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THE IMPACT OF CREDIT AND LIQUIDITY
RISK MANAGEMENT POLICIES ON THE
PROFITABILITY OF DEPOSIT MONEY BANKS
(A CASE STUDY OF FIRST BANK PLC)

BY

KAYODE FUNMILAYO LYDIA
2016/ND/AGCT/050

DEPARTMENT OF ACCOUNTANCY
School of Management Studies
The Federal Polytechnic Damaturu

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**BEING A RESEARCH PROJECT SUMMITTED TO THE DEPARTMENT OF
ACCOUNTANCY, SCHOOL OF MANAGEMENT STUDY, FEDERAL
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FULFULLMENT OF THE REQUIRMENT FOR THE AWARD OF
NATIONAL DIPLOMA (ND) IN ACCOUNTANCY**


October, 2018

APPROVAL PAGE

This project has been supervised, approved and accepted by the Department of Accountancy as a part of requirement for the award of National Diploma in Accountancy.

Mal. Adamu Madaki

Supervisor



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Head of Department



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External Examiner


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DEDICATION

This research work is dedicated to God Almighty the source of inspiration, who gave me wisdom, knowledge and understanding.

And to my beloved parent, sisters, friends and those who helped me in the process of the research work.

ACKNOWLEDGEMENTS

My greatest thanks go to God Almighty who inspired me to take up this programme which leads to the writing of this project work.

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To my wonderful H.O.D and lecturers of Accountancy Department for your support and advice, I say thank you all.

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ABSTRACT

This research work focuses on "The Impact of Credit and Liquidity Risk Management Policies on the Profitability of Deposit Money Banks" using First bank as a case study. The whole research work is sub divided into five chapters, the first chapter tend to introduce the reader to the of writing this project, that is highlighting on the background of the study, statement of the problem, aims and objective of the study, scope and limitation of the study/ significance of the study and definition of some key terms. In the second chapter then, the research tries to elicit the idea of other writers with respect to the topic under study. Invariably, chapter three of these research reviews the research methodology use by the researcher. In chapter four, data collected from the financial statement were analyzed which lead to the recommendation and conclusion found in the last chapter of the research work. Source of data and information were included at cover under reference. Chapter five treat the summary, conclusion and recommendation of the research work.

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CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Banks as financial intermediaries are very significant in the economy of every nation. The relevance of banks to the economy lies primarily in their ability to mobilize credit and grant credit to various economic actors. Lending operations are core banking activities and the most profitable asset of credit institution. In many markets, banks have to operate in the economic environment that is characterized by the existence of obstacles of good credit management. Where credit is not properly channeled, controlled and administered, it leads to a devastating effect on the banks, reducing its performance, profitability and further into bank distress and failure.

According to Cai and Anjan (2008), credit administration is the most important function of the banking industry. It is the most risky and difficult and at the same time most profitable function performed by banks. The key strategic value a bank adds has always depended upon its ability to manage credit risk. This cannot be properly done without an effective risk assessment control and follow up strategy. Sound banking practice require that bank management put in place standards for appraising and approving individual credit application to ensure that loans granted are repaid. However, due to poor credit administration caused by loopholes and violation in risk assessment and control techniques, bad and doubted debts still claim a bulk charge on bank

performance causing many banks to witness institutionalized distress and some total unexpected collapse. Since lending carries a reasonable portion of resources exposure of deposits banks in Nigeria, the ability of a bank to generate much profit is largely a function of effective management of its lending portfolio.

The impact of liquidity position in management of banks have remained fascinating and intriguing, though very elusive in the process of investment analysis vis-à-vis bank portfolio management. There appears to be an uninterrupted argument in the literature over the years on the meaning, roles and determinants of liquidity and credit management. Acharya and Naqui (2012) refer to liquidity as the speed and certainty with which an asset can be converted back into cash whenever the asset holder desires. A liquid bank stores enough liquid assets and cash together with the ability to raise funds quickly from another source to enable it meet its payment obligation and financial commitment in a timely means. Ngwu (2006) views liquidity management as the act of storing enough funds and raising funds quickly from the market satisfy depositors, loan customers and other parties with a view to maintaining public confidence.

In spite of the measures put in place and aimed at protecting depositors and other public interest, the incidence of banks distress and failure has been on the increase in deposit money banks in Nigeria. This is as a result of increased probability of banks default, reduced performance and bulk charge against profits emanating from ineffective credit and liquidity risk management. Hence, for a bank to be viable and

profitable there must be strategic credit and liquidity risk management policies formulated and implemented in full. The tools for effective implementation of these policies will be anchored on the philosophy and mission of the bank, the overall credit risk strategy and the credit policies adopted in the realization of strategic goals and objectives of the banks as well as the expansion prospects of such bank.

