



CORPORATE GOVERNANCE AND BANK CREDIT A PANACEA TO ECONOMIC GROWTH IN DEVELOPING ECONOMIES

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Abstract: Corporate governance focuses on the way organisations and firms are managed and controlled towards achieving stated objectives. This study investigates corporate governance and bank credit as a panacea to economic growth in developing economies referencing Nigeria for the period which spanned from 2011 to 2020. The objective of the study is to investigate and evaluate the extent to which corporate governance (board size and board composition) affects economic growth in developing economies and to investigate to what extent to which banks' credit (aggregate lending to private and public sector) have impacted on economic growth in developing economies. The study employed econometric approach of descriptive statistics, correlation matrix analysis. The regression model took the form of Fixed Effects Model and Random Effects Model. The study addressed Variables of Gross domestic product (GDP), Bank credit ($Bcr = (\text{Aggregate lending to private and public sector})$), Board size (Bs) and Board composition (Bc) are identified as the bases to build a model for the study. The study made use of annual data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and the annual observatory report of 21 Nigeria deposit money banks listed on NSE (Appendix1) from 1st January 2011 to 31st December 2020, which was gathered from the Fact Book of the Nigeria Stock of Exchange (NSE). The latter contained the required information for the 21 banks listed on the NSE, covering the 10 years with 110 observations. Correlation result shows that there is positive correlation between gross domestic product and banks' credit with the correlation coefficient of 0.1807. On the other hand, other result shows that there is inverse correlation between gross domestic product and corporate governance measured by board size and board composition with correlation coefficient of -0.1535 and -0.2563 respectively. Random effect estimation result revealed that board size have negative effect and statistical significant effect with coefficient estimate of -0.187323 ($p=0.03 < 0.05$) while the reported estimates for board composition reveal a negative effect and statistical insignificant effect as it coefficient estimate of -0.170156 ($p=0.68 > 0.05$). Banks' credit has positive and significant impact on gross domestic product when measured with the coefficient estimate result of 6.912538 ($p= 0000 = 0000$). Thus, banks' credit from banks increases economic growth by 691.2%. The study recommends that Banks should engage in the development and implementation of strategic training on corporate governance disclosure and banking ethics for board members and senior bank managers. Corporate governance by size of the board should be regulated which should not be too large and must consist of highly skilled and competent professionals who are conversant with oversight function.

Keywords: Corporate governance, Bank credit, Bank size, Bank composition and Economic growth

JEL codes: G3; G30



1. Introduction

Corporate governance focuses on the way organisations and firms are managed and controlled. This includes the best practices established and followed by organisations and firms to ensure its operations are governed and administered effectively and efficiently. Basically, corporate governance is the process that ensures how organisations and firm is directed, controlled and held accountable for its operational activities. This involves interaction among stakeholders dealing with the organisation directly or indirectly including employees, shareholders, creditors, subcontractors and long-term suppliers. Corporate governance entails a system by which financial institutions such as banks relate to their client and stakeholders to better their quality of life. Therefore, good corporate governance encompasses transparency, accountability and fairness in financial undertaking and reporting. Though corporate governance is not only aimed at corporate efficiency only, it also involves a much wider range of banks' strategies and life cycle development. Though banks record negative experiences of failure around the globe in recent time due to economic recession and uneasiness of Covid 19 which gives credence for the need for good and sound corporate governance practices among competing ends. However, banks around the world mostly developing countries witness acute failures as a result of perpetual occurrence of non-performing loans, poor management and bureaucratic credit policy. The extent of incessant fraud, group embezzlement of funds and graft in some financial institutions failed banks has brought into question the efficiency, reliability and effectiveness of present-day modules operational and compliance control mechanism and financial reporting systems of some failed financial institutions or banks.

The effect of corporate governance on financial institutions or bank seems unequally dispersed among developing countries. Some banks have become very important in size and serve a good medium for serving

the needs of Small and Medium Enterprises (SMEs) customers through universal banks' and Microfinance Bank in Nigeria, though microfinance banks remain relatively small but it supports the economy from the grass root. The governance of corporate bank plays an important function towards the objective of ensuring that the bank keeps to its mission of serving SMEs and other customers as the financial intermediary. The immediate objective of banks' is to operate profitably in order to maintain its sustainability, stability and improve performance which can be facilitated with good credit lending policy with the goal to maximise the value of a financial institution. Banks credit (lending) policy is a guide to successful credit administration and benefits must be weighed against the cost to ensure the benefits are worth the effort of administering the credit. Benefits like increase in market share, retention of existing customers, acquisition of new ones must be weighed against costs like selling and production costs, administration costs incurred during assessment, supervision and collection of credit and bad debts losses (Pandey, 2007). Financial institutions credit has impact on the performance of such institution. The bank credit of an institution do affects the capital adequacy, asset quality, management quality, earnings and liquidity of a financial institution either positively or negatively depending on how well the policies are made and executed. Among other factors, weakness in credit risk management has all along been cited as the main cause for lending in financial institutions (Nyawera, 2013).

