An Assessment of Non-Executive Directors Influence on the Operating Profits of Manufacturing Firms in Nigeria

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Abstract

The debate of whether board composition in the form of representation of non-executive directors may add value to the firm's performance is widely covered in the corporate governance literature. The main purpose of this study is to assess the non-executive board on operating profits of manufacturing firms in Nigeria. The study adopted content Analysis using a cross sectional survey among 20 selected manufacturing firms listed in Nigeria Stock Exchange. Data were obtained from the financial statement of the various organizations. Inferential statistics of linear regression was used for the hypothesis. The result (0.06175656 with p-value of (0.004357858) of the study shows significant at 1% probability level of significance, data observed confirm that pNED has a negative coefficient of -0.09416348 with a p-value of 0.0101306) which is statistically significant.. It was concluded that proportion number of directors to a large extent affects operational profit of manufacturing firms. Therefore, it can be concluded that manufacturing firms in Nigeria can increase their efficiency as well as overall profitability by maintaining a balanced non-executive members in their firm, as a result the firms can maximize their operational efficiency and profitability.

Key words

Non-executive board, operating profit, manufacturing firms

1. Introduction

Organizations, small, medium or large scale have a primary goal of increase performance, because it marks the bottom-line for every organization, non-performance can spell failure of those organizations (Ejike, 2018). In the manufacturing sector, over times, attention of scholars has been attracted towards its performance. Scholars and practitioners as well as policy makers within the past few decades presented reasons behind improved performance of manufacturing firms, one particular argument which this study dwells on is the argument as to the role of boards of directors as one of the key pillars of organizational performance (Monks and Minow, 2008; Tricker, 2015). The non-executive board of directors is one form of internal control mechanisms in corporate management as the board members formulate strategy as well as appoint, supervise and remunerate top managers in organizations (Minguez and Campbell, 2010). The debate of whether board composition in the form of representation of non-executive directors may add value to the firm's performance is widely covered in the corporate governance literature (Agrawal and Knoeber, 1996; Hermalin and Weisbach, 2003).

Board composition has been proven to be critical in corporate performance especially in emerging and transition economies (Bhagat and Black, 2000) as it can reflect various degrees of heterogeneity.

Common measures of board composition include the ratio of independent non-executive directors and board size. Other measures of board composition in the literature include gender and age diversity (Rashid, 2011). Independent board composition can result in enhanced decision making through increased information flows, although this may entail a cost (Sanda *et al.*, 2010). Eklund *et al.* (2009) stress board heterogeneity entails a trade-off between "information efficiency" in the case of heterogeneous boards, which typically are better informed on 'outside' issues, versus "decision efficiency" of homogenous boards deriving from higher trust, shared experience and values.

An argument challenging the role of independent non-executive directors rests on the information asymmetry between executive directors and independent non-executive directors (Rashid, 2011). Executive directors are nested within the company they govern and may therefore have a better understanding of the business than independent non-executive directors and may, in addition, be better able to make useful decisions (Sanda *et al.*, 2011). By contrast, independent non-executive directors may lack day-to-day inside knowledge of the company and therefore may play a reduced control role in the firm (Nicholson and Kiel, 2007; Rashid *et al.*, 2010). Independent non-executive directors monitor the executive management and advise the CEO on business strategy, information is also conveyed to outsiders (Jensen, 1993). Much of the literature on board size has, however, argued for the benefits of smaller boards (Wu, 2003), based on the notion that smaller groups are more cohesive and more productive, and are also able to monitor the firm more effectively than larger groups (Pablo and Felix, 2005). Similarly, larger groups are fraught with problems such as social loafing and higher coordination costs, and are thus less effective in terms of monitoring (Rashid, 2011).

However, to date there have been inconclusive findings as regards the relationship between board composition and firm performance (Finegold and Hecht 2007; Bermig and Frick, 2010; Rashid, 2011). Nevertheless, this debate is set to continue, as there are no empirical findings to tilt the argument in any particular direction (Rashid, 2011). There are several explanations for the inconclusive results on the relationship between independent non-executive directors and firm performance. One such explanation is that the simultaneity between key variables of interest confounds the interpretation of the results in studies that focus on direct relationships (Finegold *et al.*, 2007). Another explanation is that performance and board characteristics are jointly endogenous, and thus firm performance is not only a function of past board independence, but also influences board structure (Panasian *et al.*, 2008). This study, therefore assess the effect of non-executive director involvement on the performance of manufacturing firms in Nigeria.

