Original Research Article

CORPORATE GOVERNANCE MECHANISMS AND VALUE CREATION: AN EMPIRICAL EVIDENCE.

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, 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 findings of the study shows that ownership concentration, 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 an insignificant impacts on the value of Nigerian manufacturing firms.

KEY WORD: Corporate Governance Mechanisms, Economic Value Added, Firm Value.

UNDER PEER REVIEW

1.0 INTRODUCTION

The desirability of maximizing shareholders wealth and protecting the stakeholder's interest has being 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 governances upon which firms can utilised to enhance their economic value which implied the extent to which corporate governance mechanisms constitutes an important determinants 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. Several studies such as Khan, Tanveer and Malik (2017) examines the impact of corporate governance practices on firm value. These studies were able to highlight a management process whereby firms considered the interests of stakeholders in totality and operate based on fairness, accountability, transparency and responsibility in order to enhance the value of firms (Van Horne & Machowicz, 2005). The mechanisms of corporate governance encapsulate stakeholders' right and responsibility by organising 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 (Smith, 2014).

Ideally, corporate governance is at the heart of unravelling how the owners of capital can monitor the activities of management in order to safe guide their investment for an

enhancement of corporate valuation. Shleifer and Vishny (1999) highlight corporate governance as a mechanism of getting return on investment to the shareholders. The main concern of corporate governance is to provide protection to investors and stakeholders and to ensure corporate efficiency, transparency, and accountability and to mitigate arising conflicts in order to create value for owners, managers and relevant parties (Aluchna, 2009). To pursue these objectives many corporate governance mechanisms are designed to monitor the activities of the managers and to alleviate the conflict of interests between relevant stakeholders (Lecomte & Ooi 2013). Through this study, corporate governance practices as a panacea for determining the value of corporate entity will enrich existing literatures on the impact of different characteristics of corporate governance such as concentrated ownership, managerial ownership, foreign ownership, board size and board independence will be examined.

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

2.0 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 system that encourage sound systems of internal control and information systems control that safeguard stakeholders' investment and assets of public interest entities. It promote sound reporting practices and accountability through fair value financial statements that ensures annual reports are duly audited by competent independent auditors (Wahab & Holland, 2012).

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 stakeholders interest by performing the role of advisor and monitor on the firm management, and in order to enhance and sustain the prosperity of firms and corporate value (Lopes & Walker, 2012). 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.

First instance, agency problem as a result of inherent information asymmetry subsisting between management and shareholder (Jensen & Meckling, 1976) 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 (Khan e tal., 2017) 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

UNDER PEER REVIEW

practices (Vintila & Gherghina, 2013). 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, Pakistian code of corporate governance (Kamran & Shah, 2014) and the Nigerian code of corporate governance of 2016. Numerous reforms in corporate governance practices has resulted into corporate challenges to management and makers of policy that has everlasting implications to day to day management practices which influences valuation process (Shipilov, Greve, & Rowley, 2010 and Zhang & Wiersema, 2009).

There are many internal corporate governance mechanisms that minimise agency problem in corporate firms and help at maximising corporate valuation. This internal mechanisms according to Obembe, Adebisi and Adeleye (2010); Khan, et al., (2017) and Adelopo (2011), consists of board size, board independence, concentrated ownership, managerial ownership and foreign ownership.

2.1 CORPORATE GOVERNANCE IN NIGERIA

There are different regulatory agencies in Nigeria with their specific corporate governance code prior to 2016. These multiple corporate governance code affects the enforcement of a uniformed code for organization adherence. These supervisory organs comprises 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.

