Corporate Governance Mechanisms and Value Creation: An Empirical Evidence

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Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

The study examines the perceived effects of corporate governance mechanisms on the value of manufacturing firms in Nigeria by adopting economic value added as the measure of firm value. Corporate governance mechanisms such as concentrated ownership, managerial ownership, the board size, board independence, and foreign ownership as they influence corporate valuation were empirically investigated. 89 listed manufacturing firms in Nigeria were selected for 5 years (2012-2016) for the analysis. The study utilized different tests such as OLS panel data regression and multiple regression model to establish the relationship with panel corrected standard error (PCSE). The study is guided by resource enrichment theory and agency theory. The finding of the study shows that ownership concentration, the board size, and board independence positively impacted on firm value as measured by economic value added. However, managerial ownership and foreign ownership reported negative and insignificant impacts on the value of Nigerian manufacturing firms.

Keywords: Corporate governance mechanisms; economic value added; firm value.

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1. INTRODUCTION

The desirability of maximizing shareholders wealth and protecting the stakeholder’s interest has been the quest of corporate entities. The going concern concept of a corporate body is a function of the extent to which an entity can create value substantially for relevant stakeholders. Hence, for corporate entities to fulfilled corporate objective of maximizing wealth through value creation, relevant corporate governance mechanisms are strategically required for value creation. Fundamentally, there are different mechanisms of corporate govenances upon which firms can utilize to enhance their economic value which implied the extent to which corporate governance mechanisms constitutes an important determinant of the value of firms.

From the perceptive of the fundamental analysis, the concept of corporate governance as determinants of corporate value is well grounded. Another study examines the impact of corporate governance practices on firm value [1]. Those studies were able to highlight a management process whereby firms considered the interests of stakeholders and operate based on fairness, accountability, transparency, and responsibility in order to enhance the value of firms [2]. The mechanisms of corporate governance encapsulate stakeholders’ right and responsibility by organizing the relationship between management, shareholders, creditors, investors and other stakeholders. The study of corporate governance also involves the field of management study which encompasses organizational complexities in areas such as management practices, board composition, board power and other areas of corporate management [3].

Ideally, corporate governance is at the heart of unravelling how the owners of capital and relevant stakeholders can monitor the activities of the managers and to alleviate the conflict of interests between relevant stakeholders [6]. Through this study, corporate governance practices as a panacea for determining the value of corporate entity will enrich existing literature on the impact of different characteristics of corporate governance such as concentrated ownership, managerial ownership, and foreign ownership, the board size, and board independence.

The write-up comprised the review of relevant literature in respect to corporate governance mechanisms as captured in section 2. In addition, section 3 covers research methodology while section 4 has to do with data analysis and the results. Lastly, the recommendation and conclusion of the study are captured in section 5 of the study.

2. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Corporate governance mechanisms encompasses an integrated system of management that ensures and sustained a comprehensive device of controlling the affairs of corporate entity through instituting processes, rules and regulation that enhance value creation. In addition, it is a mechanism that encourage sound systems of internal and external control and information systems control that safeguard stakeholders’ investment and assets of public interest entities. It promotes sound reporting practices and accountability through fair value financial statements that ensures annual reports are duly audited by competent independent auditors [7].

For example, board of directors are expected to provide strategic and ethical leadership to a company that ensure that the action of the management is in the owner’s and other stakeholder’s interest. The approach performed the role of advisor and monitor on the firm management in order to enhance and sustain the prosperity of firms and corporate value [8]. Corporate governance as a subject of interest in the field of accounting and management practice has being an area of study for a while without an exhaustive end because other emerging corporate governance issues that are capable of undermining or enhancing corporate value in different sector of the Nigerian economy has slightly or not being examined.

