EFFECT OF BOARD OF DIRECTORS’ ATTRIBUTES ON FINANCIAL INFORMATION QUALITY: EVIDENCE FROM NIGERIAN LISTED MANUFACTURING COMPANIES

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ABSTRACT
This study examines the effect of board of directors’ attributes on the financial information quality of listed manufacturing companies in Nigeria for the period of six years (2011-2016). The sample of the study consists of 24 listed manufacturing companies from the population of 56 listed on the Nigerian stock exchange. The study employed multiple panel regression as a tool of analysis, using the longitudinal data extracted from the sampled companies’ audited financial statements. The study also extracted the residuals of Rowchowdhury (2006) model of real activities manipulation to determine financial information quality of the listed manufacturing companies in Nigeria. Board of directors’ attributes (inside directors, outside directors, gray directors, and women directors) was used as independent variables and real activity manipulation as dependent variable of the study. The results reveal that outside directors and gray directors has positive and significant effect on real activities manipulation practice by management of listed manufacturing companies in Nigeria whereas the variables of inside directors and women directors has positive but insignificant effect. The study recommends that the Securities and Exchange Commission and Nigerian Stock Exchange should make it mandatory that board of listed manufacturing companies should be dominated by outside and gray directors as they appear to be effective in deterring manipulative practices by management of companies’ therefore it provide high financial information quality in the Nigerian manufacturing sector.

Keyword: Directors, Attributes, Financial Information Quality, manufacturing companies and Nigeria

1. INTRODUCTION
The content of financial information disclosed in published annual reports vary from one firm to another and also from country to country. Literature reveals that the level of adequacy and reliability of information disclosed by listed companies in developing countries lags behind than in developed countries and government regulatory agencies are less effective in driving the enforcement of existing accounting standards (Dabor & Adeyemi, 2009). However, financial reporting quality is attained where management do not engage in much real activities manipulation. Thus, with high manipulation of accounting numbers by management when preparing financial statements, the quality of financial information derivable from the accounts by the users may be misleading. Simply put, real activities manipulation will decrease the quality of financial reporting of listed manufacturing companies in Nigeria.
The board of directors has a responsibility of maintaining good corporate governance and in creating and maintaining good systems of control within the company. This requires the board of directors to ensure that they report regularly and truthfully to the various stakeholders they have identified. The board of directors is also responsible for the organization’s system of internal control which is the system of checks and balances within the company designed to ensure that the financial information it produces is free from significant error or misstatements.

Like elsewhere, there has been a lot of corporate failures in recent years in Nigeria. For instance, the accounting scandals by Cadbury Plc., Intercontinental Bank Plc., and Oceanic Bank Plc., are notable cases. These scandals illustrate that corporate management may engage in opportunistic behavior by not reporting on the true and fair view of the affairs of their companies. These scandals has brought about doubt in the minds of shareholders and other stakeholders on the credibility and reliability of financial reports. It is as a result of accounting scandals in the presence of corporate governance mechanisms that the researchers consider it paramount to investigate the effect of board of directors’ attributes on the quality of financial information of Nigerian listed manufacturing companies.

The related literature on the relationship between board of directors’ attributes and financial information quality is inconclusive. Some studies found positive relationships (Beasley & Salterio, 2001), others found negative associations (Yang & Krishman, 2005; Lin et al, 2006; Beasley & Salterio, 2001 and Kuang & Sharma, 2013), while other researchers reported no relationships (Nelson & Jamil, 2012). These mix findings make the direction of these relationships to be illusive, and to the best of our knowledge, there is no study in Nigeria that has attempted to resolve the mixed result particularly in listed manufacturing companies in Nigeria.

In view of the above, there is the need to conduct a study with a view of filling the gap that exist in the literature.