According to Adegbite, Amaeshi and Nakajima (2013) and Osemeke and Adegbite (2016) contradictions exist among the various Nigerian codes of corporate governance which brings about poor regulatory compliance by listed firms. The manifestation of these conflicts do not only contributes to low level of compliance but also worsens enforcement and made it ineffectiveness. To mitigate this, a harmonised code for private sector came into effect in October, 2016 with the named National Code of Corporate Governance for the private sector. This 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 by responsibility the board ensures the progressive performance of the firms in creating value for all its stakeholders. Similarly, the independence of the board was also identify in the new corporate governance code as captured in section 5(1) to endanger best corporate practices and the effective participation of board members in order to enhance firm value. In the vein, section 20(1) recognises 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) emphasised the contributory role of the foreign ownership to the economic value of corporate firms.

2.2 BOARD SIZE

UNDER PEER REVIEW

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 or otherwise of corporate body (Khan et al, 2017; Obembe etal., 2010; Shleifer & Vishn, 1999). The relationship existing between the board of director and corporate valuation forms a basic fundamental concern for various scholars (Malik, Wan, Ahmad, Naseem & Rehman, 2014). Yaseer, Abdullah and Suriya (2014) and Lipton and Lorsch (1992) identify the board as an important component of corporate governance practice. According to Kumar and Singh (2013), the effectiveness of the board of director is directly related to the number of members in the board and on the premise of this argument two school of thought emerges. The two school of thought are the proponent and the antagonist of large and small board size as a basis of improving firm value respectively. According to Obembe et al., (2010) 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. In addition, smaller size of the board bring about better performance for corporate body and this enhance corporate value (Mak & Kusnadi, 2005). This is possible due to the ability of smaller board to communicate and make better decisions as a result of better coordination inherent in the ability of smaller board size to carrying out oversight function over the management. Documented empirical evidence established a positive relationship between smaller size of the board and the value of corporate entity (Yasser, Entebang & Mansor, 2011). In another vein, other scholars document negative relationship between board size and the value of firms (Rouf, 2011 and Yermack, 1996). In a nutshell, small board size emancipate the value of corporate body through efficient communication and effective decision making. However, other documented studies in respect to corporate governance supported the existence of relationship between large board size and firm value (Coles, Daniel & Naveen, 2008). According to Van den Berghe and Levrau (2004) larger size of the board through resource enrichment theory enhance corporate value by instituting managerial effectively in corporate management. Abdullah, Shah and Khan (2012) believed that large size of the board has capacity to pragmatically supervise the activities of the management and this result into an improvement in corporate valuation. The complexities in corporate management requires varying expertise in the composition of the board for smooth operations and managerial control for value creation. Hypothetical, the size of the board serves as a determining factor in creating firm value.

H1*: 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 Anglo-American background (Rashid, 2018). This is linked to the existence of dispersed ownership structure which ensures that, outside board members serves as eyewitness to corporate activities as seen in United States in the 1960s (Kesner, Victor & Lamont, 1986). Recently, concern has being raise on the need to examine whether board independence influence firms value as a result of the existence of inconclusive results. Empirically, documented evidences provide significant relationship between board independence and firm value. For example study undertaken in United States by Zahra and Pearce (1989) document significant relationship between board independence and firm value. The same significant relationship were observed in other developed economy like United Kingdom (Ezzamel & Watson, 1993) and New Zealand (Hossain, Prevost & Roa, 2001). To identify the existence of board independences in a firm, the existence of non-executive directors on a board as a measure

UNDER PEER REVIEW

(Gallo, 2005 and Khan, et al., 2017). Khan, et al., (2017) emphasise that for board to be truly independent, executive directors must not be greater than 75% of the composition of board size.

In another vein, there are studies that document negative relationship between board independences with firm value (Bhagat & Bolton, 2008). For example, Dah et al. (2012) as cited in Khan, et al., (2017) asserted that, corporate activities becomes more complicated as a result of the involvement of independent board members due to eminent delay in decision making and communication which invariably affect the value of firm negatively. Despite this school of thought, emphasis is placed on agency theory which stipulate that the presence of independent directors positively affect firm value (Ramdani & Van, 2009) The presence of independent directors is capable of ensuring timely monitoring, protection of shareholders interest and timely succession planning for chief executive officers (Khan & Awan, 2012). It is on the foundation of this arguments that this research developed the below hypothesis of the study.

