



Corporate Governance and Firm Performance of Listed Consumer Goods Companies in Nigeria

Mayowa Ebenezer Ariyibi^{1*}, Olusola Enitan Olowofela¹
and Olaiya Kehinde Isaig¹

¹Department of Banking and Finance, Olabisi Onabanjo University, Ago-Iwoye, Nigeria.

Authors' contributions

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

Article Information

DOI: 10.9734/AJEBA/2021/v21i1530478

Editor(s):

(1) Dr. Adina Dornean, Alexandru Ioan Cuza University of Iasi, Romania.

Reviewers:

(1) Dinh Tran Ngoc Huy, Banking University HCM City, Vietnam, International University of Japan, Japan.

(2) Ali Rehman, A'Sharqiyah University, Oman.

Complete Peer review History: <https://www.sdiarticle4.com/review-history/74705>

Original Research Article

Received 24 July 2021
Accepted 29 September 2021
Published 13 October 2021

ABSTRACT

We examine the impact of corporate governance on firm performance using the accounting measures based on the profitability status of the companies depending on cash flows and inflow from the income statement. In a sample of selected consumer goods companies, the study revealed that board size has positive significant effect on return on sales. Board size and board independence has positive significant effect on profit margin. It also revealed that board size and board independence negative significant effect on operating cash flow. Based on the findings, it is recommended that the organization should take cognizance of its board size since it influences the rate of turnover which is an intrinsic component of the overall performance of the organization. The organization should make sure the board size is regulated on a low-cost reduction basis so it does not induce a negative impact on the profitability status of the organization.

Keywords: Corporate governance; firm performance; board size; board independence.

JEL Classification: C23, G32, G34.

1. INTRODUCTION

The phenomenon of corporate governance in a going concern setting has always been an attempt to distinguish between ownership and control, so has to improve the shareholder's equity. This aging problem in corporate governance mechanism has continually been a debatable issue among policymakers, regulators, and researchers who tend to find a distinguishing gap in the concept of thought in literature. Corporate Governance is a stringed leaflet that aid to coordinate the business process and system of a corporate organization, set up by the owners and managers. Corporate Governance must entail the attribute of satisfying the interest of all internal and external stakeholders and shareholders in the affairs of a firm all around the globe.

The Corporate governance mechanism can be classified into the liabilities, implementation, and result basis before been used for apt strategic level management decision, which allows this study to implore the board size, board independence and audit committee to be employed has the corporate governance mechanism, due to their corporate implementation and liabilities attribute the have on the financial performance of the firm [1]. This study examined the identified categorization of corporate governance on the accounting-based measurement of firm performance. The accounting based measurement are the firm performance parameters that aid the corporate body, to understand its level of performance in terms of different financial metrics that makes up the entire performance at the end of any calendar year. And these accounting-based measurement of ROS (Return on Sales), PM (Profit Margin), and OPC (Operating Cash Flow) will aid the firm to have a clear picture of how corporate governance decision/mechanism (board size, board independence and audit committee) of the manufacturing firm contributes to the operating profit and level of turnover on daily, monthly basis before the end of the annual accounting period.

However, corporate mismanagement and monetary scandals have centrally generated attention on the appropriate corporate governance policies and regulations, induced in the ethical conduct, which is variable to the outcome of management elegance, audit sincerity, professional practices, reporting quality, and conflict of interest [2,3].

In addition, the corporate and institutional crises have created urgent attention or concern for new corporate rules and policies to control corporate governance mechanisms in developed and developing countries [4]. The corporate crises have made lawmakers, strategic managers of most countries improve the effectiveness and efficiency of corporate governance transparency in international and local industrial entities [5,6], SáenzGonzález & García-meca, 2014). For example, United States legislators enacted the Sarbanes-Oxley Act in 2002. As per the Sarbanes- Oxley Act, stock exchange legislators should induce appropriate corporate governance policies on quoted limited companies in respect to independent audit, independent board, and corporate disclosure reliability [7], Alimehmeti & Paletta, 2014).

As a result of continuous decrease in the market value of an organization, due to corporate governance leakages, much corporate entity in the world, the too big to fail have been a partaker in financial scandals and crises. Notable among such company scandals and failures are Enron, WorldCom, Arthur Anderson, and Adelphia. Also in Nigeria, different corporate governance failures like Cadbury Lever Brothers, Oceanic Bank and Intercontinental Bank as opined by Stephen & Benjamin [8] has led to a poor financial performance that has stifled the internal ability of firms to maximize equity holder's wealth due to concentrated and organized corruption within the organizational structure (Honari, Munare & Potterie, 2016).

Other sections are divided into four parts. The rest of this paper is organized as follows. The second part discusses the literature review and part three presents the data and empirical methodological issues. Part four presents the empirical results and the last part concludes.

2. LITERATURE REVIEW

2.1 Conceptual Review

Corporate governance is evident in an institution when the firm is indicted with a void in consensus ad-idem between shareholders and managers. The interest of the shareholders and managers differ, due to this difference in goals and gain of both independent parties in an organizational conflict cannot be scarce in the operation of the firm [9]. Corporate governance managers slate down targets and goals of the firm; corporate governance aid the firm to put in place effective

internal and external controls to reduce the operational risk to the barest minimum [10].