The tendency that banks may not receive its money (plus interest) from borrowers is high and often the most serious vulnerability in fragile (distress) financial institution, According to Warue (2012), since most microloans are unsecured, delinquency can quickly spread from a handful of loans to a significant portion of the bank portfolio. This contagious effect is worsened by the fact that banks' portfolios often have a high concentration in certain business sectors which subjected



many customers being exposed to the some external threats such as lack of demand for customer products. This and other factors create volatility in banks portfolio quality, therefore heightening importance of controlling credit risk

1.2 Statement of the Problem

Based on foregoing, banks in developing countries are faced with the problem of banks' credit delinquency, which may have long-term results if not addressed. Therefore, it is in the interest of the management and board of directors to fashion best corporate governance and banks' credit policies which will have a bearing on the direction that the financial institution takes and its ability to survive in the industry. This is because best corporate governance and adequate banks' credit policies ensure a financial institution is shielded from financial distress exposure in respect of loan default. Banks' with good and strong governance practices and with adequate and proper bank credit standard policies and terms will do better compared to the rest in the industry. When a firm embraces good corporate governance, legal framework and sound credit policies in its management and operations, it will have an effect on its financial profitability through significant reduction in delinquency/default rate; hence this will attract more funds and be beneficial to all its stakeholders thereby facilitating inflow of investment and economic growth. However, bad corporate governance, in conjunction with poor loan administration leads to weak financial results, risky financing patterns and high delinquency/default rate which will in turn slow down investment and economic growth. This will eventually make the banks prone to macroeconomic crises. To this end and given the important function that banks' perform in national and global economic development, this study examines corporate governance and banks' credit as a panacea to economic growth in developing economies as evidence from Nigeria through the financial performance record of

21 NSE-listed banks in Nigeria over the ten years, 2011 to 2020. In view of the empirical reviewed from developed and developing countries, it was observed that there were studies relating to corporate governance with other factors but there are few studies on corporate governance and banks' credit on economic growth in developing economies. The studies such as Wilson and ThankGod (2021); Obasi and Nkwagu (2017) and Igbekoyi and Agbaje (2018) on corporate governance and other factors are inconsistency with variables used and the result outcome are at variance and inconclusive with each other.

Notwithstanding, the findings outcome of the previous researchers have not been consistent, and the inconsistency has been the centre of debate among the academic scholars. Meanwhile, the inconclusiveness in previous findings necessitates this study to further examine corporate governance and banks' credit as a panacea to economic growth in developing economies with reference to Nigeria. Expectedly, the outcomes of this research either confirm or refute the findings of previous studies in Nigerian context. This study takes a holistic approach on corporate governance, banks' credit and economic growth. Hence this study tends to close the gap inherent to knowledge. Another significance to knowledge of this study is that it utilises longer period of estimation. The study extended the time series data backward to 2011 to cast doubts about the outcome of the estimated results in other to capture the period of economic recession of 2015 and the period of Covid 19 era of 2019 .This makes this study more current than previous studies reviewed.

1.3 Research Questions

Based on the background and statement of the problems, the following research questions were raised;

- i. to what extent does corporate governance (board size and board composition) affect economic growth in developing economies?



- ii. to what impact does banks' credit (aggregate lending to private and public sector) have on economic growth in developing economies?

1.4 Research Objectives

The broad objective of the study is to investigate corporate governance and banks' credit as a panacea to economic growth in developing countries. The specific objectives of the study are to:

- i. evaluate the extent to which corporate governance (board size and board composition) affects economic growth in developing economies;
- ii. investigate to what extent to which banks' credit (aggregate lending to private and public sector) have impacted on economic growth in developing economies?

1.5 Research Hypotheses

Based on the research questions and objectives, the following null hypotheses are tested.

- i. Corporate governance (board size and board composition) has no significant effect on economic growth in developing economies.
- ii. Banks' credit (aggregate lending to private and public sector) have no significant impact on economic growth in developing economies

The paper proceeds with reviews of relevant literature on corporate governance and bank credit, methodology, the results findings and concludes the study with summary, conclusion and recommendations.

2.0 Review of Related Literature

2.1 Corporate Governance

Corporate governance is described as the structures and processes for the direction and control of companies; corporate governance concerns the relationships among the management, Board of Directors, controlling shareholders, minority shareholders and other stakeholders (Norlia, Mohammad & Ibrahim, 2011). Mayer (1999) describes corporate governance as the sum

of the processes, structures and information used for directing and overseeing the administration of an organisation or firm. It is a system by which corporations are governed and controlled with a view to increasing shareholder's value and meeting the expectations of the other stakeholders. In other words, Alexandra, Reed, and Lajoux (2005) define corporate governance as the system by which companies are directed and controlled. The nature of corporate governance, therefore, going by this definition consists of two dimensions: direction and control. The direction dimension of corporate governance emphasises the responsibility of the board to attend to strategic positioning and planning in order to enhance the performance and sustainability of the company; while on the other hand, emphasises the responsibility of the board to oversee the executive management of the company in the execution of the plans and strategies.

The concept of corporate governance is viewed from two perspectives, namely, the narrow and broad perspectives. The narrow approach to corporate governance is viewed by Oyejide and Soyibo (2001) as the relationship of the enterprise to shareholders. It is concerned with the structures within which a corporate entity or enterprise receives its basic orientation and direction. Shleifer and Vishny (1997) contend that corporate governance mainly deals with the ways in which the returns on investment of shareholders of an organisation are guaranteed According to Pandey (2006), corporate governance is a process that ensures responsibility, transparency and accountability functions of management in order to maximise shareholders wealth and take decisions to boost its financial performance. The broad view of corporate governance is concerned with the approach by which suppliers of fund control managers to ensure that their capital cannot be use without permission and that they earn a return on their investment. It views corporate governance as the nexus of the enterprise to the society as a whole. The broader view of corporate governance is painted as being the pivotal of both the market economy



and democratic society. Corporate governance involves incorporating the interest of stakeholders such as management, shareholders, customers, creditors, government and other stakeholders in the operations of the entity and also those who have contributed in one way or the other to the smooth existence of the organisation. Rogers (2008) opines that corporate governance is about building credibility, ensuring transparency and accountability as well as maintaining an effective channel of information disclosure that would foster good corporate performance. He further opines that it is about how to build trust and sustain confidence among the various interest groups that make up an organisation.