H2*: There is a significant relationship between board independence and the value of Nigerian manufacturing firm.*

2.4 OWNERSHIP CONCENTRATION

There are two school 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 (1932) and Shleifer and Vishny (1986). Asymmetric information inherent between the owners of business and their agent as a result of business entity concept is the basis upon which this school of thought were developed. The first school of thought known as monitory hypothesis was predicated on the shareholder's incentive to minimise the management self-centredness at owner's detriment.

There was a shift from the monitory hypothesis school of thought to the expropriation hypothesis in 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 minimise 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. Demsetz and Lehn, (1985) and Heinrich, (2000) believed that dispersed ownership structure enhance managers decision on investment. There are mixed and inconclusive result with respect to ownership concentration. Hill and Snell (1989), Deb and Chatuvedular, (2003) and Ganguli and Agrawal (2009) reported positive relationship between ownership concentration and firm value on the principles of monitory hypothesis school of thought. Others emphasised negative relationship between concentrated ownership and firm value in line with the expropriation hypothesis school of thought (Mudambi & Nicosia, 1998; Boubaker 2005 and Owen, Kirchmaier & Grant 2006). The inconclusive nature of those study necessitate a further examination of the relationship between ownership concentration and firm value. The study therefore formulate the following hypothesis.

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

UNDER PEER REVIEW

2.5 MANAGERIAL OWNERSHIP

Convergence of interest hypothesis and the entrenchment hypothesis school of thought are the guiding principles upon which managerial ownership as a proxy of corporate governance mechanism is built. Berle and Means (1932) and Jensen and Meckling (1976) adopted Convergence-of-Interest hypothesis to explain the basis upon which the allocation of shares to managers as insider owners serves as an incentive for converging shareholders and management interest. The need for convergence of interest is to mitigate the agency cost associated with information symmetric inherent in owners and managers relationship in corporate firm. It is an assertion that higher insider ownership is associated with higher firm value (Obembe, et al., 2010).

Fama and Jensen (1983) through entrenchment hypothesis professed that smaller managerial ownership improve firm value in product market competition. In addition, the higher the managerial ownerships the higher the possibility for manager's self-centredness without negative effect on their remuneration and job. Nonetheless, greater insider ownership viewed as negative impact on firm value.

Mehran (1995), Seifert, Gonene and Wright (2005) evidently reinforced the convergence of interest hypothesis empirically. Entrenchment hypothesis was however empirically supported by scholars such as Lins (2002) and Lee and Ryu (2003). Summarily, several studies reported positive relationship between managerial ownership and the value of firms (Wright, Kroll, Lado, & Van Ness, 2002; Leung & Hortzwtz, 2007). 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 on foreign ownership on the performance of firms has being a subject of interest over time (Yavas & Erdogan, 2017). According to Barbosa and Louri (2005) the performances of multinational corporation tends 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. Empirical studies affirmed the superiority of foreign owned multinational over locally owned business entities due to the positive influence of foreign ownership on performance (Aydin, Sayim & Yalama, 2007). These result might not be generalise 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. For example, Grant (1987) reported the existence of positive relationship between foreign owned manufacturing firms and it profitability in United Kingdom. Study conducted by Caves and Caves (1996) and Boardman, Shapiro and Vining (1997) affirmed the superior performance of foreign owned corporate entities in advanced economies in UK and Canada respectively. According to Goethals and Ooghe (1997) foreign owned firms have better performance indices than their counterpart that are locally owned. In another study conducted in United States by Qian (1998) investigating the critical analyses of industrial corporations within a period of 12 years (1981-1992). The result of the study report a significant influence of foreign ownership on corporate