For instance, agency problem as a result of inherent information asymmetry subsisting
between management and shareholder [9] led to series of corporate failure both in the past and of recent which necessitates further examination. For example, the unprecedented and least expected global corporate scandals such as BCCI, Enron, WorldCom, Northern Rock, Lehman Brothers, Freddy Mac and Fanny Mae [1] and specifically in Nigerian organization such as in Cadbury (Nig.) Plc, Afribank Plc and Lever brothers (Nig) Plc necessitated the need for further investigation. These series of corporate disasters are ascribed to the failure on the part of the mechanisms of corporate governance to mitigate scandalous practices that undermine the value of firms.

To mitigate corporate distresses, reforms and corporate regulation were put in place worldwide and in developing economy like Nigeria in order to checkmate this unwholesome practice [10]. Globally, well-known regulations and laws about these includes Oxley Act in the United States, Cromme Code in Germany, the Recomendações sobre Governança Corporativa in Brazil, the Cadbury Code in the United Kingdom, the Provisional Code of Corporate Governance for Securities Companies in China, Pakistan code of corporate governance [11] and the Nigerian code of corporate governance of 2016 [12]. Numerous reforms in corporate governance practices has resulted into corporate challenges to management and makers of policy that has everlasting implications to the day to day management practices which influences valuation process [13,14].

There are many internal corporate governance mechanisms that minimise agency problem in corporate firms and help at maximising corporate valuation. This internal mechanism consists of board size, board independence, concentrated ownership, managerial ownership and foreign ownership [15,1,16].

### 2.1 Corporate Governance in Nigeria

There are different regulatory agencies in Nigeria with their specific corporate governance code prior to 2016. This multiple corporate governance code affects the enforcement of a uniformed code for organization adherence. These supervisory organs comprise of the Security and Exchange Commission (SEC) code for listed firms; Central Bank of Nigeria (CBN) code for banks; Pension Commission (PENCOM) code for pension funds and administrators and the National Insurance Commission (NAICOM) code for insurance firms [17].

There exist contradictions among the various Nigerian codes of corporate governance which brings about poor regulatory compliance by listed firms [18,12]. The manifestation of these conflicts does not only contribute to a low level of compliance but also worsens enforcement and made its ineffectiveness. To mitigate this, a harmonized code for the private sector came into effect in October 2016 with the named National Code of Corporate Governance for the private sector. These codes strive to promote accountability, adequate disclosure, transparency, integrity and the safeguarding of minority shareholder and stakeholder interest. Section 4(2) of the code of corporate governance of Nigeria (2016) considered the board of directors as a fundamental aspect of governance structure which serves as the link between the firms and stakeholders. The responsibility carried out by the board ensures the progressive performance of the firms in creating value for all its stakeholders. Similarly, the independence of the board also identified in the new corporate governance code as captured in section 5(1) to endangered best corporate practices and the effective participation of board members in order to enhance firm value.

In the same vein, section 20(1) recognizes the importance of the majority shareholders and requested for the modalities of ensuring constant dialogue between majority and minority shareholders in order to guarantee the achievement of the firm's objective. The structure of ownership within the corporate governance system makes this study to consider insider ownership as an important corporate governance metric. Lastly, section 36(5.3) emphasized the contributory role of foreign ownership to the economic value of corporate firms.

### 2.2 Board Size

The size of the board is an important aspect of corporate governance mechanism that oversight the activities of the management by enforcing code of corporate governance for the success and enhancement of corporate value [1,16,19]. The relationship existing between the board of director and corporate valuation forms the basic fundamental concern for various scholars [20]. This Study identify the board as an essential component of corporate governance practice [21,22]. According to [23], the effectiveness of the board of directors is directly related to the number of members on the board and it is on the premise of this argument that two school of
thought emerges. The two school of thoughts are respectively the proponent and the antagonist of large and small board size as a basis of improving firm value. The effectiveness of the board is at utmost if its size is not too large because large size of the board hindered decision making, effective communications and control [16]. In addition, smaller size of the board brings about better performance, and this enhance corporate value [24]. This is made possible due to the ability of smaller boards to communicate effectively and make better decisions as a result of excellent coordination. Smaller board size enables efficient oversight function by the board over the management [25]. Documented empirical evidence established a positive relationship between smaller size of the board and the value of corporate entity [26].