This research, therefore, examines the effect of board of directors’ attributes (inside directors, outside directors, gray directors, and women directors) on the level of real activities manipulation in the Nigerian listed manufacturing companies. Accordingly, the study hypothesizes (H0) that, board of directors attributes have no significant effect on real activities manipulation practice of listed manufacturing companies in Nigeria.

This study covers a period of six years (2011 – 2016). The selection of the period was informed by the recent reforms that took place in the area of corporate governance in Nigeria. The research considers the board of directors’ attributes and real activities manipulation as variables of the study. The study also limited to the use of published annual report and statement of accounts of the sampled firms to extract secondary data for analysis.

This study will further enrich the literature on the relationship between board monitoring and financial reporting quality by selecting Nigerian manufacturing companies for analysis. In particular, this study differs from other studies by using four attributes of board of directors and real activities manipulation variable that should capture real manufacturing companies’ operation better than accruals by exploring Nigerian listed manufacturing companies.

**Literature Review and Theoretical Framework**

**Corporate Governance**
The principles of good governance are as old as good behavior, which needs no formal definition. The corporate governance framework is there to encourage the efficient use of resources and equally to require accountability for the stewardship of those resources. The aim is to align as nearly as possible the interests of individuals, companies and society at large. “The corporate governance structure specifies the distribution of rights and responsibilities among different participants in the company, such as the board, managers, shareholders and other stakeholders and also spells out the rules and procedures for making decision on corporate affairs of the company. By doing this, it also provides the structure through which the company objectives are set, and the means of attaining those objectives and monitoring performance” (OECD, April 1999). In another study Koubaa in Sarkar (2008) opines corporate governance as the procedures for improving the quality of financial statements, and highlighted the fiduciary role that the board can play in mitigating opportunistic behavior of managers and ensuring that earnings figures convey true information about firm operation. Sanda, Garba and Mikailu (2010) posit corporate governance as ways in which all parties interested in the well-being of the firm attempt to ensure that managers and other insiders take measures that safeguard the interest of all the stakeholders. Chan, Faff and Mather (2007) are of the opinion that corporate governance mechanisms are employed to assist in reducing information asymmetry between management and shareholders and to ensure that managers opportunistic behaviors are constrain to the greater extent.

The code of corporate governance in Nigeria, (SEC CODE, 2011), issued by the Securities and Exchange Commission and applicable to all public companies registered in Nigeria, define corporate governance as “the process and structures by which the business and affairs of an institution are directed and managed in order to improve long-term shareholders value by enhancing corporate performance and accountability, while taking into account the interest of other stakeholders. The separation of ownership and control in modern corporations can give rise to the potential for conflicts of interest between owners and their agents who manage the day-to-day operation of the company.

Board of Directors
The board of directors is an important institution in the governance of Modern Corporation. A board characteristic is concerned with the attributes of a company’s board of directors. There are different board’s characteristics including insider directors, outsider directors, gray directors and women directors. The separation of ownership and control which is inherent in the modern corporate form of organization causes the agency problem between shareholders (the principals) and management (the agent). Fama and Jensen (1983) recognize the control function of board as the most critical role of directors and argue that the board is not an effective device for decision control unless it limits the decision discretion of individual top managers. Moreover, Cadbury Report suggests that “an important aspect of effective corporate governance is the recognition that the specific interests of the executive management and the wider interests of the company may at times diverge”. Therefore board independence from management is one of the important factors that determine the board effectiveness and monitoring ability. Hence, we expect to see the board independence has a positive relation with the board effectiveness in limiting real activities manipulation by the managers.
Insider Director
Chan and Zhou, (2005) defined inside director as “a proportion of directors with executive power over the total number of directors of the board or ratio of directors with executive power on the board”. Previous studies demonstrate that inside directors lose their board seats in their own and other firms after their own firms experience financial distress, perform poorly, restate earnings, and are involved in financial fraud lawsuits (Gilson, 1990; Yermack, 2004; Fich & Shirdasani, 2007; Ertimur et al., 2012). Therefore, as a direct signal of problematic financial reporting and high information risk, the reporting of internal control system under SOX section 404 may harm the reputation of inside directors in the managerial labor opportunity. Some relevant literatures suggest two conflicting views on inside directors who are also members of a firm’s management team. On the one hand, conventional agency theory literature (Mace, 1986, Warther, 1998, Malmendier, & Tate, 2009) suggests that inside directors are dependent on the chief executive officers for their continued employment, compensation, and private benefits. The inside directors usually allow chief executives officers of financial reporting decisions and help chief executive officers to manipulate accounting information for private benefits. In order to maintain their directorship and reputation, inside directors may prefer an ineffective internal control system, under which inside directors and managers have a great degree of discretion on pursuing self-utilities due to the lack of formal and effective control policies and procedures (Hogan & Wilkins, 2008).

