of the firm. Return on Assets is computed as Net Profit After Tax/ Total Assets.

The theory that provided important theoretical frameworks for corporate governance (board attributes) research and is used to explain the motivation for this study is agency theory. Agency theory provides a number of ways to address the problems raised by the separation of ownership and control in public limited liability companies. The underlying assumptions and their relationship with this study are that effective and independent board is critical to a firm's ability to reduce information asymmetry between agent and principal, the resultant agency cost (litigation cost), while simultaneously improving overall performance.

2.2 Empirical Review

Corporate governance and corporate performance

Board of directors performs monitoring and advisory role in companies and is an important corporate governance mechanism. Corporate governance and board attributes have received substantial interest from academic researchers. Extant literature is either on corporate governance or board attributes using various corporate mechanisms like board structure, board composition, audit credibility, board committee, etc. The findings of some of the extant literature are discussed in this empirical review. Uwuigbe, Peter, & Oyeniyi (2014) investigate the effect of corporate governance mechanisms on earnings management of listed firms in Nigeria. Their result shows that board size and independence had a significant negative impact on earnings management, but CEO duality has a significant positive relationship with earnings management. Similarly, Duke, Kankpang, & Okonkwo (2012), document that corporate governance code, board size, internal audit, separation of board chair from CEO and the

number of non-executive directors were positively associated with organizational efficiency. Naveen and Singh, (2012) found that while the proportion of grey directors on board has marginally deteriorated effect, the independent director's proportion has an insignificant positive effect on firm value. A study by Offurm (2011) revealed a positive and significant relationship between the return on equity (ROE) and corporate governance. Payne, Benson, & Finegold (2009) using a combined survey and archival sources discovered that board effectiveness is significantly related to corporate financial performance. Ahmed Sheikh, Wang, and Khan (2013) evaluated the relationship between internal governance mechanisms and performance measures using return on assets, return on equity, earnings per share, and market-to-book ratio. Their analyses show that board size is positively related to performance measures, whereas outside directors and managerial ownership are negatively related to the return on assets, earnings per share, and market-to-book ratio. Amar, Boujenoui and Francoeur, (2011) find that the levels of CEO and director ownership, as well as the level of board independence, were positively associated with the short-term financial performance of the acquirer, but board size was negatively related to value creation.

Board Size and corporate performance

Board size refers to the total number of directors on a firm's board. Bukair and Abdul Rahman (2015). Discovered that both the size and composition of the board have a negative effect on bank performance. Topak (2011) examines the relationship between the board size and the financial performance of an emerging market using Turkish firms to find that there is no relation between the board size and firm performance. Jackling and Johl, (2009) discovered that larger board size has a positive impact on performance thus supporting the view that greater exposure to the external environment improves access to various resources and thus positively impacts on performance. Belkhir (2009) provides evidence in favor of a positive relationship between board size and performance, as measured by Tobin's Q and the return on assets. Guest (2009) examine the impact of board size on firm performance large UK listed firms and find that board size has a strong negative impact on profitability, Tobin's Q and share returns. Similarly, Bennedsen, Kongsted, and Nielsen (2008) provide evidence of a small adverse board size effect driven by the minority of small and medium-sized firms that are characterized by having comparatively large boards of six or more members. On whether board size really matters in terms of influencing firm's performance, Garg (2007) find that there is an inverse association between board size and firm performance. Earlier on the link between board size and corporate performance, Eisenberg, Sundgren, and Wells (1998) find a significant negative correlation between board size and profitability in a sample of small and midsize Finnish firms.

Board Independence and corporate performance

Board of directors exercises oversight and control to ensure that management act in the best interest of shareholders and other stakeholders. The board requires the combination of executive and non-executive directors to achieve this. The non-executive directors on the board will not be able to exercise their duties effectively unless they are independent of management (Fuzi, Halim & Julizaerma 2016). Rashid (2018) used accounting and market performance measures in analyzing the effect of board independence on performance and finds that board independence and firm economic performance do not positively influence each other. Uribe-Bohorquez, Martínez-Ferrero, and García-Sánchez (2018) use technical evidence to measure corporate performance and provide evidence that board independence increases the firm's technical efficiency. Liu, Miletkov, Wei, and Yang (2015) find that independent directors have an overall positive effect on firm operating performance in China. On the other hand, Lu and Wang (2015) find that firms with a higher degree of board independence is negatively associated with capital investments but positively associated with R&D investments. Similarly, Arioglu (2015) investigated the market reaction to appointments and departures of independent directors to boards and discovered that investors do not value the existence of independent directors on boards or committees of boards.

