CORPORATE GOVERNANCE AND NON-PERFORMING LOANS AMONG DEPOSIT MONEY BANKS IN NIGERIA

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A PROJECT SUBMITTED TO THE DEPARTMENT OF BANKING AND FINANCE IN PARTIAL FULFILLMENT FOR THE AWARD OF HIGHER NATIONAL DIPLOMA (HND) IN BANKING AND FINANCE, SCHOOL OF BUSINESS STUDIES, AUCHI POLYTECHNIC, AUCHI

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CERTIFICATION

We the undersigned hereby certify that this project titled "Corporate Governance and Non-performing Loans among Deposit Money Banks in Nigeria" was carried out by EZINMA BLESSING CHINASA with Mat No: SBS/2282070393, under our supervision in the Department of Banking and Finance, Auchi Polytechnic, Auchi, Edo State.

We therefore certify that the project is adequate both in scope and quality and is submitted to the Department of Banking and Finance in requirements of the award of Higher National Diploma (HND) in Banking and Finance.

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DEDICATION

This project is sincerely dedicated to God Almighty for His grace and kindness towards me thus far. This project would not have been a success without Him.

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My thanks goes to God Almighty for His infinite mercy, love and guidance towards me all through my stay in school. I am indeed grateful to the Alpha and Omega.

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I specially appreciate all my friends who have in one way or the other supported me through prayers, encouragement, money, advice etc. May God keep you all and give you all unending testimonies, you all are so wonderful.

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Abstract

The study examined the impact of corporate governance on non-performing loans among deposit money banks in Nigeria for the period spanning 13 years (2009-2021). Twelve (12) listed deposit money banks were taken as sample for the study and annual data from sampled banks were subjected to various statistical and empirical tests. The dynamic heterogeneous pooled mean group estimator was used for empirical analysis while statistical testing was done using the descriptive statistics, unit root tests and co-integration tests. Corporate governance was measured using CEO duality, board size, board independence and audit committee independence. Empirical result indicated that CEO duality was found to have a significant negative relationship with non-performing loan in the long run and an insignificant positive relationship in the short run. Board size was found to have a significant positive relationship with non-performing loans both in the long and short run during the period of study. On the other hand, audit committee independence was found to have a significant negative relationship with non-performing loan in the long and short run while board independence is found to have a significant negative relationship with non-performing loan both in the long and short run. Premise on research findings the study concluded that corporate governance has a significant role in cushioning the incidence of non-performing loans among deposit money banks in Nigeria.

Key Words: CEO duality, Board Size, Board Independence, Audit Committee Independence

Word Count: 220

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Banks have an overwhelmingly dominant position in developing economy financial systems, and are extremely important engines of economic growth especially since their financial markets are usually underdeveloped thus banks in developing economies becomes an important source of finance for the majority of firms. The health and stability of banking institutions becomes a thing of concern since distress in this sector is easily transmitted to the entire economy (Lestari, 2018).

One major role played by the banking institutions includes the provision of credit facilities to meet financing needs of different firms operating in the economy. The banking institution then acts as an intermediary between deficit and surplus funds of the economy. This role played by the banking institutions (provision of credit facility) exposes them to lots of risk, credit risk being part of them. In simple words, credit risk involves the risk associated with non-repayment of loans by borrowers (Inyang, 2009). Borrowers are expected to pay a fixed installment to the bank as against their loan; however some borrowers fail to meet these obligations making the loan non-performing in the books of the bank. The term non-performing loan (NPL) is used to refer to the total amount of loan upon which the bank has not received installments for a period of time (Miria, Bilal & Muhammad, 2016).

The issue of NPLs is not new and has been problematic since the 1980's, but the effect became evidenced in late 1990's leading to cases of banks failure. For example, in 1998, 26 banks were liquidated and the Central Bank of Nigeria (CBN) reported that the NPL for the banks was N101 billion. The distressed banks‟ outstanding credits alone was N33 billion or 7.8% of the total credits, while provision for NPL stood at N64.5 billion. Since then, NPL's have been on the rise among deposit money banks in Nigeria and such concurrent incidence have been attributed to poor corporate governance practice among deposit money banks (Angahar & Mejabi, 2014). For example, Chowdhury (2019) noted that some bank management often grant loans to their friends, relatives and different political parties without adequate collateral, loan loss provision and proper loan recovery process thereby increasing the probability of loan loss.

Credit policies are made by the board members and the chief executive officer (CEO). Therefore, a good CRG practice would guide board members in making credit policies to reflect standard practice as recommended by various regulatory bodies. However, it has sometimes been found that board members grant loans to unworthy individuals therefore increasing the probability of NPL's (Lestari, 2016). Therefore, following strict CRG practices is expected to reduce the incidence of non-performing loans among deposit money banks, however NPL's among banks have continue to be on the increase among deposit money banks in Nigeria. It is in the light of this that this study intends to empirically examine the relationship between corporate governance and non-performing

loans among deposit money banks in Nigeria so as to ascertain the current practice of CRG among DMB's and its corresponding impact on NPL.

1.2 Statement of the Research Problem.

The investigation of the effect of corporate governance on non-performing loans of banks has produced conflicting findings. For instance, researchers such as Enobakhare, 2010; Nworji, Olagunji and Olarewanju, 2011; Bourdriga, Boulila and Jellouli, 2009; Magembe, Ombuku and Kiweu 2017 among others found that corporate governance has a significant effect on non-performing loans. On the other hand, researchers such as Nyor and Mejabi, 2013; Anghar and Mejabi, 2014; Abdulazeez, Lawal and Yabagi, 2019 among others found that corporate governance has no significant effect on non-performing loans of banks. The conflicting findings might be due to the level of development of the banking sector of the specific country and difference in methodology. Also, the mixed results could be linked to different periods of study utilized. Given the conflicting findings from these studies, there is no consensus in the empirical literature on the effect of corporate governance on the non-performing loans of banks. The mixed results from these studies create gaps for further investigation in this study.

It was observed that previous studies often estimated the relationship between corporate governance and non-performing loans using static models (Gorowa & Igyo, 2017; Adebisi, Love & Emena, 2018) The use of static models can be expected to have serial correlation in the error term as well as suffer endogeneity problems thereby invalidating statistical inference. Secondly, static models assume equilibrium in the model as well as

assume the relationship between variables is time invariant. However, since the relationship between corporate governance and non-performing loan is expected to be time invariant as changes in corporate governance practice in each given period is expected to be followed by changes in its relationship with non-performing loans. Therefore the use of static models in examining the relationship between corporate governance and non-performing loan is insufficient. To correct this, this study would use a dynamic panel model to capture the relationship between corporate governance and non-performing loan.

The use of dynamic panel model is appropriate for this study since it accounts for time dependent changes in the model. Dynamic models are richer in capturing the relationship between two variables since it is able to distinguish between short-run and long-run effects of the regressors on the dependent variable. To this effect, this study would be employing the dynamic autoregressive distributed lag model (pooled mean group) to capture the dynamic relationship between corporate governance and non-performing loans. This method is accredited with the ability to estimate time series variables with differing order of integration as well as solve serial correlation and endogeneity problem by using appropriate lags for the independent variables (Peasaran, Shin & Smith, 1999). It is expected that the outcome of this estimator would be more robust, reliable and most appropriate for inference as when compared to the use static models.

1.3 Objectives of the Study

The main objective of this study is to examine the relationship between corporate governance and non-performing loan among deposit money banks in Nigeria. Other specific objective is to

i. Examine the influence of CEO duality on non-performing loans among deposit money banks in Nigeria.
ii. Investigate the impact of board size on non-performing loans among deposit money banks in Nigeria.
iii. Explore the relationship between audit committee independence and non-performing loan among deposit money banks in Nigeria.
iv. Ascertain the relationship between board independence and non-performing loan among deposit money banks in Nigeria.

1.4 Research Questions

i. To what extent does CEO duality influence non-performing loans among deposit money banks in Nigeria?
ii. How does board size affect non-performing loans among deposit money banks in Nigeria?
iii. What is the relationship between audit committee independence and non-performing loan among deposit money banks in Nigeria?

iv. What kind of relationship exists between board independence and non-performing loan among deposit money banks in Nigeria?