Independent Directors
Outside director are independent directors of the board with no executive portfolio in running firms’ affairs as was observed by (Peasenell, Pope & Young, 1998; and Nicola, 2006; Visvanathan, 2008). Carcello and Neal (2000) opine that independent directors have no affiliation with the firm other than being on the board. Previous studies have shown that the personal or economic affiliation that independent directors have with the corporate management may impair their independence. Jaggi et al. (2009) investigate whether independent boards provide effective monitoring of earnings management in firms operating in the family ownership environment of Hong Kong. Their final sample consists of 770 firm-year observations and employed Kothari et al. (2005) and Francis et al. (2005) as proxies for earnings management. They document that independent boards provide effective monitoring of earnings management. However, they find that the monitoring effectiveness of independent boards is moderated in family-controlled firms, which suggests that increasing the proportion of independent directors to strengthen board monitoring is unlikely to be effective in family-controlled firms. The above findings is however, not consistent with that of Bhagat & Black (2002); Daily & Dalton, (1993); Klein, (1998); Anderson et al., (2000); but in line with Shehu (2013; 2011); Hillman, (2005); Honeine & Swan, (2010); Masulis et al., (2012); who established a significant positive association.

Gray Directors
Gray director are those who have affiliation with top management and company ex-employee related director or ex consultant that metamorphoses and become company board of directors as opined by( Carcello and Neal, 2000 Ronald, Anderson and Mansi, 2003, Hsu and Wu (2007).
Women Directors

Sringer (2008) examine whether and how the participation of women in the firm’s board of directors and senior management enhances firm’s financial performance. The study finds that women are often appointed to leadership positions under problematic organizational circumstances associated with greater risk of failure and criticism. However, the study also finds that having more women on corporate board and top management does not seem to generate significant excess return and cannot restrained manager’s opportunistic behaviors’.

Krishnan and Parsons (2008), however, extend those studies by examining actual reported financial numbers and comparing the earnings quality in companies with higher percentages of women directors to those with fewer women on their boards. They examine a set of data that covers the period from 1996 to 2000 and use accounting conservatism as a measure for earnings quality. They find that companies with more female senior managers are more profitable and have higher stock returns after initial public offerings than those with fewer females in the management ranks. They use the Catalyst annual censuses of women as corporate officers and top earners for 353 of the Fortune 500 companies. They assert that the improved performance for companies with more women senior executives is not produced through earnings management practice. Instead, they find that earnings quality is positively associated with gender diversity.

Theoretical Framework

The framework of this study is based mainly on agency and opportunistic theory. Agency theory originated from the work of Berle and Means (1932). They explored the concept of agency and the applications toward the development of large corporations. They found out how the interest of the directors and managers differ from the owners of the firm, thereby using the concepts of agency-principal relationship to explain the genesis of those conflicts. Under this contractual vision of organization, managers are appointed by shareholders to administer the activities of the firm in their best interest. Basically, the separation of ownership and control over decision making creates a potential governance problem or a situation of information asymmetry in favor of managers, who do not entirely assume the economic consequences of their opportunistic decision.