1.1. Objective of the study

The main objective of the study is to examine the effect of non-executive directors' involvement on the operating profits of manufacturing firms in Nigeria.

1.2. Research question

The study attempt to give answers to the following question: *To what extend does non-executive director involvement influences operating profits of manufacturing firms in Nigeria*?

1.3. Research hypothesis

The research hypothesis designed to guide the conduct of the study is: Non-executive directors' involvement in manufacturing firms in Nigeria significantly influences the organization operating profits.

2. Literature review

Udoka (2012) asserted that a non-executive director (abbreviated to non-exec, NED or NXD) or external director is a member of the board of directors of a company or organization who does not form part of the executive management team. They are not employees of the company or affiliated with it in any other way and are differentiated from inside directors, who are members of the board who also serve or previously served as executive managers of the company (most often as corporate officers). However they do have the same legal duties, responsibilities and potential liabilities as their executive counterparts. Non-

executive directors are directors who act in advisory capacity only. Typically, they attend monthly board meetings to offer the benefit of their advice and serve on committees concerned with sensitive issues such as the pay of the executive directors and other senior managers; they are usually paid a fee for their services but are not regarded as employees. All directors should be capable of seeing company and business issues in a broad perspective. Nonetheless, non-executive directors are usually chosen because of their independence and initiatives, and are of an appropriate caliber and have particular personal qualities.

In the views of Uchendu (2009) the responsibility of the senior management should be: implementation of strategies and policies; enthronement of processes to measure, evaluation of risks incurable to the firm and maintenance of leadership structure and chain of authority. The responsibility of executing the resolutions of the board of directors rests on the senior management; which includes; implementing guidelines and industry procedures for establishing of a useful organizational mechanism of control. This is expected to help acclimatize board members who should be independent from management with the activities and risks in manufacturing industry while remaining focused, objective and inquisitive. This will help the board provide the needed platform to checkmate excesses that may mare the audit system through workable up line communication medium with capacity for financial, legal, and internal audit functions. Periodic review is equally solicited in this platform. Such periodic reviews should look into the organizational structure; and ensuring that the usefulness of organizational system is monitored by administrative hierarchy and maintaining status quo always. According to Uzun *et al.* (2010), the board of directors should.

(1) Seasonal review of management policies and their strict observance of industry's policies as regards auditing and supervisory authorities on internal audit weaknesses.

(2) Seasonal review of the firm's strategy and risk limits and its appropriateness and application.

(3) Seasonal stakeholders' meeting on organizational mechanisms for efficiency.

(4) Strategic review of works done by auditors both internal external auditors within the system as may have institutionalized by management.

However, Candreva (2011) warned that the integrity of the firm's culture of control may also be influenced by the conducts of the top administrative management and therefore to an extent, everyone share in the responsibility of the internal control because, in the information flow, all the employees are part and parcel of the system control mechanism. Also, it is the duty of the employees to communicate all noticed anomalies to the appropriate management authority in a clear documentation. Owing to the importance of internal control in reinforcing ethical values, manufacturing organizations should ensure that vulnerabilities to fraud and sabotage are all together nipped.

3. Methodology of research

The work adopted Content Analysis using a cross sectional survey. It is a research technique used to make replicable and valid inferences by interpreting and coding textual materials qualitative data can be converted into quantitative data.

3.1. Population of the study

The population of the study is made up of the entire 40 manufacturing firms quoted on the Nigerian Stock Exchange as at December 2016.

3.2. Sample Size of the study

Twenty firms were purposively selected; the choice of selection was based on the following criteria:

Firms that was compliant with CAMA schedule 2 which stipulates that all listed companies in Nigeria should publish and submit their audited annual report and accounts to the Nigerian Stock Exchange (NSE).

