Impact of Board Characteristics on the Profitability of Listed Service Firms in Nigeria

John N. Nwankwo¹ and Leonard C. Uguru²

¹Postgraduate Student, Department of Accountancy, Ebonyi State University, Abakaliki, Nigeria
²Department of Accountancy, Ebonyi State University, Abakaliki, Nigeria

ABSTRACT
This study examined the impact of board characteristics on profitability of listed service firms in Nigeria. Specifically, it focused on determining the effects of board composition, board size and board gender on the profitability of listed service firms in Nigeria. The study adopted ex-post-facto design using secondary data collected from annual accounts and reports of selected listed service firms in Nigerian Stock Exchange (NSE) covering twenty (20) firms over a period of ten years (2011 to 2020). The ordinary least square panel regression analysis was used for the data analysis applying Generalized Method of Moment (GMM) analysis. The study found that board characteristics have strong effects on the listed service firms’ profitability. Specifically, the board size and board composition have significant positive effects on service firms’ profitability while board gender has insignificant negative effect on listed service firms’ profitability. The study recommended that the firms should increase as much as possible the board size bearing in mind Nigeria Securities and Exchange Commission corporate governance Code requirement of minimum of five and maximum of fifteen members. Also, both gender (male and female) should be appointed into board of directors providing that they are qualified and willing to serve. However, the optimal board size in relation to the scale of the firm’s operation and legal provisions should always be taken into consideration in deciding the ultimate board size.

KEYWORDS: Board Size, Board Composition, Board Gender Diversity, Profitability, Service Firms

Received 10 July, 2022; Revised 23 July, 2022; Accepted 25 July, 2022 © The author(s) 2022.
Published with open access at www.questjournals.org

I. INTRODUCTION

For all companies operating in Nigeria, the Nigerian Federal Government issued a unified corporate governance code known as "the Nigerian Code of Corporate Governance 2018" in January 2019. The code’s principal objectives were to ensure best practices in corporate governance in Nigeria in order to promote investors’ confidence in the Nigerian economy and provide a sustainable business environment for the investors to operate. It approves a mix of Executive Directors (EDs) and Non-Executive Directors (NEDs), as well as corporations’ ability to decide the size and composition of their board of directors according to sector-specific norms. Equally, the code requires annual independent consultants’ evaluation of the Board and its committees’ performance [1]. Therefore, the code emphasizes the importance of ensuring effective board of directors in every company in Nigeria.

Generally, director according to [2] is an individual properly elected by the shareholders or their representatives to direct and manage the affairs of a company. As a result, according to [3], the board of directors is a group of individuals charged with overseeing the management of a firm on behalf of the shareholders and giving a report to them at least once a year. Agency theory proponents suggest that, for the shareholders’ wealth maximization objective to be protected and assured, the board of directors must be effective and efficient on their oversight functions [4]. Some elements, such as board composition, board size, board gender diversity, ethnic diversity, and foreign directorship, influence the performance of the board of directors in overseeing the company’s activities [5], [6] and [7].

[8] define Board characteristics as the attributes of the corporate board which can be used as a way of promoting their effectiveness and efficiency in managing the activities of the firm. Effective board characteristics would increase the possibility that shareholders’ fund utilization would be monitored well indirectly through the board of directors which definitely would safeguard the shareholders’ investment [9].
Moreover, the success or failure of any firm is highly related with the role acted by those charges with the governance and the firm’s corporate governance practices [8].

On the other hand, a listed service firm is a firm quoted in the stock market which provides intangible products that satisfy human wants. The firm must be a public limited company as it is perquisite for listing firms in stock market [10]. A public limited company is a separate legal entity which no particular persons owns rather it is controlled by many [11].

The shareholders wealth dwindling and corporate failure in recent have been greatly attributed to ineffective board of directors. In Nigeria, a number of corporate failure such as Wema bank, Fin bank, Spring Bank, All State Trust Bank and so, have been recorded and publicly blamed to be as result of account improprieties and ineffective board of directors [4]. Surely, there is need for the board of directors to be more effective and efficient in the utilization of shareholders’ fund for income generation and betterment of all the company’s stakeholders’ one then wonders how the board characteristics have facilitated and promoted the oversight functions of board of directors. The extent board characteristics affect profitability of listed service firms in the Nigerian Stock Exchange is yet to be adequately investigated. In this context, the purpose of this research is to determine the impact of board characteristics on the profitability of listed service organizations in Nigeria from 2011 to 2020.