Cadbury (1992) defined corporate governance as “the structure by which an entity is controlled and directed. It is concerned with the function of a company’s strategic level to successfully head the company and their consensus with its equity holders and other external and internal stakeholders [11]. It is also explained as the process through which shareholders make management operate in their interest, giving investors confidence to operate effectively in the capital market [12]. In general, corporate governance is referred to have a propellant of growth, in the economy because when good corporate governance is practiced within the financial architecture of an economy, it will enhance investor choice and reduce the risk investor’s face in the aspects of taking accurate financial decisions [13].

Corporate governance system is classified into two main strata: Insider system and outsider system. The insider system indicates a conflict of interest between the weak and strong equity holders while the outsider system depicts the conflict of interest between widely dispersed shareholders and strong managers [14]. The Corporate Governance system has two key objectives which include controlling and maximizing shareholder wealth and integrity management [15]. Good corporate governance operated in the financial system will attract foreign capital, improve the image and reputation of the country, and prevents capital flights from internal managers. It also aids to distribute and maintain the high welfare of all stakeholders [16].

From the firm’s perspective, robust corporate governance implies increasing liquidity and decreasing the cost of capital for either investment or financial purposes in an entity. Adequate corporate governance helps firms to wade off a corporate crisis. It has been established through various studies that a firm practicing good corporate governance has more success than other firms [17, 18]. Because investors will be willing to pay high share prices for firms that practice and adopt a well quantifiable corporate governance [19]. Sound corporate governance does not endanger a firm’s sustainability but will improve corporate financial performance and market value. Finally, the soundness of corporate governance depends solely on the inter-change of power exercised by the investors and strategic level of an

organization towards attaining short-term objectives [20].

However, overregulation by the form of system practiced in a sovereign state may not always enhance economic, corporate stability, performance, and improved market value of a firm all the time. This can make corporate governance become a lacuna instead of being a positive vibe to the managerial capacity in terms of freedom to initiativeness to take wealth maximization decision to improve asset [21], Meesiri, 2014.

Corporate governance is a memorandum distribution of power, stated from the corporate affairs commission between the board of directors, managers, and shareholders for clearly showing the line of authority between the shareholder’s interests [20]. The germane ideology of the corporate governance system is accommodating the relationship among various internal and external stakeholders at different levels of interest. There is a micro and macro phenomenon of corporate governance [6,22]. The micro concept of corporate governance entails the formal inter-relationship among the company’s shareholders, management, auditors, and board of directors [6]. The macro concept of corporate governance entails the running of the firm in a just and equitable manner that in the long run, it improves capital allocation, market confidence, and welfare of the countries [23,6]. Both concepts result in the efficient and effective utilization of the four M’s in a firm [6].

Financial Performance is a metric used to determine a firm’s ability to use assets to improve turnover and in the long run, increase the level of revenue. Financial Performance is a subjective approach of determining accountability as a result of operations and activities measurable for an identified period in financial terms (Ngwenze & Kariuki, 2017). Another metric in determining financial performance includes financial efficiency ratio, liquidity ratio, profitability ratio, and debtor’s collection period for a given period. However, financial performance in the corporate governance arena has been determined in several ways. The financial performance of the corporate organization has been affected by corporate governance practices in Nigeria because the continuity and going concern prospects on the exchange floor are dependent on how well insider trading has been reduced to the barest minimum. A firm that has a good prospect of continuity will certainly increase

earnings and overall financial performance. These accurate corporate governance practices in firms will improve the demand and share price of the organization (Mobius 2002).

2.2 Theoretical Review

The ideology of corporate governance tends from the postulation of agency theory. Since the postulation of Berle and Means (1932), corporate governance has continually built the niche on the agency problem that occurs due to the distinction of ownership and control which is evident in the legal structure of an organization. Berle and Means (1932) were able to project that the compendium of the different board of directors on the company strategic level is checks and balances for the managers, so has reduce the principal-agent problem in the internal environment of a firm. In this picture, managers are agents, owners are the principals, and directors on the structure of the firm are the check and balance system towards steering the firm in maximizing shareholder's wealth [24]. Furthermore, the theoretical compendium on corporate governance policies and practices attributes two factors to agency theory. The first factor is that a corporation is an embodiment of a humanistic system of managers and shareholders who have different intrinsic interests in an entity. The second factor is the fact that agency problems will suffice due to the selfish ambition of different stakeholders joined internally or externally to a firm [25].

The seminal work of Jensen and Meckling [26] and Alchian and Demsteez [27], elucidate a firm as a nexus of different individual factors of production in an organization creating the emergence of agency theory. A firm is a legal organogram that entails different individuals with striking objectives on the firm and this firm creates a meeting point or break-even point to satisfy every individual component through goal actualization of the entity. These bound is created through contractual binding relationship in form of being an employee, supplier, customer, and creditor to the firm [26]. This contractual relationship is created to make all parties satisfy their individual goal and in the long run, reduce agency costs (perks and bonuses) and improve financial accountability and performance of the firm.