UNDER PEER REVIEW

value. Gregory and McCorriston (2005) understudy the relationship between foreign ownership and firm value in UK using 333 overseas acquisitions from 1984 to 1995. 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 provides divergent results. For instance, a study conducted by Kim and Lyn (1990) asserted that foreign owned firms in US market perform woefully in association with locally owned firms when randomly selected. According to Barbosa and Louri (2005) in Portugal and Greece performances of corporate entity has no significant association to foreign ownership links of firms. The impact of foreign ownership on firm value can either be positive or negative in advanced nations of the world as demonstrated by this study. Additionally, some substantial number of studies in developing countries established the positive relationship between foreign ownership and the value of firms (Lecraw, 1984; Willmore, 1986 and Chhibber and Majumdar, 1997). It is on this basis that further study on this subject matter will be extended to the manufacturing sector of the Nigerian economy. Study therefore hypothesise as follows:

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

2.7 FIRM VALUE

Several factors plays important role in determining the value of corporate firms. Factors such as corporate governance mechanism as determinant of firm value were grounded in several literature (Bayrakdaroglu, Ersoy & Citak, 2012). The relationship between corporate governance and firm value has long been established. Scholars such as Black, Kim, Jang and Park (2010) sees corporate governance as a determinant of corporate value. Their study established the positive and significant relationship between corporate governance mechanism and the value of corporate entity. Other studies such as that of Ararat, Black and Yurtoglu (2017) and Pourali and Arasteh (2013) support the existence of significant relationship between corporate governance mechanism and firm value.

Firm value represent the totality of firm's net financial debt (after liquid assets and stocks are deducted) and values of the shares (Chambers, 2009). The benefits derivable by shareholders from their investment is measured from the value of firms. Empirically, several studies has used different metrics to measures the value of firms. For example, Lindenberg and Ross (1981), Amit and Wernerfelt (1990), Palia (2001) and Bhagat and Jefferis (2005) adopted the use of Tobin's Q to measure firm value in their study. Other scholars such as Beisland (2009) adopted earnings and book equity as measure of firm value, while Osazevbaru (2012) measured it by 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 accounting based measures such as Tobin's Q (Victoria & Kamoche, 2016; Bayrakdaroglu, et al., 2012.; Morard & Balu, 2009 and Shrieves & Wachowicz 2001).

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 as used by Bayrakdaroglu et al. (2012) will be adopted. To measure the

UNDER PEER REVIEW

weighted average cost of capital (WACC), yearly interest rates to medium term investment loans is to be used as borrowing cost while the cost of equity capital is computed by Capital Asset Pricing Model. This model used $Ke=Rf+(Rm-Rf)*\beta$. 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 (Bayrakdaroglu et al., 2012).