In another vein, other scholar document negative relationship between board size and the value of firms [27]. In a nutshell, small board size emancipates the value of corporate body through efficient communication and effective decision making. However, study in respect of corporate governance evidenced the existence of relationship between large board size and firm value [28]. Larger size of the board through resource enrichment theory enhance corporate value by instituting managerial effectively in corporate management [29]. The large size of the board has capacity to pragmatically supervise the activities of the management capable of improving corporate valuation [30]. The complexities in corporate management requires mixtures of expertise in the composition of the board for smooth operations and managerial control needed for value creation. Hypothetical, the size of the board serves as a determining factor in creating firm value.

\[ H1: \text{There is a significant relationship between board size and the value of Nigerian manufacturing firm.} \]

2.3 Board Independence

The independence of the board as a corporate governance mechanism can be traced to the Anglo-American background [31]. It can be linked to the existence of dispersed ownership structure which ensures that outside board members serve as a watcher to corporate activities as seen in the United States in the 1960s [32]. Recently, concerns have been raised on the need to examine whether board independence influence firms value as a result of the existence of inconclusive results. Empirically, documented evidence revealed the significant relationship between board independence and firm value. For example, a study undertaken in the United States by [33] documents a significant relationship between board independence and firm value. The same significant relationship was observed in other developed economies like the United Kingdom and New Zealand [34,35]. To identify the existence of board independence in a firm, the existence of independent non-executive directors on board serves as a measure [36,1]. It was emphasized that for the board to be truly independent, executive directors must not be greater than 75% of the composition of board size [1].

In another vein, there are studies that document a negative relationship between board independence with firm value [37]. It was asserted that corporate activities become more complicated as a result of the involvement of independent board members. This is possible due to the expected delay in decision making and communication which invariably affect the value of the firm negatively [1]. Despite this school of thought, the emphasis is placed on agency theory which stipulates that the presence of independent directors positively affect firm value [38]. The presence of independent directors is capable of ensuring timely monitoring, protection of shareholders interest and timely succession planning for chief executive officers [39]. It is on the foundation of these arguments that this research developed the below hypothesis of the study.

\[ H2: \text{There is a significant relationship between board independence and the value of Nigerian manufacturing firm.} \]

2.4 OWNERSHIP CONCENTRATION

There are two schools of thought with respect to how ownership concentration affects the value of firms. The first theory was postulated through the work of Berle and Means [40,19]. Asymmetric information inherent between the owners of the business and their agent as a result of the business entity concept is the basis upon which this school of thought was developed. The first school of thought known as monitory hypothesis was predicated on the shareholder’s incentive to minimize the management self-centredness at owner’s detriment.
There was a shift from the monitory hypothesis school of thought to the expropriation hypothesis in the 1980s. The shift from the monitory hypothesis to the expropriation hypothesis was premised on the assertion that monitory exercise by large shareholders is not a problem in ownership concentration as a mechanism for corporate governance. Expropriation hypothesis minimizes the incentive of larger shareholders taken over the control of minority shareholders in concentrated ownership structure.

Concentrated ownership serves as a limitation to the tolerance level of shareholders in terms of risk and diversification. Dispersed ownership structure enhances manager’s decision on investment [41,42]. There are mixed and inconclusive results with respect to ownership concentration. A positive relationship between ownership concentration and firm value on the principles of monitory hypothesis school of thought [43,44,45]. Others indicate a negative relationship between concentrated ownership and firm value in line with the expropriation hypothesis school of thought [46,47,48]. The inconclusive nature of those studies necessitates a further examination of the relationship between ownership concentration and firm value. The study, therefore, formulates the following hypothesis.

**H4**: There is a significant relationship between ownership concentration and the value of Nigerian manufacturing firm.

### 2.5 MANAGERIAL OWNERSHIP

The convergence of interest hypothesis and the entrenchment hypothesis school of thought are the guiding principles upon which managerial ownership as a proxy of the corporate governance mechanism is built. The Convergence-of-Interest hypothesis explains the basis upon which the allocation of shares to managers as insider owners serves as an incentive for converging shareholders and management interest [40,9]. The need for convergence of interest is to mitigate the agency cost associated with information symmetric inherent in owners and managers relationship in a corporate firm. It is an assertion that higher insider ownership is associated with higher firm value [16].