The effective management of credit risk and liquidity risk is inextricably linked to the development of banking technology which will enable the bank to increase its speed of decision making and at the same time reduce the cost of controlling banking risk. The management of these banking technologies that reduces operating cost and cost of risk control will inevitably yield greater earning and returns for the bank in terms of contribution and profitability. Banks are vital institutions in Nigeria as they significantly contribute to the development of the economy through facilitation of business. Banks also facilitates the development of saving plans and is instrument of government's monetary strategy among others. In banks, mismanagement and poor banking service may cause failure. In fact, mismanagement is set to play a crucial role in bank failure. Fraud and forgeries are another reason for bank failure. Some banks have been ruined as a result of collaboration with insiders including members of the board management and staff to defraud the bank or use the bank facilities to defraud.

First bank has solidified itself as a brand of fortitude, strength and innovation in Nigeria financial sector since its creation in 1894. The iconic African elephant with

Navy blue and ivory color has been a national symbol of one of the biggest international player in financial service industry to date. In the ever evolving Nigeria financial sector, First bank group moved into its second century of operation on April 27 2004; the brand unveiled a new corporate identity and new logo.

First Bank engages in business of deposit banking and has a number of subsidiaries that focus on international deposit banking, registrar, trusteeship, capital market, pension funds, custodian, mortgage financings, insurance brokerage, management of Small and Medium Industries Equity Investment Scheme (SMIEIS) fund investment and small scale banking, not forgetting bureau de change activities. The bank has been through many seasons since 1894, from being the only bank in Nigeria for decades, to the recent shake up of Nigerian banks to 25 banks, it is still strong, dependably dynamic and “truly the first”

1.2 Statement of the problem

The unstable situation of the Nigerian financial market makes it difficult for banks to rely on the aforementioned determinants. Business conditions are often unpredictable and can lead to changes in the borrower’s financial position and can affect their ability to repay the loans at the date of maturity.

With the above scenario, the banks face a credit risk of losing part or the entire loan including the interest receivable on such loan. This negatively affects the bank and

reduces its financial strength to meet its financial obligation as they fall due. As these conditions remain unchecked, the liquidity of the bank is also threatened.

Liquidity is considered as the success of a bank, whose inefficient management constitutes a huge problem to both banks and the economy at large. The far reacting consequences of poor credit and liquidity management apart from decline in profit include loss of confidence in the bank's ability to fulfill its short term and long term obligation, lack of trust on the part of depositors and other customers alike and the concomitant reduction in the level of operations.

1.3 Objectives of the study

Given the increased range of banks client (depositors and loan customers) and volume of credit transactions in the Nigerian economy, it is expedient for banks to have a full-fledged cash monitoring policy in order to remain in business. The cash credit monitoring will enable the bank grant credit to customers applying for loans at an agreed interest rate which is an income to boost the profit level of banks and at the same time ensuring the availability of adequate cash and liquid assets to meets its financial obligation.

Thus, the specific objectives of this study are to;

- I. Establish whether First Bank has an effective credit and liquidity management policy in place.

- II. Ascertain credit appraisal techniques and the effects of bad debt on income.
- III. Critically appraise the risk assessment and control policies of First Bank.
- IV. Examine the liquidity position of First Bank and identify the causes of illiquidity of the bank.
- V. Assess to what extent credit risk and liquidity influence the probability of bank default.

1.4 Research Question

To achieve the above objectives, the researcher will be guided by the following questions:

- I. Does First Bank have effective credit and liquidity in place?
- II. Does First Bank have credit appraisal and techniques?
- III. Does First Bank appraise the risk assessment and control policies?
- IV. Does the cause of illiquidity influence the liquidity position of First Bank?
- V. Does credit risk and liquidity influence customer's defaults?

1.5 Research Hypothesis

For the purpose of this study, the following hypotheses have been formulated for testing.

Hypothesis 1

(H₀): First Bank has no credit and liquidity in place.

Hypothesis 2

(Ho2): First Bank has no credit appraisal and techniques.

Hypothesis 3

(Ho3): There is no risk assessment and control policy in First Bank.

Hypothesis 4

(Ho4): Illiquidity has no influence on the liquidity position of First Bank.

Hypothesis 5

(Ho5): Credit risk and liquidity have no influence on customer's default.

1.6 Significance of the study

The essence of this research work is to examine the impact of credit risk and liquidity risk management policies on the profitability of deposit money banks in Nigeria.

Banks and other financial institution will find this study useful in establishing a sound risk assessment and control policy that will help monitor their credit risk and liquidity risk. The findings will be helpful to scholars and other researcher to obtain and seek more knowledge about the impact of credit and liquidity management policies available to banks and credit institutions in order to maintain their growing pace of profits. It would also be of immense benefits to students of higher learning who may wish to carryout research on similar topic.