1.5 Research Hypotheses

The research hypotheses are stated in their null form, and they are stated below

i. There is no significant relationship between CEO duality and non-performing loans among deposit money banks in Nigeria.
ii. There is no significant relationship between board size and non-performing loans among deposit money banks in Nigeria.
iii. There is no significant relationship between audit committee independence and non-performing loans among deposit money banks in Nigeria.
iv. There is no significant relationship between board independence and non-performing loans among deposit money banks in Nigeria.

1.6 Significance of the study

This study is significant as it hopes to provide empirical insight as to the relationship between past corporate governance mechanisms and non-performing loans among deposit money banks in Nigeria. The outcome of this study is expected to be useful to the following stakeholders

Banks and Financial Experts: The outcome of this study is expected to serve as a guide to banks and financial experts who are involved daily in loan analysis, administration, and disbursement. It will also enable banks and supervisory authorities to re-evaluate

existing policies so as to determine whether the policies need to be changed, modified or retained.

Researchers: Future researchers will hopefully find the outcome of this study useful in examining the issues of corporate governance and non-performing loan of deposit money banks in Nigeria.

Investors and Shareholders: Most investors and owners of the firm may not understand the issues relating to corporate governance and non-performing loan of deposit money banks in Nigeria even though the consequences are known to them. Often times, Corporate Governance and Non-Performing loan leads to the liquidation and make shareholders to lost their investment in these firms. Hence it is necessary for the investors and equity holders to become aware of how corporations are governed so as to make an informed investment.

1.7 Scope of the study

This study focuses on examining the relationship between corporate governance and non-performing loan among Nigeria deposit money banks in Nigeria. Nigeria banks are worth considering due to the high incidence of non-performing loans recorded in the banking industry. The study runs through a period of thirteen (13) years (2009 to 2021).

1.8 Limitation of the study

The accuracy of data extracted from various sources and their measurement procedures may not be without some intricacies, this is as a result of the fact that we are relying on secondary data. However effort will be made to ensure that errors are mitigated in order

to ensure results obtained are valid, reliable and dependable with respect to the data employed.

1.9 Definition of Operational Terms

Audit Committee Independence

Audit committees typically review financial statements quarterly and annually in public companies. In addition, members will often discuss complex accounting estimates and judgments made by management and the implementation of new accounting principles or regulations.

Board Independence

Independence occurs when a board member has not been and is not currently employed by the company or its auditor and the board member's employer doesn't do a significant amount of business with the company.

Board Size

Board size is taken to refer to the total number of members serving on a firm's board.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section espouses the detailed review of related literature relevant to corporate governance and non-performing loan. This section is categorized into three headings, namely; conceptual review, theoretical, and empirical literature.

2.2 Conceptual Review

2.2.1 Concept of Non-Performing Loans

Generally, Non-performing loan refers to loans which have both its initial amount and interest unsettled over a period outside agreement in the condition of the loan. Loan facility that has not reached the date specified in the payment guide of the initial amount and interest against the items of the condition of the loan is NPLs. Equally, the IMF's defines NPLs in its Compilation Guide on Financial Soundness Indicators: A loan is nonperforming when payments of interest and/or principal are past due by 90 days or more, or interest payments equal to 90 days or more have been capitalized, refinanced, or delayed by agreement, or payments are less than 90 days overdue, but there are other good reasons such as a debtor filing for bankruptcy to doubt that payments will be made in full (IMF, 2005).

Nigeria apex bank defines NPL as loan and advances whose full collection of the initial amount and interest and credit quality has deteriorated, also, as per the agreement terms

are in question (CBN, 2015). These are loans that are 90days or above overdue in interest/capital payment (Bexley & Nenninger, 2012).

2.2.2 Concept of Corporate Governance

Corporate governance has been defined differently in the finance literature. These attempts in defining the term have made the concept to be one of the topics that have received the most attention in corporate finance literature.

Corporate governance literarily is the mechanism used by decision-makers of a firm to enhance the operations of a corporation in order to achieve the sole responsibilities to the firm stakeholders (Inyang, 2009). Wilson (2006) sees corporate governance as a process which firms are managed, controlled and meets its obligations of better management of the firm and ensures they deliver the set objective to the shareholders and those which have interest in the corporation. Ibrahim, Ouma and Koshal (2019) define corporate governance as a process that allows accountability by the directors to the shareholders of the firm for proper management of the corporation and to put first the interest of the owners of the corporation.

Cadbury Committee (1992) defined corporate governance as the structure put in place to control and direct an organization. The Organization for Economic Cooperative Development (OECD) asserts that corporate governance is defined as the interrelation between the management of a corporation, its board, and stakeholders. Also, corporate

governance is a structure that allows the objective and the tactics of attainment and performance monitoring are put in place. At this level managers must be able to put on the thinking cap, be strategic. Rwegasira and Sullivan (2000) cited in Oyejide and Soyibo (2001), put forward that corporate governance could be view from both perspective: a parochial view; this has to do with the structures inside the corporation where it receives its basic positioning and planning and, while from the broader view is regarded major view of the market and friendly society. The various assertions indicate that corporate governance is critical and vital to the continuous existence of every business establishment within and outside Nigeria. Transparency, integrity, accountability, honesty, protection of owner's interest and fulfillment, ethics and value, performance orientation, fairness and commitment to organization are the key ingredients of corporate governance.

2.2.3 Corporate Governance in Nigeria

Lots of regulatory framework has been put into place to foster good corporate governance practice in Nigeria. There are whole lot of corporate governance provisions in the Companies and Allied Matters Act (CAMA) 1990, the Bank and other Financial Institutions Act (BOFIA) 1991 (as amended), the Investment and Securities Act, 1999 (as amended), and the Securities and Exchange Commission Act, 1988 (as amended). These laws which burden the CAC, SEC and CBN with the authority of corporate governance regulation, reveals some of the OECD principles of corporate governance following the continuous concerns on corporate governance issues and realizing the need to be in line

international best practices. The Securities and Exchange Commission (SEC) in conjunction with the Corporate Affairs Commission (CAC) set up a seventeen-member panel to pinpoint the flaws in the practice of corporate governance in Nigeria and come up with reasonable changes that can assist the operation of Corporate Governance in Nigeria.

2.2.4 Corporate Governance Mechanisms

Some of corporate governance attributes have been identified as board size, CEO duality, board composition and audit committee independence (Li, et al, 2020). Some of these attributes are briefly discussed below

i. **Board Independence:** Board independence is an attribute of an effective corporate governance system. To be effective in discharging their responsibilities, the directors should be independent of executive management and also of fellow directors. Directors should show independence of character; be able to reach their own views and judgments, and should be able to express their personal opinions with conviction; hence, independence means reaching opinions, expressing them and not necessarily agreeing with everything that fellow directors say (Emile Wolf International, 2013).

ii. **Board Size:** This comprises the total members on the board. This study will examine the degree to which non-performing loans are influenced by size of the board. Smaller board size is ordinarily believed to display more corporate governance responsibility, over banks with larger boards. According to Rahman

and Razali (2018), the board should preferably be no larger than 10 directors but can be up to 12 directors with valid reasons. They further argued that numbers of directors should be sufficient to ensure that the board can effectively discharge its roles and responsibilities. At the same time, the size must be contained so that the board does not become too large, which could then compromise board dynamics and the accountability of individual directors.

iii. **CEO Duality:** The position of the chairman of the board and that of the Chief Executive Officer have been identified by many codes of corporate governance as the two most powerful positions on the board of directors. If a single individual within the board combines the roles of the chairman of the board and that of the chief executive officer, there is the risk that he/she might dominate decision making by the board.

iv. **Audit Committee Independence:** Independence is the main attribute of any audit committee as earlier asserted by Fama and Jensen (1983) who suggested that the independence of a non-executive director is a crucial quality that contributes to the effectiveness of audit committee monitoring function.

