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CORPORATE GOVERNANCE AND PERFORMANCE OF QUOTED DEPOSIT MONEY BANKS IN NIGERIA USING BALANCED SCORECARD APPROACH

DONALD OSADEBAMWEN IMUETINYAN
Department of Accounting,
University of Benin, Benin City,
Edo State.

And

SUNDAY NOSA UGBOGBO, Ph.D
Department of Accounting,
Benson Idahosa University, Benin City
Edo State.

Abstract

The study examines corporate governance and performance of quoted money banks in Nigeria using balanced scorecard approach. The study investigated the effect of board size, board composition, board gender diversity and audit committee size on corporate performance of quoted banks using balanced scorecard. The motivation for this research is our observation that a lot of studies have examined the relationship between corporate governance and performance using traditional performance measurement systems which focus only on financial indicators of performance. The longitudinal research design was used for this study. The population of the study consisted of the 15 banks quoted on the Nigerian Stock Exchange. The entire population was used as the sample for the study covering the period 2010-2016. The data analysis procedure includes descriptive statistics, the Generalised Least Squares Regression Analysis in the estimation of the model. The study reveals that board size and board independence have a significant effect on corporate performance using balanced scorecard while board gender diversity and audit committee size have no significant effect. The study recommends that companies should make use of a more robust performance measure tool such as the balanced scorecard in assessing organisational performance as it would provide a holistic approach.

Keywords: Corporate governance, financial performance, board size, board independence, board gender diversity and audit committee size

Corporate governance, in recent times, has gained global prominence having been found to be critical to sustainable organisational performance (Anameje, 2007). An improvement in corporate governance practices is widely acknowledged as an essential element in strengthening the foundation for the long-term economic performance of nations and corporations. According to Abdullah and Valentine (2009), several corporate governance variables have varying implications for performance of firms. For example, a large board size is favourable because they enhance the pool of expertise and resources available to the organization, notably so in firms with a multiplex business model. These may not only be relevant from the perspective of the advisory role of the board but also from the perspective of its monitoring role. Sanda, Mikailu and Garba (2011) evidence that boards tend to contribute more to performance if they have the right mix of non-executive and executive directors than boards with a majority of executive directors. While, Boyle and Jane (2011) asserted that female board members will bring diverse viewpoints to the boardroom and will elicit lively boardroom discussions. Management may be less able to manipulate a more heterogeneous board to achieve their personal interests (Erhardt, Werbel, & Shrader, 2003). The influence of corporate governance on financial performance dimension is a well debated area and has been extensively dealt with by several scholars in the Nigerian environment.

However, performance measurement (PM) using financial indicators have failed to measure and monitor multiple dimensions of organisational performance. In consequence, strong reliance on financial measures alone in presenting the true picture of an organisational performance is in itself backward looking. This has been observed by Eccles (1991) and Kaplan and Norton (1992). This shows that performance measurement incorporating non-financial measures has been a topic of great interest throughout most of the 1990s. The Balanced Scorecard approach using a blend of financial and non-financial indicators in performance measurements addresses the shortcomings of conventional measurement systems. As a result, several studies have examined the relationship between corporate governance and corporate performance. A majority of these studies however focus on only financial indicators of performance. For example, Sami, Wang and Zhou (2011) established that firm performance is positively associated with different measures of governance, whereas Masood Fooladi (2011) found the relationship between the independence of board of directors, size of the board of directors, ownership structure respectively and firm

performance to be insignificant. Thus the lack of consensus and non-inclusion of non-financial measure is a major gap that this current study seeks to address by utilising a balanced scorecard approach in investigating the effect of corporate governance on performance. As earlier observed, the Balanced Scorecard (BSC) approach assesses total business performance from financial, customer, internal business process and learning and growth perspectives. Therefore this study will include the non-financial measures in order to have a holistic measure of corporate performance.

Literature Review
Corporate Performance Evaluation

According to Adusei (2011), performance is the final result of all activities. How well an organization executes on its most important parameters, typically financial, market and shareholder performance is measured by corporate performance. However, in recent years, there exists a broader idea of corporate health. Like the idea of business sustainability, good corporate performance is now considered to embroil not only financial considerations but also other factors including customer satisfaction, innovation, reputation, productivity and employee morale. As such, performance is no longer quantified only on key performance indicators (KPI) such as revenue or return on investment (ROI). In evaluating performance the emphasis is on assessing the current behaviour of the organisation in respect to its efficiency and effectiveness. It is about monitoring an organisation's effectiveness in fulfilling its own predetermined goals or the requirements of stakeholders. For a company to be successful, it must be able to perform better not simply in terms of cost but also in other dimensions such as adaptability, flexibility, value, quality and so on. To ensure an effective and informed decision making at both strategic and operational levels, it is important to have a performance measurement system that enables it meet these demands satisfactorily. The comparison of outcomes against objectives enables the identification of problems so that timely corrective actions can be taken. The appropriate performance measurement tool should be relevant to the strategic goals of the organisation and accountable to the individuals concerned.