The study findings will be particularly significant to policy makers and financial regulatory authorities as it widens the existing information on credit risk and

liquidity risk and the management policies adopted in relation to banks profitability and performance.

The research will be helpful to the society at large as it reveals the importance of bank liquidity to the general condition of the economy.

1.7 Scope and limitation of the study

The scope of this study is discussed under the following;

Subject scope: The study focused on examining the relationship between liquidity and credit risk, consolidated impact of credit risk and liquidity risk management on bank profitability, the influence of credit and liquidity risk on bank defaults and establishing other factors that affects the profitability of First Bank in Nigeria.

Geographical scope: The study is carried out at First Bank Nigeria PLC, Damaturu Branch. The choice of First Bank of Nigeria is influenced by its position as a net player in the money market, its size in banking industry and its relative importance during many distress periods in the Nigerian economy.

Period scope: The study covers the period 2000-2010. The period so selected captured the era of increasing bank distress in the Nigerian economy.

This research is limited by the following factors which are;

Attitude of the respondent: This is a limited factor whereby the respondents are not willing to give out useful information to the researcher about the impact of credit and liquidity management policies of the bank. Information

gathered is limited to those assessed and made available by the respondents and end users.

Insufficient funds: The fund available to the researcher to carry out this work is not sufficient as a result of high economic hardship as well as high cost of transportation.

Inadequate time: The time available is very limited, as a result of this , the researcher are restricted to some places for interviews and questioning during the collection of data.

Finally, the academic workload on campus is one of the limiting factors of this research work. Despite all this problems, the researcher was able to carryout a fair and effective study on this topic.



1.8 Definition of terms

This section is intended to give definition of some of the technical terms that are particular to every discipline especially for those who are not from the particular discipline. Among these terms used in the research work are:

Credit: It is a contractual agreement in which a borrower receives money or resources and agrees to repay the lender at some date in future generally with interest.

Credit risk: means the risk of default on a debt that may arises from a borrower failing to make required payment.

Risk: It is the potential of gaining or losing something of value

Risk management: It refers to the practice of identifying potential risks in advance, analyzing them and taking necessary steps to reduce the risk.

Illiquidity: refers to assets which cannot be exchanged for cash easily.

Liquidity: refers to as the marketable feature whereby an individual or firm can quickly purchase or sell an asset without causing a drastic change in the asset's price.

Liquidity Risk: means the risk that a company or bank may be unable to meet short term financial demands.

Default: refers to the failure to repay a loan.

Profitability: is the ability or state of yielding a financial profit or gain.

Portfolio: refers to any combination of financial assets such as stock, bond and cash.

Policy: means set of basic principle and associated guidelines formulated and enforced by a governing body of a firm.

Deposit: refers to the sum of money paid into a bank or any financial institution

CHAPTER TWO

LITERATURE REVIEW

2.1 Theoretical framework

Over the years, different theories have been formulated in ensuring the availability and sufficiency of liquidity at any point in time. The following theories shall be considered in the validation of this study;

2.1.1 Liquidity Asset Theory: This theory was first developed by John Maynard Keynes in his book "The General Theory of Employment Interest and Money "(1936) to explain determination of the interest by the supply and demand for money. Based on this theory, the asset side of the balance sheet must hold large amount of liquid assets against possible demand or payment cushion of readily marketable short term liquid assets against unforeseen circumstances.(Ngwu 2006)

2.1.2 Shift Ability Theory: This theory was founded by H.G Moulton. This theory states that "for an asset to be perfectly shiftable, it must be directly transferable without any loss of capital when there is need for liquidity. Based on the theory, banks liquidity is maintained if it holds assets that could be shifted or sold to other lenders or investors for cash. Also, these assets could be shifted to the central bank for cash without material loss in case of necessity than relying on maturities to solve their liquidity problems. (Ngwu 2006)

2.1.3 Anticipated Income Theory: This theory was developed by H.V Prochanow in 1944. This theory states that “irrespective of the nature and feature of a borrower’s business, the bank plans the liquidation of the term- loan from the expected income of the borrower”. Based on this theory, banks liquidity can be estimated and met if scheduled payment are based on the income of the borrower. It emphasis that bank should relates loan repayment to income rather than relying heavily on collaterals. That is, bank liquidity can be influenced by the maturity pattern of loans through customer’s installment rather than those secured by real estate. (Ngwu 2006)

2.1.4 Commercial Loan Theory: Also called the real bill theory was developed by Adams Smith. It state that “banks should advance short term self-liquidating productive loans to business firms. In other words, banks should finance the movement of goods through the successive process of production so that once these goods are sold, the loans will liquidate themselves. Such loans are termed inventory or working capital loan. (Ngwu 2006)

2.2 Review of current literature

Credit risk is a serious threat to the performance of banks which unchecked would lead to collapse of banks. Liquidity risk also act as a trap with an unsound risk assessment and control policy. In the face of current events in the banking sector these two risks cannot be ignored as they have considerable bearing on the performance and survival of banks (Coyle, 2000). In order to reduce the combine effects of these risks on

the overall default risk of banks, there is need for efficient credit and liquidity management policies to be formulated and fully implemented in banks.