2.3 Theoretical Review

2.3.1 Agency Theory

Agency was originated by Alchian and Demsetz (1972), Jensen and Mecklinglater advanced the theory in (1976). It is referred to be the relationship between the principals such as shareholders, and agents such as the company executives and managers. In

agency theory, the shareholders (principal) employ the managers to work on their behalf (agent). These shareholders leave the operation of the organization in the hands of agents, (Clarke, 2004).

According to this theory, it is expected of the agents to take action and make decisions in the owner's (principal's) interest. However, the agents may act against this expectation (Padilla, 2002). This first came on board in the 18th century by Adam Smith and later, Ross (1973). However, it was Jensen and Meckling (1976) that initially showed a clear analysis of this theory. Furthermore, Davis, Schoorman and Donaldson (1997) affirmed the notion of consequences arising from ownership separation and control in the theory.

Agency theory can be used to assess ownership and management structure relationships. However, in the event of a separation, the agency model can be employed in order to adjust the management's goals with the owners' goals. In a family-owned establishment where the management consists of members of the family, the agency cost would be low, and would not have much effect on the performance of the firm (Eisenhardt, 1989). The Agency theory portrays employees as individualistic, self-interested and extremely rational where rewards and punishments are prioritized. The theory establishes that those employed the owners are answerable for the duties allocated to them. They must embody a proper corporate governance mechanism instead of just satisfying the shareholders' expectations, which may affect the governance structure.

2.3.2 Adverse Selection Theory

It was originated by Pagano and Jappelli (1993) who explained that sharing information would improve bank's knowledge about the credit applicant, hence reducing the problem of adverse selection. The theory posits that it is not easy to differentiate between 'good' from 'defaulting' borrowers (Auronen, 2003), and this invariably leads to moral hazards and adverse selection issues. The adverse selection theory describes the situation where the probability of loan default increases with rising interest rate and the quality of borrowers worsens as the cost of borrowing rises (Musara & Olawale, 2012).The theory is founded on the assumption that banks are not certain in selecting credit-worthy borrowers from a pool of loan seekers with different credit risk exposures ex-ante. Thus, financial intermediaries are more likely to lend to high-risk borrowers who are not concerned about the harsh lending conditions and are prone to loan default (Ezeoha, 2011).

This theory further posits that a party with better information on the deal to be transacted is more expected to negotiate deal than the other party, (Auronen, 2003). The person with lower information is then left in a tight corner of taking either appropriate or inappropriate decision about the deal.

2.3.3 Moral Hazard Theory

The theory suggests that the party borrowing would likely not meet up with obligation unless there are repercussions for his/her later application for loan. This arises from the hardship faced by borrowers in estimating the affluence borrowers will have gathered by

the date of repayment, and not at the time of application. If the wealth of the lenders cannot be surveyed, the lender is likely tempted to fail in meeting obligation. In order to thwart this, rate is increased by the lenders, which can cause lending to crash in the market (Alary &Goller, 2001). Musara and Olawale (2012) also noted that moral hazard exist where the borrower of bank credit takes action that adversely aspects the returns to the lender.

2.3.4 Stakeholder Theory

The Stakeholder theory was introduced into the field of management in 1970 and later advanced by Freeman (1984) integrating corporate accountability to a large number of stakeholders. The stakeholder theory is referred to as any group or individual who can affect or is affected by the achievement of the organization's goals. It was different from the agency theory in which those in charge of running the business are working for the stakeholders, stakeholder school of thought advocate that organizational managers have an interrelation which includes staff and customers. Freeman (1999) argued that this group of networks is more vital than agent/principal relationship as in agency theory.

Sundaram and Inkpen (2004) challenged that stakeholder theory takes care of those stakeholders that warrant and desire the intentness of management. Donaldson & Preston (1995) opined that all parties that are involved in organization aim to make profit. Notwithstanding, Clarkson (1995) opined that the organization is a mechanism with owners and the general aim of the firm is to aim stakeholders' wealth. Freeman (1984) argues that the process of making decision could be disturbed by the many groups in the

network of relationships as stakeholder theory has to do with the nature, processes, and result of these relationships for the organization and its stakeholders. Donaldson & Preston (1995) asserted that the stakeholder place attention on the managements' in drafting decision, and all owners have intrinsic interests, with no sets of interests expected to surpass the other.

2.4 Empirical Review

Previous works conducted on corporate governance and non-performing loans and bank performance would be reviewed viz a viz works done in Nigeria and outside the Nigerian context.

Nigeria Studies

Enobakhare (2010) investigates the nexus between corporate governance and bank's profitability in Nigeria. Multiple regression was employed in analyzing the data sourced from secondary sources used for the study. The study showed a significant correlation between corporate governance culture and the efficient operation of Nigerian banks. It was also revealed that a bank's own style has a significant impact on its profitability. The study asserts that past bank crises in Nigeria were incited by poor corporate governance.

Nworji, Olagunju, and Olanrewaju (2011) researched on corporate governance and the failure of banks in Nigeria. Data were sourced using questionnaire, while data analysis was carried out using the Pearson product coefficient of correlation. The findings indicated that the recent corporate governance code of banks can reduce Bank distress

and that inefficient managing of risk, over-expansion of Banks, and the corrupt practices of bank staff were the main reasons for bank failure. The study opined that good corporate governance is fundamental to the wellbeing and continuity of Banks, also that well-implemented corporate governance is key to the prevention of bank distress.

Akpan and Riman (2012) attempt to find the answer to the question; Does Corporate Governance affect Bank Profitability? Using variables such as ROA, ROE, nonperforming loans, the board of director's size, numbers of shareholders, total asset and total equity for the period of 2005 to 2008. The annual reports of 11 out of 24 Nigerian banks were used as the secondary data for this research. The study found that bank's profitability is influenced by good corporate governance and net asset value.

Mohammed (2012) investigate the effect of Corporate Governance on Nigerian Banks Performance using data from secondary sources derived from annual statements of nine quoted banks for a ten (10) year period (2001- 2010) using bank performance as dependent variable, asset quality of bank and loan to deposit ratio, multiple regression was employed in analyzing the data. The result showed that asset quality and loan deposit ratio both have negative relationships with financial performance. Hence, the research agrees with the hypothesis that states that corporate governance impacts bank performance positively. The research also revealed that a sample size of 9 banks is relatively small, hence, not enough for proper decision making. In a sector with over 20 banks there is a need to use a larger sample size to be able to appropriately capture the relationship between bank performance and corporate governance.

Angahar and Mejabi (2014) examined the impact of Corporate Governance variables (Board size, Board Composition, Composition of Audit Committee and power separation) on Non-performing Loans of Nigerian Deposit Money Banks for the period spanning 2005-2011 using multivariate regression analysis. The findings showed that corporate governance variables of Board size, Board Composition, composition of audit committee and power separation have no significant impact on non-performing loans of Nigerian Deposit Money Banks.

Oyerinde (2014) studies the relationship between bank performance and corporate governance in Nigeria, employing secondary data for 11 years (2000 to 2010). The research utilized panel data on banks in Nigeria pre and post 2004 consolidation reforms. The dependent variables used were ROE and net interest income, on a model that comprised of both numbers of board members and related insider loans. It was noticed that board size significantly impact on bank performance, the correlation between insider loan and bank performance was negative. The findings discovered that insider loans were the most detrimental effect of bad corporate governance in Nigerian banks.

Okoi and Stephen (2014) investigate the impact of corporate governance on Nigerian financial institution's performance, using data from secondary source, sourced from the audited reports of the banks used in the study, and the information from the CBNs factbook. The Ordinary Least Square (OLS) method was adopted to scrutinize the variables using multiple linear regression models. The variables used were capital adequacy, liquidity ratio, policy shift, asset base, investment, inflation and their

relationship with profitability. The findings indicated an increase in banks' profitability within the years under review, as the banks' asset base increased. It further indicates that a rise in policy shift and investment causes a sizable increase in profitability.

Adeoye (2015) investigates the problems of corporate governance in Nigerian banks. Questionnaires were given out which made up the data for this study, and the SPSS was used in the analysis. The research discovered a dearth of information presentation in banks which was found to be more common before the consolidation era than in the post-consolidation era. It was then concluded that a dearth of proper corporate governance leads to bank failure in Nigeria.