II. REVIEW OF RELATED LITERATURE AND HYPOTHESIS DEVELOPMENT

2.1 Corporate Governance as a Background to Board Characteristics

Corporate governance is the process of directing and managing a company's activities in the best interests of its shareholders and other stakeholders [12]. The company’s boards are the apex influential decision making unit of a corporation, [13]. Section 305 of CAMA states that the company board should carried its fiduciary duties to the company and show utmost good faith towards the company in any business dealings with the company or on behalf of the company. The corporate boards are expected to ensure the company assets are safeguarded, utilized in the best interest of the company members considering the firm’s environment and carry out their duties with integrity, diligence, high skills and due care. Section 306 emphasized that the director’s personal interest shall not conflict with the companies’ interest in performing of their duties. Deductively, the board of directors plays a vital role in the survival and good performance of a company. Board characteristics are features of board of director such as the size, executive directors and non-executive directors’ mix, the gender mix of the board, the ages of directors in board, the length of experience in years, the race of the board members, [14](Thakolwiro & Sithipolvanichgul, 2021).

2.2 Listed Service Firms in Nigeria

According to Business Dictionary, service industry is an industry made up of companies that primarily team revenue through providing intangible products and services. Service industry companies are involved in retail, transport, distribution, food services as well as other service-dominated business. It is also called “service sector, or tertiary sector of industry”. [15] noted that the Nigerian services sector comprises of electricity, water, building and construction, road, rail, ocean, and air transport, communication, wholesale and retailing business, hotel and restaurants, financial services, real estate, housing (dwelling), private non-profit activities, as well as repairs and other services. However, for the purpose of this study, the listed service firms are classified into six sectors: Consumer services, Financials, Industrial-training, Technology (Technology and Telecom), Oil and gas distribution, and Health care in line with NGX classification of the Sectors with little modifications. Some of the sub-sectors are dominated by public activities especially in electricity, water, rail and ocean transport and communication services. [16] states that service firms play an increasingly significant role in Nigeria economy, and are expected to grow fast given the growth prospects and the various internationalization policies of the federal government. Sequel to this, it is important for the board characteristics of a listed service firms to include members with more vision and a longer-term perspective than an external board members so they may shape the strategic direction of the firms and ensure it continues on tracks [17].

2.3 Profitability and its measures.

The profitability of a firm is useful in ascertaining the quality of managerial decisions in the utilization of the economic resources at the disposal of a firm [18]. Profitability is the primary goal of every privately owned business enterprises [19]. The objective of managerial decision is usually to achieve maximum economics results that will boost the firm’s competitive advantage, maximize shareholders’ wealth while satisfying the interests of other stakeholders of the organizations [18]. Profitability in economics terms refers to a positive outcome of business expressed in relation to some variable used in making the profit. Therefore, profitability is a relative measure of absolute profit with respect to some variables utilized in the achievement of the profit. Ignoring the interests of all other stakeholders and focusing only on the
shareholders might be devastating to firm in long run and promoting maximizing the shareholders’ interest. This primary aim of firm’s wealth maximization is achievable only when there is suitable profitability in the organization. Hence, sustained profitability is imperative to every business that wishes to grow and expand. Profitability can be measured in different ways which include gross margin, operating margin, net profit margin, return on equity and return on assets.

2.4 Board of Directors Size and Profitability

The size of board of directors is the total persons serving as members of the firm board at a particular time. The number of the corporate board is observed as being among the peculiar characteristics which significant and strategic effect on the board objectively and the standard in an organization [20]; [21]. The board size is important tool for the achievement of the board effectiveness and efficiency in utilization of organizational resources for the pursuit of its corporate objectives [22]. The size of the board of director affects the number of persons that a corporate board can accommodate for quality deliberation which will lead to high strategic economic decisions that could facilitate the achievement of the corporate objectives. Even with the guidance of good corporate governance, the challenge of determining an appropriate board size remains unsolved because no consensus has been established. Many corporate governance literature favors board sizes between five and fifteen members. [23] advocates for a minimum of seven persons and the maximum of nine persons as members. [20] cited in [23] suggested eight-director member board as an optimal board in terms of size. Equally, [24] was cited in [23] to approve board size of five which enjoyed the empirical findings of the study. The importance of an appropriate board size in the corporate board cannot be overemphasized as that can limited the chance of having a good size to accommodate correct number of persons for good debates and deliberations economics and strategic decisions are taken in the organization.