CONCEPTUAL FRAMEWORK OF THE STUDY

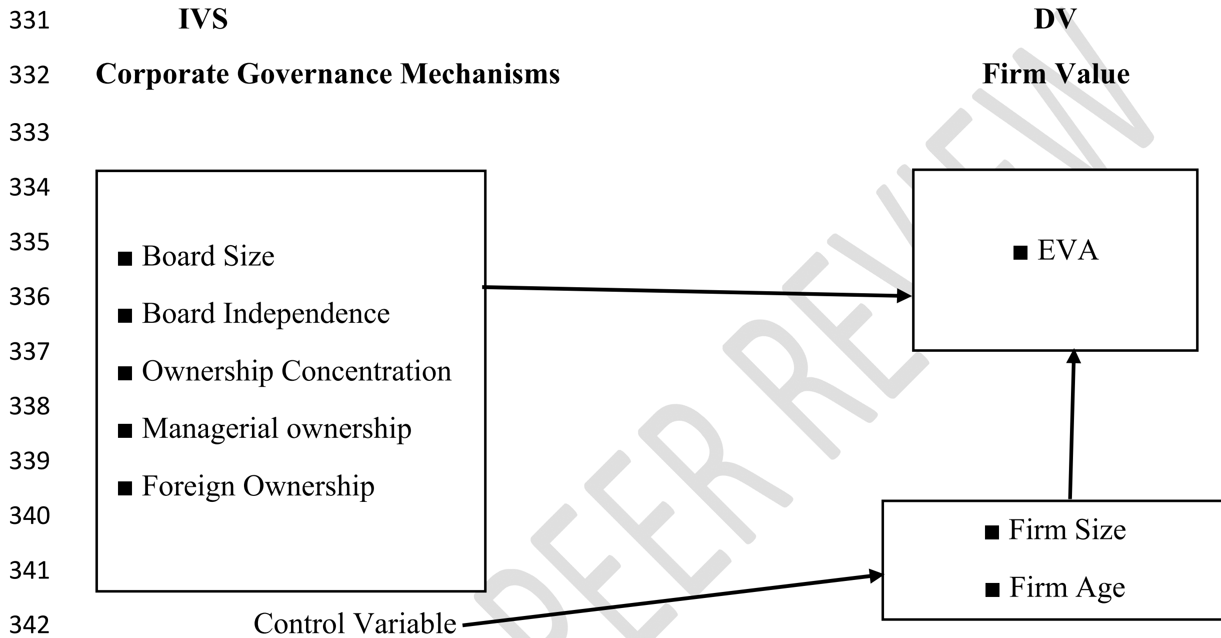

Fig. 1. The Proposed Framework of the Study

3. RESEARCH METHODOLOGY

The study made used of panel data for a period of 5 years spanning from 2012- 2016. The purposive/judgement sampling technique adopted because of the specialised nature of data required. The manufacturing sector of the Nigerian economy was the focus of this study. Study made used of 89 listed manufacturing firms comprising of different industries within the sector. Stata software 14 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 definition and the measures of independent variables, control variables and dependent variables.

TABLE 1: MEASURES OF EXPLAINABLE VARIABLES

Variables	Measurement	Key	Type	Justification
FIRM VALUE (EVA)	Net Income to Common Shares After Taxes (Cost of Equity)*Common	FRV (EVA)	Dependent	(Bayrakdaroglu, 2012)

UNDER PEER REVIEW

	Equity.			
BOARD SIZE(BOS)	Logarithm of the Number of Members in the Board of Directors.	CGM	Independent	(Tsagem, Aripin, & Ishak, 2015)
BAORD INDEPENDENCE(BIN)	Proportion of independent directors sitting in board	CGM	Independent	(Khan, Tanveer, & Malik, 2017)
OWNERSHIP CONCENTRATION (OWC)	Proportion of Total Ownership of People or Institutions with More Than 5% Share to the Total Capital.	CGM	Independent	(Al-dhamari, Nor, Ku, & Al-gamrh, 2016)
MANAGERIAL OWNERSHIP (MOW)	Percentage of Stock held by CEO and Board Members.	CGM	Independent	(Obembe, Adebisi, & Adeleye, 2010)
FOREIGN OWNERSHIP (FOW)	1 if there is a foreigner on the board of directors and 0 if otherwise.	CGM	Independent	(Adelopo, 2011)
FIRM SIZE (FSZ)	Natural Logarithm of Total Assets.	CONV	Control variable	Foyeke et al. (2015)
FIRM AGE (AGE)	Number of Years since Incorporation Date	AGE	Control Variable	Coad, Holm, Kraff and Quatraro (2018).

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

$$\mathbf{EVA_{it}=\beta0+\beta1BOS_{it}+\beta2BIN_{it}+\beta3OWC_{it}+\beta4MOW_{it}+\beta5FOW_{it}+\beta6FSZ_{it}+\beta7AGE_{it}+\epsilon_{it}}$$

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 **β** whereas $_{it}$ 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 cognisance with the study of Khan, et al., (2017) and Obembe et al. (2010).

UNDER PEER REVIEW

4. Result 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 using excel file from the annual reports of Nigerian manufacturing firms through the stata 14 software and descriptive statistics.