2.2 The Code of Corporate Governance in Nigeria

According to Central bank of Nigeria (2014) code of corporate governance in Nigeria, *Section 34 of the code of corporate governance stipulates some details and issues, which merit reflection in the annual reports of Nigerian companies. The items include a corporate governance report, risk-management issues, directors' accounts and loans, related parties' transactions, and board reports concerning the compliance level of the organisation to SEC 2011 codes. The code indicates that the board should use great prudence in revealing issues not related or stated in the code that could possibly affect the financial position of the business.*

The code of corporate governance in Nigeria inherently connotes and acknowledges that the board is answerable for the organisation in a legal and adequate manner and must safeguard the organisation by continually developing its value as much as possible. Adewuyi and Olowookere (2013) noted that the code emphasises the significance of holding frequent board meetings, at least once a quarter, with enough notice to allow investors to contribute purposely at the annual general meeting. This scheduling for meeting may foster effective control and monitoring of the business. Investors with more than 20% holding in a company must have a representative on the board while minority investors are permitted to have at

least one director on the board. Shareholders with the most shares, in addition, are encouraged to participate in the process of corporate governance to maximise shareholders' wealth (Osaze, 2007). The code states that the board should comprise both executive and non-executive members, with the Chairman as the overall supervisor (Oyewole, Olusanmi & Owolabi, 2015). The provisions of the code of corporate governance further stipulates that the roles of the chairman and chief executive should be divided between different persons while a non-executive director should be independent of the business and not subject to any interference to be able to make independent judgements concerning the organisation (Oyerinde, 2014).

Nordberg and McNulty (2013) suggest that practical studies indicated that boards usually lack the capability to govern chief executives and might be weak and inefficient. Nordberg and McNulty (2013) further observe that boards are strong only when an independent non-executive director promotes accountability by adopting individual and concerted attitudes that both challenge and encourage executives. Non-executive directors who exercise their independence and conduct themselves with noble character can strengthen higher accountability to investors.

Adewuyi and Olowookere (2013) further indicate the only difference between the codes of the SEC and the CBN is the sanction of erring banks in the CBN codes of 2006. The CBN regulates the banks solely while SEC regulates all registered companies in Nigeria. Guo, Smallman and Radford (2013) explain that the board of directors plays a significant role in corporate governance and is answerable for monitoring and guiding the managers on behalf of the investors.

2.3 Theoretical framework

2.3.1 Agency Theory Perspective

The agency theory (Jensen and Meckling, 1976) offers a framework that links corporate disclosure behavior to firm-specific characteristics. Corporate governance



mechanisms are introduced to control or mitigate the agency problem and ensure that directors act not just in the interests of shareholders but all stakeholders. The agency perspective of CGD creates a dichotomy of interrelationships: the internal and external governance mechanisms. The internal ecosystem of corporate governance comprises issues that are within the circle of influence and control of the firm, which is that focal area the board has control over and can act upon. The external governance mechanisms, on the other hand, are concerned with issues that are essentially outside the circle of control and influence of the firm (the board). External stakeholders, as they are perceived, include the firm's external market, government, regulatory bodies, and their rules and regulations and other externalities. External governance mechanisms are imposed on and/or controlled by those outside the firm and serve the objectives of government, policymakers, regulators, tax authorities, industry/trade union associations, and institutional compliance agencies. External stakeholders illuminate the character traits and practices of good corporate governance and use their eclectic industry experiences and interactions to illustrate authentic guidelines and comparative corporate governance practices. Corporate governance mechanisms ensure that directors pursue economic efficiency by minimizing transaction costs. The agency theory is architected as an alternative variant of the transaction cost theory.

2.4 Empirical Review

Wilson E. H, and ThankGod C. A. (2021) The study investigates the effect of corporate governance disclosure (CGD) on the financial performance of commercial banks listed on the Nigeria Stock Exchange from 2011 to 2016. The study trichotomized CGD into those relating to the board of directors, risk framework, and whistleblowing policy. The results of the hypothesized nexus revealed a positive and meaningful relationship between CGD and the banks' financial performance, with a positive effect of CGD on the board of directors and whistleblowing policy.

However, the study outcome did not find a meaningful association between CGD of risk management framework and the banks' financial performance during the studied period.

Lestari (2018) analyses the effect of corporate governance, bank capital reserve, and non-performing loan on bank risk taking listed in Indonesia Stock Exchange from 2009 to 2016. The corporate governance represent management decision making and bank management policy related to risk and other banking issue while capital reserve and non-performing loan indicate bank financial performance. Capital reserve is an important indicator for bank compared to its risky activities, and non-performing loan will give bank information about bank efficiency in lending behaviour. Using regression analysis, the study found that ownership concentration, the big four audit committee, and non-performing loan have negative effects on bank's risk taking behaviour while capital reserve is not statistically significant on bank risk taking.

Igbekoyi and Agbaje (2018) examine the effect of corporate governance on the quality of accounting information revealed in Nigerian banks. Using quoted banks in the Nigerian Stock Exchange, secondary data were obtained from annual reports and fact book of selected banks during the period of 2006-2015. Data gathered were analysed using statistical tools; unit root, co-integration and error correction model. The corporate governance indices used in the study include; Audit committee meeting (ACM), Audit committee qualification (ACQ), Board size (BS), Directors in audit committee (DAC), Ownership structure (OS) and Corporate board members (CBM). The study outcome shows that Audit committee meeting (ACM), Audit committee qualification (ACQ), Board size (BS), Directors in audit committee (DAC) and Ownership structure (OS) have a meaningful positive nexus with accounting information disclosure respectively, while Corporate board members (CBM) had an insignificant



inverse relationship with accounting information disclosure in Nigeria. Based on the finding outcome of the study, it is concluded that corporate governance contributes to the quality of accounting information disclosed in the banking sector.