According to Abu-Tapanjeh (2006), performance measurement tools could be traditional or non - traditional. Traditional measures indicating the financial strengths, weaknesses, opportunities and threats are Residual Income (RI), Return on Investment (ROI), Dividend Yield, Earning Per Share (EPS), Price Earnings Ratio, Growth in Sales, Market Capitalization etc. It is discovered that beside financial performance, non-conventional performance of corporate bodies are clamoured by users of financial

statements, in such cases tools like Balanced Scorecard, Economic Value Added, etc are to be used.

The Balanced Scorecard Perspective

The introduction of balanced scorecard as a measurement tool for performance was to assess the activity of both tangible and intangible assets of an organisation. Kaplan and Norton (1992) described the way organizations measure performance as outdated and unresponsive as it is based on internal financial data. The introduction of balanced scorecard was aimed at moving organizations from a financially biased approach to one that connects the various perspectives of an organization's success: financial, customer, internal processes and learning and growth. Balanced scorecard framework has evolved from this multi-perspective performance measurement system to a complex strategy management and control system. Balanced scorecard is an integration of financial and non-financial measure employed in a firm's strategy emphasizing communication with members and providing feedback for attaining organisation goals (Mendoza & Zrihen, 2001). According to Kaplan and Norton (1992), balanced scorecard provides executives and managers tools needed to compete in the future and monitor the effectiveness of a firm's strategy. With balanced scorecard an organization is able to translate its strategy and mission into a set of performance measures that provide the underpinning for a strategic management system. Balanced scorecard includes not only conventional financial objectives, but also objectives that drive financial results.

Corporate Governance

Corporate governance is concerned with the ways through which parties interested in the wellbeing of a company (stakeholders) ensure that managers and other insiders take measures or adopt mechanisms to satisfy the interests of the stakeholders (Sanda et al., 2011). Anameje (2007) referred to corporate governance "as a system which ensures that managers and directors of organisations execute their functions within a framework of transparency and accountability". The reason most organisations get into financial problems is revealed by this definition. Most companies in Nigeria often lack accountability and transparency in their business deals, and the boards of directors who are supposed to ensure that management complies with corporate governance principles are often weak, complacent and docile. The corporate governance structure specifies that the various participants in the corporation have different rights and responsibilities distributed among them. Such rights and responsibilities spell out the rules and procedures for making decisions on corporate affairs. By doing so, it also provides the framework through which the company objectives

are set and the means of attaining those objectives and monitoring performance. Ruin (2001) states that corporate governance is a group of people coming together with the main duty to direct, control and rule with authority. On a collective effort, this body is empowered to regulate, determine, restrain, curb and exercise the authority given to it. Corporate governance can also be defined as a structure and framework used for the directing and managing of the business and affairs of a company with the aim of improving the success and accountability of the business.

According to Uwuigbe, Olusanmi and Iyoha (2015), corporate governance is seen as a framework or an arrangement consisting of a wide range of practices (accounting rules, standards concerning financial disclosure, size, executive compensation, and composition of corporate boards) and institutions that seek to shield the interest of corporation's owners. The concept mainly exists to reduce agency challenges by serving as checks and balances between shareholders and management. Therefore, the control right given to managers is reduced, and the chance that manager's investment decisions enhance the maximization of shareholders wealth improved (Shleifer & Vishny, 1997).

Corporate Governance and Banks

The usefulness of corporate governance of banks in developing economies can be adduced to the following: firstly, banks have a remarkable dominant position in the financial system of a growing economy and are extremely important engines of economic growth. Secondly, financial markets are often underdeveloped; banks in developing economies are typically the handy source of finance for a majority of firms. Thirdly, in addition to providing a generally acceptable payment means, banks in developing countries are usually the main depository purse for the economy's savings (King & Levine, 1993; Levine 1997).

Hettes (2002) stressed that banking supervision can only function when there is "correct corporate governance" because experience has unfolded the need for an appropriate level of control, responsibility and balance of competences in each bank. Hettes (2002) further explained that correct corporate governance simplifies the work of banking supervision and enhances cooperation between a bank's management and the banking supervision authorities. Crespi, Garcia-Cestona and Salas (2002) noted that in the context of banks, corporate governance refers to the different methods by which bank owners induce managers to implement value-maximising policies. These mechanisms may be external to the firm, like the market for corporate control or the product and labour markets competition level. They may also be internal mechanisms such as a disciplinary intervention by shareholders (referred to as proxy fights) or a board of directors' intervention (Crespi et al., 2002).