The agency role of the directors refers to the governance function of the board of directors in serving the shareholders by ratifying the decisions made by the managers and monitoring

the implementation of those decisions. This role has been examined in a large body of literature [28,29], Daily & Dalton 1994; [30], Lorsch & MacIver 1989. Much of this research has examined board composition due to the importance of the monitoring and governance function of the board (Barnhart, Marr).

The agency attributes of the directors refer to the governance responsibilities of the internal board in nullifying the decision or plan made by the agents that do not tend towards shareholder's wealth maximization. This specific role has been reviewed by Baysinger & Butler [28]; Baysinger & Hoskisson [29]; Daily & Dalton 1994; Fama & Jensen [30]; Lorsch & MacIver 1989. Much literature has examined corporate governance in the view of board composition due to the germane feature of monitoring the governance style of the agents (Barnhart, Marr & Rosenstein 1994; Bhagat & Black 1998; Daily & Dalton 1994; Gales & Kesner 1994; Kiel & Nicholson 2003; Pearce & Zahra 1992). The major bane of agency theory is the relationship between shareholders and corporate managers, due to uncertainty and information asymmetries [31]. The corporate manager's firm-specific knowledge will aid their decision towards some concentrated strategic decision that may not relay the shareholder's view or personal wealth objective, that supports the bedrock of any strategic process taken by the managers of the organization.

This also announces the peculiarity of accounting operations in reducing agency cost in an organization through the peculiar accounting systems that improve company profits and in the large perspective will increase managers bonus and remuneration that is as a result of accounting system-aided profits used in the organization.

Arising from the different premises above is the agency problem faced in a corporate setting to structure and align the managers to function in the interest of their stakeholders and shareholders. The use of monitoring costs is to reduce the agency problem evident in a corporate setting [32]. Jensen and Meckling [26] define agency costs as the compulsory expenditure expended by the principal of the firm, so has to limit the aberrant or dislodging activities of the agent towards incurring a residual loss that will occur by pursuant of different goals in a firm. However, agency problems depend on the ownership components or structure in a country. In a situation where the

owners of a firm are dispersed and not satisfied with the ownership structure or performance results of their company which they have equity stock in, they show their aggravated feelings through existing the firm and signaled reduction in the company share prices. In a concentrated ownership style in companies' managers tends to gain private institutional control over the firm and agents in the company [33].

The agency constructs believe that individuals have complete information and stakeholders possess accurate knowledge of whether or not governance activities conform to their preference [34]. The agency theory believes that an efficient market has the attributes to solve agency problems in an organization and enhance corporate control (Clarke 2004).

The stakeholder's theory is also an integral part of a company to the external environment. A stakeholder is a component in the affairs of a firm that is affected or can affect the activities of a firm towards actualizing its corporate objectives and goal [35]. The World Business Council for Sustainable Development (1999) refers to the following to be categorized as stakeholders which includes labor organizations, academia, church, indigenous peoples, human rights groups, government and non-governmental organizations and shareholders, employees, customers/consumers, suppliers, communities, and legislators. According to Ansoff (1965), a firm can attain in projected objective by balancing the antagonistic interests of different classes of stakeholders. Therefore, a fundamental phenomenon of stakeholder theory is for a firm to identify its own internal and external environment which holds its stakeholders (Clarkson 1995).

Corporate governance systems are in a state of transformation and innovativeness due to capital market internationalization, the value-based approach of shareholders, and attaining sustainable development through stakeholder responsibilities of firms (Clarke 1998). It is been understand that stakeholder theory posits external benefits and internal benefits of a firm while agency theory posits internal benefits of the firm [34]. The stakeholders agree with the supports of the company performing their CSR and implement the concept of risk management to manage divergent interests.

Criticism that agrees with the ideology of stakeholder theory identify that who are the true stakeholder's. Some believe that agreeing with

the stakeholder's interest posits a path for corruption, where agents through fraudulent preference divert the equity of shareholders to their own stakeholder not company identified stakeholders. But the moral perspective of stakeholder theory is all stakeholders have a right to be treated fairly by an organization, and managers should manage the organization for the benefit of all stakeholders, regardless of whether the stakeholder management leads to better financial performance [31].

2.3 Empirical Review

In the study of Puneeta Goel (2018), the implication of corporate governance and financial performance; the study examined the effectiveness of the corporate governance reforms looking into the corporate governance practice in the two reform periods bi Indian companies (The financial year 2012-2013 as period 1 and Financial year 2015-2016 as period 2). The study considered the mandatory regulations as stated in clause 49 of the listing agreement with the securities exchange board of India and the required governance standards in the new company Act of 2013. The Act develops a corporate governance performance (CGP) index which enables the measurement of corporate governance scores of companies in India. The corporate governance structure implied by Indian companies indicates significant improvement, leading to a decrease in the number of independent directors inducted into the board immediately after the reforms in period 2. It was indicated that the various sectors studied have an improvement in following corporate governance practices after the various reforms. It was revealed that there exists a significant relationship between an integrated framework of total corporate social performance and financial performance in period 1 only. The reforms do not affect financial linkages in the Indian market in period 2.