Obasi and Nkwagu (2017) examine the effect of corporate governance on risk management of commercial banks in Nigeria from 2006 to 2015. Specifically, the study ascertains the influence of board committees on the liquidity risk of banks in Nigeria. The study adopts ex-post facto research design. Simple random sampling was applied to select ten banks used in the study. The effect of independent variable (board committee) on the dependent variable (liquidity risk proxied as ratio of total deposit) was examined using ordinary least square regression method. The result of the ordinary least square showed that board committees negatively but significantly influences the liquidity risk of commercial banks in Nigeria. The study recommends that the number of board committees of commercial banks in Nigeria should be small in order to be effective and efficient in their risk management functions. The result of the study reveals negative and significant effect on liquidity risk which may be attributed to the limited independent variable. If the study includes board independence and board size to its list of independent variables, the result could be positive and significant. However, the implication arising from the result is that increase in the number of board committees will result in decrease in the way commercial banks in Nigeria manage their liquidity risk.

In Spain Valentín Azofra-Palenzuela, López-Iturriaga and Tejerina-Gaite (2014) use sample of 142 non-financial firms between 1999 and 2002 to show the outstanding role which banks play in the corporate governance of the Spanish firms. Using analysis of tables, the study found that banks have a dual and very relevant influence on the performance of the firms. For bank-controlled firms, bank shareholdings can enable colluding interactions among banks and, thus, reduce the performance of the firm. On

the contrary, for non-bank controlled firms, bank shareholdings improve the corporate governance and increase the performance of the firm. This effect is particularly significant for the firms in which bank scrutiny is more crucial: when the largest shareholder has voting rights in excess of his/her cash flow rights, and when the control of the largest shareholder can be more contested.

3.0 Methodology

The study utilized a quantitative method in the analysis in carrying out econometric approach to examine corporate governance and banks' credit as a panacea towards economic growth in developing economies referencing Nigeria.

3.1 Specification of Model

The model measures economic growth using variable of Gross domestic product (GDP), which is dependent variable on Bank credit (Bcr = Aggregate lending to private and public sector), Board size (Bs) and Board composition (Bc) which are identified as the bases to build a model for the study. The model is functionally formulated is stated thus as:

$$GDP = f(Bcr, BS, BC) \text{ -----}$$

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Expressing equation (1) more explicitly, we have:

$$GDP = \beta_0 + \beta_1 Bcr + \beta_2 BS + \beta_3 BC + U_t \text{2}$$

Where:

GDP= Gross domestic product; Bcr = (Banks' credit = Aggregate lending to private and public sector); Board size (Bs); Board composition (Bc); β_0 = Constant intercept; $\beta_1 - \beta_3$ = Parameters or coefficients to be estimated; f = Functional notation and U_t = Stochastic error term

3.1 Estimation Technique, Variables, Samples and Data source

The econometric technique used in this study includes descriptive statistics, correlation matrix analysis and the regression approach which took the form of Fixed Effects Model and Random Effects Model. In order to establish



the most appropriate regression with the highest explanatory power, that is better suited to the data employed in the study, i.e. a balanced panel, Hausman test was employed (Greene, 2003 and Salawu, 2007). The study made use of annual data obtained from the Central Bank of Nigeria (CBN) Statistical Bulletin and The annual observatory report of 21 Nigeria deposit money banks listed on NSE from 1st January 2011 to 31st December 2020, which were gathered from the Fact Book of the Nigerian Stock of Exchange (NSE). The latter contained the required information for the 21 banks listed on the NSE, covering the 10 years with 110 observations. The choice of this period was to capture the period of economic recession and Covid 19 era and to give a wider scope which is to account for the developments on the applied variables of GDP= Gross domestic product; Bcr =

(Banks' credit = Aggregate lending to private and public sector); Board size (Bs); Board composition (Bc).

The *a priori* expectation provides expected signs and significance of the values of the coefficient of the parameters under review on the part of our regression model and it is stated as:

$$\beta_0 \neq 0; \beta_1 \geq 0; \beta_2 \leq 0; \beta_3 \leq 0$$

4.0 Empirical Findings and Discussion

The results of the findings from the study are presented in tables and figures below and discussed as follows

4.1 Descriptive Analysis

The descriptive analysis was used because it presents the result in a more meaningful way for simpler interpretation of data result and simpler summary of results as it helps to determine the normalcy of the distribution.



Table 1 Result of Descriptive Statistics

	GDP	Bcr	BS	BC
Mean	4.263840	0.379786	7.070953	0.654102
Median	1.876502	0.363070	8.030010	0.653501
Maximum	24.85401	0.887003	11.60000	0.987000
Minimum	0.025010	0.244000	6.000000	0.056000
Std. Dev.	4.744528	0.187010	1.962105	0.220657
Skewness	3.117092	0.762081	-0.273976	0.211015
Kurtosis	8.870165	3.720646	1.765197	2.453746
Jarque-Bera	457.0613	31.76210	13.51567	15.166110
Probability	0.000000	0.000000	0.000000	0.000000
Observations	110	110	110	110

Note: GDP= Gross domestic product, Bcr = Aggregate lending to private and public sectors, BS = Board size and BC = Board composition

Source: Author’s Computation, (2020) from E-view 9

Table 1 shows the descriptive analysis results of all the variables involved in the analysis of corporate governance, banks’ credit and gross domestic product in Nigeria for the period of 2011 to 2020. The result outcome reveals that on average, the mean coefficient of GDP, Bcr, BS and BC varies from 4.26, 0.38, 7.07 and 0.65 respectively to minimum of 0.02, 0.24, 6.00 and 0.05 to maximum of 24.85, 0.89, 11.60 and 0.98 with standard deviation of 4.74, 0.18, 1.96 and 0.22. More so, it was established that GDP, Bcr and BC are positively skewed with skewness coefficient of 3.12, 0.76 and 0.21 respectively thus implying that the distribution of the GDP, Bcr, BC, under consideration have long tail to the right while the coefficient of BS is -0.27 which implies

that the variable had a long tail to the left. However, the kurtosis of the GDP and Bcr with kurtosis coefficient indexes of 8.87 and 3.72 respectively were mesokurtic in nature while the kurtosis of BS and BC with kurtosis coefficient indexes of 1.77 and 2.50 respectively are platykurtic in nature. The Jarque-Bera and probability values shows that all the variables are statistically significant in examining the nexus between corporate governance, banks’ credit as a panacea to economic growth in developing economies referencing Nigeria.