With managerial inclination to pursue their self-interest which might be at the detriment of shareholders (principal), monitoring mechanism become important not only to checkmate the excesses of management but also to align their actions towards the interest of shareholders and the overall good of the company. Corporate governance mechanisms of board of directors are critical monitoring instruments in the company and the effectiveness with which these mechanism is able to monitor to a large extent depends on its attributes.

METHODOLOGY AND DATA

This study adopts descriptive research design. The population of this study comprises all the 56 listed Nigerian manufacturing companies, as at 31st December, 2011 to 31st December, 2016. The manufacturing companies are considered under the following: - Conglomerates; Food and Beverages/Consumer goods; Construction and Real Estate; Industrial Products; Chemicals and Paints. In view of nature of the model used, filter were employed to eliminate some of the companies that have no complete records of all the data needed for measuring the variables of
the study. Specifically, two filter criteria was adopted whereby a) Company must have all data needed for the variables of the study, and b) Companies must not be suspended from trading within the period of the study (2011-2016). The filter resulted to a sample of 24 companies.

The data on the variable board of directors’ attributes was extracted manually from the published annual financial reports of sampled companies. The study data had both longitudinal and panel dimensions.

This study employed longitudinal panel, multiple regressions for the purpose of data analysis, using panel data to examine the effect of board of directors’ attributes on real activities manipulation practice by management of listed manufacturing companies in Nigeria. The study model composed of a single dependent variable; real activity manipulation (RAM) and one explanatory variables; board of directors’ attributes with four proxies (inside directors, outside directors, gray and women directors).

Correlation matrix is used to test the relationship between the dependent and independent variables and also between themselves. Also robustness test is applied for dependent and independent variables to improve the validity and reliability of the statistical inferences derived from the regression models.

**Model Specification**

\[
\text{RAM} = f (\text{CG} + \text{BD})
\]

\[
\text{RAM}_{it} = \beta_0 + \beta_{\text{IDR}}_{it} + \beta_{\text{ODR}}_{it} + \beta_{\text{GDR}}_{it} + \beta_{\text{WDR}}_{it} + \epsilon_{it}. 
\]

Where:

- **RAM** = Real activity manipulation (Abnormal cash flow)
- \(\beta_0\) = Intercept, **IDR** = Inside directors, **ODR**= Outside directors, **GDR**= Gray directors, **WDR**= Women directors, \(\epsilon_{it}\) = Error term.

The equation (1) is developed to see whether board of director’s attributes can be used in restraining real activity manipulation of listed Nigerian manufacturing companies.

RAM is a linear function of sales and change in sales, all scaled by lagged total assets. RAM can be determined using the residuals of Rowchowdhury (2006) model of abnormal cash flow. Abnormal cash flow from operation is the actual cash flow from operation minus the normal cash flow from operation calculated using estimated coefficients from the corresponding industry year model and the firm years, sales and lagged assets. The regression can be run and save the residuals, it’s the residuals that portray whether the companies engaged in real activities manipulation or not by looking at its gravity. The higher the residuals, the higher the activity manipulation and the higher it affects the quality of financial information of listed manufacturing firms. In addition, the lower the residuals, the lower the activity manipulation and the higher it impacts on the quality of financial information of listed manufacturing firms. Board of director’s attributes can now be run against real activity manipulation to see whether the board of directors attributions can restrained this behavior by testing of stated hypothesis.
Table 1: Variables Measurement