4.1 Descriptive Statistics

The characteristics of data of the study is statistically explained using the descriptive statistics. Table 4.2 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 0.3028869 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 independence directors on the board is approximately 5.72%. The mean of the foreign ownership is **0.5225225** with a standard deviation of **0.5000559.** The result indicate a maximum and minimum value of 1 and 0 respectively. The overall result shows that 52.25% of the Nigerian manufacturing firms comprises of foreign ownership.

Table 4.2 Descriptive statistics of each variable

STAS	EVA	OWC	MAO	BOS	BIN	FOW	FSZ	AGE
Mean	**2036982**	**0.5163**	**0.0507127**	**8.658427**	**0.0572096**	**0.5225225**	**16.27954**	**40.1573**
Max	**1.97E+07**	**1**	**0.4951658**	**18**	**0.3333333**	**1**	**19.45079**	**93**
Min	**-5163596**	**0**	**0**	**4**	**0**	**0**	**13.07742**	**4**
Sd	**5697466**	**0.3028869**	**0.1306527**	**2.521118**	**0.1035428**	**0.5000559**	**1.752556**	**19.09253**
Skewness	**2.050726**	**-0.4825597**	**2.614944**	**0.7611827**	**1.775754**	**-0.0901816**	**0.0737301**	**0.0452856**
Kurtosis	**6.66053**	**2.105763**	**8.44124**	**3.730885**	**4.880162**	**1.008133**	**2.113205**	**2.436134**
Observations	**445**	**445**	**445**	**445**	**445**	**445**	**445**	**445**

4.2. Hausman test for random effect regression or fixed effect regression

To analyse the study data empirically, the hausaman test provided significant result of 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 utilised the panel corrected standard error to control for both the problem of autocorrelation and that heterogeneity.

UNDER PEER REVIEW

Table 4.3
Correlated Fixed Effect- Hausman Test
Equation: Untitled
Test Panel Data Fixed Effects

Table 4.3. Statistical interpretation showing Correlated Fixed Effect- Hausman Test

Test Summary	**Chi-Sq. Statistic**	**Chi-Sq D.F**	**Prob.**
Panel Data Fixed Effects	16.68	16	0.0196

4.3 Results and Discussion

Table 5.
Result of panel data regression
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 5. Panel data regression model of each variables

Variables	***Coefficient***	***Std Error***	***T-Statistic***	***Prob.***
Constant	***2.66e+07***	***1780504***	***-14.94***	***0.000***
OWC	***1623857***	***716622***	***2.27***	*0.023*
MAO	***-436689.8***	***938902.6***	***-0.47***	*0.642*
BOS	***243001.1***	***105939.6***	***2.29***	*0.022*
BIN	***8285137***	***1580136***	***5.24***	*0.000*
FOW	***-161586.3***	***559586.5***	***-0.29***	*0.773*
FSZ	***1458656***	***79571.42***	***18.33***	*0.000*
AGE	***39352.98***	***11202.4***	***3.51***	*0.000*
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 literatures 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, board size, board independence and foreign ownership

UNDER PEER REVIEW

as the basic determinants of the economic value added of Nigerian manufacturing firms based on existing literatures. 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. On the average executive directors with shareholding are represented with **5.07%.** The finding with respect to board size as measure of firm value indicates a positive significant with the value of Nigeria manufacturing firms. The descriptive analysis provided an average of **8** board sizes with maximum of **18** and minimum of **4** board members. Other corporate governance metric like board independence reported a positive relationship with economic value added at 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 negative insignificant relationship with the value of Nigeria manufacturing firms. On the average, 52.25% of the Nigerian manufacturing firms poses foreign ownerships. This shows the higher the number of foreign shareholding the lower the economic value added in the Nigerian manufacturing firms.

The results of the study attested to the influenced of ownership concentration, 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 established a significant relationship with firm value. The scope of this study need 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.

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