Board Size and Performance

According to Upadhyay and Sriram (2011), a larger board has greater resources than a smaller board to monitor managerial performance, so directors would ponder on important corporate decisions more extensively and would also demand that the managers disclose important issues to the stakeholders which will lead to greater information transparency. However, decision-making costs increase with board size even if a bigger board has more knowledge and skill. For instance, Jensen (1993) argued that because of free-riding issues amongst directors and due to increased time expended in decision making, large boards are less effective in monitoring the management. When acquiring information is costly, the motivation to gather and analyse information may diminish where a large board size exist. In regard, Persico (2004) asserted that larger boards can be less participative, less cohesive, and less able to reach consensus. Uadiale (2010) revealed that coordination, communication and decision-making challenges are more likely when the number of directors' increases and these often impede a firm's performance. These reasons underlay the popular view that small boards are better from a shareholder's perspective.

The question of whether a large board or a small board helps improve a firm's financial performance is a debatable issue that researchers have not reached a consensus on. Empirical evidence from researchers often shows mixed results about the relationship between board size and financial performance of firms. For instance, Adusei (2011) found that as the size of a bank's board of directors decreases, its profitability increases. Al-Manaseer, Al-Hindawi Al-Dahiyat and Sartawi (2012) established a significant negative relationship between board size and banks' performance. Shehu and Farouk (2014) revealed that board size has a negative impact on banks performance. On the other hand, Adeusei, Akeke, Aribaba and Adebisi (2013) revealed that board size has a positive association with the financial performance of banks. Manmeet and Madhu (2014) asserted that there is a positive connection between board size and financial performance. The following relevant research hypotheses are formulated to provide a direction for the study. *H_{01}: Board size has no significant effect on corporate performance in quoted banks.*

Board Composition/Independence and Performance

The composition of a board pertains to the number of outside directors expressed as a proportion of total board membership. An autonomous board is one controlled by outside directors and is more likely to safeguard the interests of stakeholders (Sanda, Tanda & Mikailu, 2011). Sanda et al. (2011) opined that the importance of outside directors cannot be overemphasized as it is being recognised even at the level of policy making with codes of corporate governance giving particular attention to the need to have a reasonable mix of

them on the board of firms. They further emphasized that there will be more contribution from a well-constituted boards with the right proportion of non-executive directors than boards with a predominance of inside directors (Sanda et al., 2011). The question of whether having a higher number of non-executive directors than executive directors on a board enhances a firm's financial performance is still being debated. Empirical evidences from researchers have often been with mixed results. Roman, Rosenstein and Persida (2012) affirmed that board independence (in terms of composition) does not have a statistically significant relationship with banks' profitability. Kwanbo and Abdulquadir (2013) discovered no significant relationship and impact between board composition and financial performance. The above findings run contrary to those of Uadiale (2010) discovered a positive relationship between outside directors on the board and corporate financial performance. Abdur (2011) affirmed a positive significant relationship between ROE and board composition. Adebayo, Ayeni and Oyewole (2013) showed that there is positive and significant relationship between independence of the board and organizational performance (ROE). Shehu and Farouk (2014) showed that board composition strongly and significantly influences the performance (ROA) of banks positively while insider director was found to be an insignificant contributor to performance (ROA). The following relevant research hypotheses are formulated to provide a direction for the study. *H$_{02}$: Board independence has no significant effect on corporate performance in quoted banks.*

Board Gender Diversity and Performance

Several countries promote board diversity including Nigeria. For example, in Norway all listed companies must abide by a 40 percent gender quota for female directors. This law was enacted in January, 2008. Diversity can have positive effects on group performance since it endows a group with the flexibility which can be valuable if the group's tasks change or become more complex (Campbell & Minguez-Vera, 2008). Adams and Ferreira (2009) stated that boardroom gender diversity improves several important aspects of a board's behaviour such as directors' attendance at board meetings. They also stated that CEOs will be held responsible for poor stock price performance as CEOs' turnover is more sensitive to stock return performance in firms that have relatively more women on the boards diverse boards will more likely hold. This suggests that there exist tougher monitors in gender-diverse boards. There are however, mixed results based on findings from various empirical works done by researchers. For instance Roman et al. (2012) found a significant positive correlation between the presence of women on the boards of directors of banks and both ROE and ROA. Also, Priya and Nimalathasan's (2013) result revealed that the number of women on the board (NWB) is significantly correlated with firms financial performance.