4.2 Correlation Result

Correlation test indicate the degree of association among the studied variables in the model

Table 2: Correlation matrix

	GDP	Bcr	BS	BC
GDP	1.000000	0.180757	-0.153565	-0.256341
Bcr	0.180757	1.000000	0.054324	0.252444
BS	-0.153565	0.054324	1.000000	-0.003465
BC	-0.256341	0.252444	-0.003465	1.000000



Source: Author’s Computation, (2020) from E-view 9

Correlation result presented in Table 2 shows that there is positive correlation between gross domestic product (GDP) and banks’ credit (Bcr) (aggregate lending private and public sectors) with the correlation coefficient of 0.1807 over the period covered in the study across sampled deposit money banks. On the other hand, other result shows that there is inverse correlation between gross domestic product (GDP) and corporate governance measured by board size (BS) and board composition (BC) which implies that gross domestic product tends to move predominantly in opposite direction with board size and board composition with correlation coefficient -0.1535 and -0.2563 respectively. Thus, it can be established based on the result of the correlation matrix that banks’ credit (aggregate lending to private and public sectors) contributed positively, significantly and serve as an engine device to drive economic growth in developing economies with special reference to Nigeria.

4.3 Fitted Regression Model

The fitted regression estimate was applied on the studied variables, namely; (GDP, Bcr, BS, BC)

In this section, results analyses were done using fixed effect and Random estimator are presented after which evaluation for consistency and efficiency was done using Hausman test.

4.3.1 Fixed Effect Estimation

This estimation systematically incorporated the heterogeneity effect across sampled banks into the model to account for the uniqueness. This study separately incorporates firm’s heterogeneity effect and period effect into the model using dummy approach in which each firm and year is assigned an intercept term. Results of the least square dummy variable fixed effect estimations for (cross sectional and period specific) are presented in Table 3.

Table 3: Fixed Effects Estimates (Cross-sectional and Period specific) of Corporate Governance, Bank Credit and Gross domestic product

Series: GDP, Bcr, BS, BC

CROSS-SECTIONAL SPECIFIC EFFECT			TIME SPECIFIC EFFECT		
Variables	Coefficients	Prob	Variables	Coefficients	Prob
C	4.643217	0.0000	C	0.132631	0.5871
Bcr	0.678787	0.0451	Bcr	0.422415	0.0371
BS	-0.129106	0.1761	BS	0.057683	0.7466
BC	-0.328711	0.5276	BC	-0.452887	0.0187
R-square = 0.873841 Adjusted R-square = 0.871280 F-statistics = 40.72067 Prob(F-stat) = 0.000000			R-square = 0.672563 Adjusted R-square = 0.536767 F-statistics=11.33503 Prob(F-stat)= 0.016124		
CROSS-SECTION SPECIFIC		Effect	TIME SPECIFIC	DATEID	Effect
Access Bank Plc		7.825907	2011	1/1/2011	-0.086566
Afriland Plc		-2.185822	2012	1/1/2012	-0.001664
Diamond Bank Plc		-0.384722	2013	1/1/2013	0.046252



Eco Bank	16.16437	2014	1/1/2014	0.082403
Equatorial Trust Bank Plc	-2.627218	2015	1/1/2015	0.040772
First City Monument Bank Plc	-2.156643	2016	1/1/2016	0.046017
Fidelity Bank Plc	-2.281666	2017	1/1/2017	-0.010523
First Bank Plc	2.743836	2018	1/1/2018	-0.046617
Guaranty Trust Plc	-2.211721	2019	1/1/2019	0.002067
IBTC-Chartered Bank Plc	-1.613024	2020	1/1/2020	-0.020155
Intercontinental Bank Plc	6.731270			
Oceanic Bank Plc	10.34332			
Platinum-Habib Bank Plc	0.676061			
Stanbic Bank Ltd	0.880789			
Standard Chartered Bank Ltd	1.466446			
Sterling Bank Plc	0.221016			
United Bank for Africa Plc	-2.504670			
Union Bank Plc	-2.861833			
Unity Bank Plc	-2.361182			
Wema Bank Plc	-2.657653			
Zenith International Bank Plc	-1.688060			

Source: Author's Computation, (2020) from E-view 9

Fixed effect cross-sectional specific estimation result presented in Table 3 shows that when heterogeneity effect across banks sampled in the study is incorporated into the model, bank credit (aggregate lending to private and public sectors) has positive with significant effect on economic growth whereas board size and board composition have negative and insignificant effects on economic growth measured by gross domestic product. The reported coefficient estimate for banks' credit (aggregate lending to private and public sector), board size and board composition coefficient estimate at 0.678787 ($p = 0.0451 < 0.05$), -0.129106 ($p = 0.1761 > 0.05$) and -0.328711 ($p = 0.5275 > 0.05$) respectively. Adjusted R-square value reported for cross-sectional specific estimation presented in Table 3 stand at 0.871280, which reflects that about 87.12% of the systematic variation in gross domestic product can be

explained jointly by the explanatory variables while the remaining 12.88% were accounted for by the stochastic variables that were not represented in the study.