Through the entrenchment hypothesis, smaller managerial ownership improves firm value in product market competition [49]. In addition, the higher the managerial ownerships the higher the possibility for manager’s self-centeredness without a negative effect on their remuneration and job. Nonetheless, greater insider ownership viewed as a negative impact on firm value. [50,51] evidently reinforced the convergence of interest hypothesis empirically. Entrenchment hypothesis was however empirically supported by other scholars [52,53]. Summarily, several studies reported a positive relationship between managerial ownership and the value of firms [54,55]. On the basis of the above discussion, the next hypothesis is formulated.

**H5**: There is a significant relationship between managerial ownership and the value of Nigerian manufacturing firm.

### 2.6 FOREIGN OWNERSHIP

The impact of foreign ownership on the performance of firms has being a subject of interest over time [56]. The performances of a multinational corporation tend to outweigh that of domestic enterprises as a result of superiority in governance, marketing strategy, expertise in financial management, product differentiation and the advantages associated with economies of scale. Several studies have been conducted to address this conundrum [57]. Empirical studies affirmed the superiority of foreign-owned multinational over locally owned business entities due to the positive influence of foreign ownership on performance [58,59]. These results might not be generalized to developing economy like Nigeria and more importantly to the manufacturing sector of the economy.

Several studies in the advanced economies supported the empirical supremacy of foreign-owned firms over domestically owned firms [59]. For example, the existence of a positive relationship between foreign-owned manufacturing firms and its profitability in the United Kingdom is reported [60]. Other studies affirmed the superior performance of foreign-owned corporate entities in advanced economies in the UK and Canada respectively [61,62]. Foreign-owned firms have better performance indices than their counterpart that are locally owned [63]. In another study conducted in the United States by [64] investigating the critical analyses of industrial corporations within a period of 12 years (1981-1992). The result of the study reports a significant influence of foreign ownership on corporate value. Scholars understudy the relationship between foreign ownership and firm value in the UK using 333 overseas acquisitions.
from 1984 to 1995 [65]. The result of the study concluded that foreign-owned firms significantly and positively enhance firm performance.

Despite all empirical proves of the impact of foreign ownership on firm value, other studies provide divergent results. For instance, a study conducted by [66] asserted that foreign-owned firms in US market perform distressingly in comparing with locally owned firms when randomly selected. In Portugal and Greece performances of corporate entity has no significant association to foreign ownership [57]. The impact of foreign ownership on firm value can either be positive or negative in advanced nations of the world as demonstrated by those study. Additionally, some substantial number of studies in developing countries established a positive relationship between foreign ownership and the value of firms [67,68]. It is on this basis that further study on this subject matter will be extended to the manufacturing sector of the Nigerian economy. therefore, hypothesize as follows:

**H6:** There is a significant relationship between foreign ownership and the value of Nigerian manufacturing firms.

2.7 FIRM VALUE

Several factors play an important role in determining the value of corporate firms. Factors such as corporate governance mechanisms as determinants of firm value were grounded in several literatures [69]. The relationship between corporate governance and firm value has long been established. Scholars see corporate governance as a determinant of corporate value [70]. Their studies established a positive and significant relationship between corporate governance mechanisms and the value of corporate entities. Other scholars evidenced the existence of a significant relationship between corporate governance mechanisms and firm value [71,72].

Corporate value epitomizes the summation of the worth of the firm’s shares and net financial liabilities [73]. The benefits derivable by shareholders from their investment is measured from the value of firms. Empirically, several studies have used different metrics to measures the value of firms. For example, [74,37,75,76] adopted the use of Tobin’s Q to measure corporate value in their studies. Other scholars adopted earnings and book equity as a measure of firm value [77], while [78] measured it by using the net operation profit/overall capitalization rate. This study will adopt the use of economic value added (EVA) as a performance-based measure as a metric of firm value due to the superiority of economic value added in measuring firm value over the use of accounting-based measures such as Tobin’s Q [69,79,80,81].