Credit management policy is a comprehensive process that deals with identifying the target market; credit monitoring and identifying the proceeds. Credit management policy entails the mechanisms, standards and parameters that guide the bank officers in granting loans and managing the loan portfolio under the banking discipline. It is asset of guidelines designed to maximize cost associated with credit while maximizing benefits from it (Mc Naughton,1996). Marsh (2008) further added that credit management policy assists financial institution's credit department in the extension of credit privileges governed by rules and guidelines established by top management.

According to Jhingan (2010), a bank needs a high degree of liquidity in its assets portfolio. The bank must hold a sufficient large proportion of its asset in the form of cash and liquid assets for the purpose of profitability. If the bank keeps liquidity the uppermost, its profit will be low.

According to Graham (1990), profitability is always associated with performance; therefore true pure profit is the increase in wealth that an investor get out making an investment taking into consideration all costs associated with it including the opportunity cost of capital. Pandey (1991) defines profitability and performance as the ability of a business to interpret the term in relation to other elements. Profitability measures and assesses the performance of banks in prevailing market conditions.

According to Hifza (2011), profitability and performance is one of the most important objectives of financial management since one goal of financial management is to maximize the owner's wealth. Hermanson (1990) defines profitability as the ability generating income and its inability to generate income is loss. In the banking industry, every credit granted attracts an interest to the bank. Hence, banking lending operations are risky but very profitable. In order to maximize those inherent risks in banking activities, there is a need for efficient, effective and strategic credit and liquidity management which will in turn accelerate the tempo of profit.

On the other hand, if profitability ignores liquidity and aims at earning more, it will be disastrous for it.

2.2.1 Credit risk management and bank credit instruments

There are basically two types of credit instruments: the cash facility and the contingent facility.

Cash facility: These are obligations involving cash outlays and denomination in the local currency, which the customer owes the bank under specifically stipulated terms and conditions. They include:

1. **Overdraft:** This is borrowing from a bank on a current account for a short-term period where interest is calculated on a daily utilized amount basis. The repayment is done on demand or on expiry.

2. **Loans:** These are longer term facilities given by the bank to finance long term projects. Upon approval, a loan account is opened to the customer's name, while the approval sum will be transferred from the loan account to the customer's current account from where drawings can be made. Interest is payable on the outstanding balance on a reducing balance method due to installment payment.
3. **Advances:** These are granted for a specific purpose with the assurance of repayment from the asset being financed.
4. **Financial papers/Banker Acceptance:** A commercial paper is an unconditional promise by a company to make a future payment of a certain sum to the designated party in the future.

Export and warehousing finance: The bank finance pre-export activities and post-export activities as well as the procurement of agricultural commodities or imported goods which shall be stored or be warehoused.

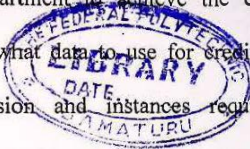
Contingent facility: These are those obligations the clients pay to the bank upon assurance of certain events. They include;

- a. **Guarantee:** This is an undertaking in writing to be liable for the debt of a customer to a third party on default. They include advance payment guarantee, performance guarantee and retention fee guarantee.

- b. Bonds: They are usually issued to a third party on behalf of customers as a safeguard against non- performance of an agreement .They include tender bonds, customs and excise bonds and re-exportation bonds.
- c. Indemnities: These are issued on behalf of importers of shipping agents for missing late Bills of Lading to facilitate release of goods.

2.2.2 Bank credit procedures and standards

To achieve the goals of credit management, there is need for the adoption of credit procedures. Marsh (2008) defines credit procedure as specific ways in which top management require the credit department to achieve the credit management policies. It includes instructions on what data to use for credit investigation and analysis, process, account supervision and instances requiring management notifications.



These are criteria that the client should meet to qualify for credit and according to kakuru (2000) these criteria require intensive analysis to ensure effectiveness. It is important for credit information, credit limits and defaults rate of an individual credit applicants.

Kakuru (2000) recognizes 5c's of credit as the parameters for setting credit standard. These parameters include:

1. Character: This evaluates the applicant's trait to analyze the willingness of the applicant to meet the credit obligations. Analysis is carried out on the

applicant's banking behavior, mental status and other demographic information as well as the past dealing with the bank.

