



# THE IMPACT OF BOARD COMPOSITION ON PROFITABILITY OF LISTED NIGERIAN FIRMS

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## ABSTRACT

*This work aims at finding out the relationship between main board composition factors and firm's profitability of Nigeria firms listed on the Nigeria Stock Exchange. Appropriate statistical tools of correlation was used. The paper identified the association between the variables, with sample of 63 listed firms, data from 2014 to 2018 was used. The study uses quantitative method. It was discovered that there is no significant relationship between some of the board composition factors namely- number of board of directors, percentage of independent directors and experience of board member and the profitability measure (Av. ROE) of Nigerian large firms. In case of the proportion of female directors, the paper found a significant correlation between the firm profitability measure (Av. ROE) and percentage of female directors of Nigerian large firms.*

**KEYWORDS:** *Corporate Governance; Board of Directors, Profitability Measurements and CEO*

## INTRODUCTION

It can broadly be defined as a mechanism which focuses on the combination of applicable laws, regulations, and listing rules that facilitate directing and monitoring corporations' affairs in attracting capital and performing effectively and efficiently to increase shareholders' value (Rezaee and Riley, 2009).

Board is the major component of corporate governance like chief executive officer (CEO), shareholders, stakeholders or community in general. The board is authorized to decide on the operations, management, and strategy of the company on behalf of the shareholders. Since, they represent their interests. In other words, it has influence on the future viability and continuity of the company.

The image of good corporate governance enhances the reputation of the organization and makes it more attractive to customers, investors, suppliers (Lipman, and Lipman, 2006). Aguilera

and Cazorra (2009, p.377) mentioned some universal principles of codes of good governance for effective corporate governance that are common to most countries.

The main goal of this study is to analyze the level of correlation between selected board composition factors and accounting profitability of the firm; by using appropriate statistical tools of correlation we aim to identify the association of selected variables. The paper used four variables to access the board compositions which are: number of board of directors, independency, experience of board of directors and the proportion of female.

## OBJECTIVE OF THE STUDY

The main purpose of this study is to assess the impact of board composition on profitability of listed Nigerian Firms.

## RESEARCH QUESTIONS

To what extent does board composition impacts on profitability profits of listed firms in Nigeria?

## RESEARCH HYPOTHESIS

**H<sub>0</sub>:** Board composition has no significant impact on the profitability of firms listed in Nigeria.

## REVIEW OF RELATED LITERATURES

### 2.1 Definition and Concept of Corporate Governance

“Corporate governance is a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance are determined (Hand, Isaaks, and Sanderson, 2004).”

The concept of corporate governance has made boards of organizations popular and critical. Shareholders in a publicly held corporation cannot represent themselves therefore they have to select others to perform that function for them. They have to elect a specified number of qualified and respected people to represent their interests as members of a corporation’s board of directors. As a result, together with management boards pursue objectives that are in the interests of the organization and its stakeholders, facilitate effective monitoring and encourage an organization to use its resources more efficiently (Kiel and Nicholson, 2003).

### 2.2 Theoretical Framework

#### 2.2.1 Agency Theory

Agency theory explains the conflict of interests between the shareholders-principal and managers-agent and the separation of ownership and control. This has been one of the most controversial issues in the financial literature (Ehikioya, 2009). These days, more attention is given to directors and executives pursuing their own interests, by investing and expanding their own asset in contrast to increasing the return to their shareholders. Since agency problem has influence on the structure and composition of boards, it continues to be important in governance terms, on the requirements for disclosure, and on the balance of power between shareholders and directors (Cadbury, 2002).

Most literature on the theory of the firm and corporate governance suggest that the agency problem that arises with absentee ownership can be reduced by a firm’s board of directors (BOD) which is an important institution for mitigating the conflict. The agency problem in this context is that the interests of management may differ from the interests of the

shareholders for whom the BOD work (Murphy and McIntyre, 2007).

### 2.3 Board of Directors

The board of directors is a group of elected individuals whose primary responsibility is to act in the owners’ best interests by formally monitoring and controlling the corporation’s top-level executives (Hitt et al., 2009).