Ngwenze and Karuiski (2017) examine the effect of corporate governance practices and financial performance of listed agricultural firms in Kenya, covering all the 7 firms listed on the NSE from 2012 to 2016. The corporate governance practices included in the study were composition and size of the board of directors, board and audit committee independence. The descriptive research design was used in the study to determine the relationship between corporate governance practices and financial performance. Using multiple regression analysis, it was

revealed that there was a violation of the capital market authority (CMA) Act threshold of three non-executive directors in the composition of the audit committee by some companies while the board composition of others was poor. It was shown that corporate governance practices do not significantly influence performance measures (ROE and ROA) of the listed agricultural firms in Kenya. Significant influence was shown with the debt-equity ratio. The findings were following extant empirical studies on corporate governance. This indicates that the adoption of the established corporate governance practice plays a vital role in improving the performance of agricultural firms.

More so, Skare and Hasic (2016) in their study; corporate governance, firm performance, and economic growth, were based on theoretical perspectives, offering a consistent literature review and assessing the connection between corporate performance and economic growth. Studies across individuals and cross-country reveal that corporate governance has a significant positive effect on the performance of firms and as a result on economic growth. Extant literature and research show corporate governance help in economic growth and it's a determinant to be reviewed when it comes to growth models. The study gives a future direction to studies about corporate governance and economic growth.

Palanaippan and Srinivasa [35] examined the relationship between corporate governance and financial performance. The study uses a sample of 10 manufacturing firms that are listed on the BSE stock exchange covering different sectors. Data were collected from CMIE, from respective companies, and the framework of content analysis through disclosure of the company's annual report and accounts and corporate governance reports. Using correlation and regression analysis, the relationship and its impact were measured. It was revealed that a positive significant impact exists between corporate governance disclosure and firms performance of manufacturing firms in India. Also, related to the study of Ademola, Moses, and Ucheagwu [36]; Corporate governance and financial performance of manufacturing firms in Nigeria. The population of the study was 45 manufacturing firms listed on the NSE from 2010 to 2014 while using a sample of 30 companies. The study adopts multiple regression analysis in analyzing the data. It was established from the result that the board structure index has a

significant positive relationship with performance; the audit committee index has a positive significant relationship with performance while the ownership structure index has a negative insignificant relationship with performance. It was revealed that performance measured from the study (ROA) relates to the component of the corporate governance index. The study recommends that reforms should be seen to be a mechanism that will improve the corporate governance practice of manufacturing firms in Nigeria, emphasizing ownership structure and audit committee.

Abdulazeez, Ndibe, and Mercy [37] in their study; corporate governance and financial performance of deposit money banks in Nigeria, believe that the sample size and the period covered by previous studies are inadequate to generalized findings. It was against this methodological gap that the study examined the impact of corporate governance on the financial performance of all listed deposit money banks in Nigeria, covering the period of 7 years 2006-2012 (after the consolidation of banks). The study test for multicollinearity using Pearson correlation and VIF test, while regression analysis was adopted to analyze the data. It was revealed that board size has a significant positive effect on the financial performance of deposit money banks in Nigeria. The study further suggests that banks should increase their board size but bearing in mind the maximum limit as stated in the code of corporate governance.

Noordin and Kassim [38] examined corporate governance and financial performance: Empirical evidence from public listed construction companies in Malaysia, using data of all 38 construction companies listed on Bursa Malaysia for 2009 to 2012. The corporate governance variables used in the study are board size, board independence, the role of duality, board meetings, audit committee, nomination committee, and remuneration committee, while Tobin's Q was used as a proxy for financial performance. The study shows that there is a significant positive relationship between board size and financial performance (this is in agreement with the study of Abdulazeez, Ndibe, and Mercy (2016) of listed construction companies in Malaysia. It was inducted that board characteristics of construction companies are unique and should strive under a segregated corporate governance structure.

3. METHODS

These models were adapted and adjusted to suit the present study from the study of Vu & Nguyen [39], Ademola, Moses & Ucheagwu [36], and Nazrul and Kassim (2015). The corporate governance proxies were adopted from the study of Ademola, Ademola, Moses & Ucheagwu [36] and Nazrul and Kassim (2015) while the various accounting performance measures mentioned in Vu & Nguyen [39] was used as the dependent variable which includes return on sales, profit margin and operating cash flow.