2. Capacity: This evaluates the customer's assets and capital to ascertain his ability to repay debt when advanced in the required period.
3. Capital: This evaluates the financial statement with specific emphasis on the risk and debt to equity ratios as well as the working capital of the applicants.
4. Collateral: The security offered for the loan extended to the borrower such as land, house, estates or any other property should be safe, easily marketable and able to cover up the debt when sold in case the borrower defaults in repayment.
5. Condition: The financial manager should form a reasonable judgment regarding the chances of default and estimate the profitability to repay the debt which will in turn prove unprofitable to the bank.

2.2.3 Bank lending policies and loan monitor

Until recent years, lending has been the essence of deposit banks and in fact, now a very large part of bank assets in its grants. As a result, the formulation and execution of a sound lending policy constitute part of the most vital responsibility of bank management. Kargi (2011) stated that well-conceived lending policies and careful lending practices are essential for a bank if it is to perform its credit creating functions effectively and efficiently and at the same time minimize or eliminate the

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risk inherent in any extinction of credit. It is important to note that the type and number of loans a bank will make as well as to whom it will grant credit and at what conditions and circumstances, requires a sound policy decision; adequate care must be taken in the process of arriving at such decisions. Thus, a meaningful periodic appraisal of lending and credit administration of a bank in the light of ever changing environmental conditions is necessary.

Another important aspect of lending policies and guidelines is in respect of payment. Credit is commonly believed to be the lifeblood of the economy. If this assertion is correct, then any credit which ceases to flow becomes stagnant. It should therefore be a basic policy of deposit money bank that any money loaned should flow back to the bank in the form of repayment. A sound bank loan should be collectable from the anticipated income or profit of the borrower rather than from liquidation of any collateral that may be pledged (Kargi 2011)

Apart from individual loans, it is also important that the overall quality of the loan portfolio and in which way they are carried out be monitored. How elaborate, effective and efficient this monitoring is performed depends on the size of the bank, the number of branches a bank has as well as the variation in the marketing. There are basically two methods of monitoring bank loans as contained in Gurarati and Sangeetha (2011). The first is the external method where banks use external auditors, examiners and inspectors as independent check. The internal method contains three

methods. The first methods are called continuing quality control where constant quality control is carried out within each branch at the head office by a credit committee set up to survey and report on the quality of lending. The second method is to establish a loan audit department with a reporting authority directly to the senior manager of the bank via the controller or the accountant. The third method is inspection. A team inspects all branches and head offices division on a periodic basis. Each inspection is usually carried out as a surprise examines the documentation of loan, controlling the follow-up of payments or collaterals.

2.2.4 Functions of bank liquidity

Management of a bank's liquidity is a process of creating the means to have the possibility of paying contractual or traditional obligation under the comprehensible prices and at any time. To achieve this, liquidity plays two basic functions: satisfaction of demand for credit and withdrawal of investor's deposit. Liquidity serves to demonstrate the market where the tendency of avoiding risk dominates. It helps to build an unwavering confidence on the bank by customers and would be investors. It helps banks match the timing of cash flow thereby avoiding assets and liabilities mismatch (David 2011).

Vital information of bank liquidity is that it helps to avoid a run on the bank. Bank with inadequate capital in the form of cash and liquid assets are often faced with customer's panic over their deposits which in turn lead to a congested withdrawal of

deposit from such banks. If this happens, the bank's objectives and goals of existence are altered thereby experiencing distress or collapse. Liquidity therefore stands to avoid the ugly event described above.

The challenges faced by deposit money bank in order to achieve a maximum liquidity position and meet a reasonable demand by the depositors of funds and other borrowers are broadly highlighted below:

- a. Availability of assets and cash within the coffers of the bank.
- b. The sterility of cash not put into any use. Idle cash yield no rewards, hence any amount cash held by the bank in pursuance of maximum liquidity remains sterile as no interest or income is accrued on it.
- c. The illiquidity of earning assets. Unlike loans which are already in cash form, the earning assets of a bank is income yielding but highly illiquid since they cannot instantaneously be converted into cash without loss of time and value.

2.3 The relationship between liquidity risk and credit and their influence on the profitability of default in deposit banks

What is the relationship between liquidity risk and credit in financial institutions? Classical theories of macroeconomics of banking support the view that liquidity risk and credit risk are closely linked. Both industrial organization perspective in

Bryant((2010) and Diamond (2011), suggest that a bank assets and liquidity structure are closely connected, especially with regards to borrower's default and funds withdrawals.