In many countries in Europe, two tier board structures are a legal requirement for large companies. The two-tier system has benefits over the one-tier system since it allows a clearer separation between the supervisory body and the executive being supervised though the one-tier system allows closer relationships and better flow of information between directors and executives (Clarke, 2007).

BOD that deals with complex issues under potentially ambiguous task and role situations can be viewed as organizational teams. There are three important elements in corporate board structure namely the CEOs, who are the inside directors and are in most cases top managers of the firm, and outside directors, and all have the knowhow of what a good and a bad project is (Kyereboah-Coleman and Biekpe, 2007). Generally it can be said that directors of the company may be classified in two types: executive- the ones who are delegated some executive powers and are supposed to run the company. And the non- executive boards are boards that have some contractual relationship with the firm and they provide independent counsel to the firm.

#### 2.3.3 Board Composition

Board of director literature tells us, board composition can impact organizational performance. In this paper, four conceptual board composition drivers are developed to explain the factors’ impacting on firm’s performance. Namely board size, board independence, board member gender and board competency.

#### 2.3.4 Board Size

Determinants of corporate boards’ sizes become significant especially when corporate boards have been the focus of attention for some time now. (Kim and Nofsinger 2007) have made research and argued that large corporate boards may be less efficient due to the difficulties in solving agency problem among members of the board. Large board creates less value than small boards. When boards become too big, director free riding increase within the board and the board becomes more symbolic and less a part of the management process. That means for a board with few directors, each board member may feel to add more effort, as they each become conscious that there are only a few others monitoring the firm.

### 2.3.5 Board Independence

Mallin (2006) defined independent directors as directors who apart from receiving a director's remuneration do not have any other material pecuniary relationship or transactions with the company, its promoters, its management or its subsidiaries, in which the judgment of the board may affect their independence of judgment. Independence is not only a function of the proportion of inside to outside directors, rather it includes whether the board has dual leadership role and the degree of director share ownership. Like boards with heavy share ownership, boards with dual leadership are considered less independent (Murphy and McIntyre, 2007).

### 2.3.6 Board Member Gender

In many countries, the question concerning getting more women on boards and in top executive jobs become a highly debated issue. For example, in Norway's case, the political initiatives are regulating the proportion of women among board members. The results to Danish firms also showed to some extent supporting the view that a more gender diversity in top management positions would improve the financial performance (Smith, Smith and Verner, 2006). It is argued that women directors on corporate boards offer many contributions. Corporations can gain competitive advantage by being receptive to women's contribution at the top (Huse and Solb, 2006).

### 2.3.7 Board Competency

According to Ollendick and Prinz (1993) age uses as a proxy for competence, people of certain age are presumptively competent and their competence may be challenged for cause. It is believed that knowledge, skills and experience gained through age. A profile of the types of skills and experience needed on the board is created as a first step for nominating a committee. This list depends on the business in which the company engages and the strategy it expects to employ.

### 3.3.3 Board Composition

According to the Nigeria's Corporate Governance Code, the board is supposed to have a composition appropriate to the company's operations, phase of development and other relevant circumstances. The board members must fulfill the following criteria; first they must have diversity and breadth of qualifications, experience and background. Second, there should be equal gender distribution among board members and no more than one member of the board is expected to hold a position in executive management of the company or a subsidiary (IBID).

### 3.4. Profitability Measurements

Management's operating effectiveness is proven if the company can prosper, obtain funding, and reward the suppliers of its funds (Friedlob and Plewa, 1996).

Financial performance, measures of profitability and market value, and others, are considered as indicators of how well the firm satisfies its owners and shareholders. The ultimate goal for most firms is to increase their financial performance, particularly for public firms in shareholder value (Blocher et al., 2008).

### ROE

Return on equity (ROE) is a percentage determined by dividing profit to equity i.e. pretax profits from the profit and loss statement and equity or net worth from statement of financial position. The result represents the return you have made on the naira that you invested in your business. ROE ratio tells us how much profit a business earned in comparison to the book value of its shareholder's equity. It is useful especially for privately owned business, which is hard to determine the market value of owners' equity.