Towing a different line, Ferede (2012) showed that the percentage of female directors on banks' boards does not have a significant effect on financial performance. Manmeet and Madhu (2014) discovered that the percentage of female directors on the board does not significantly impact on the financial performance of banks. The following relevant research hypotheses are formulated to provide a direction for the study. *H_{03}: Board gender diversity has no significant effect on corporate performance in quoted banks.*

Audit Committee Size and Performance

Audit committee size pertains to the number of members serving in the committee. The feasible studies that have investigated the relationship between audit committee size and performance of firms show mixed results. For instance, Tornyeva and Wereko (2012) found that audit committee size is positively associated with financial performance (ROA and ROE). Kyereboah-Coleman (2007) explained that the size of the audit committee could be a sign of the seriousness attached to issues of transparency by the organisation. Nagel (2012) revealed that more experienced smaller audit committees with better educational qualifications are more likely to be associated with positive firm performance. Ferede (2012) on the other hand, found that audit committee size negatively influences financial performance (ROA, ROE and NIM). Similarly, Ghabayen (2012) revealed that audit committee size has no effect on a firm's performance (ROA). The following relevant research hypotheses are formulated to provide a direction for the study. *H_{04}: Audit committee size has no significant effect on corporate performance in quoted banks.*

Theoretical Framework

Agency Theory

Agency theory amongst other theories is the most popular and has received greater attention from academics and practitioners (Habbash, 2010). This theory is based on the principal-agent relationships. The application of the agency theory is premised on the separation of ownership from management in modern corporations. In contemporary corporations managers are hired through directors to manage the organisation as the shareholders (principals) are widely dispersed and are not usually involved in the day to day administration and management of the companies. (Habbash, 2010). From the viewpoint of agency theory, corporate governance enhances corporate performance by settling agency problems through monitoring management's activities, controlling self-centred behaviours of managements and examining the financial reporting process (Habbash, 2010). Moreover, corporate governance can eliminate agency costs by aligning the clashing interests of management with the shareholders' through the monitoring of management and using

diverse corporate governance mechanisms. Therefore, corporate governance mechanisms such as boards of directors and audit committees enable shareholders to carefully monitor the activities of managers. Inactive audit committees and boards may give confidence to managers to pursue their interests, but active boards and audit committees can eliminate deceitful behaviours of managers by unearthing fraudulent financial reports and engaging in active monitoring. According to the assumptions of agency theory, corporate governance mechanisms affect financial performance. As a consequence, improving corporate governance mechanisms should result in improved financial performances. Taking agency theory into consideration, the study variables were identified with the aim of investigating the relationships between corporate governance mechanisms and financial performance. Board structure has relied heavily on the concepts of agency theory while focusing on the controlling function of the board (Habbash, 2010). The corporate governance mechanisms considered in this research include board size, board gender diversity, board composition/independence and audit committee size.

Methodology

This study employs a longitudinal research design. A longitudinal design involves repeated observations of the same variables over long periods of time unlike the cross-sectional design which examines variables at a point in time. The population of this study covers 15 banks quoted on the Nigerian Stock Exchange (NSE) from 2010 to 2016. The focus on banks is because the sector is arguably amongst the most active in the Nigerian Stock Exchange (NSE).While a consensus of the is 15 banks form the sample for the study. More importantly, the generalised least squares (GLS) regression analysis was used in the estimation of the models and in the determination of the causal relationship between the variables. There are two basic approaches used to account for relationships within or between each cross-section variables. First, is the fixed effect approach which assumes that the individual constant is a group specific constant term in the regression model. Second is the random effect approach which assumes that the individual constant is a group specific disturbance similar to the error term, except for each group. The hausman test was conducted to determine which of the effects should be adopted.

Model Specification

The model for the study examines the effect of corporate governance on corporate performance of Nigerian banks. In performance measurement, the balanced scorecard approach is adopted in this study. The Balanced Scorecard (BSC) approach assesses total

corporate performances from financial, customer, internal business process and learning and growth perspectives.

Financial Perspective Model

Financial perspective model which focused on the financial dimension of balance score card incorporating traditional profitability indictors such as, Return on equity (ROE), Return on assets (ROA) and Profit after tax (PAT). The model shows the impact of corporate governance on financial performance dimension of BSC. The model is presented below:

$$ROE_{it} = \beta_i + \beta_1 BDS_{it} + \beta_2 BDIND_{it} + \beta_3 BDGD_{it} + \beta_4 AUDS_{it} + \beta_5 FS_{it} + \mu_{it} \text{ -------------- } (1)$$

Customer Satisfaction Model

Customer satisfaction model which gauged customer satisfaction for banks by customer loyalty and retention which can be measured using amount of customer deposits. Some measures of customer satisfaction include: Gross current account deposits (GCD), Gross fixed account deposits (GFD) and Total deposits (TD). The model shows the impact of corporate governance on customer satisfaction dimension of BSC. The model is presented below:

$$GCD_{it} = \beta_i + \beta_1 BDS_{it} + \beta_2 BDIND_{it} + \beta_3 BDGD_{it} + \beta_4 AUDS_{it} + \beta_5 FS_{it} + \mu_{it} \text{ -------------- } (2)$$