The linear equation is given below;

$$FP_{t(ROS,PM,OPC)} = f(CG_t) \tag{1}$$

$$ROS_{i,t} = (\alpha_0 + \beta_1 BI_{i,t} + \beta_2 AUC_{i,t} + \beta_3 BS_{i,t} + \mu_t) \tag{2}$$

$$PM_{i,t} = (\alpha_0 + \beta_1 BI_{i,t} + \beta_2 AUC_{i,t} + \beta_3 BS_{i,t} + \mu_t) \tag{3}$$

$$OPC_{i,t} = (\alpha_0 + \beta_1 BI_{i,t} + \beta_2 AUC_{i,t} + \beta_3 BS_{i,t} + \mu_t) \tag{4}$$

To accomplish the research hypothesis, the data for this study was gathered from (15) listed non-financial manufacturing (Consumer goods sector) firms quoted on the Nigeria Stock Exchange (NSE) using the stratified and simple random technique. The panel data was employed for the study between 2014-2018. The study employed the panel regression analysis for the study using EViews 10 Statistical package for the study. The study employed the following variable to measure the dependent and independent variables for the study.

Table 1. Description of variables

Variables	Description	Measurement
Dependent Variable		
ROS	It is the amount in value in which the sales have been able to improve the overall income of the organization.	It is measured by Net Income divided by total revenue.
PM	It is the earnings before interest and other expenses are deducted from the gross profit	It is the EBIT before any other expenses in deducted.
OPC	It is the amount of cash generated by the regular operating activities of a business in a specific period.	It is measured by Net income plus non-cash expenses.
Independent Variables		
BI	All or most of the board’s members do not have a relationship with the company except as executives [6].	The proportion (%) of independent directors to the total number of directors on the board of the company
AUC	An Audit Committee is to review the internal accounting system and control process, as well as hold meetings with the external auditors regularly to review financial statements [40], Maztoul, 2014; Samaha & Abdallah, 2012).	Dummy variable for audit committee existence 1 if the company has an audit committee and 0 otherwise.
BS	It means the number of members on the bank board. It varies according to firm size and the nature of business. (Dehaence, DeVuyst & Oogne, 2001)	It is measured as the total number of board of directors in the company.

Author’s Compilation, 2019

4. RESULTS AND DISCUSSION

This section deals with the analysis and discussion of empirical findings. This covers the descriptive statistics, correlation matrix, Hausman Test, and fixed & Random Effect Model.

4.1 Descriptive Analysis

The above table depicted the descriptive statistics used in the study. ROS (Return on Sales) has a mean value of 0.40%, median value of 0.28% and standard deviation has a variation value of 0.48. PM (Profit Margin) has a mean value of 0.28%, median value of 0.28%, and Standard deviation has a variation of 0.10. OC (Operating Cash Flow) has a mean value of 14.3%, median value of 66.7%, and Standard deviation has a variation value of 18.1. The independent variable of the study includes; BS (Board size) has a mean value of 10.5%, a median value of 9.0% and a Standard deviation has a variation value of 2.81. BI (Board independence) has a mean value of 0.55%, median value of 0.57%, and Standard deviation has a variation value of 0.06%. AUC (Audit Committee) has a mean value of 5.8%, median value of 6.0%, and Standard deviation has a variation value of 3.0. The minimum value and maximum value of the variable include the following; ROS (Return on Sale) has a minimum value of 0.00 and a maximum value of 2.89. PM (Profit Margin) has a minimum value of 0.07 and a maximum value of 0.50. OC (Operating Cash Flow) has a minimum value of -80.9 and a maximum value of 73.8. BS (Board size) has a minimum value of 6.0 and a maximum value of

17.0. BI (Board Independence) value 0.66. AUC (Audit Committee) has a minimum value of 3.00 and a maximum value of 8.00. The Skewness in the variable include; ROS (Return on Sales) is positively skewed at 3.52. PM (Profit Margin) is positively skewed at 0.11, OC (Operating Cash Flow) is positively skewed at 1.78, BS (Board size) is positively skewed at 0.69. BI (Board independence) is negatively skewed at -0.25. AUC (Audit Committee) is negatively skewed at -1.28. The Kurtosis in the variable include; ROS (Return on Sales) is platykurtic at 17.8, PM (Profit Margin) is leptokurtic at 2.46. OC (Operating Cash Flow) is platykurtic at 5.14. BS (Board size) is leptokurtic at 2.34. BI (Board independence) is leptokurtic at 2.14. AUC (Audit Committee) is platykurtic at 5.87. The Jarque-Bera Statistics include: ROS (Return on Sales) is 842.4 at 0.00 which is indicating the variable is not normally distributed. PM (Profit Margin) is 1.04 at 0.59 probability value indicating it is normally distributed. OC (Operating Cash Flow) is 54.1 at 0.00 probability value indicating the variable is not normally distributed. BS (Board size) is 793.0 at probability value indicating it is normally distributed. BI (Board independence) is 3.09 at 0.21 probability value indicating it is normally distributed. (AUC) Audit Committee is 46.49 at 0.00 probability value indicating the variable is not normally distributed.