### Profit Margin

Profit margin is the most commonly and popular system used to measure corporate operations and judging a company's performance. It is computed by dividing the amount of net profit by gross sales. The profit margin is not fully understood by people invested in the market, though; it is often used for comparative purpose between companies and historical analysis. As a consequence, profit margin is expected unrealistically by market analysts and investors.

### Return on Investment

ROI is a traditional performance management tool. DuPont Power Company developed it in the early 1900s to help manage the vertically integrated enterprise. It is used to evaluate the performance of the company or its department by comparing its accounting measure of income to its accounting measure of investment. The formula to measure ROI is:

ROI = Income/ Investment.

## 3.0 RESEARCH METHODOLOGY

This section describes the method that was adopted to achieve the aim of the study. These include; the research design, population, sampling technique, sample size, research instruments, data collection procedures, data analysis and presentations, statistical model and hypothesis testing.

### 3.1 Research Design

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. In a cross sectional survey, data is collected at a point in time from a sample selected to describe some larger population.

**3.2 Population of the study**

The population of the study is made up of the entire 163 large firms listed on the Nigerian Stock Exchange as at December 2018.

**Sample**

Sixty three 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).

**Method of Data Collection.**

Secondary data from annual reports and accounts of the sampled firms under study for the period of ten years (2014 – 2018) were used.

**4.5 Data Analysis**

	N	Minimum	Maximum	Mean	Std. Deviation
Board size	63	5	16	10.75	2.811
Valid N (list wise)	63				

**Table 1: The Descriptive Statistics of Board Size**

From the above table we can see that, the average number of board size in Nigeria listed companies range from 10 to 11 and standard deviation of 2.811 .The values ranging with minimum 5 to maximum of 16.

For the 63 sample size we found a sample mean of 10.75 and a standard deviation of 2.811.Coefficient of variation =2.811/ 10.75=0.2615. In other words the coefficient of variation tells us that the sample standard deviation is 26.15% of the value of the sample mean.

Table 2 shows the percentage of independent directors, we measure board independency with percentage of outside directors over the total number

Analysis of hypothesis is based on four variables to assess the board compositions which are: number of board directors, independency, experience (competency) of board directors and the proportion of female. Then we will measure the performance of the company with an accounting perspective by taking return on equity as a measure of the accounting performance of the firm i.e. AV.ROE since ROE is the best way to measure shareholders return.

**RESULTS**

**5.1 Descriptive Statistics of Our Sample**

Here is the descriptive statistics for the sample of companies listed in the Nigerian Stock Exchange (NSE). A total of 63 firms with 5 years observations were used to perform the research.

of directors. The average percentage of board independency is 65.66 and its standard deviation is 17.55.The values ranging with minimum 29 to maximum of 100.

To know how large the standard deviation in relation to the mean, we calculated coefficient of variation. For the 63 sample size as we mentioned above we found a sample mean of 65.66 and a standard deviation of 17.551.Coefficient of variation =17.551/ 65.66=0.2673. In other words the coefficient of variation tells us that the sample standard deviation is 26.73% of the value of the sample mean.

	N	Minimum	Maximum	Mean	Std. Deviation
% of independent directors	63	29	100	65.66	17.551
Valid N (listwise)	63				

**Table 2: The Descriptive Statistics for % of Independent Directors**

Table 3, present information regarding to the competency of board of directors with mean value of approximately 55. We use age as measure of the competency (experience) hence it includes all the knowledge the directors could get through their experience. The values ranging from 48 to 63.And the standard deviation is 3.345.

To know how large the standard deviation in relation to the mean, we calculated coefficient of variation. For the 63 sample size as we mentioned above we found a sample mean of 55.19 and a standard deviation of 3.345.Coefficient of variation =3.345/ 55.19=0.0606. It tells us that the sample standard deviation is 6.06% of the value of the sample mean.

	N	Minimum	Maximum	Mean	Std. Deviation
Age of Board of directors	63	48	63	55.19	3.345
Valid N (listwise)	63				

**Table 3: The Descriptive Statistics of Age of Board Directors**

Table 4 which show the statistical description of our last variable: % of female directors. On average the percentage of females who work as board of directors in Nigerian listed firms is 21 i.e. from total directors 21% are female. The value ranges with minimum of 0

and maximum of 67 and value which deviates from the mean is 12.87. In other words the coefficient of variation tells us that the sample standard deviation is 61.06% of the value of the sample mean.