Internal Business Process Model

Internal business process model measured the quality of internal business process for banks using credit growth and growth in non-current assets. The model shows the impact of corporate governance on internal business process dimension of BSC. The model is presented below:

$$GCR_{it} = \beta_i + \beta_1 BDS_{it} + \beta_2 BDIND_{it} + \beta_3 BDGD_{it} + \beta_4 AUDS_{it} + \beta_5 FS_{it} + \mu_{it} \text{ -------------- } (3)$$

Learning and Growth Model

Learning and growth model which suggested that measures of learning and growth include employee capabilities, employee know-how and human capital development. We employ training and development cost as a measure of learning and growth. The model shows the impact of corporate governance on learning and growth dimension of BSC. The model is presented below:

$$TDC_{it} = \beta_i + \beta_1 BDS_{it} + \beta_2 BDIND_{it} + \beta_3 BDGD_{it} + \beta_4 AUDS_{it} + \beta_5 FS_{it} + \mu_{it} \text{ -------------- } (4)$$

Where: BDS = Board Size, BIND = Board Independence, BDGD = Board Gender Diversity, AUDS = Audit Committee Size, FS = Firm Size (Control Variable), i = Companies, t = Period (2010-2016) and μ = Stochastic term. While the apriori signs are $\beta_1 - \beta_4 > 0$

Table 1: Variable Definition and Measurement

Variable	Definition	Measurement	Aprori sign	Source
Financial dimension	Return on equity(ROE)	The amount of net income returned as a percentage of shareholder's equity.		Kajola (2008)
Customer satisfaction	Gross current account deposit (GCD)	The total amount of customers current account deposits before COT deductions and other relevant charges.		Ghanendra (2014)
Internal business Process	Credit Growth (GCR)	The increase in the amount of credit provided to individuals or businesses		Omoye & Ughuvuu (2016)
Learning and growth	Training and development cost (TDC)	Cost of employee training		Kaplan & Norton (1996)
Corporate Governance	Board size (BDS)	Number of individuals on the board	+	Zahra *et. al.* (1989)
	Board independence (BDIND)	Number of external directors	+	John *et. al.* (1998)
	Board Gender diversity (BDGD)	Ratio of female to male	+	Boyle & Jane (2011)
	Audit Committee Size (AUDS)	Number of directors in the committee	+	Jensen & Meckling (1976)
FS (Control Variable)	Firm size	Log of total assets	+	Omoye & Martha ()

Source: Researcher's Compilation, 2020

Presentation and Analysis of Data

Table 2: Descriptive Statistics

	ROE	GCD	GCR	TDC	BDS	BDIND	BDGD	AUDS	FS
Mean	0.196347	1.59E+08	1.98E+08	0.904762	15.04762	8.095238	2.790476	6.114286	7.403247
Median	0.143389	8655575.	3955113.	1.000000	15.00000	8.000000	3.000000	6.000000	6.985775
Maximum	1.408152	9.87E+08	1.42E+09	1.000000	20.00000	12.00000	6.000000	10.00000	9.637300
Minimum	-0.336870	67765.00	136982.0	0.000000	9.000000	5.000000	0.000000	6.000000	4.860386
Std. Dev.	0.287424	2.47E+08	3.22E+08	0.294951	2.486042	1.397276	1.356574	0.542684	1.455981
Skewness	1.582390	1.596624	1.956030	-2.757764	-0.175334	0.467120	-0.289213	5.521731	-0.015534
Kurtosis	6.830843	4.414911	6.338800	8.605263	2.681623	2.991704	2.610653	34.90176	1.436382
JarqueBera	108.0240	53.36977	115.7266	270.5501	0.981452	3.818819	2.126987	4986.102	10.70067
Probability	0.000000	0.000000	0.000000	0.000000	0.612182	0.148168	0.345248	0.000000	0.004747

Source: *Researcher's Compilation, 2020*

Table 2 shows the mean (average) for each of the variables, their standard deviation (degree of dispersion) and Jarque-Bera (JB) statistics (normality test) for the sample. As observed, the mean value for Return on Equity (ROE), Gross Current Deposit (GCD), Growth in Credit Rate (GCR) and Training and Development Cost (TDC) using the balanced scorecard approach assesses corporate performance from financial perspective, customers' satisfaction, internal business process and learning and growth perspective stood at 0.196, 1.59, 1.98 and 0.905 with a standard deviation of 0.287, 2.47, 3.22 and 0.295. The maximum and minimum values for the period under review were 1.408, 9.87, 1.42, 1 and -0.336, 677, 137, 0

respectively. The Jarque-Bera statistic value of 108.02, 53.369, 115.73, 270.55 and p-value of 0.00 confirm the normality of the data and suitability for generalization. While, the corporate governance mechanism as Board Size (BDS), Board Independence (BDIND) and Board Gender diversity (BDGD) has a mean value of 15.05, 8.095 and 2.790 with a standard deviation of 2.486, 1.397 and 1.357. The maximum and minimum values for the period under review were 20, 12, 6 and 9, 5, 0 respectively. The Jarque-Bera statistic value 0.981, 3.819, 2.126 and p-value of 0.612, 0.148 and 0.345 confirms the normality of the data and suitability for generalization. It also indicates the absence of outliers in the data.