All manufacturing firms which have remained quoted on the Nigeria Stock Exchange between 2003 - 2016. Based on the above criteria, the following firms were chosen:

1. Unilever Plc.	11. 7UP Bottling Company Plc.
2. Nestle Plc.	12. Dangote Floor Mills Plc.
3. Cadbury Plc.	13. National Salt Company of Nigeria Plc.
4. Fidson Healthcare Plc.	14. Mobile Oil Plc.

5. Evans Medical Plc.	15. Total Nigeria Plc.
6. Glaxo Smithkline Plc.	16. MRS Oil Nigeria Plc.
7. Nigerian Breweries Plc.	17. Berger Paints Plc.
8. Guinness Nigeria Plc.	18. Nigerian Ropes Plc.
9. International Breweries Plc.	19. Ashaka Cement Plc.
10. Vita Foam Nigeria Plc.	20. Cement Company of Northern Nigeria Plc.

3.3. Sources and Method of Data Collection.

Secondary data from annual reports and accounts of the sampled firms under study for the period of ten years (2003 – 2016) are used.

4. Data Analysis

4.1. Description of research variables

Dependent variables

In the study Operating Profit (OP) represents the dependent variable. Operating Profit (OP) is a financial metric used to access firms' operational efficiency by revealing the proportion of money left over after accounting for cost of goods sold and other operating expenses. Operating Profit margin ratio measures the relationship between net profit before tax, interest, finance income and financial cost.

Independent variables

The independent variable for the study is proportionate of non-executive directors who have oversight functions in the organization over total number of directors in the organization in a period of time.

Key:
OP = Operating Profit;
NED = Non-Executive Directors;
TND = Total Number of Directors.

Based on the following the independent variables and the dependent variable can be quantified as follows:

(i) Model Specification

Linear regression in the form: $Y = \beta_0 + \beta_1 X_1 + \ldots \beta_n X_n$ (1)

4.2. Result Presentations

Descriptive Statistics

Discussion on the descriptive statistics of the data collected for the study is presented below. The summary of the descriptive statistics of the data collected is presented in Table 1 as follows:

Table 1. Descriptive Statistics of the Variables: All firms (2003 to 2016)

VAR	MIN	MAX	MEAN	STD	SKY	KUR	N
OP	0.25	103	48	22	0.57	0.64	200
pNED	15	530	160	97	1.18	1.58	200

Source: STATA Output

Table 1 show that our measure of operational profit (OP) has a minimum value of 0.25 and 103 as the maximum value. The average value of the OP is 48 with standard deviation of 22, which implies that the deviations from both side of the mean value is 22. From the above, the implication is that there is a wide dispersion of the data (operational profit of listed manufacturing firms in Nigeria under study). The standard deviation is closer to the mean whereas the kurtosis value which is -0.64 suggests that majority of the data are not higher than mean; also, the data is positively skewed as evidenced by the skewness coefficient value of 0.57 and thus, symmetrical distribution assumption was not met by the data. The table

also indicates that on average, proportion of non-executive directors' has a score of 160 with standard deviation of 97, implying that the deviation from the mean is 97 in the sample firms. The minimum and maximum values of pNED 15 and 530 respectively. The coefficient of skewness = 1.18 indicates that the data is positively skewed, that is, the data did not meet the symmetrical distribution requirement. Similarly, the coefficient of kurtosis of 1.58 implies that the Gaussian distribution is not met.

Table 2. Results of Normality Test

Variables	W/E	V/Con.index	Z -order	Prob>Z	N
OP	4.459	1.000	2.247	0.012	200
pNED	0.254	4.192	-.171	-0.194	200

Source: STATA Output

The variables of the study are subjected to Shapiro-Wilk (W) test for data normality; also test of the null hypothesis (that the data is normal), that is, whether the variable came from a normally distributed population is carried out. From the result in Table 4.3 above, there is indication that the data collated for all the variables are not normally distributed ass supported by the P-values which are significant at .01 (1%) level of significance (pNED >Z value of -0.194, and 0.015 respectively): and .05 (5%) level of significance (consider OP Prob>Z value of 0.012). Based on the above, the alternate hypothesis (that, the data is normally distributed) is therefore confirmed. Consequently, the implication may affect the results since there is an assumption that most of the parametric tools of analysis including regression are normally distributed.