Result of fixed effect period-specific estimation presented in Table 3 shows that when heterogeneity effect over time is incorporated into the model as intercept term, bank credit (aggregate lending to public and private sectors) has positive with significant effect on gross domestic product with the coefficient of 0.422415 ($p = 0.03 < 0.05$), board size has positive with an insignificant effect gross domestic product with the coefficient of 0.057683 ($p = 0.74 > 0.05$), board composition has negative with a significant effect on gross domestic product with coefficient of -0.452887 ($p = 0.018 < 0.05$). Reported Adjusted R-square statistics of 53.6767 shows that about 53.67% of the systematic variation in gross domestic product can be explained jointly by bank credit



(aggregate lending to private and public sectors) board size and board composition while the remaining 46.33% were accounted for by the stochastic variables that were not represented in the model.

Deviation from the intercept term for cross-sectional specific effect (4.643217) corresponding to the reference banks (Access bank) stand at 7.825907, -2.185822, -0.384722, 16.16437, -2.627218, -2.156643, -2.281666, 2.743836, -2.211721, -1.613024, 6.731270, 10.34332, 0.676061, 0.880789, 1.466446, 0.221016, -2.504670, -2.861833, -2.361182, -2.657653 and -1.688060 for Afribank Plc, Diamond Bank Plc, Eco Bank, Equatorial Trust Bank Plc, First City Monument Bank Plc (FCMB), Fidelity Bank Plc, First Bank Plc (FBN), Guaranty Trust

Plc, IBTC-Chartered Bank Plc, Intercontinental Bank Plc, Oceanic Bank Plc, Platinum-Habib Bank Plc, Stanbic Bank Ltd, Standard Chartered Bank Ltd, Sterling Bank Plc, United Bank for Africa Plc (UBA), Union Bank Plc, Union Bank Plc, Unity Bank Plc, Wema Bank Plc and Zenith International Bank Plc respectively. Deviation from the intercept term for time specific effect (0.132631) of the reference period stand at -0.086566 for 2011,-0.001664 for 2012, 0.046252 for 2013, 0.082403 for 2014, 0.040772 for 2015, 0.046017 for 2016, -0.010523 for 2017, -0.0466617 for 2018, 0.002067 for 2019 and -0.020155 for 2020 respectively.

4.3.2 Test for Random Effect Estimation

Table 4 Random Effect Estimation of Corporate Governance Bank Credit and Gross Domestic product (Economic growth)

Series: GDP, Bcr, BS, BC

Variable	Coefficient	Standard Error	T-Test Values	Probability
C	0.305764	1.156165	0.272407	0.7814
Bcr	6.912538	1.028151	5.517631	0.0000
BS	-0.187323	0.087014	-2.055737	0.0300
BC	-0.170156	0.688163	-0.259720	0.6852
R-square = 0.952655; Adjusted R-square = 0.941177; F-statistics = 83.04456; Prob(F-statistic) = 0.000000; Durbin-Watson stat = 2.439138				
CROSS-SECTION SPECIFIC	Effect	TIME SPECIFIC	DATEID	Effect
Access Bank Plc	7.651343	2011	1/1/2011	-0.066057
Afribank Plc	-2.158106	2012	1/1/2012	-0.010252
Diamond Bank Plc	-0.253570	2013	1/1/2013	0.018810
Eco Bank	13.64321	2014	1/1/2014	0.057360
Equatorial Trust Bank Plc	-2.569710	2015	1/1/2015	0.014884
First City Monument Bank Plc	-2.123411	2016	1/1/2016	0.031570
Fidelity Bank Plc	-2.118824	2017	1/1/2017	0.003048
First Bank Plc	2.660221	2018	1/1/2018	-0.010166
Guaranty Trust Plc	-2.146665	2019	1/1/2019	0.005159
IBTC-Chartered Bank Plc	-1.438601	2020	1/1/2020	0.048797



Intercontinental Bank Plc	5.644171
Oceanic Bank Plc	10.17308
Platinum-Habib Bank Plc	0.560255
Stanbic Bank Ltd	0.712415
Standard Chartered Bank Ltd	1.335560
Sterling Bank Plc	0.238247
United Bank for Africa Plc	-2.643678
Union Bank Plc	-2.614413
Unity Bank Plc	-2.434611
Wema Bank Plc	-2.631601
Zenith International Bank Plc	-1.425748

Source: Author's Computation, (2020) from E-view 9

Random effect estimation result presented in Table 4 revealed that when heterogeneity effect across banks and over time is incorporated into the model via the error term, the result shows that bank credit have positive and statistical significant effect with estimate of 6.912538 ($p=0.00 < 0.05$) on gross domestic product (economic growth). More so, both board size and board composition have negative effect on gross domestic product, however, board size has significant effect while board composition has insignificant effect respectively given the reported coefficient estimates for board size at -0.187323 ($p=0.03 < 0.05$), and coefficient estimate for board composition at -0.170156 ($p=0.68 > 0.05$). The board composition has an inverse with statistical insignificant effect on economic growth in developing economics referencing Nigeria. This implies that higher presence of non-executives or independent members in their board may not be able to protect their reputations as effective, independent decision makers. More so, it implies that non-executive directors are likely not to have a hands-on approach or are not necessarily well versed in the operations of the institution, hence, do not necessarily make the best decisions.