Gender diversity and corporate performance

Having women on boards has become a high profile issue in recent years. Traditionally women were underrepresented in the company's board. With an increase in the presence of women in recent years, researchers have been examining the relationship between their presence in the board and corporate performance. Results indicate that female directors on the remuneration committee contribute to a moderation of executive remuneration growth and are consequently perceived by shareholders as valuable resources (Garcia-Izquierdo, Fernández-

Méndez & Arrondo-García, 2018). On the issue of the presence of women, Boulouta (2013) did research on with the role of women on boards and especially their impact on corporate social performance. The study reveals that board gender diversity significantly affects corporate social performance. Mallin and Michelin, (2011) in their study on the relationship between board reputation and corporate social performance provided empirical evidence that the proportions of independent, community influential and female directors are positively associated with corporate social performance. They also discovered that CEO duality and community influential directors with multiple directorships have a negative effect on corporate social performance. Campbell and Vera (2010) noted that the stock market reacts positively in the short term to the announcement of female board appointments, suggesting that investors on average believe that female directors add value. This was confirmed the results of their study which show that female board appointments are positively associated with a firm value over a sustained period. Study by Rose (2007), does not find any significant link between firm performance as measured by Tobin's Q and female board representation Earlier on a study about woman on board, Smith, Smith and Verner (2006) noted that woman directors may better understand particular market condition which brings more creativity and quality to board decision making. Also having women on board may generate a better public image of the firm and improve firm performance. The results of their analysis show that the proportion of women in top management jobs have positive effects on firm performance, even after controlling for numerous characteristics of the firm and direction of causality. However, Gallego-Álvarez, García-Sánchez, and Rodríguez-Dominguez (2010) noted that gender diversity might not influence corporate performance. On their work on the effect of gender diversity on corporate performance, they find that companies with higher levels of gender diversity do not obviously outperform other companies with lower levels, in terms of several markets and accounting measures. In line with this finding, Jhunjhunwala and Mishra (2012) find that diversity in teams often leads to conflicts, adversely affecting performance unless properly managed. Their analysis shows that there is no link between board heterogeneity and financial performance in Indian firms.

Directors' shareholding and corporate performance

Directors' shareholding is a situation where the director holds shares in a company that he/she directs. It means being a shareholder and a director at the same time. It is a way of making directed have a vested interest in addition to working as a director. A study by Zondi and Sibanda (2015) do not support the agency theory that aligning the interests of managers and shareholders will improve firm performance, and their study reveals a negative relationship between managerial ownership and firm performance. Chen, Hou, and Lee (2012) find that insider managerial ownership has a significantly positive impact on the performance of firms. Florackis, Kostakis, and Ozkan (2009) provide evidence of initial alignment effect of managerial ownership with a corporate performance at levels lower while they do not lead to a strong inference on the relationship between managerial ownership and corporate performance for intermediate and high levels of managerial ownership. A study by Li, Moshirian, Nguyen, and Tan (2007) indicate that managerial ownership has a positive effect on firm performance. Hu and Zhou, (2008) find that firms of significant managerial ownership outperform firms whose managers do not own equity shares. Chen, Guo, and Mande (2003) find that *corporate performance* increases monotonically with managerial ownership. This indicates that as ownership increases, there is greater alignment of managerial interests with those of stockholders. Short and Keasey (1999) consider different measures of firm performance in analyzing managerial ownership and performance of firms and discover a non-linear relationship between firm performance and managerial ownership. Similarly, Farrer and Ramsay (1998) discover that, in some circumstances, such a relationship does exist, but the results differ according to a number of factors such as the performance measure used.

Directors Remuneration and corporate performance

Kerr and Bettis, (1987) noted that boards of directors should reward executives on the basis of financial returns to shareholders. They posit that studies of this issue have been inconclusive. In a most recent study, Raithatha and Komera (2016) investigate the relationship between executive compensation and firm performance and find that firm performance measured by accounting, as well as market-based measures, significantly affects executive compensation. Ozkan (2011) examines the link between CEO pay of UK non-financial firm and discover that an increase in shareholder return corresponds to an increase in cash compensation. Nahar (2006) investigate the extent to which a firm's performance is being influenced by directors' remuneration. The result shows that directors' remuneration is not associated with a firm's profitability, as measured by ROA. A negative and

significant association is observed between directors' remuneration and lagged ROA. Contrary to this Muller (2014) find a significant relationship between non-executive directors' basic fee, fees paid in shares and additional remuneration for board committee membership and financial performance of firms. Ghosh (2006) find larger boards have a dampening influence on firm performance both in terms of either accounting or market-based measures of performance. The analysis also show that compensation of the CEO has a significant effect on the performance of the firm. Kato and Long (2006) find a statistically significant association of annual cash compensation (salary and bonus) for top executives with respect to shareholder's value. In addition, they discovered that sales growth is significantly linked to executive compensation.