The EVA is calculated by using the following formula as adopted. The economic value added measured by (return on invested capital minus the weighted average cost of capital) multiply by invested capital [69]. To measure the weighted average cost of capital (WACC), yearly interest rates to medium term investment loans are to be used as borrowing cost while the cost of equity capital is computed by Capital Asset Pricing Model. This model used Ke=Rf+(Rm-Rf)* β. The coefficient for beta represents the average simple interest rate on treasury bills of the corresponding periods were used to represent the risk-free rate of returns. This data will be sourced from the central bank of Nigeria website [69].

**CONCEPTUAL FRAMEWORK OF THE STUDY**

![Fig. 1. The proposed framework of the study](Image)
3. RESEARCH METHODOLOGY

The study made use of panel data for a period of 5 years spanning from 2012-2016. The judgemental sampling technique is adopted because of the specialized nature of the data required. The manufacturing sector of the Nigerian economy is the focus of this study. The study made use of 89 listed manufacturing firms comprising of different industries within the sector. Stata 14 software was used for data analysis by utilizing different tests such as OLS panel data regression, Hausman test, and random effect regression. The following Table provides the operational definitions and the measures of independent variables, control variables, and dependent variables.

The used of multiple regression model by the research was to evaluate the hypotheses already formulated in this study:

\[
EVA_{it}=\beta_0+\beta_1BOS_{it}+\beta_2BIN_{it}+\beta_3OWC_{it}+\beta_4MOW_{it}+\beta_5FOW_{it}+\beta_6FSZ_{it}+\beta_7AGE_{it} + \epsilon_{it}
\]

Where: EVA: Economic Value Added
BOS: Board Size, BIN: Board Independence, OWC: Ownership Concentration, MOW: Managerial Ownership, FOW: Foreign ownership, FSZ: Firm Size and AGE: Firm Age. The intercept is depicted with \( \beta \) whereas \( \epsilon_{it} \) represented the panel data of firms and time.

The equation was used to measure the regression model in order to evaluate the value of Nigerian manufacturing firms by using corporate governance characteristics such as board size, board independence, CEO duality, ownership concentration, and managerial ownership, foreign ownership as the independent variables and firm size and GDP growth as control variables. The model is in cognizance with several empirical studies \[1,16\].

4. RESULTS AND ANALYSIS

The analysis of the panel data and the findings of the regression analysis is reported under this section. The corporate governance variables are analysed using the data generated and arrange in excel file from the annual reports of Nigerian manufacturing firms and imported into the Stata 14 software for regression analysis and the estimation of descriptive statistics.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement</th>
<th>Key</th>
<th>Type</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm Value (EVA)</td>
<td>Net Income to Common Shares After Taxes (Cost of Equity)*Common Equity.</td>
<td>FRV (EVA)</td>
<td>Dependent</td>
<td>[69]</td>
</tr>
<tr>
<td>Board size (BOS)</td>
<td>Logarithm of the Number of Members in the Board of Directors.</td>
<td>CGM</td>
<td>Independent</td>
<td>[82]</td>
</tr>
<tr>
<td>Board Independence (BIN)</td>
<td>Proportion of independent directors sitting in board</td>
<td>CGM</td>
<td>Independent</td>
<td>[1]</td>
</tr>
<tr>
<td>Ownership Concentration (OWC)</td>
<td>Proportion of Total Ownership of People or Institutions with More Than 5% Share to the Total Capital.</td>
<td>CGM</td>
<td>Independent</td>
<td>[83]</td>
</tr>
<tr>
<td>Managerial Ownership (MOW)</td>
<td>Percentage of Stock held by CEO and Board Members.</td>
<td>CGM</td>
<td>Independent</td>
<td>[16]</td>
</tr>
<tr>
<td>Foreign Ownership (FOW)</td>
<td>1 if there is a foreigner on the board of directors and 0 if otherwise.</td>
<td>CGM</td>
<td>Independent</td>
<td>[15]</td>
</tr>
<tr>
<td>Firm Size (FSZ)</td>
<td>Natural Logarithm of Total Assets.</td>
<td>CONV</td>
<td>Control variable</td>
<td>[84]</td>
</tr>
<tr>
<td>Firm Age (AGE)</td>
<td>Number of Years since Incorporation Date</td>
<td>AGE</td>
<td>Control Variable</td>
<td>[85]</td>
</tr>
</tbody>
</table>
Table 2. Descriptive statistics