Abubakar, Abubakar, Shehu and Nahari (2015) investigated the impact of audit committees' size and financial expertise on the discretionary loan loss provision of listed Deposit Money Banks in Nigeria. The study employed OLS technique to analyze data spanning 2009-2013. The study found a significant association between discretionary loan loss provision and Audit Committee characteristics. The study also found that the Audit Committee Size of the sampled Deposit Money Banks has significant negative impact on the discretionary loan loss provision. Similarly, the study found that the audit committee financial expertise of the sampled Deposit Money Banks has significant negative impact on the banks' discretionary loan loss provision

Okoye, Evbuomwan, Achugamonu, and Araghan (2016) review corporate governance's impact on Nigerian bank's profitability. The study used ROA and ROE to capture bank profitability, while liquidity ratio, capital adequacy ratio, and the ratio of total loans to

nonperforming loans were employed to capture corporate governance, with the control variable being Inflation Rate. Secondary data were used on the selected variables from 2003-2015. The Augmented Dickey-Fuller (ADF) method was utilized to detect the data's stationary trend. Also, Ordinary Least Square (OLS) was used to ascertain the effect of the chosen variables for corporate governance on bank profitability. It was found that the profitability of the sampled Nigerian banks was impacted significantly corporate governance during the period.

The study of Abdulazeez, Lawal and Yabagi (2019) examined the impact of Board structure (Board size and Independence) on the asset quality (NPL&LDR) of listed deposit money banks in Nigeria for a period of 10 years (2008-2017). The descriptive statistics, correlation and OLS Robust regression were used to describe and analyze the data. It was found that board structure proxies showed no significant impact on Asset Quality.

The study of Osamor, Saka and Olatunji (2019) examined the relationship between corporate governance indicators and asset quality of DMBs in Nigeria for the period spanning 2012 to 2017. Using the ordinary least square, fixed effect, random effect techniques were used to capture the proposed relationship. Findings revealed that UBA has the best asset quality with the average ratio of non-performing loan to total loan (0.0175), while Union bank is the least performing bank in terms of asset quality with the average ratio of non-performing loan to total loan (0.2579).

Adegboye, Ojeka and Adegboye (2020) examined the effect of corporate governance structure and bank externalities on non-performing loans in Nigeria covering the period 2009–2017. The study conducted a panel data analysis using static and dynamic estimators to examine the sensitivity of non-performing loans and corporate governance structure. From the empirical analysis, corporate governance structure of banks in Nigeria had a negative and significant influence on non-performing loans in Nigerian banks. This result reveals that sound corporate governance structure enhances the loan quality and bank stability. In addition, the study affirms that stringent policy imposed by the bank regulators has a negative impact on non-performing loans.

Other Economies

Boudriga, Boulila, and Jellouli (2009) analyze the determinants of non-performing loans and the possible effect of administrative influence on different countries' openness to credit risk. The study employs aggregate banking, financial, economic and legal environment of fifty-nine (59) countries for 5 years (2002 – 2006). The baseline model was used in data analysis in which the results indicated that the capital adequacy ratio and prudent provisioning policy seemingly decreases the number of nonperforming loans. Although, all the controlling means employed either had no productive effect on nonperforming loans or non-significantly increased credit risk exposure which was rife in countries with inadequate financial institutions, bad democracy, and a corrupt environment for business.

Ranjan and Chandra (2013) evaluate the determinants of NPLs of Indian commercial banks in 2002. A panel model regression was used in data analysis and it was discovered that lending rate directly influences the nonperforming loans, which means that an expected rise in the interest rates led to changes in cost conditions which led to a rise in the number of NPLs. In addition, the correlation between loan-to-deposit ratio and nonperforming loans was found to be negative and significant, which means a more customer-centric bank is expected to experience lower failure as the borrowers would be expecting to turn to the bank for the financial requirements.

Aregawi (2015) studies the causes of nonperforming loans and their provision in development banks of Ethiopia. A total of 60 firms were selected from both performing and nonperforming clients' and 14 employees using primary data collected through questionnaires and unstructured interviews. The findings showed a significant correlation between the demographic features of the clients and employees and the repayment of loans. The study concluded, causes of non-performing loans may be tied to diversion to the other business, marketing problems, inflation condition, amateurs on the business, due to shortage supplies to their business and asymmetric information between the bank and employee. The study recommends an extension of the government's Growth and Transformation Plan (GTP) to five years to enable the banks recognize and decrease the problems of nonperforming loans and their provision as a policy in the region.

.Maria, Bilal, and Muhammad (2016) investigate board composition (Board Size and number of Non-Executive Directors) and Non-Performing Loans. They investigated 18

Pakistani banks for the period of 2005 – 2013. The GMM was used as estimation techniques. The study revealed that board composition (board size and number of non-executive directors) significantly reduces the number of nonperforming loans in banks, hence reducing credit risk subsequently. The inverse correlation between Size of the board and nonperforming loans reveals that bigger boards formulate more balanced policies to avert credit risk.

The study of Saha and Ghosh (2019) examined the role of corporate governance on non-performing loans (NPLs) of Bangladesh banking sector for the period 2012-2016. Using multivariate pooled regression analysis, the study reveals that board size, Big 4 affiliated external audit and expert internal audit committee has significant negative influence on NPL of Bangladeshi listed banks. But remaining variables like board independence, independent internal audit committee, political connection and female member representation in BOD has no significant impact on NPLs.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter presents the research design, sources of data, the theoretical framework and model specification. Also, the measurements of variables, preliminary tests, and estimation techniques are highlighted.

3.2 Research Design

This study will employ a causal research design in studying the relationship between corporate governance and nonperforming loans of Nigerian Deposit Money Banks (DMBs). The use of longitudinal data will be employed, given that the nonperforming loans of several banks (DMBs) will be observed over time.

3.3 Population and Sampling

The population of the study is made up of the fourteen (14) listed deposit money banks presently operating in Nigeria. However twelve banks listed in the stock exchange will be drawn from the listed DMBs in the Nigeria stock exchange using purposive sampling technique. The banks sampled for the study are First bank plc, United Bank for Africa, Sterling bank, Fidelity bank, Zenith bank, Union bank, Eco bank, Guaranty Trust bank, Access Bank, FCMB, Stanbic IBTC bank and Wema bank.

3.4 Sources of Data

Secondary data were sourced from audited annual reports of sampled banks. The data on corporate governance measures and non-performing loans of individual banks will be sourced from the annual reports and financial statements of the 12 DMBs listed on the Nigerian stock exchange (NSE) as at December 2021.

3.5 Model Specification

In order to investigate the effect of corporate governance on non-performing loan of DMBs in Nigeria, this study adopted the model of Nyor and Mejubi (2013) where non-performing loan was modeled as a function of board composition, board size, CEO duality and audit committee independence. Thus our model is specified as;

$$NPL = f(BI, BSZ, CD, ACI, BS) \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots.. (1)$$

Where NPL is non-performing loans in the loan portfolio of DMBs and is the dependent variable. The independent variables include BI, which is Board independence; BSZ which is Board Size; CD which is CEO duality; ACI which is Audit Committee Independence. To these, bank size has been added as a control variable.

However, this study follows the autoregressive distributed lag models proposed by Pesaran, Shin and Smith (1999). The general form of the model is given as;

$$\Delta lnY_{i,t} = \alpha_0 + \sum_{i=0}^{q} \alpha lnX_{i,t-1} + \sum_{i=1}^{p-1} \mu_{i-j}\, \Delta lnY_{i,t-1} + \sum_{i=0}^{q-1} \beta_{i-j} \Delta\, X_{i,t-1} + \emptyset ECT_{i,t-1} + \varepsilon_{it} \qquad (2)$$

Where

ln= Log Operator

Δ = Difference Operator

Y_t = Vector of Dependent Variable

X_t = Vector of explanatory variables

α = Long run coefficient of explanatory variables

μ = short run coefficient of dependent variable

β = Short run coefficient of explanatory variables

ε_{it} = Error term.