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Real Activities Manipulation (RAM)</td>
<td>Residuals of Roychowdhury (2006) model of abnormal cash flow: &lt;br&gt; $\text{CFO}<em>t/\text{TA}</em>{t-1} = \alpha_0 + \alpha_11/\text{TA}<em>{t-1} + \alpha_2\text{SL}<em>t/\text{TA}</em>{t-1} + \Delta\text{SL}<em>t/\text{TA}</em>{t-1} + \mu_t$ &lt;br&gt; Where: &lt;br&gt; $\text{CFO}<em>t =$ cash flow from operations of present year &lt;br&gt; $\alpha^*(1/\text{A}</em>{t-1}) =$ scaled intercept &lt;br&gt; $\text{TA}</em>{t-1} =$ total assets of previous year &lt;br&gt; $\alpha_0 =$ intercept &lt;br&gt; $\alpha_1, - \alpha_2 =$ parameters for estimating normal cash flow &lt;br&gt; $\text{SL}_t =$ sales at present year &lt;br&gt; $\Delta\text{SL}_t =$ change in sales &lt;br&gt; $\mu_t =$ residuals</td>
</tr>
<tr>
<td>2. Inside Director</td>
<td>Measured by the proportion of executive directors on the board</td>
</tr>
<tr>
<td>3. Outside Director</td>
<td>Measured by the proportion of non-executive director on the board</td>
</tr>
<tr>
<td>4. Gray Director</td>
<td>Measured by the proportion of gray directors on the board</td>
</tr>
<tr>
<td>5. Women Director</td>
<td>Measured by the proportion of women on the board</td>
</tr>
</tbody>
</table>

Source: Researchers Designed, 2017

Table 1 indicates the study variables and their measurement. There is a prior expectation that all the independent variable will restrain real activities manipulation.

RESULTS AND DISCUSSION

Table 2: Descriptive Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Std. Dev</th>
<th>Kurtosis</th>
<th>Skewness</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>1.746519</td>
<td>0.006427</td>
<td>4.40311</td>
<td>1.14651</td>
<td>2.172448</td>
<td>0.2540073</td>
</tr>
<tr>
<td>ISD</td>
<td>0.2626499</td>
<td>0.000557</td>
<td>0.7659693</td>
<td>0.1490413</td>
<td>3.034053</td>
<td>0.2399832</td>
</tr>
<tr>
<td>ODR</td>
<td>0.429876</td>
<td>0.0107901</td>
<td>1.013704</td>
<td>0.2056498</td>
<td>2.69734</td>
<td>0.0229004</td>
</tr>
<tr>
<td>GDR</td>
<td>0.1472342</td>
<td>0.0252036</td>
<td>0.7632615</td>
<td>0.2101651</td>
<td>5.899671</td>
<td>2.178701</td>
</tr>
<tr>
<td>WDR</td>
<td>0.1674369</td>
<td>0.001928</td>
<td>0.641</td>
<td>0.1435837</td>
<td>5.840491</td>
<td>1.991889</td>
</tr>
</tbody>
</table>

Source: STATA OUTPUT 2017

The results in table 2 shows that the measure of real activity manipulation (RAM) of the Nigerian manufacturing sector has a mean value of 1.746519 with standard deviation of 1.14651, and minimum and maximum values of 0.006427 and 4.40311 respectively. This implies that the
average manipulation of real activity by managers in Nigerian manufacturing firms is 1.746519 to 4.40311, and the deviation from both sides of the mean is 1.14651. This suggests a wide dispersion of the data from the mean. The minimum RAM value of 0.006427 implies that the lowest real activity manipulation by managers is not serious to cause significant distortion in the financial statement. However, the maximum RAM of 4.40311 is high and implies a situation where the RAM covered 4.40311 of the distortion in the financial statement of Nigerian manufacturing firms. Thus, the data did not meet a normal distribution assumption and asymmetrical distribution assumption. The peak of the data is represented by the value of kurtosis of 2.172448, implying that most of the data are higher than the mean value, thus the data did not meet a normal distribution assumption. The coefficient of skewness represented by 0.2540073 implies that the data is positively skewed, hence the data did not meet the symmetrical distribution assumption (that is most of the data are on the right side of the normal data curve).