Reported R-square for random effect estimation presented in Table 4 stand at 0.952655 which implies that about

95.27% of the explanatory variables contributes to gross domestic product. The coefficient of adjusted R-square is 0.941177 which implies that 94.12% of the systematic variation in gross domestic product can be explained by board size, board composition and bank credit of the sampled banks in Nigeria towards economic growth in developing economies while the remaining 5.88% were accounted for by the stochastic variables that were not represented in the model. The F-statistics value of 83.04456 with the probability value of $0.000 < 0.05$ shows that the random regression model is statistically significant and thus appropriate, reliable and acceptable for assessing corporate governance and bank credit towards economic growth in developing economies. More so, the Durbin Watson test statistics of 2.439138 shows that the model is free from any serial autocorrelation.

Deviation from the intercept term (0.305764) corresponding to the reference banks (Access Bank Plc) stands at 7.651343, -2.158106, -0.253570, 13.64321, -2.569710, -2.123411, -2.118824, 2.660221, -2.146665, -1.438601, 5.644171, 10.17308, 0.560255, 0.712415, 1.335560, 0.238247, -2.643678, -2.614413, -2.434611, -2.631601 and -1.425748, for Afribank Plc, Diamond Bank Plc, Eco Bank, Equatorial Trust Bank Plc, First City Monument Bank Plc (FCMB), Fidelity Bank Plc, First



Bank Plc (FBN), Guaranty Trust Plc, IBTC-Chartered Bank Plc, Intercontinental Bank Plc, Oceanic Bank Plc, Platinum-Habib Bank Plc, Stanbic Bank Ltd, Standard Chartered Bank Ltd, Sterling Bank Plc, United Bank for Africa Plc (UBA), Union Bank Plc, Union Bank Plc, Unity Bank Plc, Wema Bank Plc and Zenith International Bank Plc respectively. Deviation from the intercept term of the reference period stands at -0.066057 for 2011, -0.010252 for 2012, 0.018810 for 2013, 0.057360 for 2014, 0.014884 for 2015, 0.031570 for 2016, 0.003048 for 2017, -0.010166 for 2018, 0.005159 for 2019 and -0.048797 for 2020 respectively.

The F-test of heterogeneity stands at 20.19 and 1.26 with probability values of 0.0000, and 0.0047 for cross sectional and period specific effect respectively. Result reveals that there is enough evidence to reject the null hypothesis that all differential intercept corresponding to each cross sectional specific and the period specific units are equal to zero. This implies that there is significant cross sectional and the period specific heterogeneity effect amidst the sampled banks used for estimation.

Table 5 Hausman Test

Null hypothesis	Chi-square stat	Probability
Difference in coefficient not systematic	24.1537	0.0005

Source: Author's Computation, (2020) from E-view 9

Table 5 reports chi-square statistic of 24.15 and probability value of 0.0005. The result reveals that there is enough evidence to reject the null hypothesis that differences in coefficients of fixed effect estimation and random effect estimation are significant.

The study investigates corporate governance and banks' credit as a panacea for economic growth of developing economies referencing Nigerian banks which cut across twenty one universal banks listed on the Nigerian Stock Exchange from 2011 to 2020. The study measures corporate governance with (board size and board

composition); banks' credit is also measured with (aggregate lending to private and public sectors) while economic growth in developing economies is measured with (gross domestic product). The study made use content analysis to extract Corporate Governance data from 110 annual reports of twenty one (21) universal deposit money banks in Nigeria. In order to achieve the earlier stated objectives of the study, various econometric and estimation tests were employed. Importantly, the descriptive analysis conducted in the study includes mean analysis, standard deviation analysis, minimum and maximum analysis, correlation analysis matrix, panel regression estimate is conducted using fixed effect and random effect with the use of Hausman test. The findings indicates that board size and board composition inversely connect with gross domestic product (economic growth) in developing economies referencing Nigeria while banks' credit (aggregate lending to private and public sectors) positively relate with gross domestic product (economic growth) in developing economies referencing Nigeria. This result implies that corporate governance of banks in Nigeria is at variance with the trend of movement of banks' credit policy in Nigeria in respect to this study.

By applying the Hausman test to justify the best method and result, it directly reveal that the random effect is the most appropriate, suitable, reliable, dependable and fitted model to employ for decision analysis. This becomes evident as the probability of Chi-square statistics is greater than 0.05% in the model.

Based on the test of hypothesis one, the study found that corporate governance measured by board size and board composition both have a negative effect however, board size has statistical significant while board composition has statistical insignificant effect on gross domestic product (economic growth) by -18.7% and -17.0% respectively. Furthermore, hypothesis two revealed that banks' credit has positive and significant impact on gross domestic product proxy economic growth with the



coefficient of 6.912538. Therefore, this implies that any attempt to increase banks' credit (aggregate lending to private and public sectors) by banks will further increase economic growth and economic activity in developing economies by 691%. More so, the hypothesis two inferred that banks' credits positively enhance business growth and performance as it helps to meaningfully impact on economic development.

The multiple coefficient of adjusted R-square indicates that 94.11% of the systematic variations in gross domestic growth (economic growth) are being explained by corporate governance (board size and board composition); and banks' credit (aggregate lending to private and public sectors) of the sampled banks in Nigeria while the remaining 5.89% are subjected to error term. The F-test is used in testing for the significant relationship between the explain and explanatory variables indicates that F-value of 83.04456 with the probability value of $0.00 < 0.05$ implies that it is statistically significant and thus appropriate, reliable and acceptable for assessing the effect of corporate governance and banks' credit as a panacea for economic growth in developing economies referencing Nigeria. More so, the Durbin Watson test statistics of 2.43 means that the model is free from any serial autocorrelation. Evidence from the result of the Random effect on objective one indicates that board size and board composition has a negative but with an insignificant effect on economic growth in developing economies like Nigeria. This implies that there are not too many directors on the board of banks in Nigeria; hence the number of directors on the board in banks should be reduced. The result is in conformity to *a priori* expectation of negative expectation on economic growth from corporate governance perspective. Nonetheless, the insignificant effect implies that banks with larger board size leads to slower and less-efficient decision-making processes which causes communication problems and hence negatively affects the banks' performance which in turn

affects economic growth. The negative but significant relationship found in board compositions implies that ineffective and inefficient board existing in corporate governance entity such as banks will hinder quick decision making on investment decision and bank s' portfolio diversification which ought to fast track economic growth in developing economies but the existence of such board in the organisation is noticed as essentially significant in the study and this is consistent with the conclusions drawn by Igbekoyi and Agbaje (2018).