Adapting equation 2 to our study, we obtain the following equation

$$\Delta NPL_{i,t} = \alpha_0 + \alpha_1 NPL_{i,t-1} + \quad \alpha_2 BC_{i,t-1} + \alpha_3 BSZ_{i,t-1} + \alpha_4 CD_{i,t-1} + \alpha_5 ACI_{i,t-1} + \alpha_6 BS_{i,t-1} + \sum_{i=1}^{q} \mu \Delta NPL_{t-1} + \sum_{i=0}^{q} \beta_1 \Delta BI_{i,t-1} + \sum_{i=0}^{q} \beta_2 \Delta BSZ_{i,t-1} + \sum_{i=0}^{q} \beta_3 \Delta CD_{i,t-1} + \sum_{i=0}^{q} \beta_4 \Delta ACI_{i,t-1} + \sum_{i=0}^{q} \beta_5 \Delta lnBS_{i,t-1} + \emptyset ECT_{i,t-1} + \varepsilon_{it} \quad (3)$$

Where;

α_1-α_6 = Long run coefficients for explanatory variables

β_1-β_4 = Short run coefficients for explanatory variables

ECT= Error correction term.

It is expected that variations in corporate governance variables have a restricting effect on non-performing loans. Specifically, audit committee independence (ACI) and board independence is expected to have a negative effect on non-performing loans (Rahman & Razali, 2018; Ouma & Koshal. 2019). However, CEO duality and board size are expected to have a positive relationship with non-performing loans.

3.6 Method of Data Analysis

Prior to empirical testing, statistical tests would be carried out to test for background characteristics of the data set. Descriptive statistics, correlation, unit root test and co-integration test would be used for this study. Panel based unit root (Breitung test, Im, Pesaran & Shin) and co-integration test (Pedroni) would be used for this study.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS OF RESULT

4.1 Introduction

In this chapter, we perform the statistical analysis that forms the basis for the empirical evaluation of the study. Model specified in the previous chapter are estimated and interpreted. This chapter begins by first carrying out preliminary tests to check for the series properties and characteristics of the data set. This is followed by capturing the relationship between corporate governance and non-performing loans.

4.2 Data Presentation

Financial data spanning 13years (2009- 2021) were sourced from the audited annual reports of the sampled banks. The data set used for the study is presented in the appendix.

4.3 Data Analysis

Various statistical test and empirical techniques are performed hereunder rand also to test data to avoid colored result and capture the relationship between corporate governance and non-performing loans.

4.3.1 Descriptive Statistics

Checking for background characteristics is important as it enables the study ascertain the level characteristics of the dataset. The descriptive statistics of the dataset is presented below;

Table 4.3.1 Descriptive Statistics

Variables	Mean	Std.Dev	Maximum	Minimum	P-value (Jaque Bera)
NPLR	10.67	3.65	22.38	1.60	0.00
BSZ	14.50	1.62	22.00	12.00	0.00
BS	155.26	39.05	245.35	9.230	0.00
BI	0.46	0.07	0.57	0.210	0.00
ACI	4.60	0.78	6.00	4.00	0.00
CD	0.33	0.47	1.00	0.00	0.00
Observation	131	131	131	131	131

Source: Authors computation

The summary statistics is presented in table 4.3.1 above. The result indicated that non-performing loan was considerably low for all banks pooled together during the period of study. However, the maximum value indicates that some banks had a non-performing loan ratio of over 22% evidencing the huge burden of non-performing loans in the portfolio of some banks sampled. The standard deviation was relatively low indicating there was low fluctuation in the mean of non-performing loan. The board size is found to be averaged at 15 with minimum value of 12. This indicates that the banks sampled for the study had a very large board size during the period of study. Result also indicates that the board was largely dependent as seen from the mean value of 0.46 indicating that more than half of the board members were executive directors. The minimum value emphasizes that the board of sampled banks cannot be said to have been independent considering the fact that more than half of the board were also executive directors.

On the contrary, the audit committee is found to be largely independent as indicated by the mean value of 4.60. The result indicates that for the entire banks taken together, the

minimum number of external auditor in the committee is four (4) and judging from the maximum value of 6, the result also suggests that most of the audit committee members were external. Result also show that the banks taken together separated the role of CEO from the board chairman as indicated by the mean value of 0. Bank size was found to vary significantly as indicated by the standard deviation and this indicates that banks sampled for this study are not equally sized. The Jaque Berra test indicates that all variables are not normally distributed judging from the low p-value which makes the rejection of the null hypothesis of a normal distribution impossible.

4.3.2 Unit Test Result

Two differing unit root test would be employed to test for the stationarity of the dataset. These two unit root test are based on two differing assumptions. The Levin, Lin and Chu (LLC) test is based on the assumptions of common unit process. However, the Im, Pesaran and Shin (IPS) test is based on the assumption of individual unit root process. The aim of this test is to ensure that none of the variables are I(2) variables. This is important as the ARDL techniques can only combine I(0) and I(1) variables and not I(2) variables.

Table 4.3.2 Unit Root Test Result

Variables	**Levin, Lin and Chu Test (assuming common unit root process)**					**Im, Pesaran and Shin (assuming individual unit root process)**				
	Levels		**1st Diff**			**Levels**		**1st Diff**		
	Stat	**Prob**	**Stat**	**Prob**	**Order**	**Stat**	**Prob**	**Stat**	**Prob**	**Order**
NPLR	-2.89	0.00	-9.60	0.00	(0)	-1.23	0.10	-4.29	0.00	(I)

BSZ	-2.88	0.00	-42.46	0.00	(0)	-1.88	0.03	-11.97	0.00	(0)
BS	-2.75	0.00	-6.36	0.00	(0)	-1.12	0.12	-2.98	0.00	(0)
BI	-7.52	0.00	-11.97	0.00	(0)	-3.82	0.00	-5.15	0.00	(0)
ACI	-3.95	0.00	-6.18	0.00	(0)	-1.91	0.02	-5.38	0.00	(0)
CD	-1.34	0.08	-5.22	0.00	(I)	-0.57	0.28	-3.34	0.00	(I)

Source: Authors Computation

The stationarity status of variables is presented in the table 4.3.2 above. The LLC which assumed common unit process indicates that all variables are stationary at their levels. However, the IPS indicates that some of these variables are non-stationary at levels although the IPS confirms that some variables are stationary at levels (BSZ, BI &ACI). These results indicate that some variables are stationary given both assumptions while others are not. All series were subjected to their first difference and the two test result indicated that all series are stationary after first difference. The conflicting results will pose no limitation to our study since the ARDL technique is capable of handling models with different mix of integration.

4.3.3 Co-Integration Test

This study employs two panel co-integration test which are the Pedroni and Kao test. The Pedroni test allows the dynamic and fixed effects to be different across cross-sections by allowing for heterogeneity in the co-integration vector. The result is presented below;

Table 4.3.3 Co-Integration Test Result

Pedroni cointegration test **common AR coefficients (within dimensions)*				
	Statistics	**p-value**	**Weighted statistics**	**p-value**
Panel v	-2.39	0.99	-3.05	0.99
Panel rho	3.59	0.99	3.29	0.99
Panel PP	-4.41	0.00**	-6.14	0.00**
Panel ADF	-3.46	0.00**	-2.43	0.00**
**individual AR coefficients (between dimensions)*				
Group rho	4.69	1.00		
Group PP	-7.35	0.00**		
Group ADF	-1.98	0.02*		
***Kao residual cointegration test**				
Test Statistics =-2.39 (0.00)				

Source: Authors computation

The result shows the co-integrating relationship between variables of the study. The null hypotheses of no co-integration would be tested at the 5% level of significance. The columns labeled within dimensions contain the computed value of the statistics based on estimators that pool the autoregressive coefficient across different sampled banks for the unit root tests on the estimated residuals. The columns labeled between-dimensions contain the computed value of the statistics based on estimators that average individually calculated autoregressive coefficient for each bank. Results indicate the presence of co-integration among variables when both assumptions are held. The ADF and PP panel shows the rejection of the null hypothesis at the 1% and 5% level of significance. This indicates that the variables of the study under consideration have long-run relationship. The Pedroni test result is confirmed by the Kao test affirming the presence of long-run relationship between variables under study.