Table 3: Correlation

	ROE	GCD	GCR	TDC	BDS	BDIND	BDGD	AUDS	FS
ROE	1								
GCD		1							
GCR			1						
TDC				1					
BDS	.046	-.034	.095	-.029	1				
BDIND	.101	.088	.017	-.103	.189**	1			
BDGD	.016	.005	.002	.010	.130	-.031	1		
AUDS	-.017	-.037	.001	-.019	-.056	-.081	-.035	1	
FS	.325**	.075	.314**	.010	.130	-.181**	.023	-.025	1

Source: *Researcher's Computation (2020)*

**. Correlation is significant at the 0.01 level (2- tailed)

Table 3 shows associations of variables captured in the study using the four criteria of the balanced scorecard approach assesses corporate performance from financial perspective, customers' satisfaction, internal business process and learning and growth perspective using Return on Equity (ROE), Gross Current Deposit (GCD), Growth in Credit Rate (GCR) and Training and Development Cost (TDC) as the dependent variable. When ROE, GCD, GCR and TDC was at unit value, Board Size (BDS) stood at positive correlation value of 0.046 (at about 5 %), Board Independence (BDIND) was 0.10, Board Gender diversity (BDGD) was at positive value of 0.016, Firm Size (AUDS) was at positive value of 0.325** , while Audit Committee Size (AUDS) was at a negative value of -0.017.Outcome of the pearson correlation indicated that the variables are highly correlated and absent of the presence of multicollinearity since none of the pearson correlation values exceeded 0.90 as stated by Dwivedi (2008) for case of multicollinearity.

The Financial Perspective Model

In the financial perspective model, the return of equity was used to capture firm's performance. The result of the estimation of the financial perspective model is shown in table below.

Table 3: Regression Result of the Financial Perspective Model

Variables	Fixed effect estimates	Random effect estimates
BDS	-0.0495**	-0.0448**
	(-2.2683)	(-2.5715)
BDIND	0.0006	0.0823**
	(0.0210)	(2.9702)
BDGD	-0.0390	-0.0165
	(-1.3102)	(-0.6860)
AUDS	0.0617**	0.0990**
	(2.0487)	(2.0257)
FS	0.1218*	0.0707*
	(2.7145)	(3.3401)
C	-1.0543	-0.1421
	(-1.4175)	(-0.2778)
Hausman Test		3.3227 (0.6504)
R – Squared	0.6048	0.6290
Adjusted R- squared	0.5944	0.6040
F – Statistics	1.9617 (0.0191)	2.1813 (0.0469)
D-W Statistics	1.9045	1.9954
S.E of regression	0.1650	0.0628

*significant at 1%, **significant at 5%, ***significant at 10%

Source: *Researcher's Computation (2020)*

Table 3 shows the fixed effect and random effect estimation. To ascertain the preferred estimate the Hausman test is conducted. From the result, the hausman chi-square coefficient is 3.3227 with a p-value of 0.6504. Since the p-value is greater than 0.05, the null hypothesis of the hausman test which states that the fixed effect model is preferred is rejected. In the above case, the random effect estimate gives a more reliable result. Therefore, the interpretation of the above estimate will be based on the estimate of the random effect model. From the results in table 1, the sign expectation was met for board independence, audit committee size and firm size. However, the sign expectation was not met for board size

and board gender diversity. The statistical properties of the model were satisfactory. The coefficient of determination (R^2) is 0.6048. This shows that about 60% of the systematic variations in the dependent variable was explained by changes in the group of the explanatory variables. Also, the F- Statistics is statistically significant. This shows that the group of regressors has linear relationship with the dependent variable. The Durbin Watson statistics has a coefficient of 1.9954. This is an indication that there is no probable case of first order serial correlation in the model. The stability of the model was tested using the ratio of the standard error of regression to the mean of the dependent variable. From the result, the ratio was less than one. This shows that the model is stable with a high forecasting power.