From extant literature, conclusive evidence on the relationship between corporate governance mechanism and firm performance lacks as previous investigations have not produced a consistent result. While some researchers report a positive relationship between governance and firm performance; others report a negative relationship and yet others no relationship. Attempting to draw general conclusions from the literature is not possible and hence need for further study. Based on the previous finding, it is reasonable to test the following assertions stated in their null form:

1. Board size has no significant effect on corporate performance;
2. Board independence has no significant effect on corporate performance;
3. Board gender diversity has no significant effect on corporate performance;
4. Directors' shareholding has no significant effect on corporate performance;
5. Board remuneration has no significant effect on corporate performance;

3. Methodology

This study adopted *ex post facto* research design, and the population consists of all quoted non-financial companies on the Nigerian Stock Exchange. The sectors described as non-financials are Agriculture, Conglomerate, Construction & Real Estate, Consumer, Healthcare ICT, Industrial, Oil & Gas, Resources and Services Sectors. 93 out of 122 firms listed under the sectors were selected from 2006 to 2015 based on those firms that have complete data on the variables. The existing data of board attributes (explanatory variables) were extracted from the annual reports of the selected companies through content analysis. On the other hand, data for corporate performance (dependent variables) and control variables were gathered from MachameRATIOS, a database maintained by TalkData Associates (www.machameRATIOS.com). 93 out of 122 non-financial firms listed on the Nigerian Stock Exchange from 2006 to 2015 that have complete data on the variables. The data were analysed using pooled ordinary least regression with the aid of STATA software. Before analyzing the pooled data, some preliminary statistics such as descriptive statistics, normality, correlation and two post-regression diagnostic tests (multicollinearity and heteroscedasticity) were also conducted to confirm assumptions of regression. To test the hypotheses of this study, the following model stated in its functional and econometric form was used. $FinPerf = F(BSIZE, BOIND, BOGD, DHOLD, DCOST, Controls$

$$ROA_{it} = \beta_0 + \beta_1 BSIZE_{it} + \beta_2 BOIND_{it} + \beta_3 BOGD_{it} + \beta_4 DHOLD_{it} + \beta_5 DCOST_{it} + \beta_6 FSIZE_{it} + \beta_7 FAGE_{it} + \beta_8 TLBTA_{it} + e_{it}$$

Where:

- ROA = Corporate performance which is measured as Net Profit After Tax/ Total Assets
 β_0 = Intercept estimates
 β_{1-8} = Coefficient of the independent variables
 e = error term

Specifically, the independent variables are measured as Board size (BSIZE) measured as a number of board members, Board independence (BODIND) is the proportion of non-executive directors to total directors. Board gender diversity (BOGD) is the proportion of female to a number of directors. Directors' shareholding (DHOLD) is measured as Directors Shares divided by outstanding shares. Board Remuneration (DCOST) is measured as Directors Cost divided by Total Assets. Control Variables are: Firm Size (FSIZE), is measured as a Log of total

assets. Firm Age (FAGE) is measured as Number of years a company is listed on the Nigerian Stock Exchange. Leverage (TLBTA) is measured as Total Liabilities divided by total assets.

4. Empirical Analysis and Discussion of Findings

Descriptive statistics on Table 1 in the Appendix provides information regarding the mean (average), maximum, minimum, standard deviation, and median for each of the specific Board attributes used. For instance, the descriptive statistics show that the largest board in the sample during the period under review had seventeen (17) members, while on the average most of the companies had a board size of nine members. The variable of board independence reveals that 64% of the sampled firms had more independent directors than dependent directors in their board. The statistics show that the ratio of female to male directors on the board is 7%. The statistics also show that some companies do not have any female representation in its board among other findings. From the Normality Test in Table 2 of Appendix, all the variables of interest are normally distributed and satisfy the test of significance at 1% level of significance except for the variables of firm size, which did not pass even at 10%. However, this situation may be overlooked since it is a control variable. Overall, the statistics revealed that there is no sample selection bias or outlier in the data that would impair the generalization from this study. Table 3 in the Appendix is the correlation matrix table which shows the relationship that exists between the variables used for the study. Table 5 and 6 from the appendix shows the result obtained from the variance inflation factor analysis and also the test for heteroscedasticity. Here the mean VIF value of 1.39 which is less than the benchmark value of 10 indicates the absence of multicollinearity. Breusch-Pagan/Cook-Weisberg test for heteroscedasticity with a probability value of 0.40 resulting from the test is statistically insignificant which implies that the data are free from the presence of unequal