4.3.4 Panel long and short run Analysis

In this section, the equations specified in the previous chapter are presented and analyzed. The aim is to establish the importance of the equations, relevance of individual coefficients as well as the usefulness of the equations for hypotheses testing. Diagnostic test outcomes (R-squared, adjusted R-squared, D.Watson) would not be reported since the equations are panel based. The Pooled mean group (PMG) estimator would be employed for analyzing the equations specified in previous chapter. The panel long and short run relationship is presented below;

Table 4.3.4 Panel long and short run analysis (Pooled mean group Estimates)

Variables	Short run parameters	t-stat	P-value	Long-run parameters	t-stat	P-value
BSZ				0.81	5.52	0.00**
BS				0.00	0.94	0.34
BI				-32.10	-8.21	0.00**
CD				-2.11	-2.63	0.01*
ACI				-2.72	-4.88	0.00**
ECM	-0.52	-3.29	0.00**			
D(NPLR(-1))	0.34	4.02	0.00**			
D(BSZ)	1.41	2.60	0.01*			
D(BS)	0.04	1.61	0.11			
D(BI)	-19.68	-4.57	0.00**			
D(CD)	1.31	1.10	0.27			
D(ACI)	-1.73	-3.24	0.00**			
C	7.20	2.88	0.00**			

Source: Authors Computation (2022)

Note * and ** signify statistical significance at the 5% and 1% respectively

Table 4.3.4 presents the long and short run relationship in tabular form as well as various levels of significance (p-value). Interesting relationship is found to exist between variables of the study. Specifically, board size is found to have a significant positive long run relationship with non-performing loan. This indicates that a unit change in board size will lead to changes in non-performing loans. Similar relationship was found to exist between board size and no-performing loan in the short run. Increasing board size is found to reinforce non-performing loan during the period of study. The relationship is also found to be significant at the 5% level and is in line with apriori.

Result indicates that board independence has a negative long run relationship with non-performing loans during the period of study. This indicates that more independent boards reduce non-performing loans during the period of study. A unit shock in board independence would lead to a corresponding change in non-performing loan. This relationship is found to be significant at the 1% level. In the short run, similar relationship was found to exist as board independence was found to have a negative relationship with non-performing loans. This would also mean that increasing board independence limits non-performing loans. The short run relationship was found to be statistically significant under the 1% level and it is in line with apriori

CEO duality is found to have a negative relationship with non-performing loans in the long run. This indicates that CEO duality limits higher incidence of non-performing loans during the period of study. This relationship is found to be statistically significant under the 5% level and the result is found to negate apriori expectation. It was expected that

CEO duality (an individual playing the both roles of CEO and chairman) would increase the incidence of non-performing loans. This negative relationship can also be expected as the summary statistics indicates that responsibility was separated between the CEO and board chairman (CEO did not play dual roles). This standard corporate governance practice is expected to curb the incidence of non-performing among banks sampled for the study hence the negative relationship. However, an insignificant positive short run relationship was found between CEO duality and non-performing loan during the period of study.

Audit committee is found to have an inverse relationship with non-performing loan both in the long and short run during the period of study. Specifically, result indicates that in the long-run, audit committee independence has a negative relationship with non-performing loans. This indicates that banks with more independent audit committees would have lower incidence of non-performing loans and vice versa. This relationship was found to be significant at the 1% level and is in line with apriori of this study. Similar negative relationship was found to exist between audit committee independence and non-performing loans in the short run. This also indicates that audit committee independence have a cushioning effect incidence of non-performing loans. Bank size is found to have no significant relationship with non-performing loans both in the short and long-run. However, a positive relationship was found to exist between bank size and non-performing loans. This indicates that larger banks might be more exposed to incidence of non-performing loans during the period of study.

The result from the short run panel indicates that changes in current non-performing loan are significantly explained by previous non-performing loans. This implies that non-performing loan is self reinforcing evidencing that non-performing loan in the previous period has a positive influence on current period non-performing loan. This relationship is found to be significant at the 1% level. The error correction model (ECM) is found to bear the expected sign and significance. The ECM is found to be negative (-0.52) and statistically significant (0.00) indicating that the variables converge after short run shock. The error correction term indicates that 52% of disequilibrium in the past period is corrected in the current period. This also emphasizes the long run relationship between the explanatory variables and non-performing loans.

4.4 Hypotheses Testing

Various hypothesis specified in previous sections would be tested hereunder. The estimates from the pooled mean group estimate in table 4.3.4 would serve as the backdrop for testing the various hypotheses. The sign and significance of the coefficients would be used for the rejection or acceptance of the null hypotheses.

Hypothesis One: *There is no significant relationship between CEO duality and non-performing loans among deposit money banks in Nigeria*.

The significance of the estimated coefficient of CEO duality given in table 4.3.4 would serve as the foundation for testing this hypothesis. The coefficient of CEO duality is found to be negative and statistical significant at the 5% level ($0.01 < 0.05$). Therefore,

there is enough statistical evidence to reject the above stated null hypothesis, we therefore conclude that there is a significant relationship between CEO duality and non-performing loans among deposit money banks in Nigeria.

Hypothesis Two: *There is no significant relationship between board size and non-performing loans among deposit money banks in Nigeria.*

The result presented in table 4.3.4 shows board size to be positive and statistically significant at the 1% level (0.00 < 0.05). This result provides us with enough statistical proof to reject the null hypothesis and concludes that there is a significant relationship between board size and non-performing loans among deposit money banks in Nigeria.

Hypothesis Three: *There is no significant relationship between audit committee independence and non-performing loans among deposit money banks in Nigeria.*

The significance of the estimated co-efficient of audit committee independence given in table 4.3.4 would serve as the backdrop for testing this hypothesis. The coefficient is found to be negative and statistically significant at the 1% level (0.00 > 0.05). We therefore have enough statistical evidence to reject the above stated hypothesis and we conclude that there is a significant relationship between audit committee independence and non-performing loans among deposit money banks in Nigeria.

Hypothesis Four: *There is no significant relationship between board independence and non-performing loans among deposit money banks in Nigeria.*

In testing this hypothesis, we focus on the coefficient of board independence in the estimates in Tables 4.3.4. In the result, the coefficient is negative and significant at the 1 percent level. This study rejects the null hypothesis and accepts the alternate and concludes that there is a significant relationship between board independence and non-performing loans among deposit banks in Nigeria.

4.5 Discussion of Findings and Policy Implication

The findings of the study have been found to be robust and fitting for policy formulation. The descriptive statistics showed the general corporate governance practice among sampled banks. The board size of banks sampled was found to be relatively large which can possibly lead to bureaucracy among board members. However sample banks were found not to be independent indicating that more of the board members were also executive directors. This can greatly impact on the incidence of non-performing loans incurred by banks. However, the audit committee was found to be independent evidencing a good corporate governance practice. The study also found that the role of CEO and board chairman was duly separated as stipulated in the corporate governance code. The result also indicated that non-performing loan is self reinforcing during the period of study. The implication of this is that when banks incur high incidence of non-performing loans in the previous period, the non-performing loan of current period is expected to be high. This result is found to be in conformity with the study of Olarewaju (2020) which submitted a positive relationship between lagged non-performing and current level of non-performing loans among deposit money banks.

The long and short run analysis also indicated that corporate governance significantly explains the variations in non-performing loans among sampled banks. Specifically, board size was found to have a significant positive relationship with non-performing loan in the short and long run. The implication of this is that larger board size would increase the incidence of non-performing loans of banks. Larger board size is characterized with lots of bureaucracies leading to slow and poor decision making process. On the contrary, smaller board size is better able to make fast and prompt decision and this would have an effect on the incidence of non-performing loans. This findings is in line with apriori and follows the submissions of Stefanelli & Cotugno (2012), Maria, Bilal & Muhammad (2016) and Adegboye, Ojeka & Adegboye (2020) were board size was found to have a positive and significant relationship with non-performing loans. However, this finding negates the study outcome of Nyor & Mejabi (2013), Angahar & Mejabi (2014) and Abdulazeez, Lawal & Yabagi (2019) were an insignificant relationship was found between board size and non-performing loans.