Table 3. Summary of Regression Result of the Model of the Study

OLS Model	
Variables	**Statistics**
R^2	0.8219201043
Adj. R-Square	0.71252
Anova. Sign.of (F)	0.02923

Source: STATA Output

Table 3 shows R-Square value of 0.829 or 82%. This shows how well the regression line approximates the real data. This number tells how much of the output variable's variance is explained by the input variables' variance. A threshold of at least 0.6 (60%) or 0.7 (70%) is ideal. It should be noted thus that "Adjusted R Square is quoted most often when explaining the accuracy of the regression equation; adjusted R Square is more conservative than R Square because it is always less than R Square" is the reason for the use of the adjusted R in ascertaining the strength of predictability.

In table 3 Adjusted R-Square value of 0.71252 which is the same as 71% against thresholds of 60 to 70% with F-significant of 0.02923 which indicate that there is only2% chance that the Regression output was merely a chance occurrence. This shows that the regression model is accurate. Additionally "F value'' statistics test the overall significance of the regression model. The table shows that the overall model is fitted for the study as evidenced by F-Significance of 0.2923. When the regression parameters are non-zero there is implication that the regression coefficient is low value an evidence that at least some of equation does have some validity in fitting the data (i.e., there is lack of pure randomization among the independent variables with respect to the dependent variable). The time-series nature of data was the reason for choosing OLS regression in the analysis and hypotheses testing.

The output results as in Table 4 confirm that the independent variables, proportion of non-executive directors) explained 82% of the variability in the dependent variable, operational profit of the listed manufacturing firms in Nigeria with adjusted R2 value of 0.71252 or 71%. The remaining 29% of the operating efficiency are not covered under the model. The above result is an indication that proportion of non-executive influence operational profit significantly. This confirms the model's goodness of fit to explain the variations and validate that the independent variable affect the dependent variable.

4.3. Hypotheses testing

In this section, the study tested the hypotheses formulated; Table 6 presents the coefficients of the variables of the study from which the hypotheses are tested. The hypothesis tested was: H_0: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$ H_1: At least one of (β_1, β_2, β_3, β_4, β_5)≠0.

Table 4. Regression Coefficients of the Study (2003 to 2016)

Variables	*Coefficient*	*P-value*
Intercept/Constant	56.14584815	6.5005231
pNED	0.053800077	0.005899845

Taking a look from Table 4 above, although significant effect on the operational profit of Nigerian firms (manufacturing sector) as indicated by the coefficient of -0.06175656 with p-value of (0.004357858) significant at 1% probability level of significance, data observed confirm that pNED has a negative coefficient of -0.09416348 with a p-value of 0.0101306) which is statistically significant. Therefore the null hypothesis is rejected and alternate one is accepted. By implication, pNED has significantly affected the operational efficiency of Nigerian manufacturing firms within the research period.

5. Discussions and conclusions

The findings of pNED on operational profit of manufacturing firms in Nigeria showed that there are statistical significant effects on operational profit of Nigerian manufacturing firms within the timeline of the current research effort. The role of boards as a mechanism for corporate governance of firms listed at the NSE is of special relevance in a framework of limited competition, intense regulation, and higher informational asymmetries due to the complexity of running such firms. Thus, the board becomes a key mechanism to monitor managers" behavior and to advise them on strategy identification and implementation". Directors' specific knowledge of the complexity of the firm's business enables them to monitor and advice managers efficiently.

The findings of pNED on operational profit of manufacturing firms in Nigeria showed that there are statistical significant effects on operational profit of Nigerian manufacturing firms within the timeline of the current research effort. Findings of the current research showed that proportion number of directors to a large extent affects operational profit of manufacturing firms. Therefore, it can be concluded that manufacturing firms in Nigeria can increase their efficiency as well as overall profitability by maintaining a balanced non-executive members in their firm; as a result the firms can maximize their operational efficiency and profitability. Specifically, conclusion on the current findings can be drawn that, proportionate number of non-executive director has a statistical significant negative effect on the operational efficiency of manufacturing firms in Nigeria.

6. Recommendations

The board should make steps in ensuring stakeholders are involved in the managerial activities as executives, so as to work towards the protection of the firm. This can lead to better financial performance of the firm since proportionate number of non-executive directors had an influence on the operating profit on the sampled firms under study.

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