Over the past 50 to 60 years, a tremendous amount of literature has dealt with banks' liquidity and credit risk. The financial intermediation models view banks as pods of liquidity which provide both depositors and borrowers with the ready availability of cash, thereby enhancing economic welfare and internalizing economic liquidity risk while the industrial organization approach models view banks as profit maximizing price takers in oligopolistic loan and deposit markets; on the assets side, banks generate returns through loan interest rates on the liabilities side bank faces costs through deposit interest rate. The models of both stands of literature suggest that at least in theory there is a relationship between liquidity and credit risk. A liquidity risk is seen as a profit lowering cost, a loan default increases this liquidity risk because of the lowered cash inflow and depreciation it triggers.

Diamonds and Rajan (2008) stated that there is a positive relationship between liquidity risk and credit risk. This model is based on the premise that banks obtain money from unskilled depositors which is used for lending. Problems arises if too many economic projects funded with loans yield insufficient funds (or even defaults) and the bank cannot meet depositor's demands. Due to this asset deterioration, more and more depositors will claim back their money. The bank will call in all loans and

thereby reduce aggregate liquidity. The result is therefore the higher credit risk accompanies higher liquidity risk through depositor's demand. According to Acharya (2011), financial firms raise debts which have to be rolled over constantly and which is used to finance assets and such as more debts in the banking system yields a higher "bank-run" risk. In times of crisis when assets prices deteriorate, banks find it more difficult to roll over debt, this becomes a liquidity problem.

Having established the relationship between liquidity and credit risk from a theoretical perspective, the logical follow up question then is how are banks affected by this relationship in their overall risk structure? Gratev and Strahan (2009) said that bank's default risks are mainly driven by low capitalization, low earnings, over exposure to certain categories of loans and excessive loan default. To him, excessive investment banking activities, bad macroeconomics conditions in the banks immediate vicinity, low equity and heavy concentrations in real estate loans substantially increase bank probability of default.

From the theoretical evidence presented above and the anecdotal evidence of bank failure during the recent crisis in Nigeria, it can be an indication that the joint occurrence of liquidity risk and credit risk might have played a role in causing bank default and institutionalized collapse of deposit money banks in the Nigerian financial environment.

2.4 Deposit money banks profitability and performance

One of the principal objectives of a bank is to earn more profit. It is essential for the purpose of paying interest to depositors, wages to staff, dividends to shareholders and meeting other expenses. According to Athanasoglou (2009) profitability is measured by income and expenditure which is the performance. Coyle (2009) defines performance as the accomplishment of a given task measured against preset standard of accuracy, completeness, cost and speed. Income is the money generated from the activities of the bank such as the interest income on the loan obligation lent out to clients as interest received from loans lent out to other banks and financial institutions, returns on investment in corporate shares, commission received on bills, bonds collections and turnover as well as bad debt recovered. Expenses are costs of resources used up or consumed in the course of the banking business. These cost include the opportunity cost of tying up the funds in debts, the costs of debt recovery, cost of borrowed funds to meet financial obligation, loss on sale of assets, management expenses among others.

According to Graham (2000), profitability is used to measure and ascertain the success, performance and viability of a business. It is used to ascertain the growing trend of income over expenditure. The level of profitability associated with any bank is influenced by the structure of the revenue generating assets. It is also dependent

on the bank's ability to eliminate risks in the assets operations in order to ensure correspondence between the assets and liabilities of such bank.

2.4.1 Impact of credit risk on profitability

It is a major concern for bank customer to be aware of the safety of their deposits in any given bank. For this reason, it is very essential for banks to critically assess the customer who demand the extension of credit or loan facility before granting such. This is because a weak and poorly administered credit policy would lead to bad debt in the loan portfolio of banks. This will in turn affects the entire assets strength of the bank. To this, pandey (2011) advances that the planning, monitoring, collection and management of lent funds is core of the credit department which must be effectively carried out to ensure the survival of the banking industry. If credit risk increase with the growing volume of credit transaction in banks, bad and doubtful debt will claim a bulk of the supposed profit estimated to be earned by banks.

As these risks remains unchecked, the profitability of banks reduces with each transaction. This also reduces the operational performance of bank.

2.4.2 Impact of liquidity risk on profitability

Cash is the important current assets for the operation of any business running continuously. A bank as a business is concern needs to have cash and liquid assets which it can easily covert at short notice. Pandey (2011) identifies the types of assets available to a bank to include cash, deposits with the central bank, treasury bills. Thus, for banks to remain in the business of financial intermediation, they must formulate policies to ensure the availability of cash and liquid assets in the assets portfolio at any time.

Liquidity risk reduces the ability of the bank to meet its financial obligation as they fall due. When this risk remains unchecked, banks will lose customers thereby reducing the volume of deposits. When deposits reduce, the bank will have insufficient funds for other investments; this significantly reduces the level of profitability.