<table>
<thead>
<tr>
<th>STAS</th>
<th>EVA</th>
<th>OWC</th>
<th>MAO</th>
<th>BOS</th>
<th>BIN</th>
<th>FOW</th>
<th>FSZ</th>
<th>AGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2036982</td>
<td>0.5163</td>
<td>0.0507127</td>
<td>8.658427</td>
<td>0.0572096</td>
<td>0.5225225</td>
<td>16.27954</td>
<td>40.1573</td>
</tr>
<tr>
<td>Max</td>
<td>1.97E+07</td>
<td>1</td>
<td>0.4951658</td>
<td>18</td>
<td>0.3333333</td>
<td>1</td>
<td>19.45079</td>
<td>93</td>
</tr>
<tr>
<td>Min</td>
<td>-5163596</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>13.07742</td>
<td>4</td>
</tr>
<tr>
<td>Sd</td>
<td>5697466</td>
<td>0.3028869</td>
<td>0.1306527</td>
<td>2.521118</td>
<td>0.1035428</td>
<td>0.5000559</td>
<td>1.752556</td>
<td>19.09253</td>
</tr>
<tr>
<td>Skewness</td>
<td>2.050726</td>
<td>-0.4825597</td>
<td>2.614944</td>
<td>0.7611827</td>
<td>1.775754</td>
<td>-0.0901816</td>
<td>0.0737301</td>
<td>0.0452856</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>6.66053</td>
<td>2.105763</td>
<td>8.44124</td>
<td>3.730885</td>
<td>4.880162</td>
<td>1.008133</td>
<td>2.113205</td>
<td>2.436134</td>
</tr>
</tbody>
</table>

Table 3. Regression analysis results

Correlated Fixed Effect- Hausman Test
Equation: Untitled
Test Panel Data Fixed 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>Panel Data Fixed Effects</td>
<td>16.68</td>
<td>16</td>
<td>0.0196</td>
</tr>
</tbody>
</table>
4.1 Descriptive Statistics

The characteristics of data of the study are statistically explained using the descriptive statistics. Table 2 captured, the mean, max, min, standard deviation, skewness and kurtosis of each variable. The average value of EVA is 2036982 for 89 manufacturing firms. The mean of the ownership concentration is 0.5163 with a standard deviation of 0.302869 for 89 listed manufacturing firms. The average value of managerial ownership is 0.0507127 with a standard deviation of 0.1306527. Board size averagely provided a value of 8.658427 for 89 manufacturing firms with a standard deviation of 2.521118. The minimum number of the board size is 4 while the maximum number of the board size is 18 and averagely the ratio of board independence is 0.0572096 and 0.1035428 as the standard deviation. The maximum proportion of board independence is 0.3333333 with a minimum of 0. The percentage of independent directors on the board is approximately 5.72%. The mean of foreign ownership is 0.5225225 with a standard deviation of 0.500559. The result indicates a maximum and minimum value of 1 and 0 respectively. The overall result shows that 52.25% of the Nigerian manufacturing firms comprise of foreign ownership.

4.2 Hausman Test for Random Effect Regression or Fixed Effect Regression

To analyze the study data empirically, the Hausman test provided a significant result of the p-value of 0.0196 which makes the fixed effect model most appropriate for the analysis of the data. However, due to the problem of autocorrelation and that heterogeneity, the study utilized the panel corrected standard error to control for both the problem of autocorrelation and that heterogeneity.