Table 4.1: Accounting Performance and Corporate Governance Sustainability Regression Model

Independent Variables	Coef.	t-Stat	P>/t/
bsize	0.120	0.45	0.053*
boind	-4.931	-1.40	0.003***
bogd	16.444	2.48	0.013***
dhold	-0.044	-1.55	0.122
dcost	-0.163	-6.61	0.000***
fsize	0.632	0.69	0.493
fage	0.015	0.32	0.746
tlbta	-0.034	-5.88	0.000***
F – Stat	30.42		0.000***
R-squared	0.460		
Adjusted R-squared	0.452		

Source: Extract from STATA Output

Where *, ***, implies statistical significance at 05% and 1% levels respectively

Based on the result from the table 4.1 above, the specific finding from the explanatory variables and each control variable from the regression model is provided as follows: It was observed that the regression results show that the R-squared and adjusted R-squared values were (0.46) and (0.45). This suggests that all the explanatory variables jointly explain about 45% of the systematic variations in the performance of return on total assets across the quoted sample in this study and over the period under consideration. This means that regression models that include corporate board attributes of board size, board independence, board gender diversity, directors' shareholding, directors' remuneration, and control variables of firm size, firm age, and leverage, may not be completely appropriate in explaining the behavior of accounting performance variable of return on total assets. Other variables outside the explanatory variables used in this study need to be included in the social sustainability model. The F-statistics (30.42) and its p-value (0.00) (see complete regression table 4 at appendix) show that the accounting regression model is generally significant at 1% levels and its coefficients may be adopted for policy purposes. Specific findings are discussed below:

From table 4.1, the variable of board size (bsize) with a coefficient of = 0.120 impacts positively on accounting performance and it is statistically significant at 5% level (P-value 0.053) during the period of study. This result reveals that expanding an eight-person board by one member implies an addition in profitability of about 0.120. This change is economically significant. This result, therefore, suggests that we should reject the null hypothesis which states that the size of the board does not significantly affect the financial performance of listed companies in Nigeria. This justifies the argument that larger boards are positive and significantly related to higher corporate performance. Also, that larger board will be more effective in monitoring financial reporting, because the company might be able to appoint directors with relevant and complementary expertise and skills and, thus, draw from a broader range of knowledge and experiences. Additionally, previous researchers posit that executives may start to prioritize the firm's interests rather than their own along with the increase in the board size. This finding contradicts the findings of Guest (2009), Bennedsen et al. (2008), Garg (2007) Eisenberg et al. (1998) Narwal & Jindal (2015) that find negative association between board size and profitability. But uphold the findings of Belkir (2009) that provides. Uribe-Bohorquez evidence in favor of a positive relationship between board size and performance. The alternative hypothesis that board size has a significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria is accepted.

On the other hand, the variable of Board Independence (boind) have a negative and statistically significant effect on accounting performance of return on total assets. The coefficient of -4.931 and P-value of 0.003 confirm this. One possible reason for this result is that outside directors appointed to the board may lack specific knowledge regarding the operations of the companies into which they direct specifically in Nigeria. The outcome as obtained here however negates the findings of Uribe-Bohorquez et al (2018) and Liu et al (2015) that show that independent directors have an overall positive effect on firm operating performance, but correspond with the assertion of Fuzi et al (2016) and Arioglu (2015) that investors do not value the existence of independent directors on boards or committees of boards. Thus greater board independence did not indeed increase the likelihood of firm improving performance. Hence the alternative hypothesis that board independence has a significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria is accepted.