In Nigeria, the revised code of corporate governance 2011 specifies that minimum of five (5) board members for every public company though it does not specify the maximum rather that actual corporate board size is determined by the complexity and scale of operation of the company [25]. Previous studies have divergence views over the relationship between board size and the profitability of a firm. Some supported smaller board size members as appropriate to unit cost and facilitate quick decisions making [20]; [26]; [27] and [28]. On the other hand, [29]; [30]; [31] and [32] advocated for larger board size as it allows for the room to include necessary professionals and expertise required for good deliberation and optimal decision making. With the ambiguous results from different studies as seen above in their attempt to explain the relationship that exist between board of directors size and profitability of firms, we therefore decided to conduct this study and focused on listed service firms in an emerging economy. Hence we hypothesize as follows:

\[ H_0: \] The size of board of directors has no significant relationship on the profitability of listed service firms in Nigeria.

2.5. Board Gender and Profitability

Gender diversity refers to the proportion of female directors on a board of directors to the total number of directors on a board of directors at any given period. Female board members, according to [33], are fair and unbiased in their decision-making and contributions because they are not part of the organization’s “Old boys” network. Women have been found to be considerable and loyal to their organization when placed in leadership position [34]. Critical mass theory states that a minimum of three (3) minority group members is essential to positively influence the board of directors for optimal performance in monitoring and strategic decisions of the organization [35]. Also, the Central Bank of Nigeria (CBN) through her banker’s committee made it compulsory that female should have at least 30 percent representation in board formation of deposit money banks in the country [36].

Previous studies have revealed a mix of results, between gender diversity and firms’ performance, [37], [38] and [39] found a positive significant relationship between board gender diversity and firm’s performance. [40] and [41], on the other hand, discovered an inverse negligible link between gender diversity and financial performance of enterprises. However, [42] found that there is no relationship between board gender diversity and firms’ financial performance. Based on the controversy of the results of previous studies, this study therefore hypothesizes that:

\[ H_{02}: \] Board gender has no significant impact on the profitability of listed service enterprises in Nigeria.

2.6 Board Composition and Profitability

Board composition is the ratio of non-executive directors in relation to the total number of directors on the board at any given time [3]. Non-executive directors are members of the board of directors who do not hold a managerial role in the firm or participate in its day-to-day operations. According to Section 4.1 of Nigerian Corporate Governance 2011, the board of directors should be comprised of executive and non-executive
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directors to enhance diverse experience, expertise, and professionalism for those charged with governance of the organization. The code stipulates at least one (1) independent non-Executive director among the minimum of five (5) members board of directors. However, according to the 2015 Nigerian Code of Corporate Governance, the number of executive directors on a board shall not exceed one-third of the board members at any given moment. This means that non-executive directors should form a maximum of 77.78% in the board of directors. The aim is to ensure critical management which takes the appropriate economic decisions in the stakeholder’s interest which result in better performance and higher profitability for the organization [43]. Previous research on the effects of board composition on business financial performance has yielded mixed results. Some studies found a positive substantial association between non-executive directors serving on the board and business financial success [44], [3] and [45]. On the hand, a number of studies have observed a negative significant relationship between non-executive directors and firms financial performance which include but not limited to [46], [47] and [48]. Based on the above controversy on the effect of board composition and financial performance, the study then hypothesized that:

\( H_0 \); Board composition has no significant effect on the profitability of listed service firms in Nigeria.

III. THEORETICAL FRAMEWORK

3.1 Stakeholder Theory

The stakeholder theory is adopted by this research since it is very relevant for the success of a business which depends on the activities of its different stakeholders. The term stakeholders refer to all persons, groups, or organizations that have an impact on the company's activity or are influenced by the company [49]. The stakeholders include the owners/shareholders, investors, employees, customers, suppliers, business partners, competitors, the government, the public and so on [50]. Each of these parts somehow interacts and influences the business of a company directly or indirectly. Numerous articles and books written on stakeholder theory generally credit Mr. Edward Freeman as the father of stakeholder theory from the Freeman's Strategic Management published in 1984 [51].