Result indicated that board independence has a significant negative relationship with non-performing loans both in the long and short run. The implication of this is that banks with independents board members would record lower incidence of non-performing loan. This is so as the influence of board members on the credit facilities would be reduced since the board is constituted with lesser executive directors. This finding is in tandem with apriori and in conformity with study findings of Liang, Xu and Jiraporn (2013) and Maria, Bilal

and Muhammad (2016) which documented a negative relationship between board independence and non-performing loans.

Study findings indicated that CEO duality has a significant negative long-run relationship and an insignificant short run relationship with non-performing loans. The implication of this is that the separation of power between the CEO and board chairman reduces the incidence of nonperforming loan in the long run. This finding is in contrast with apriori and this is as a result of the fact that most sampled banks actually separated power between the CEO and board chairman which is capable of cutting non-performing loans to size. The long run relationship is in conformity with the study of Nijethilake and Ekanayake (2019) and Fiador and Sarpon-Kumankoma (2020) which documented a negative relationship between CEO duality and non-performing loans. Similarly, the short run relationship is in line with the studies of Magembe, Ombuku and Kiweu (2017) and Rejeb and Missaoul (2019) which documented a positive relationship between CEO duality and non-performing loans.

Audit committee independence was found to have a significant negative relationship with non-performing loan both in the short and long-run. This implies that a bank having an audit committee with more external auditors would have lower incidence of non-performing loans. This is because external auditors are more likely to unveil malpractices and non-performing loans arising from banks operations. This result is in line with apriori and follows the submissions of Zgarni, Fedhila & Gaied (2018) and Saho & Ghosh (2019) were a negative relationship was found between audit committee independence

and non-performing loans. Finally, bank size was found to have an insignificant positive relationship with non-performing loans. This implies that bigger banks are more likely to have higher incidence of non-performing loans than smaller banks. This study is in line with the study of Gambo, Ahmad and Muhammad (2017) which documented a positive relationship between bank size and non-performing loans.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

This section summarizes the entire findings of the study, draws conclusion from the findings and makes apt recommendations.

5.2 Summary of Findings

This study was carried out to investigate the impact of corporate governance on non-performing loans in Nigeria. This study was necessitated by the huge incidence of non-performing loans among deposit banks in Nigeria. Corporate governance viz a viz board independence, board size, audit committee independence and CEO duality were found to have a mixed relationship with non-performing loan.

A panel data structure was used in the empirical analysis with data on twelve (12) deposit money banks spanning 2009-2021 and to achieve this, a dynamic panel framework was devised for the analysis and the estimates obtained from the pooled mean group technique were found to be robust to both specifications and data manipulations. From empirical analysis, interpretation and test of hypotheses, a general outcome of the study indicates that corporate governance has a mixed relationship with non-performing loans. More specifically, the following findings were made:

i. CEO duality was found to have a significant negative relationship with non-performing loan in the long run and an insignificant positive relationship in the short run.
ii. Board size was found to have a significant positive relationship with non-performing loans both in the long and short run during the period of study.
iii. Audit committee independence was found to have a significant negative relationship with non-performing loan in the long and short run.
iv. Board independence is found to have a significant negative relationship with non-performing loan both in the long and short run.
v. Lagged non-performing loan was found to be self reinforcing. Indicating a positive relationship between previous non-performing loans and current level of non-performing loans.

5.3 Conclusion

This study was conducted to examine the relationship between corporate governance and non-performing loan among deposit money banks in Nigeria for the period spanning 2009-2021. In order to achieve the objective of this study, twelve (12) listed deposit money banks were chosen and analyzed on panel bases and the PMG technique was used for data analysis. Premise on the research findings this study concludes that corporate governance has a significant role in cushioning the incidence of non-performing loans among deposit money banks in Nigeria.

5.4 Recommendations

Premise on the research findings, this study makes the following recommendations

i. Since the result indicated that CEO duality has the potential of cushioning non-performing loans, it is therefore the recommendation of this study that the powers between the chief executive and board chairman be duly separated. This is important because the CEO having powers as the board chairman can lead to malfeasance and financial malpractices.
ii. The study revealed that larger board size can reinforce the level of non-performing loans. It is in the light of this that this study recommends that the board should be cut to size so as to avoid bureaucracy that can stem from larger board size. Smaller board size is expected to give board members enough room to be prompt and more efficient in addressing issues relating to increasing incidence of non-performing loans.
iii. Audit committee independence was found to have the capacity of curbing increasing non-performing loans. This study therefore recommends that banks audit committee should be constituted more of external auditors so as to allow for more audit committee independence.
iv. This study also recommends that the board be made more independent by ensuring that the board is constituted with more non-executive directors. This is important as this study finds that more independent boards are better able to cushion the increasing incidence of non-performing loans.

v. Finally, all recommendations made above should be keenly and strictly adhered to with the aim of curbing the increasing incidence of non-performing loans. This is especially important as non-performing loan in the past period was found in this study to reinforce the current level of non-performing loans.

5.5 Contributions to Knowledge

This study contributes to knowledge as it;

i. Investigates the relationship between corporate governance and non-performing loans among deposit money banks in Nigeria.
ii. Investigates the relationship between corporate governance and non-performing loans among deposit money banks in Nigeria by using a dynamic panel framework. This is superior to prior studies as prior studies were found to have used more of static modeling than dynamic models.
iii. Updates the finance literature by using current time series data spanning 2009-2021 which better captures the financial crisis and post consolidation exercise carried out in Nigeria banks.

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Appendix

Dataset (2009-2021)

BANK	YEAR	NPLR	BS	CD	BI	BSZ	ACI
ACCESS	2009	15.2	57.33	1	0.53	14	4
ACCESS	2010	12.3	59.65	1	0.53	15	4
ACCESS	2011	22.38	62.47	1	0.53	17	4
ACCESS	2012	15.32	86.91	1	0.53	15	4
ACCESS	2013	3.34	85.03	0	0.54	15	4
ACCESS	2014	11.36	95.35	0	0.54	15	5
ACCESS	2015	10.39	97.82	0	0.54	15	5
ACCESS	2016	9.42	89.42	0	0.53	15	5
ACCESS	2017	6.5	75.72	0	0.53	15	6
ACCESS	2018	5.75	96.2	0	0.54	15	6
ACCESS	2019	5.5	117.2	0	0.54	15	4
ACCESS	2020	12.4	112.5	1	0.76	16	5
ACCESS	2021	11.5	89.4	0	055	16	5
Union Bank	2009	4.2	45.23	0	0.46	13	4
Union Bank	2010	5.1	48.94	1	0.48	13	4
Union Bank	2011	20.8	52.57	0	0.48	13	4
Union Bank	2012	14.39	65.02	0	0.5	14	4
Union Bank	2013	10.7	60.9	1	0.5	14	4
Union Bank	2014	20.5	73.82	0	0.53	14	4
Union Bank	2015	10.61	111.54	0	0.52	14	4
Union Bank	2016	9.67	115.12	0	0.5	14	5
Union Bank	2017	8.5	118.3	0	0.53	14	6
Union Bank	2018	6.76	119.2	0	0.53	14	5
Union Bank	2019	7.15	120.5	0	0.52	14	4
Union Bank	2020	8.4	121.4	0	0.56	14	4
Union Bank	2021	9.37	122.7	0	0.54	14	4
FCMB	2009	7.7	58.75	0	0.44	13	4
FCMB	2010	8.1	60.25	1	0.44	13	4
FCMB	2011	13.26	66.97	1	0.45	13	4
FCMB	2012	20.14	96.61	1	0.38	13	4
FCMB	2013	14.4	65.56	1	0.5	13	4
FCMB	2014	12.15	68.77	1	0.46	13	4
FCMB	2015	12.38	65.63	1	0.42	13	4
FCMB	2016	10.24	58.22	0	0.46	13	4
FCMB	2017	9.85	59.7	0	0.38	13	5
FCMB	2018	10.7	62.35	0	0.48	14	6
FCMB	2019	11.2	65.7	0	0.43	13	4
FCMB	2020	12.38	65.63	1	0.42	13	4
FCMB	2021	10.24	58.22	0	0.46	13	4
Stanbic	2009	9.5	55.45	0	0.43	12	4
Stanbic	2010	7.3	62.27	0	0.53	12	4
Stanbic	2011	10.78	71.48	1	0.48	12	4