4.3 Results and Discussion

The finding of the study revealed the positive significant of ownership concentration, the board size, and board independence on the value of Nigerian manufacturing. This shows the impact of ownership concentration, the board size, and board independence on firm value.

Table 4. Result of panel data regression Please insert caption here

Dependent variable: Economic Value Added
Method: Panel Corrected Standard Error (Panel Data Fixed Effects)
Sample: 2012-2016
Number of years: 5
Firms: 89
Firm Year’s Observations: 445

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>Std Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>2.66e+07</td>
<td>1780504</td>
<td>-14.94</td>
<td>0.000</td>
</tr>
<tr>
<td>OWC</td>
<td>1623857</td>
<td>716622</td>
<td>2.27</td>
<td>0.023</td>
</tr>
<tr>
<td>MAO</td>
<td>-436689.8</td>
<td>938902.6</td>
<td>-0.47</td>
<td>0.642</td>
</tr>
<tr>
<td>BOS</td>
<td>243001.1</td>
<td>105939.6</td>
<td>2.29</td>
<td>0.022</td>
</tr>
<tr>
<td>BIN</td>
<td>8285137</td>
<td>1580136</td>
<td>5.24</td>
<td>0.000</td>
</tr>
<tr>
<td>FOW</td>
<td>-161586.3</td>
<td>559586.5</td>
<td>-0.29</td>
<td>0.773</td>
</tr>
<tr>
<td>FSZ</td>
<td>1458656</td>
<td>79571.42</td>
<td>18.33</td>
<td>0.000</td>
</tr>
<tr>
<td>AGE</td>
<td>39352.98</td>
<td>11202.4</td>
<td>3.51</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Weighted Statistics
R-Squared 0.3687
Wald Chi2 (7) 1763.08
Prob > Chi2 0.0000
Estimated Covariance 4005
Estimated Autocorrelations 0
Estimated Coefficients 8
5. CONCLUSION

Several studies globally in the past examined the empirical relationship between the mechanisms of corporate governance and the value of manufacturing firms. Reviewing various literature in Nigeria generally provided a research gap that requires some attention. The identified gap is aimed to be addressed in this study. The study identified ownership concentration, managerial ownership, the board size, board independence, and foreign ownership as the basic determinants of the economic value added of Nigerian manufacturing firms based on existing literature. The empirical finding of the regression analysis indicates that ownership concentration had a positive significant relationship with the value of Nigerian manufacturing firms. Averagely, 51.63% of the Nigerian manufacturing firms are substantially owned by major shareholders. Managerial ownership as a proxy of corporate governance shown a negative insignificant relationship with the economic value added (EVA). On the average executive directors with shareholding are represented with 5.07%. The finding with respect to board size as a measure of the firm value indicates a positive significant relationship with the value of Nigeria manufacturing firms.

The descriptive analysis provided an average of 8 board members with a maximum of 18 and a minimum of 4 board members. Another corporate governance metric like board independence reported a positive relationship with economic value added at a 1% level of significance. This shows that the existence of independent non-executive director impacted strongly and positively on the economic value added of Nigeria manufacturing firms. The average independence non-executive directors present on the board of Nigerian manufacturing firms is 5.72%. Lastly, the metric of foreign ownership provided a negative insignificant relationship with the value of Nigerian manufacturing firms. On average, 52.25% of Nigerian manufacturing firms possess foreign ownership. This shows the higher the number of foreign shareholdings the lower the economic value added of Nigerian manufacturing firms.

The results of the study attested to the influence of ownership concentration, the board size, and board independence as measures of corporate governance mechanisms in determining the economic value added whereas variables such as managerial ownership and foreign ownership failed to establish a significant relationship with firm value. The study, therefore, suggests the need for Nigerian manufacturing firms to ensure the existence of major owners, and the adoption of an average of 8 members on the board and inclusion of more independence non-executive directors in order to improve their economic value. The scope of this study needs to be expanded to include other relevant corporate governance variables such as board interlocked, board expertise, women on board, family ownership in order to further assess their impact on the value of Nigerian manufacturing firms.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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