Stakeholder theory extends the concept of ownership of the firm beyond that of the traditional legal or economic owners of the firm, who become a stakeholder by contribution of capital or other means that results in equity ownership”. Without a doubt, the activities of each of the stakeholders have an impact on the profitability of the listed service in Nigeria, and good corporate governance emphasizes that they should all be treated equally. Hence, stakeholder theory is considered appropriate for this work as it is in line with corporate governance strive.

3.2 Agency Theory

The agency theory is another theory adopted by this study because it deals with board characteristics which is derived from Board of Directors (BOD) being the agent of shareholders thereby creating agency relationship. Because executives are self-interested and opportunistic, and have divergent aims and risk preferences, agency theory posits that separation of ownership and control might result in a conflict of interest between management and shareholders [52], [53]. It is stated that the board of directors is an important instrument for monitoring and controlling CEOs from pursuing their own interests at the expense of the wealth of shareholders [54] and [55]. In order to strengthen the board's independence and successfully perform its oversight responsibility, the Agency theory proposes a large number of independent outside directors on the board and separation of the Chief Executive Officer (CEO) and Chairperson of the Board (COB) responsibilities [56].

IV. METHODOLOGY

4.1 Research Design

This study uses Ex-post-facto design since the description of ex-post-facto design is in line with the study's goal. An Ex-post-facto design is one in which an existing case is watched for a period of time, or at intervals, in order to research or evaluate it [57]. Secondary data was acquired from annual accounts and reports of chosen listed service organizations on the Nigerian stock exchange (NSE). The data was collected in a panel format and covered twenty publicly traded service companies over a period of ten years, from 2011 to 2020. The service industries identified include Consumer services, Financials, Health care, Industrial-Trainings, Oil and gas distribution, and Technology. Hence, descriptive statistical analytical tools were used to carry out empirical analysis of data collected in order to obtain intended objectives.
4.2 Description of Model Variables
The dependent variable in the study is profitability, which was measured using return on average total asset as its proxy. Whereas, the independent variable is board characteristics decomposed into board size, board composition and board gender diversity. Specifically the variable definitions could be summarized thus:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return on total Asset</td>
<td>Profit before interest and taxation (PBIT) as a percentage of average total asset for a financial year [58].</td>
<td>ROA</td>
</tr>
<tr>
<td>Board Size</td>
<td>The number of directors on the board of directors [59]</td>
<td>BS</td>
</tr>
<tr>
<td>Board Gender</td>
<td>The proportion of male directors to the total number of directors on the board of directors [60]</td>
<td>MD</td>
</tr>
<tr>
<td>Board Composition</td>
<td>The proportion of non executive directors to the total number of directors on the board of directors [29].</td>
<td>NED</td>
</tr>
<tr>
<td>Average Total Asset</td>
<td>The opening total asset plus closing total asset divided by two</td>
<td>ATA</td>
</tr>
<tr>
<td>Firm Age</td>
<td>The number of years the firm has been in operation from day of incorporation.</td>
<td>FA</td>
</tr>
<tr>
<td>Inflation Rate</td>
<td>The rate at which prices increase over time, resulting in a fall in the purchasing value of money.</td>
<td>INFR</td>
</tr>
</tbody>
</table>

Source: [58]; [59]; [60] and [29]

4.3 Model Specification
Since the data is of panel in nature consisting of both time series and cross sectional data, so ordinary least square panel regression was used for the purpose of analysis. The following regression equation is used in the estimation:

$$ ROA_i = \alpha_i + \beta_1 BS_i + \beta_2 BMD_i + \beta_3 BNED_i + \beta_4 AGE + \beta_5 ATA + \beta_6 INFR + \mu_i $$

In the above regression equation, ROA<sub>i</sub> represents the profitability of firm i at time t. BS<sub>i</sub>, BMD<sub>i</sub> and BNED<sub>i</sub> represent corporate governance structure variables of i at time t. \( \alpha_i \) and \( \mu_i \) stand for the intercept-control variable and standard error term respectively. \( \beta_1 \), \( \beta_2 \) and \( \beta_3 \) are slope of the co-efficient which influence the dependent and independent variables.

The data analysis technique that was used in this study is the multiple regression analysis. Data analysis software was employed where data become large and unease to analyze manually. Specifically, the researcher applied Generalized Method of Moment (GMM) analysis where necessary.