It is also clear from table 2 that the average gray directors (GDR) is 14% with standard deviation of 21%. This suggests a wide dispersion of the data from the mean because the standard deviation is quit high compared to the mean value. The minimum and maximum values of 2% and 76% respectively implies that the minimum number of gray directors on the board is about 2% and the maximum representation by GDR in a particular year for any of the sample firm is 76% of the total number of board members. The peak of the data is represented by the value of kurtosis of 5.899671 implying that the data did not meet the normal distribution assumption. The coefficient of skewness of 2.178701 suggest that most of the GDR data are positively skewed (that is most of the data are on the right side of the normal curve), therefore, the data did not meet the symmetrical distribution assumption.

The descriptive statistical tools (multiple regression and correlation) is employed in the study to equate the independent variables against dependent variable and also against themselves to determine which corporate governance mechanism has greater impact on the quality of financial information of Nigerian listed manufacturing firms.

<table>
<thead>
<tr>
<th>Variables</th>
<th>RAM</th>
<th>ISD</th>
<th>ODR</th>
<th>GDR</th>
<th>WDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ISD</td>
<td>-0.2412</td>
<td>1.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ODR</td>
<td>0.2462</td>
<td>0.1479</td>
<td>1.0000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDR</td>
<td>0.36709</td>
<td>-0.5207</td>
<td>0.1408</td>
<td>1.0000</td>
<td></td>
</tr>
<tr>
<td>WDR</td>
<td>0.1886</td>
<td>*-0.0309</td>
<td>*0.0425</td>
<td>0.2615</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).

Source: STATA OUTPUT, 2017

The results in table 3 shows the degree of association between real activity manipulation (RAM) and all pairs of independent variables individually and between themselves and cumulatively with the dependent variable (RAM) of the study in the Nigerian manufacturing firms. In the model, Table 3 indicates a negative relation exists between RAM and inside directors (ISD), as is reveal by the correlation coefficient of -0.2412. Table 3 shows that there is positive association between RAM of the Nigerian manufacturing firms and outside directors (ODR), gray directors (GDR) and women directors (0.2462, 0.36709, and 0.1886 respectively). The association among
the independent variables is positive except that between inside directors (ISD) with gray directors (GDR) and women directors (WDR).

Table 4: Robustness Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model One</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean VIF</td>
<td>1.32</td>
</tr>
<tr>
<td>Hettest Chi2</td>
<td>24.63</td>
</tr>
<tr>
<td>Hettest Sig</td>
<td>0.0000</td>
</tr>
<tr>
<td>Hausman Chi2</td>
<td>0.27</td>
</tr>
<tr>
<td>Hauman Sig</td>
<td>0.9914</td>
</tr>
<tr>
<td>LM Test Chibar2</td>
<td>0.00</td>
</tr>
<tr>
<td>LM Test Sig</td>
<td>1.000</td>
</tr>
</tbody>
</table>

SOURCE: STATA OUTPUT, 2017

To formally substantiate the absence of multicollinearity between the independent variables, colinearity diagnostics of variance inflation factor (VIF) and tolerance values (TV) are observed and all indicate the lack of multicollinearity in the data. In particular, table 4 indicates mean VIF of the regression model of 1.32, implying the absence of multicollinearity between the variables of the study (Tobachnick & Fidell, 1996).

The result of the test in table 4 reveals that there is presence of heteroscedasticity because the probability of the chi square is statistically significant at 1% in the regression model, indicating that the data are not homoscedastic. This suggests that the original OLS regression will not fit the study. This test whether the unique errors (stochastic disturbance) are correlated with the independent variables. The result of the test reveals that they are highly correlated because the chi-square probability is not significant at any level of significant (0.9914), which guided the interpretation of the results using the random effect model.