Stanbic	2012	10.27	56.75	0	0.47	13	4
Stanbic	2013	13.15	58.71	0	0.43	13	4
Stanbic	2014	14.09	66.73	1	0.53	13	4
Stanbic	2015	12.02	62.28	0	0.43	13	4
Stanbic	2016	13.3	62.4	0	0.42	12	4
Stanbic	2017	9.7	60.25	1	0.5	12	5
Stanbic	2018	8.5	59.73	0	0.46	13	6
Stanbic	2019	10.2	67.25	0	0.45	14	6
Stanbic	2020	11.3	71.4	1	0.65	14	6
Stanbic	2021	12.4	70.1	0	0.56	14	6
First Bank	2009	12.5	79.2	0	0.45	16	4
First Bank	2010	12.73	90.66	0	0.5	22	4
First Bank	2011	10.09	178.11	0	0.45	14	5
First Bank	2012	11.31	176.68	0	0.45	18	5
First Bank	2013	9	166.6	0	0.42	18	5
First Bank	2014	9.61	179.83	1	0.45	17	5
First Bank	2015	6.5	245.35	0	0.45	18	6
First Bank	2016	6.24	110	1	0.5	18	6
First Bank	2017	5.77	121.5	0	0.45	18	6
First Bank	2018	8.25	135.6	0	0.45	18	6
First Bank	2019	7.5	147.32	0	0.38	18	6
First Bank	2020	10.09	178.11	0	0.45	18	5
First Bank	2021	11.31	176.68	0	0.45	18	5
Fidelity Bank	2009	5.5	47.34	1	0.45	13	4
Fidelity Bank	2010	4.77	58.901	1	0.38	13	4
Fidelity Bank	2011	8.12	52.06	1	0.21	14	4
Fidelity Bank	2012	9.23	72.41	1	0.25	14	4
Fidelity Bank	2013	12.07	54.1	1	0.45	14	4
Fidelity Bank	2014	19.21	53.62	0	0.38	15	4
Fidelity Bank	2015	4.48	56.52	0	0.21	13	4
Fidelity Bank	2016	15.19	65.31	0	0.25	13	4
Fidelity Bank	2017	12.02	78.33	1	0.33	13	4
Fidelity Bank	2018	11.5	78.9	1	0.3	13	4
Fidelity Bank	2019	13.21	75.26	0	0.26	12	4
Fidelity Bank	2020	15.19	65.31	0	0.25	13	4
Fidelity Bank	2021	12.02	78.33	1	0.33	13	4
UBA	2009	18.35	63.55	0	0.45	14	4
UBA	2010	12.331	65.8	1	0.45	16	4
UBA	2011	11.66	73.21	1	0.38	17	5
UBA	2012	19.25	85.87	1	0.21	16	4
UBA	2013	13.23	9.23	1	0.25	16	5
UBA	2014	12.24	122.07	0	0.48	15	6
UBA	2015	10.2	131.17	0	0.51	16	6
UBA	2016	12.16	143.63	0	0.45	15	5
UBA	2017	11.75	146.7	0	0.49	17	5
UBA	2018	12.5	139.72	0	0.48	18	6
UBA	2019	13.75	149.3	0	0.46	14	5
UBA	2020	11.75	146.7	0	0.49	17	5
UBA	2021	12.5	139.72	0	0.48	18	6

GTB	2009	10.5	69.83	1	0.47	14	4
GTB	2010	11.2	72.2	1	0.35	14	6
GTB	2011	13.13	77.18	0	0.44	14	5
GTB	2012	10.18	63.64	1	0.5	14	4
GTB	2013	16.18	102.48	1	0.32	14	4
GTB	2014	7.2	107.92	0	0.45	14	5
GTB	2015	10.38	96.78	0	0.47	14	5
GTB	2016	15.42	108.92	0	0.46	15	4
GTB	2017	13.5	120.33	1	0.48	16	6
GTB	2018	12.35	126.9	0	0.47	15	6
GTB	2019	11.65	70.3	0	0.52	17	5
GTB	2020	10.38	96.78	0	0.47	14	5
GTB	2021	15.42	108.92	0	0.46	15	4
ECO	2009	13.21	65.89	0	0.5	13	4
ECO	2010	11.65	71.22	1	0.55	15	6
ECO	2011	13.09	160.2	0	0.48	15	6
ECO	2012	1231	180. 2	0	0.56	15	5
ECO	2013	9.1	165.3	0	0.47	16	4
ECO	2014	12.61	133.8	0	0.56	15	4
ECO	2015	10.5	105.4	0	0.55	15	5
ECO	2016	10.24	102.3	1	0.48	15	5
ECO	2017	9.71	99.88	0	0.43	15	5
ECO	2018	8.25	95.2	0	0.45	15	5
ECO	2019	9.77	96.15	0	0.5	16	6
ECO	2020	15.42	108.92	0	0.46	15	5
ECO	2021	13.21	65.89	0	0.5	13	4
Sterling	2009	10.2	60.2	0	0.46	13	4
Sterling	2010	11.45	62.17	1	0.57	14	4
Sterling	2011	12.25	72.06	1	0.44	13	4
Sterling	2012	11.23	83.41	0	0.45	13	4
Sterling	2013	14.07	91.1	0	0.48	14	4
Sterling	2014	10.21	85.62	0	0.5	14	4
Sterling	2015	18.48	46.52	0	0.45	14	4
Sterling	2016	12.19	65.31	1	0.52	14	4
Sterling	2017	9.8	66.28	0	0.48	14	4
Sterling	2018	10.71	65.45	0	0.45	14	4
Sterling	2019	1.6	70.1	0	0.45	14	5
Sterling	2020	11.1	45.32	1	0.52	14	4
Sterling	2021	10.71	65.45	0	0.48	14	4
WEMA	2009	11.3	71.33	0	0.55	14	5
WEMA	2010	10.62	78.59	0	0.53	13	4
WEMA	2011	10.13	80.18	1	0.49	15	4
WEMA	2012	10.18	90.64	0	0.48	14	4
WEMA	2013	13.18	72.48	0	0.45	15	5
WEMA	2014	8.2	66.92	0	0.5	14	4
WEMA	2015	7.38	35.78	0	0.46	14	4
WEMA	2016	9.42	25.32	1	0.48	13	6
WEMA	2017	8.45	19.7	0	0.5	15	4
WEMA	2018	9.6	18.2	0	0.49	15	6

WEMA	2019	10.2	18.52	0	0.45	15	4
WEMA	2020	11.4	21.4	0	0.54	15	5
WEMA	2021	10.4	20.1	1	0.63	15	5
Zenith	2009	9.66	20.15	0	0.53	13	5
Zenith	2010	8.93	24.22	0	0.53	13	4
Zenith	2011	5.33	95.3	1	0.5	14	5
Zenith	2012	7.22	90.1	1	0.45	15	4
Zenith	2013	8.11	93.2	1	0.46	15	4
Zenith	2014	6.2	84.7	1	0.47	15	6
Zenith	2015	7.81	109.2	0	0.45	16	5
Zenith	2016	9.2	142.3	0	0.5	16	4
Zenith	2017	8.5	145.2	0	0.46	15	6
Zenith	2018	10.2	165.3	0	0.5	17	4
Zenith	2019	9.55	172.9	0	0.45	16	5
Zenith	2020	7.81	109.2	0	0.45	16	5
Zenith	2021	9.2	142.3	0	0.5	16	4

Source: Annual Audited Bulletin of Sampled Banks.