Customer Satisfaction Model

In the customers' satisfaction model, gross current account deposit was used to capture corporate performance. The result of the estimation of the customers' satisfaction model is presented in the table below

Table 4: Regression Result of the Consumer Satisfaction Model

Variables	Fixed effect estimates	Random effect estimates
BDS	-8.6894* (-6.3926)	-1.3211* (-3.1157)
BDIND	2.4466** (2.0262)	2.2155** (1.9959)
BDGD	4.1873* (2.9673)	3.5488* (3.1091)
AUDS	-4.8153 (-0.1574)	-2.8393 (-1.0190)
FS	2.1651** (2.0647)	1.1183* (7.62551)
C	-21500553 (-0.0609)	-5.1600** (-2.1356)
Hausman Test	19.2512	(0.0017)

R – Squared	0.7885	0.6971
Adjusted R- squared	0.7413	0.6674
F – Statistics	16.6857(0.000)	13.0463(0.000)
D-W Statistics	1.9382	1.9720
S.E of regression	1.2600	1.3400

*significant at 1%, **significant at 5%, ***significant at 10%
Source: *Researcher's Computation (2020)*

Table 4 shows the estimates from fixed effect and random effect estimation. To ascertain the preferred estimate, the Hausman test was conducted. From the result, the hausman chi-square coefficient is 19.2512 with a p-value of 0.0017. Since the p-value is less than 0.05, the null hypothesis which states that the fixed effect model is preferred is accepted. Hence, in the above case, the fixed effect estimate gives a more reliable result. Therefore, the interpretation of the above estimate will be based on the estimate of the fixed effect model. In the estimate from Table 1, the sign expectation was met for board independence, board gender diversity and firm size. However, the sign expectation was not met for board size and size of the audit committee. The statistical properties of the model were satisfactory. The coefficient of determination (R^2) is 0.7885. This shows that about 78% of the systematic variation in the dependent variable was explained by changes in the group of the explanatory variables. Also, the F- Statistics is statistically significant. This shows that the group of regressors has linear relationship with the dependent variable. The Durbin Watson statistics has a coefficient of 1.9382. This is an indication that there is no serious case of serial correlation in the model. The stability of the model was tested using the ratio of the standard error of regression to the mean of the dependent variable. From the result, the ratio was greater than one. This shows that the model is stable with a high forecasting power.

4.1.3 Internal Business Process Model

In the quality of internal business process model, corporate performance was captured by credit growth (GCR). The result of the estimation of the model is presented in the table below:

Table 5: Regression Result of the Internal Business Process Model

Variables	Fixed effect estimates	Random effect estimates
BDS	-8.6894*	1.0359*
	(-6.3926)	(5.2205)
BDIND	2.4466**	-2.2268
	(2.0262)	(-1.4784)
BDGD	9.2013	3.8209*
	(0.5381)	(2.9148)
AUDS	-4.8153	-8.4762
	(-0.1574)	(-0.2698)
FS	2.1651**	1.2223*
	(2.0647)	(5.8441)
C	-5.1800	-7.3777*
	(-0.9515)	(-2.5264)
Hausman Test	22.1643	(0.0007)
R – Squared	0.7885	0.6217
Adjusted R- squared	0.7413	0.5874
F – Statistics	31.4318(0.0000)	9.3921(0.0000)
D-W Statistics	1.9382	1.8417
S.E of regression	1.26E+08	14655071

*significant at 1%, **significant at 5%, ***significant at 10%

Source: *Researcher's computation (2020)*

Table 5 shows the estimates from fixed effect and random effect estimation. To ascertain the preferred estimate, the Hausman test is conducted. From the result, the hausman chi-square coefficient is 22.1643 with a p-value of 0.0007. Since the p-value is less than 0.05, therefore the null hypothesis which states that the fixed effect model is preferred is accepted. Hence, in the above case, the fixed effect estimate gives a more reliable result. Therefore, the interpretation of the above estimate will be based on the estimate of the fixed effect model. In the estimate from table 1, the sign expectation was met for board independence, board gender diversity, size of the audit committee and firm size. However, the sign expectation was not met for board size. The statistical properties of the model were satisfactory. The coefficient of determination (R^2) is 0.7885. This shows that about 78% of the systematic variation in the dependent variable was explained by changes in the group of the explanatory variables. Also, the F- Statistics is statistically significant. This shows that the group of regressors has linear relationship with the dependent variable. The Durbin Watson statistics

has a coefficient of 1.9382. This is an indication that there is no case of serial correlation in the model. The stability of the model was tested using the ratio of the standard error of regression to the mean of the dependent variable. From the result, the ratio was greater than one. This shows that the model is stable with a high forecasting power.

Learning and Growth Model
In the learning and growth model, corporate performance was captured by cost of employee training (TDC). The result of the estimation of the model is presented in table 6

Table 6: Regression Result of Training and Development Model.