The estimated equation of the model is presented as follows:
RAM = .353 + .068 (ISDR) + .306 (ODR) + 1.746 (GDR) + .004 (WDR)
Z-stat 6.85  (1.18)  (3.89)  (13.08)  (0.01)
R² = 0.4817
F-stat = 412.85
F-sig = 0.0000

The cumulative R² (0.48) of the model which is the multiple coefficient of determination gives the proportion or percentage of the total variation in the dependent variable (RAM) as explained by the independent variable (IDR, ODR, GDR and WDR) jointly. Hence, it signifies 48% of total variation in real activity manipulation in Nigerian listed manufacturing firms is caused by the collective effort of inside directors, outside directors, gray directors and women directors.

This result further indicates that the model is fit, variables properly selected, combined and used in the study, this is statistically supported by the Fishers’ statistics of 412.85 with it corresponding p-values of F-Sig 0.0000. It is clear that holding all the explanatory variables constant, RAM will be limited by 35.3%.
It is clear that one percent change in inside directors will curtail RAM by about 6.8%. The result reveals a positive but statistically insignificance relationship at all level of significance between inside directors and real activity manipulation. Therefore, the research hypothesis (HO1) is accepted. With respect to outside directors’, the model indicates that one percent increase will lead to limiting of RAM by 30.6%. The result reveals that outside directors’ is positively and statistically significantly related to real activity manipulation of listed Nigerian manufacturing companies at 1% level of significance. Thus, there is evidence to reject null hypothesis two of the study hence the alternate is accepted the result is in agreement with the result of Bhagat & Black (2002); Daily & Dalton, (1993); Klein, (1998); Anderson et al., (2000). A one percent increase in the variable gray directors will affect RAM by 174.6%. Gray directors as a measure of the proportion of gray directors to the total number of board members, is reveal to have a positive and statistical significant association at 1% with real activity manipulation of listed manufacturing companies in Nigeria. This provides evidence of rejecting null hypothesis three (HO3) of the study and accepting the alternate hypothesis. It is also instructive that a one percent increase in the variable women directors will affect RAM by 0.4%. Women directors as a measure of the proportion of women directors on board to the total number of board members is found to have a positive but insignificant influence on the real activity manipulation practices of listed manufacturing companies in Nigeria. There is therefore basis to accept the study null hypothesis four (HO4), which is in line with the findings of Farrel & Hersch (2005), and Al-Hayale & Lan (2004) and contradicts the findings of Carver (2002), Hampel (1998).

In summary, the board of director’s attributes of outside directors and gray directors was found to be effective in restraining real activities manipulation practice of listed manufacturing companies in Nigeria while inside directors, and women directors are less effective in constraining real activity manipulation practice of listed manufacturing companies in Nigeria. These findings are in line with the researchers’ expectation that non-executive directors play a prominent role of monitoring the activities of management as they are not involved in running the day today affairs of the companies contrary to the executive directors who are the managers. However, for the women directors it is observed that majority of them are inside directors in the sampled companies of this study, which of course is not a surprising result.

The implication of the findings is that the more outside directors on the board the less real activities manipulation practice in the Nigerian listed manufacturing companies. Hence, the better board is capable of monitoring opportunistic accounting behavior of listed manufacturing companies in Nigeria. It behooves on the regulatory authorities therefore to change policy direction on the composition of company boards to have greater number of outside and gray directors.

**CONCLUSION AND RECOMMENDATIONS**

The financial information quality disclosed in the annual reports and accounts prepare by corporate directors is fundamental to the decision quality of users. However, real activities manipulation by managers undermines information quality and harm users due to their reliance on the information for decision making. The result of this study provides basis to conclude that board attributes particularly outside directors and gray directors are important monitoring and control mechanisms for deterring manager’s opportunistic behavior, while other board features
like inside and women directors do not help in preventing abusive accounting practice by management in Nigerian listed manufacturing companies. Based on the conclusion drawn, the study recommends that the regulatory authorities; SEC and NSE should step up surveillance such that listed manufacturing companies in Nigeria strictly comply with corporate governance best practice on the composition of board members to be dominated by outside directors comprising of independent, non-executive and gray directors in order to fully protect shareholders and other stakeholder’s interest.

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