V. RESULTS AND DISCUSSION
Fixed effect and random effect models were explored in order to identify the proper model for regression analysis, and the Hausman test was utilized to select the optimal model for analysis. The results are listed below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>13.16967</td>
<td>10.59550</td>
<td>1.242949</td>
<td>0.2161</td>
</tr>
<tr>
<td>LBS</td>
<td>0.544938</td>
<td>0.926718</td>
<td>0.588029</td>
<td>0.5575</td>
</tr>
<tr>
<td>LMD</td>
<td>-1.356069</td>
<td>1.473272</td>
<td>-0.920447</td>
<td>0.3590</td>
</tr>
<tr>
<td>LINED</td>
<td>-1.159493</td>
<td>1.422404</td>
<td>-0.815165</td>
<td>0.4164</td>
</tr>
<tr>
<td>LAGE</td>
<td>0.055395</td>
<td>0.449781</td>
<td>0.123160</td>
<td>0.9022</td>
</tr>
<tr>
<td>LATA</td>
<td>-0.115247</td>
<td>0.297116</td>
<td>-0.387887</td>
<td>0.6987</td>
</tr>
<tr>
<td>LINF</td>
<td>-0.214350</td>
<td>0.364342</td>
<td>-0.588320</td>
<td>0.5573</td>
</tr>
</tbody>
</table>

Effects Specification

Cross-section fixed (dummy variables)

<table>
<thead>
<tr>
<th>R-squared</th>
<th>0.567589</th>
<th>Mean dependent var</th>
<th>1.288258</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-squared</td>
<td>0.486915</td>
<td>S.D. dependent var</td>
<td>1.540820</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>1.103688</td>
<td>Akaike info criterion</td>
<td>3.18258</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>163.2291</td>
<td>Schwarz criterion</td>
<td>3.682574</td>
</tr>
</tbody>
</table>
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**Corresponding Author:** John N. Nwankwo

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**Log likelihood**  
-228.6286  
**Hannan-Quinn criter.**  
3.385775  
**F-statistic**  
7.035614  
**Durbin-Watson stat**  
2.090295  
**Prob(F-statistic)**  
0.000000

**Source:** Researchers’ Compilation from E-view 9, 2022

The Fixed Effect Model (FEM) allowed for heterogeneity or individuality to have its own intercept value among the selected listed companies. The fixed effect model was chosen because it is time invariant, which means that while the intercept may change between different publicly traded businesses, it does not change over time. The R-squared value of 0.5676 implies that the explanatory variables BS, MD, NED, AGE, ATA, and INF with p-value 0.00000 of f explain 56.76 percent of the total variation in ROA. - statistic.

### Table 3: Random Effect Test Result.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-10.31724</td>
<td>4.946548</td>
<td>-2.085746</td>
<td>0.0387</td>
</tr>
<tr>
<td>LBS</td>
<td>1.267919</td>
<td>0.365268</td>
<td>3.471206</td>
<td>0.0007</td>
</tr>
<tr>
<td>LMD</td>
<td>-1.432860</td>
<td>0.935378</td>
<td>-1.531852</td>
<td>0.1276</td>
</tr>
<tr>
<td>LNED</td>
<td>3.350723</td>
<td>0.737729</td>
<td>4.541944</td>
<td>0.0000</td>
</tr>
<tr>
<td>LAGE</td>
<td>0.531868</td>
<td>0.151874</td>
<td>3.502033</td>
<td>0.0006</td>
</tr>
<tr>
<td>LATA</td>
<td>0.019322</td>
<td>0.104307</td>
<td>0.185244</td>
<td>0.8533</td>
</tr>
<tr>
<td>LINF</td>
<td>-0.383598</td>
<td>0.442352</td>
<td>-0.867178</td>
<td>0.3872</td>
</tr>
</tbody>
</table>

**R-squared**  
0.184686  
**Mean dependent var**  
1.288258  
**Adjusted R-squared**  
0.152713  
**S.D. dependent var**  
1.540820  
**Sum squared resid**  
307.7696  
**Akaike info criterion**  
3.579555  
**Schwarz criterion**  
3.714094  
**Log likelihood**  
-279.3644  
**Hannan-Quinn criter.**  
3.634186  
**F-statistic**  
5.776289  
**Durbin-Watson stat**  
1.154374  
**Prob(F-statistic)**  
0.000019