Variables	Fixed effect estimates	Random effect estimates
BDS	-0.2594* (-19.4030)	0.0250** (2.1967)
BDIND	0.0234* (2.5146)	-0.0181 (-1.0261)
BDGD	0.0190 (1.0475)	-0.0081 (-0.5281)
AUDS	-0.0058 (-0.1487)	0.0172 (0.4637)
FS	0.0553* (3.4986)	0.0425*** (1.8328)
C	1.3473* (2.9596)	0.2837 (0.8443)
Hausman Test	31.0090	(0.0000)
R – Squared	0.7569	0.06127
Adjusted R- squared	0.6974	0.0138
F – Statistics	13.6160	1.2925
D-W Statistics	2.0283	1.4791
S.E of regression	0.1622	0.1823

*significant at 1%, **significant at 5%, ***significant at 10%
Source: *Researcher's Computation (2020)*

Table 6 above shows the estimate from fixed effect and random effect estimation. To ascertain the preferred estimate, the Hausman test is conducted. From the result, the hausman chi-square coefficient is 31.0090 with a p-value of 0.0000. Since the p-value is less than 0.05, therefore the null hypothesis of the hausman test which states that the fixed effect

model is preferred is accepted. Hence, in the above case, the fixed effect estimate gives a more reliable result. Therefore, the interpretation of the above estimate will be based on the estimate of the fixed effect model. In the estimate from table 1 the sign expectation was met for board independence, board gender diversity, size of audit committee and firm size. However, the sign expectation was not met for board size. The statistical properties of the model were satisfactory. The coefficient of determination (R^2) is 0.7526. This shows that about 75% of the systematic variation in the dependent variable was explained by changes in the group of the explanatory variables. Also, the F- Statistics is statistically significant. This shows that the group of regressors has linear relationship with the dependent variable. The Durbin Watson statistics has a coefficient of 2.0283. This is an indication that there is no case of serial correlation in the model. The stability of the model was tested using the ratio of the standard error of regression to the mean of the dependent variable. From the result, the ratio was less than one. This shows that the model is stable with a high forecasting power.

Discussion of Findings

Firstly, it was observed that board size in the four criteria of the balanced scorecard were negative but highly significant. However, there is no doubt that several studies have been conducted so far and are still ongoing; the findings are therefore in line with the work of Adeusei, Akeke, Aribaba and Adebisi (2013) who revealed that board size has a positive association with the financial performance of banks. Likewise, Manmeet and Madhu (2014) asserted that there is a positive connection between board size and financial performance.

Secondly, board independence in the four criteria of the balanced scorecard was positive and the impact was highly significant. This finding conformed to extant study of Adebayo, Ayeni and Oyewole (2013) who affirmed that there is positive and significant relationship between independence of the board and organizational performance (ROE).

Thirdly, board gender diversity on corporate performance was not statistically significant in three of the four criteria of the balanced scorecard. Specifically, the impact of board gender diversity on return on equity, credit growth and training and development were not statistically significant. The impact of board gender diversity was only statistically significant on gross current account deposit. However, mixed results was found which is support from the work of Priya and Nimalathasan's (2013) who result revealed that the number of women on the board (NWB) is significantly correlated with firms financial performance and Manmeet and Madhu (2014) who discovered that the percentage of female directors on the board does not significantly impact on the financial performance of banks.

Finally, the impact of audit committee size on corporate performance was not statistically significant in all the four criteria of corporate performance of the balanced scorecard. It

showed that audit committee size is contrary with our apriori expectation, implying that decrease in audit committee size could decrease financial performance. The finding is consistent with findings of Ferede (2012) who found that audit committee size negatively influences financial performance.

Conclusion

An important body of research in modern business environment has been the impact of corporate governance on corporate performance. A firm's performance remains an important concept that relates to the manner in which the firm's available resources are judiciously used to achieve the overall corporate objective of the organisation which is also a paramount concern of corporate governance. Thus there has been some level of curiosity about the relationship that exist among these variables. The aim of this study is to provide an insight into the impact of corporate governance mechanisms on corporate performance using the balanced scorecard approach. Following the theoretical framework of this study, the study identified some corporate governance mechanisms to use as a basis for our arguments. As we examined the probability of board size, board independence, board gender diversity and audit committee size impacting significantly on corporate performance. The study found out that board size and board independence have significant effects on corporate performance, while board gender diversity and audit committee size have no significant effect on corporate performance. The following recommendations are suggested:

1.   Corporate governance and corporate performance has proved to be of paramount importance to companies in Nigeria and hence also important to stakeholders. Thus we recommend that companies should make use of a more robust performance measure tool (balanced scorecard) in assessing organisations' performance.

2.   It is also, recommended that the management of listed deposit money banks in Nigeria should not rely necessarily on these corporate governance mechanism (board gender diversity and audit committee size) to explain significantly the performance of deposit banks in Nigeria using a balanced scorecard approach as our findings shows no positive relationship.

3.   The results in this study add to the growing body of knowledge of balanced scorecard application in the banking industry. Furthermore other industries should embrace the use of this approach to performance measurements

4.   The study suggests that this study be replicated in other sectors to examine whether the results found here still hold for other corporate organisations. This will aid in enhancing comparability of findings.

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