The Table 2 shows depicts the relationship between the dependent variable and the independent variable. The table depicts that ROS (Return on Sales) has a positive relationship with BI (Board independence) and a negative relationship with BS (Board size) and AUC (Audit Committee). PM (Profit Margin) has a positive

Table 2. Descriptive analysis

	ROS	PM	OC	BS	BI	AUC
Mean	0.407876	0.282302	14.34778	10.57333	0.558138	5.866667
Median	0.284585	0.285478	66.76051	9.000000	0.575556	6.000000
Maximum	2.891608	0.509002	73.82390	17.00000	0.666667	8.000000
Minimum	0.000872	0.077808	-80.92870	6.000000	0.416667	3.000000
Std. Dev.	0.484020	0.103632	18.16083	2.814890	0.065770	0.859499
Skewness	3.527746	0.113302	1.782866	0.690684	-0.253883	-1.284624
Kurtosis	17.82601	2.469159	5.147984	2.344139	2.143378	5.876859
Jarque-Bera	842.4708	1.041069	54.15086	7.307281	3.098835	46.49174
Probability	0.000000	0.594203	0.000000	0.025897	0.212372	0.000000
Sum	30.59071	21.17264	1076083.	793.0000	41.86033	440.0000
Sum Sq. Dev.	17.33641	0.794731	2.44E+10	586.3467	0.320102	54.66667
Observations	75	75	75	75	75	75

Author's Compilation, 2019. Note; ROS (Return on Sales), PM (Profit Margin), OC (Operating Cash Flow), BS (Board Size), BI (Board Independence), AUC (Audit Committee)

Table 3. Correlation matrix

	ROS	PM	OC	BS	BI	AUC
ROS	1					
PM	-0.35	1				
OC	-0.04	0.31	1			
BS	-0.04	0.10	0.39	1		
BI	0.12	0.03	-0.16	0.24	1	
AUC	-0.05	-0.08	0.27	0.31	0.08	1

*Author's Compilation, 2019***Table 4. Model two****Dependent Variable (ROS)**

Variable	Fixed	Random
C	-1.1943 (0.0740)	-0.2999 (0.6353)
BS	0.2062 (0.0001)	0.0748 (0.0327)
BI	0.2073 (0.8420)	-0.1229 (0.8970)
AUC	-0.1182 (0.2414)	-0.0025 (0.9759)
R²	0.7247	0.6562
Adjusted R²	0.6156	0.6171
Durbin Watson	1.8937	0.4231
F-Statistics	6.6450	1.9528
Prob (F-statistics)	0.0000	0.1288
Hausman Test	1.0000	

Author's Compilation, 2019

relationship with BS (Board size) and BI (Board independence) and a negative relationship with AUC (Audit Committee). OC (Operating Cash Flow) has a positive relationship with BS (Board size) and AUC (Audit Committee).

3.2 Regression Analysis

Model two shows the empirical results for the relationship between corporate governance practices and policies firm performance of non-financial firms in Nigeria. The accounting measures used for performance include ROS (return on sales). The two-panel model were significantly sound for the fixed-effect model and insignificantly sound for the random effect model given the Durbin Watson test and probability of the F-statistics. The DW value is 1.89 for fixed-effect model and 0.42 for the random effect model. The two probability for the model is significant and insignificant at 5%. Using the Hausman test, the Random Effect model was appropriate. Board size has a positive significant effect on return on sales at 0.1%, while Board independence and Audit committee has a

negative insignificant effect on return on sales at 0.1. A percentage increase in board size results in a 0.03% increase in return on sales. A percentage decrease in board independence results in a 0.12% increase in return on sales. A percentage decrease in the audit committee results in a 0.00% increase in return on sales. The study is consistent with Pureta Goal (2018) and Ademola, Moses, and Uchegwu [36].

Model three shows the empirical results for the relationship between corporate governance practices and policies firm performance of non-financial firms in Nigeria. The accounting measures used for performance include PM (profit margin). The two-panel model were significantly sound for the fixed-effect model and insignificantly sound for the random effect model given the Durbin Watson test and probability of the F-statistics. The DW value is 1.69 for the fixed-effect model and 1.40 for the random effect model. The two probability for the model is significant and insignificant at 5%. Using the Hausman test, the Random Effect model was appropriate. Board size and Board independence

have a positive significant effect on profit margin at 0.1%, while the Audit Committee has a negative insignificant effect on profit margin at 0.1. A percentage increase in board size results in a 0.00% increase in profit margin. A percentage increase in board independence results in a 0.09% increase in profit margin. A percentage increase in the audit committee results in a 0.00% increase in profit margin. The study is also consistent with Palanaippan & Srinivasa (2016) and inconsistent with Abdulazeez, Ndibe & Mercy [37].