**Sources:** Researchers’ Computation from E-Views 9, 2022

In order to account for the unobserved effect in the fixed effect model, the random effect regression model was used. The random effect model yielded R-squares of 0.1847, indicating that the explanatory variables (BS, MD, NED, AGE, ATA, and INF) account for 18.47 percent of the overall differences in ROA). The p-value of f-statistics is 0.000019 for random effect and some of the independent variables are statistically signified such as board size, (BS), male/female director ratio (MD), non-executive director ratio at 0.0007, 0.0000 and 0.0006 respectively. This result seems to be better than fixed effect model result but only 18.47% of the reactions for the total variation for in dependent variable was explained here, hence, there is need to compare the result of fixed effect model with random model to know the better of the two. The Hausman test was used to choose the model (fixed effect or random effect), and it will be most suitable for estimate. The null hypothesis of the Hausman test is that the random effects model is correct, whereas the alternative hypothesis is that the fixed effects model is correct. The statistical insignificance of the p-value of the Hausman test determines whether to use a fixed effect or random effect model.

### Table 4: Correlated Random Effects - Hausman Test

**Equation:** Untitled  
**Test period random effects**

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period random</td>
<td>6.888943</td>
<td>5</td>
<td>0.2290</td>
</tr>
</tbody>
</table>

**WARNING:** estimated period random effects variance is zero.

<table>
<thead>
<tr>
<th>Period random effects test comparisons:</th>
<th>Fixed</th>
<th>Random</th>
<th>Var(Diff.)</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LBS</td>
<td>1.314490</td>
<td>1.267919</td>
<td>0.000844</td>
<td>0.1089</td>
</tr>
</tbody>
</table>

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From Table 4, the Hausman test statistics p-value is 22.9% (0.2290). It implies that its p-value is insignificant because it is greater than 5% (0.05) chosen level of significance. Thus, the null hypothesis was not rejected. Therefore, it is concluded that random effect model is desirable for prediction.

The Generalized Method of Moment (GMM) estimator was used to regress the data in order to evaluate the hypotheses of this study.

Table 5: Generalized Method of Moments (GMM)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-10.31724</td>
<td>4.918216</td>
<td>-2.097761</td>
<td>0.0376</td>
</tr>
<tr>
<td>LBS</td>
<td>1.267919</td>
<td>0.363176</td>
<td>3.491202</td>
<td>0.0006</td>
</tr>
<tr>
<td>LMD</td>
<td>-1.432860</td>
<td>0.930020</td>
<td>-1.540676</td>
<td>0.1255</td>
</tr>
<tr>
<td>LNED</td>
<td>3.350723</td>
<td>0.733503</td>
<td>4.568108</td>
<td>0.0000</td>
</tr>
<tr>
<td>LAGE</td>
<td>0.531868</td>
<td>0.151004</td>
<td>3.522206</td>
<td>0.0006</td>
</tr>
<tr>
<td>LATA</td>
<td>0.019322</td>
<td>0.103709</td>
<td>0.186311</td>
<td>0.8524</td>
</tr>
<tr>
<td>LINF</td>
<td>-0.383598</td>
<td>0.439818</td>
<td>-0.872173</td>
<td>0.3845</td>
</tr>
</tbody>
</table>

Effects Specification

<table>
<thead>
<tr>
<th></th>
<th>S.D.</th>
<th>Rho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period random</td>
<td>0.000000</td>
<td>0.0000</td>
</tr>
<tr>
<td>Idiosyncratic random</td>
<td>1.410173</td>
<td>1.0000</td>
</tr>
</tbody>
</table>

Weighted Statistics

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
<th>Description</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.184686</td>
<td>Mean dependent var</td>
<td>1.288258</td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.152713</td>
<td>S.D. dependent var</td>
<td>1.540820</td>
</tr>
<tr>
<td>S.E. of regression</td>
<td>1.418297</td>
<td>Sum squared resid</td>
<td>307.7696</td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>1.154374</td>
<td>J-statistic</td>
<td>153.0000</td>
</tr>
<tr>
<td>Instrument rank</td>
<td>10</td>
<td>Prob(J-statistic)</td>
<td>0.000000</td>
</tr>
</tbody>
</table>

Unweighted Statistics

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Value</th>
<th>Description</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-squared</td>
<td>0.184686</td>
<td>Mean dependent var</td>
<td>1.288258</td>
</tr>
<tr>
<td>Sum squared resid</td>
<td>307.7696</td>
<td>Durbin-Watson stat</td>
<td>1.154374</td>
</tr>
</tbody>
</table>

Source: Researchers’ Compilation from E-Views 9, 2022

The null hypothesis is rejected if the probability value corresponding to the variable, in this case board size in the GMM estimator, is less than 0.05, implying that the estimated parameter is statistically significant; otherwise, accept the null hypothesis, implying that the parameter is statistically insignificant. The probability value for B.S (0.0006) is less than 0.05 at a 5% level of significance. We reject the null hypothesis since the probability value of BS is less than 0.05, and we infer that board size has a significant positive effect on the probability of listed service firms in Nigeria.