Again, a high liquidity risk causes a run on the bank. This run is evidenced in the panic withdrawal of deposits by customer from the bank. This adversely affects the potentials of the bank by keeping away would be customers and potential investors from the bank. Consequent upon this, the bank's operation reduce drastically and results to a significant reduction in profit

2.4.3 Impacts of bank specific factors and macroeconomic control variables on the profitability of deposit money banks

Apart from credit risk and liquidity risk, banks profitability is also determined by bank specific factors and macroeconomic control variables in which banks operate. Athanasoglou, Sophocles and Matthaïos (2005) examined the effect of bank specific factors and macroeconomic determinants of bank profitability, using an empirical framework that incorporates the traditional Structure-Conduct-Performance (SCP) hypothesis. To account for profit persistence, they applied Generalized Method of Moment (GMM) techniques to a panel of Greek banks that covers the period between 1985 and 2001. The estimation results showed that profitability persisted to a moderate extent, indicating that departures from perfectly competitive market structure may not be that large. All bank specific determinants affects bank profitability significantly in the anticipated way. However, no evidence was found in support of the SCP hypothesis.

2.4.4 Bank specific factors

Bank activity mix: The overall level of risk undertaken by banks in all ares of transaction affects profit due to the volatile interest paid.

Capital Adequacy: The higher the structure of a bank, the better the performance and profitability of the bank (Allen 2004). This is because a well-capitalized bank will have to borrow less for expansion or meeting its financial obligations. This reduces

the cost attached to capital which in turn lifts the level of profit higher. Ngo (2006), attempted to find out the effect of Endogenous Capital and Profitability in Banking. He investigated the relationship between bank capital and profitability. According to his study and to the best of his knowledge, no previous paper had analyzed the problem in a two-equation structural model. Contrary to what is often reported with surprising frequency in this field of research, his results showed no significant relationship between capital and profitability. Given non-binding capital requirements his finding was consistent with the view that while raising capital is costly for banks, it is associated with compensating benefits that offset these additional costs.



Market power: McDonald and Schumacher (2009) stated that banks in more concentrated markets should be able to adjust in unfavorable conditions.

2.4.5 Macroeconomic control variables

Macroeconomic control variable includes inflation, Price of fuel, price of commodities, the level of economic development as well as the institutional environment in which the banks operates. In a study to analyze the determinants of interest rate margins in six countries of the European Union, McDonald and Schumacher (2009) observed that macroeconomic volatility and regulation have a significant impact on the level of profit made by banks.

2.5 Effective credit risk and liquidity risk management strategies in today's banking dispensation: a critical appraisal

Having analyzed the impact of credit risk and liquidity risk to the overall performance of deposit banks in Nigeria, there is need for the formulation and implantation of appropriate management strategies that will help improve the profit trend of Nigerian banks as well as developing an indomitable resistance to distress or unexpected failure. The credit risk management strategies are measures employed by banks to minimize the adverse effect of credit risk. A sound credit risk management is crucial for banks so as to enhance profitability and guarantee survival.

The strategies for hedging credit risk include the following:

- a. **Credit Derivatives:** This provides banks with an approach which does not require them to adjust their loan portfolio. Credit derivative provides banks with a new source of fee income and offer banks the opportunity to reduce their regulatory capital (Shao and Yeager 2007). The common type of credit derivative is credit default swap whereby a seller agrees to shift the credit risk of a loan to the protection buyer. This improved banking innovation has encouraged banks to lend more than they would at lower rates to riskier borrowers (Marsh 2008)

- b. **Credit Securitization:** This is the transfer of credit risk to a factor or insurance firms who relieves the bank from monitoring the borrowers and fear of the hazardous effect of classified assets. This approach insures the lending activities of banks as this instrument of securitization used to diversify concentrated credit risk and explore alternative source(s) of funding.
- i. **Compliance to Based Accord:** The based accord is international principles and regulation guiding the operation of banks to ensure soundness and stability introduced in Switzerland in 1988. Compliance with this accord means being able to identify, generate, track and report on risk related data in an integrated manner with full audit ability and transparency. This creates the opportunity to improve the risk management process of bank (Chen and Pan, 2012)
- ii. **Adoption of Internal Lending Policy:** The lending policy guides banks in disbursing loans to customers. Strict adherence to the lending policy is by far cheapest and easiest method of credit risk management. The lending policy should be in line with the overall bank strategy, industry norms, general economic conditions of the country among others (Kithinji 2010)
- c. **Credit Bureau:** this is an institution which compiles information and sells this information to banks as regards to the lending profile of a borrower. The Bureau awards credit score called statistical odds to borrower which makes it easy for banks to make instantaneous lending decisions. An example is the

Credit Risk Management System (CRMS) of the Central bank of Nigeria (CBN).