**Descriptive Statistics % of Female Directors**

	N	Minimum	Maximum	Mean	Std. Deviation
% of female Directors	63	0	67	21.07	12.866
Valid N (list wise)	63				

**Table 4: The Descriptive Statistics of our sample**

The following table describes the average return on equity of listed firms in Nigeria. For the 63 sample size we found a sample mean of 19.84 and a standard deviation of 21.93. Coefficient of variation =  $21.92697 / 19.8393 = 1.1056$ . In other words the coefficient of variation tells us that the sample

standard deviation is 110.56% of the value of the sample mean.

**Descriptive Statistics Average Return on Equity**

	N	Minimum	Maximum	Mean	Std. Deviation
Average Return on Equity	63	-8.31	148.16	19.8393	21.92697
Valid N (list wise)	63				

**Table 5: The Descriptive Statistics of our 63 case**

		63	63
Board size	Pearson Correlation	0.134	1
	Sig. (2-tailed)	0.294	
	N	63	63

**Table 6: The Correlation result of Board Size and Return on Equity**

At 95 % level of confidence, the null hypothesis cannot be rejected because the error limit is 29.4%. That means the correlation for our sixty three cases is 0.134 which indicates that, there is a weak relationship between our variables: board size and AV.ROE. Then, when we test the significance of

the relationship to accept the error limit we obtained amount which is far from minimum limit of 5% so we cannot reject our null hypothesis. This correlation result is inconsistency with the prior studies. (Kim and Nofsinger, 2007)

**SUMMARY OF FINDINGS**

Variables	No.of Cases	r	Significant Level	Result
Board Size	63	0.134	0.294	Accept Ho
%age of Independent Directors	63	-0.087	0.497	Accept Ho
Average Age of Board Members	63	-0.087	0.496	Accept Ho
%age of Female Director	63	0.295	0.019	Reject Ho

**Table 10: Summary of Findings of Correlation**

Table 10 shows the summary of correlation results of all variables. Regarding board size, %age of independent directors and average age of board members, even if the level of correlation (r) is different from zero its significant level test shows a value far above 5% so we are obliged to accept the null hypothesis. Whereas for the %age of female directors the significant level of the observed correlation i.e. 29.5% is below the 5% limit so we reject the null hypothesis (accept the alternative hypothesis).

**6. CONCLUSION**

The purpose of this study is to analyze the level of correlation between selected board composition factors and profitability of the firm. To meet this purpose the paper draw conclusion and answer research question.

What is the relationship between main board composition factors and firm’s profitability?

When answering the research question the researcher took selected board composition factors namely: number of directors, independency of directors, experience of board of directors and the proportion of female directors and their impact on profitability of the Nigeria listed firms. The study is based on the final sample size of 63 listed Nigerian firms. Pearson’s correlation coefficient (r) was used to examine the relationship between board composition factors on profitability of the firm (Av. ROE) and the following results were found.

Considering the relationship between number of directors and the accounting profitability measure (Av. ROE), we found no significant relationship between

them. This means our results show the change in number of directors does not have significant contribution on profitability of Nigerian listed large firms.

Regarding the correlation between percentages of independent directors and accounting profitability measure (Av. ROE), the same result was found like board size. It implies that the firm may record profit regardless of whether they are governed by more insider dominated board of directors or not.

Here we are considering the relationship between board competency and the profitability measurement (Av. ROE). The result shows the experience and the qualification of board member does not relate with the firm’s profitability record.

Whereas, in the case of the proportion of female directors, we obtained a significant correlation between the profitability measure (Av. ROE) and percentage of female directors. Firms which have high proportion of female directors show higher average return on equity (Av.ROE).

In general we conclude that some of the board composition drivers such as board size, independency of board member and competency of director do not have significant impact on profitability of listed firms in Nigeria. However proportion of female directors has a positive impact on profitability of Nigerian listed firms.

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