Model four shows the empirical results for the relationship between corporate governance

practices and policies firm performance of non-financial firms in Nigeria. The accounting measures used for performance include OPC(Operating Cash Flow). The two-panel model was significantly sound for the fixed-effect model and insignificantly sound for the random effect model given the Durbin Watson test and probability of the F-statistics. The DW value is 1.28 for the fixed-effect model and 1.05 for the random effect model. The two probability for the model is significant and insignificant at 5%. Using the Hausman test, the Fixed Effect model was appropriate. Board size and Board independence have a negative significant effect on operating cash flow at 0.1% and 0.05%, while the Audit

Table 5. Model three

Dependent Variable (PM)

Variable	Fixed	Random
C	0.3470 (0.0010)	0.3376 (0.007)
BS	-0.0157 (0.0381)	0.0084 (0.0612)
BI	0.1158 (0.4629)	0.0955 (0.0917)
AUC	-0.0063 (0.6770)	-0.003 (0.7959)
R ²	0.8625	0.7246
Adjusted R ²	0.8080	0.7043
Durbin Watson	1.6977	1.4046
F-Statistics	15.8354	1.1070
Prob (F-statistics)	0.0000	0.3520
Hausman Test	0.4636	

Author's Compilation, 2019

Table 6. Model four

Dependent Variable (OPC)

Variable	Fixed	Random
C	60.7616 (0.7419)	-19.4427 (0.9913)
BS	-54.4356 (0.0685)	12.1882 (0.0497)
BI	-66.0731 (0.0206)	-84.0573 (0.0975)
AUC	21.3664 (0.4481)	29.0120 (0.9031)
R ²	0.8466	0.4571
Adjusted R ²	0.7858	0.4139
Durbin Watson	1.2816	1.0584
F-Statistics	13.9341	1.6601
Prob (F-statistics)	0.0000	0.5792
Hausman Test	0.0125	

Author's Compilation, 2019

Committee has a positive insignificant effect on operating cash flow at 0.05%. A percentage decrease in board size results in a 54.4% increase in operating cash flow. A percentage decrease in board independence results in a 66.0% increase in profit margin. A percentage increase in the audit committee results in a 21.3% increase in operating cash flow. The findings are consistent with Nordin & Kassim [38] but inconsistent with Samson & Tarila (2014).

4. CONCLUSION AND RECOMMENDATION

The study investigated the impact of corporate governance practices and policies on the firm financial performance of listed companies in Nigeria. The study established the usage of some relevant accounting measures has the dependent variable of return on sales, profit margin, and operating cash flow on corporate governance and corporate governance independent variable of board size, board independence, and audit committee between 2014-2018. Based on the findings of the study, the random regression model (model two) depicted that board size shows a positive statistically significant effect on return on sales which illustrates that the capacity of the board of directors in an organization can aid the turnover capacity of a consumer goods company. The random regression model (model three) depicted that board size and board independence show a positive and negative statistically significant effect on profit margin. The fixed regression model (model four) depicted board size and board independence shows a negative statistically significant effect on operating cash flow. This study, therefore, supports the agency theory that corporate governance enhances manufacturing firms' ability to efficiently allocate and manage their resources. It is therefore recommended that the organization should take cognizance of its board size since it influences the rate of turnover which is an intrinsic component of the overall performance of the organization. The organization should make sure the board size is regulated on a very low-cost reduction basis so it does not induce a negative impact on the profitability status of the organization.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Honoré F, Munari F, de La Potterie BVP. Corporate governance practices and companies' R&D intensity: Evidence from European countries. *Research Policy*. 2015;44(2):533-543.
2. Mang'Unyi EE. Ownership structure and Corporate Governance and its effects on performance: A case of selected Banks in Kenya. *International Journal of Business Administration*. 2011;2(3):2.
3. Bhuiyan MB, Roudaki J, Clark MB. Corporate governance compliance and discretionary accruals: New Zealand evidence; 2013.
4. Jen CT, Hu J, Zheng J, Xiao LL. The impacts of corporate governance mechanisms on knowledge sharing and supply chain performance. *International Journal of Logistics Research and Applications*. 2020;23(4):337-353.
5. Kaspereit T, Lopatta K, Zimmermann J. Does compliance with the German Corporate Governance Code pay off? An investigation of the implied cost of capital. *The Journal of Risk Finance*; 2014.
6. Pandya H. Corporate governance structures and financial performance of selected Indian banks. *Journal of Management and Public Policy*. 2011;2(2): 4-21.
7. Ali CB. Corporate governance, principal-principal agency conflicts, and disclosure. *Journal of Applied Business Research (JABR)*. 2014;30(2):419-432.
8. Yamin AM, Benjamin SF, Roberts CA. Pulsating flow in a planar diffuser upstream of automotive catalyst monoliths. *International Journal of Heat and Fluid Flow*. 2013;40:43-53.
9. Martani D, Saputra YE. The impact of corporate governance to the economic value added listed company in BEI 2003-2004. *China-USA Business Review*. 2009; 8(3):26-40.
10. Kang SA, Kim YS. Does earnings management amplify the association between corporate governance and firm performance?: Evidence from Korea. *International Business & Economics Research Journal (IBER)*. 2011;10(2).
11. Pass C. Corporate governance and the role of non-executive directors in large UK companies: an empirical study. *Corporate Governance: The International Journal of Business in Society*; 2004.