Furthermore, corporate board attribute of Board Gender Diversity (bodg) reveals a positive effect on return on total assets of the firm (16.444). The relationship is significant as its probability value is lesser than 5% benchmark adopted in this study. (P-value = 0.013). This result suggests that as listed companies in Nigeria continue to engage more female on the board, there will be meaningful improvements in terms of firm accounting performance. This result may equally suggest that the market will punish firms that did not give female a chance to participate on boards since board gender diversity was found to have a significant effect on performance. These findings may have arisen because the majority of the sampled companies have significant numbers of women directors on the board thereby influencing the strategies of the firms. Prior research finds that female executives are more risk averse (Faccio, Marchica, & Mura, 2016). This characteristic can cause their monitoring and advising to focus on reducing the possibility of extremely negative outcomes, which reduces the likelihood of the firm being subject to poor future corporate performance. Hence the alternative hypothesis of a significant relationship between board gender diversity and firm financial performance in Nigeria is accepted. This result supports the findings of Boulouta (2013), Campbell and Vera (2010) and Smith et al. (2006) that having women on board may generate a better public image of the firm and improve firm performance. However, it contradicts the finding Gallego-Álvarez et al. (2010) and Jhunjhunwala and Mishra (2012) that diversity in teams often leads to conflicts, adversely affecting performance. Thus the alternative hypothesis that board gender diversity has a significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria is accepted.

Another result to note in this study is the variable: Directors Shareholding ($dhold = -0.044$) which have a negative influence on market performance but statistically insignificant even at 10%. The t-value is -1.55 while its P-value is 0.122. This contravenes the argument that directors' shareholding aligns the interests of managers and shareholders and thus enhances performance (Zhou 2001). This result is in line with the finding of Akinyomi & Olutoye (2015), Zondi and Sibanda (2015) and Short and Keasey (1999) that aligning the interests of managers and shareholders will improve firm performance, but disagree with prior empirical results of Chen et al (2012) and Li et al (2007) that insider managerial ownership have a significantly positive impact on the performance of firms. From the finding of this study, the null hypothesis concerning *Directors Shareholding* provides a satisfactory basis

for explaining the accounting performance of Nigerian listed companies. Thus the alternative hypothesis of a significant relationship between director shareholding and accounting performance variable of return on total firm assets is rejected.

Board Remuneration ($dcost = -0.163$) have a negative influence on firm financial performance and is statistically significant. The P-value and coefficient of 0.000 and -0.163 confirms that. This indicates that an increase in director's remuneration will reduce the return on assets by 16%. This result contradicts the findings of Raithatha and Komera (2016), Muller (2014) and Ozkan (2011) that directors remuneration has a significant positive impact on profitability, but support the work of Nahar (2006) This result did not support the null hypothesis which states that directors' remuneration has no significant effect on firm financial performance in Nigeria. Thus the alternative hypothesis is accepted.

Furthermore, for the control variable of Firm Size ($fsize$) the results discover a positive relationship with firm accounting performance of return on assets. (Coeff.0.632). However, the relationship is not significant as its P-value is greater than 5% benchmark adopted in this study. (P-value = 0.493). Firm Age ($fage$) showed a positive (0.015) and statistically insignificant (P-value = 0.746) effect on firm financial performance measured by return on total assets. This implies that as a firm grows in its listing age, financial performance rate of return on total assets improves but at an insignificant rate. This result is consistent with the postulation that older firms can acquire experience based economies and mitigate the liabilities of newness. However, less concern should be given to this position as it appears to be insignificantly related to the dependent variable of return on assets. With respect to the variable of Leverage ($tlbta = -0.034$), its effect on financial performance among listed companies in Nigeria is negative, and the influence is statistically significant at 1%. The P-value of 0.000 confirms that. From this analysis, it can be seen that an increase in financial leverage decreases firm financial performance among listed companies in Nigeria during the period under consideration. Findings from the above analysis can be summarized as:

1. Board size has a positive and significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria.
2. Board independence has a negative and significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria is accepted.
3. Board gender diversity has a positive and significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria.
4. Directors' shareholding has a negative but insignificant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria.
5. Board remuneration has a negative and significant effect on accounting performance variable of return on total firm assets among listed firms in Nigeria.

5. Conclusion and Recommendation

With the good corporate board in place managers are sure to act in the best interest of all stakeholders, and this will enhance the company's bottom line. Evidence from this study indicates that financial rewards of implementing effective corporate governance mechanism outweigh the costs involved in the long run. Larger board size with their effective monitoring, expertise, and skills lead to greater corporate performance. Engaging female on the board improves corporate performance. However, having a greater number of outside directors appointed to the board, directors having an ownership interest and the mode of compensating the directors have value decreasing effect on the performance of firms in Nigeria. Based on the findings the paper recommended that companies in Nigeria should promote diversity in its membership across a variety of attributes particularly gender diversity considering that it is relevant for enhancing firm performance. Considering that larger board is more effective in monitoring financial reporting since it offers company opportunity of appointing directors with relevant and complementary expertise and skills and, thus, draw from a broader range of knowledge and experiences, the study recommends that there should be sufficient size to enable the board to undertake the activities required of them. There should be a periodic review of corporate board attributes particularly those that have a significant effect on corporate performance to ensure that the attributes continue to contribute to improvement in firm performance. The Board should ensure that the company remunerates fairly, responsibly and transparently so as to reduce the decreasing effect of board remuneration and promote positive outcomes in the short, medium and long term. There should be

comprehensive disclosure of all corporate board attributes adopted by firms. There should be an appropriate mix of Executive, Non-Executive and Independent Non-Executive members so that the negative effect of board independence can be reduced.