Implication of Findings arising from the study findings from the objectives discloses that banks in Nigeria are now prudent and meticulous in business dealings than before as they connect with their customers thereby adopting the use of effective loan collection policies which include; monitoring loans that are in arrears to avoid bad debt, penalising clients for late payment, use of stringent loan policies to avoid loan default since lending is the pivot for economic growth and development.

However, financial institutions management are also meticulous when setting up banks' credit policy in order not to inversely affect the operations of banks in order to ensure maximisation of profits and reduce management risk that affects the quality of assets and increases loan losses and non-performing loan which may eventually lead to financial distress from incapability to collect loans and advances granted to customers.

5.1 Summary of overall results

- i) Banks' credit has positive and significant impact on gross domestic product when measured. Which implies that, banks' credit (aggregate lending to private and public sectors) increases economic growth by 67.8% and 691.2% respectively;
- ii) Corporate governance through board size has negative and insignificant effect on gross domestic product by 12.9% and 18.7% respectively;



- iii) Corporate governance through board composition has negative effect but significant effect on gross domestic product. This implies that board composition contributes negatively to gross domestic product by 32.8% and 17.0% but it is important in an organisation;
- iv) The multiple coefficient of adjusted R-square indicates that 87.12 and 94.12% of the systematic variation in gross domestic product (economic growth) are being explained by banks' credit, board size and board composition of the sampled banks in Nigeria while the remaining 12.88 and 5.88% were accounted for by the stochastic variables that were not represented in the study.
- v) The F-test indicates that F-value of 40.72067 and 83.04456 with the probability value of $0.00 < 0.05$, and $0.00 < 0.05$ are statistically significant and thus appropriate, reliable and acceptable for assessing corporate governance and banks' credit on economic growth among selected banks in Nigeria and
- vi) The Durbin Watson test statistics of 2.43(Random effect) explores that the model is free from serial autocorrelation.

5.2 Conclusion

The study has empirically investigated corporate governance and banks' credit as a panacea to economic growth in developing economies with reference to Nigeria. Statistical evidence establishes that both corporate governance and banks' credit are tools to economic growth but corporate governance has negative effect whereas banks' credit has positive impact on economic growth in developing economies. It has been established in the literature that corporate governance affects stakeholders and banks' as whole, corporate governance affects the potential or ability of a bank to

reach its market share both domestically and globally. This study has, however, established that corporate governance practices when measured by board size have insignificant though with a negative effect on economic growth. However, when measured board composition, it has a negative with significant effects on economic growth. The study, therefore, concludes that corporate governance has negative effect on economic growth in developing economies like Nigeria because of the possible abuse in the appointment or selection of the board members appointed in developing economies like Nigeria which may not have adequate knowledge of the dealings of the organisation to serve. On the other hand, the study establishes that banks' credit impacted positively and significantly as a panacea to economic growth in developing economies like Nigeria. The findings from the study conclusively align with the empirical finding of Nyawera (2013), Wilson E. H. &, ThankGod C. A. (2021) that banks' credit policy has positive and significant effect on delinquency management of banking institutions.

5.3 Recommendations

Based on the premised of the discoveries and conclusion of this study, the following recommendations are put forward:

- (i) Banks should engage in the development and implementation of strategic training on corporate governance disclosure and banking ethics for board members and senior bank managers.
- (ii) Corporate governance by size of the board should be regulated which should not be too large and must consist of highly skilled and competent professionals who are conversant with oversight function;
- (iii) Management of banks need to be cautious in setting up banks' credit policy that may adversely affect banks' profitability and encourage bad debt or loan delinquency;



- (iv) Management of banks should ensure debt stringent collection effort. Therefore the credit committees at all levels must work in co-ordination in order to ensure that credit is collected in a timely manner;
- (v) The Central Bank should issue efficient monetary policies that would intensify transparency, integrity and curtail insider abuses on customers account in the Banking institutions.

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Appendix 1: Sampled Nigerian Deposit Money Banks (DMBs)

S/N	Bank Name	Remark
1	Access Bank Plc	International authorisation bank
2	Afribank Plc	National authorisation bank
3	Diamond Bank Plc	National authorisation bank
4	Eco Bank	National authorisation bank
5	Equatorial Trust Bank Plc	National authorisation bank
6	First City Monument Bank Plc (FCMB)	International authorisation bank
7	Fidelity Bank Plc	International authorisation bank
8	First Bank Plc (FBN)	International authorisation bank
9	Guaranty Trust Plc	International authorisation bank
10	IBTC-Chartered Bank Plc	National authorisation bank
11	Intercontinental Bank Plc	National authorisation bank
12	Oceanic Bank Plc	National authorisation bank
13	Platinum-Habib Bank Plc	National authorisation bank
14	Stanbic Bank Ltd	National authorisation bank
15	Standard Chartered Bank Ltd	National authorisation bank
16	Sterling Bank Plc	National authorisation bank



17	United Bank for Africa Plc (UBA)	International authorisation bank
18	Union Bank Plc	International authorisation bank
19	Unity Bank Plc	National authorisation bank
20	Wema Bank Plc	National authorisation bank
21	Zenith International Bank Plc	International authorisation bank