12. Rezaee Z. Corporate governance and ethics. John Wiley & Sons; 2008.
13. Spanos LJ. Corporate governance in Greece: developments and policy implications. *Corporate Governance: The international Journal of Business in Society*; 2005.
14. Ibrahim Q, Rehman R, Raoof A. Role of corporate governance in firm performance: A comparative study between chemical and pharmaceutical sectors of Pakistan. *International Research Journal of Finance and Economics*. 2010;50(5):7-16.
15. Bostan I, Grosu V. The role of internal audit in optimization of corporate governance at the groups of companies. *Theoretical & Applied Economics*. 2010; 17(2).
16. Dagli H, Eyuboglu K, Ayaydin H. Performance evaluation of corporate governance index in Turkey. *Journal of Accounting and Finance*. 2012;12(2):163-172.
17. Murcial FCDS, Dal-Ri Murcia F, Rover S, Borba JA. The determinants of credit rating: Brazilian evidence. *BAR-Brazilian Administration Review*. 2014;11(2):188-209.
18. Zeitoun H, Osterloh M, Frey BS. Learning from ancient Athens: Demarchy and corporate governance. *Academy of Management Perspectives*. 2014;28(1):1-14.
19. Dagli H, Eyuboglu K, Ayaydin H. Performance evaluation of corporate governance index in Turkey. *Journal of Accounting and Finance*. 2012;12(2):163-172.
20. Ngoungo D. The practice of corporate governance in companies receiving foreign direct investment in Cameroon. *Research in World Economy*. 2012;3(1):2-19.
21. Levišauskaitė K, Koncevičienė I, Ščerbina-Dalibagienė S. The influence of corporate governance regulation on the capital markets performance: The EU case. *Organizacijų vadyba: sisteminiai tyrimai*. Kaunas: Vytauto Didžiojo universiteto leidykla. 2012;62.
22. Rahim MM, Alam S. Convergence of corporate social responsibility and corporate governance in weak economies: The case of Bangladesh. *Journal of Business Ethics*. 2014;121(4):607-620.
23. Crişan AR, Fülöp MT. The role of the audit committee in corporate governance—case study for a sample of companies listed on BSE and the London Stock Exchange-FTSE 100. *Procedia Economics and Finance*. 2014;15:1033-1041.
24. Mallin C, Dunne T, Helliar C, Ow-Yong K. FRS 13 and corporate governance: a fund management perspective. *Qualitative Research in Accounting and Management*. 2004;1(2):17-42.
25. Daily CM, Dalton DR, Cannella Jr. AA. Corporate governance: Decades of dialogue and data. *Academy of Management Review*. 2003;28(3):371-382.
26. Jensen MC, Meckling WH. Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*. 1976;3(4):305-360.
27. Alchian AA, Demsetz H. Production, information costs, and economic organization. *The American Economic Review*. 1972;62(5):777-795.
28. Baysinger BD, Butler HN. Corporate governance and the board of directors: Performance effects of changes in board composition. *Journal of Law, Economics, & Organization*. 1985;1(1):101-124.
29. Baysinger B, Hoskisson RE. The composition of boards of directors and strategic control: Effects on corporate strategy. *Academy of Management Review*. 1990;15(1):72-87.
30. Fama EF, Jensen MC. Separation of ownership and control. *The Journal of Law and Economics*. 1983;26(2):301-325.
31. Deegan C. Environmental disclosures and share prices—a discussion about efforts to study this relationship. In *Accounting forum*. Taylor & Francis. 2004;28(1):87-97.
32. Shleifer A, Vishny RW. A survey of corporate governance. *The Journal of Finance*. 1997;52(2):737-783.
33. Spanos LJ. Corporate governance in Greece: Developments and policy implications. *Corporate Governance: The International Journal of Business in Society*; 2005.
34. Smallman C. Exploring theoretical paradigms in corporate governance. *International Journal of Business Governance and Ethics*. 2004;1(1):78-94.
35. PVVS SR, Palaniappan G. Board independence, audit committee effectiveness and firms performance: An empirical evidence of manufacturing firms in India. *Imperial Journal of Interdisciplinary Research*. 2016;3(1).
36. Ademola OJ, Moses OI, Ucheagwu CJ. Corporate governance and financial

- performance of selected manufacturing companies in Nigeria. *Corporate Governance*. 2016;2(10).
37. Abdulazeez DA, Ndibe L, Mercy AM. Corporate governance and financial performance of listed deposit money banks in Nigeria. *Journal of Accounting and Marketing*. 2016;5(1):1-6.
38. Noordin NH, Kassim S, Prabangasta D, Hayeeyahya N. Does composition of Shariah committee influence Shariah governance disclosure? Evidence from Islamic banks in Malaysia. *IUM Institute of Islamic Banking and Finance, Malaysia*. 2015;31.
39. Vu NH, Nguyen T. Impacts of corporate governance on firm performance-Empirical studies of listed Singaporean companies; 2017.
40. Cohen JR, Hoitash U, Krishnamoorthy G, Wright AM. The effect of audit committee industry expertise on monitoring the financial reporting process. *The Accounting Review*. 2014;89(1):243-273.

© 2021 Ariyibi et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:

The peer review history for this paper can be accessed here:
<https://www.sdiarticle4.com/review-history/74705>