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Appendix

TABLE 1: DESCRIPTIVE STATISTICS (CORPORATE BOARD ATTRIBUTES)

stats	bsize	boind	bogd	dhold	dcost	GOVI
mean	8.866817	6423363	.0747856	16.50044	2.703342	-1.07e-09
p50	9	.67	.08	3.72	.2975	.19503
min	3	0	0	0	0	-7.989573
max	17	1.13	.4	123.58	495.342	2.80061
sd	2.431963	.164372	.0858043	23.1074	30.36445	1.27332
N	886	886	886	878	886	878

TABLE 2: NORMALITY TEST

Skewness/Kurtosis tests for Normality					
----- joint -----					
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	Prob>chi2
retoa	885	0.0000	0.0000	.	0.0000
bsize	886	0.0000	0.8178	23.12	0.0000
boind	886	0.0000	0.0937	24.96	0.0000
bogd	886	0.0000	0.0053	.	0.0000
dhold	878	0.0000	0.0000	.	0.0000
dcost	886	0.0000	0.0000	.	0.0000
fsize	886	0.5810	0.1850	2.06	0.3565
fage	886	0.0000	0.0000	10.70	0.0000
tibta	883	0.0000	0.0000	.	0.0000

TABLE 3: CORRELATION ANALYSIS

	retoa	bsize	boind	bogd	dhold	dcost	fsize	fge	tibta
retoa	1.0000								
bsize	0.0984	1.0000							
boind	-0.0234	0.0521	1.0000						
bogd	0.1221	0.0029	0.0237	1.0000					
dhold	-0.2211	-0.0200	0.0857	0.0240	1.0000				
dcost	-0.4446	0.0089	0.0092	-0.0596	0.2477	1.0000			
fsize	0.1929	-0.0208	0.0314	0.0736	-0.3011	-0.1911	1.0000		
fage	0.0418	-0.1869	0.0253	-0.0042	-0.3084	-0.0333	0.0486	1.0000	
tibta	-0.4426	-0.0954	-0.0463	-0.0911	0.3193	0.6674	-0.2455	0.0165	1.0000

TABLE 4: ACCOUNTING PERFORMANCE AND CORPORATE GOVERNANCE

Source	SS	df	MS	Number of obs = 874		
Model	83301.726	8	8330.1726	F(8, 863)	=	30.42
Residual	236357.503	863	273.878914	Prob > F	=	0.0000
				R-squared	=	0.4606
				Adj R-squared	=	0.4520
				Root MSE	=	16.549
Total	319659.229	873	366.161775			

retoa	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
bsize	.1209186	.2688257	0.45	0.653	-.4067101	.6485472
boind	-4.931931	3.530066	-1.40	0.163	-11.86045	1.996589
bogd	16.44486	6.634647	2.48	0.013	3.422931	29.46679
dhold	-.0441601	.0285656	-1.55	0.122	-.1002262	.0119061
dcost	-.1633447	.024722	-6.61	0.000	-.2118671	-.1148224
fsize	.6327748	.9218187	0.69	0.493	-1.176494	2.442044
fage	.0150508	.0463759	0.32	0.746	-.075972	.1060735
tlbta	-.034112	.005797	-5.88	0.000	-.0454899	-.0227341
_cons	-7.65862	6.614843	-1.16	0.247	-20.64168	5.324443

TABLE 5: TEST FOR MULTICOLLINEARITY (VIF TEST)

Variable	VIF	1/VIF
tlbta	1.99	0.502403
dcost	1.82	0.549225
fsize	1.64	0.610949
dhold	1.39	0.719422
bsize	1.35	0.742295
fage	1.20	0.835506
boind	1.06	0.946021
bogd	1.03	0.972714
Mean VIF	1.39	

TABLE 6: TEST FOR HETEROSCEDATICITY

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of retoa

chi2(1) = 520.18

Prob > chi2 = 0.4000