This result is consistent with the findings of other studies such as [61]; [62]; [63]; [64]; [65] and [66], which found that there is a positive significant relationship between board size and performance. However, [67];
[68] and [69] on the other hand, concluded that there is a negative significant association between board size and firm performance.

In hypothesis 2, if the probability value corresponding to the variable in this case board gender (MD) in the GMM estimator is less than 0.05, reject the null hypothesis because it implies that the parameter estimated is statistically significant; otherwise, accept the null hypothesis, which implies that the parameter is statistically insignificant. The probability value (0.1255) is bigger than 0.05 at the 5% threshold of significance, making it statistically insignificant. We accept the null hypothesis and conclude that board gender has no bearing on the likelihood of a listed service firm in Nigeria”.

Some previous studies corroborated our finding. These include [70]; [71]; [72] and [73]. Their studies revealed negative insignificant influence on firms’ financial performance from board gender diversity. Also, [74], [75] and [76] found a negative relationship between gender diversity and profitability. However, [77], [78] and [79] found that there is positive significant relationship between board gender diversity and financial performance of firms which profitability is an indicator of good financial performance.

In the third hypothesis, if the probability value corresponding to the variable, in this case, board composition in the GMM estimator is less than 0.05, reject null hypothesis meaning that the parameter is statistically significant otherwise accept null hypothesis, meaning that the parameter is statistically insignificant. Because the probability value for board composition (0.0000) is smaller than 0.05 at 5% significance, we reject the null hypothesis and conclude that board composition has a significant positive impact on the profitability of Nigerian listed service firms.

This finding is in tandem with the results of [80]; [81]; [82]; [83] and [84]. This finding of the study, however, contradicts those of [85]; [86]; [87]; [88] and [49], who found a negative and significant relationship. In some other studies, no type of relationship at all was found [89]; [90] and [91].

VI. CONCLUSION

Board characteristics offered a formidable tool to the listed service firms to be used to ensure efficiency in utilization of the organizational resources to achieve the settled objectives of the firms. It is expected that adoption of strong board characteristics will promote fairness and transparency in distribution of profit generated by the service firms thereby boosting the stakeholders’ confidence. This study therefore, concludes that poor board characteristics, which present itself in the form of irrelative board size, imbalanced board gender diversity could be the reasons for poor performance of listed service firms in Nigeria. Hence, there is need to promote the adoption of strong board characteristics in Nigeria. The regulatory authorities should strengthen enforcement and monitoring mechanisms to achieve the adoption.

VII. RECOMMENDATIONS

This study therefore recommends that listed service firms in Nigeria should adopt strong board characteristics which help to ensure optimal profitability of the listed service firms in Nigeria. Specifically,

(i) Companies should adhere to the corporate governance code provision that board membership should not be less than five (5) nor exceed fifteen (15) persons for as a mere fulfillment of law but consider the nature of the company activities and appropriate board size required

(ii) Enterprises in Nigeria should increase the number of independent directors on their boards to improve the efficacy of non-executive directors. Firms should also adopt Derck Higg’s recommendation, which states that any person accepting an appointment as a new non-executive director must conduct due diligence on the board and the company to ensure that they have the knowledge, skills, experience, and time to make a positive contribution to the board and the company in general.

(iii) Based on the results of board gender diversity, listed service businesses should not focus on expanding the quota of female directors serving on the board, as this will not help to increase the companies’ profitability potential. Rather, they should concentrate on developing a crop of people who can ensure operational efficiency, superior services, and cost-effective pricing.

REFERENCES


Corresponding Author: John N. Nwankwo


Impact Of Board Characteristics On The Profitability Of Listed Service Firms In Nigeria


[68]. Nwonyu, K.N. (2016). Corporate Governance and Profitability of Listed Food and Beverages Firms in Nigeria. Thesis Submitted to School of postgraduate studies, faculty of Administration, Department of Accounting and Finance.