Apart from credit risk strategies management, liquidity risk also has to be strategically managed. The strategies discussed in this study include but not limited to;

- i. Developing a structure of managing liquidity and communicating such structure throughout the organization. This information system will help in measuring, monitoring, controlling and reporting liquidity risk.
- ii. Measuring and monitoring net fund requirement: This would help banks know the level of liquidity that is adequate for bank performance. Any increase in the net fund will result to cash sterility (idle cash), while any decrease will result to illiquidity.
- iii. Contingency planning: These are plans that address that strategy for handling crises and include procedures for making up cash flow shortfall in emergency situations.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This is the method applied by the researcher in collecting data used in any topic under consideration. Research methodology can also be defined as a set of methods used for the process of arriving at a dependable solution to problems through the planned and systematic collection analysis and interpretation of data. It is the background against which reader evaluates the findings and conclusions.

The aim of this study is to ascertain the level of impact of credit and liquidity risk management policies on profitability of deposit money banks.



3.2 Research Design

Research design refers to the overall strategy that you choose to integrate the different components of the study in an orderly and logical way thereby ensuring you will effectively address the research problems. It constitutes the blueprints for the collection, measurement and analysis of data.

3.3 Population of the study

This research as stated earlier was conducted in First Bank of Nigeria PLC, Damaturu branch. The entire staff made up of management team and all department of the bank constitute the population of the study.

3.4 Census Sampling

A census sampling is the statistical study of every unit, everyone or everyone in a population. It is known as a complete enumeration which means a complete count. It can be finite or infinite, countable or uncountable.

For the purpose of this study, the non- probability census sampling will be used for more simplicity of the research.

3.5 Method of data collection

The financial statement of First Bank Nigeria PLC was used in collecting the secondary data for this study. The statement was used to gather information in other to determine the level of credit and liquidity risk management policies on profitability of deposit money banks.

3.6 Method of data analysis

Data analysis is the collecting and organizing of data so that a researcher can come to a valid conclusion.

For the purpose of this research, simple percentage analysis will be used in presenting data.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1 Introduction

This chapter deals with analysis, presentation and interpretation of data. Data analysis is a process in which collected or available data (Raw Data) is analyzed by following theoretical aspect related to the study and applying suitable method being used. The raw data will be edited and tabulated by the researcher as the requirement of the study. For the purpose of analyzing data for the study, some accounting and statistical tools and techniques will be adopted by the researcher

In this chapter the researcher will go for using accounting and statistical tool and techniques like ratio analysis tools

4.2 Uses of financial statement

Financial analysis is the process of identifying the financial strength and weakness of the firm by properly establishing relationship between the items of the balance sheet and profit and loss accounts, financial analysis can be undertaken by management of the company or by parties outside the company like creditors, owners, potential investors and others. The nature of the analysis will differ depending on the aim of the analysis.

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4.3 Nature of financial statement

Ratio analysis is a powerful tool of financial analysis. A ratio is defined as the indicate quotient of two mathematical expression and as the relationship between two or more variables. In financial analysis a ratio is used as an index or yardstick for evaluating the financial position and performance of a firm. The absolute figures reported in the financial do not provide a meaningful understanding of the performance and financial position of a firm. Accounting figures convey meaning when it is related to other relevant information. The relationship between two accounting figures express mathematically is known as financial ratio.

Among the various ratio analyses the following ratio will be used as a test of data analysis collected from First Bank Nigeria PLC Annual Reports and Accounts. These ratio are:

1. Liquidity Ratio
 - a. Current Asset Ratio
 - b. Loan-to-Deposit Ratio
2. Efficiency (Profitability Ratio)
 - a. Return on Capital Employed(ROE)Ratio
 - b. Return on Investment Ratio

FIRST BANK OF NIGERIA PLC

BALANCE SHEET AS AT MARCH 31, 2007

ASSETS	2007	2006
	₦M	₦M
Cash and short-term fund	60,881	49,444
Due from bank and financial institution	137,864	94,029
Bills discounted	159,832	108,316
Trading securities	71,477	-
Investments	64,048	63,729
Loans and advances	219,185	175,657
Advances under finance lease	3,043	1,701
Other assets	29,701	31,317
Fixed assets	16,850	13,952
Goodwill	-	1,984
Total Asset	762,881	540,147
LIABILITIES		
Deposit and current account	581,827	390,846

Due to other banks	14,448	323
Tax payable	5,710	4,148
Deferred taxation	2,671	2,751
Dividend payable	-	5,238
Other liabilities	58,773	75,843
Long term borrowing	22,101	-
	685,530	549,149
CAPITAL AND RESERVE		
Share capital	5,238	2,619
Share premium	15,858	15,858
Statutory reserve	13,452	10,699
Exchange difference reserve	2,836	2,836
General reserve	28,799	16,972
Bonus issue reserve	873	2,619
Reserve for small/medium scale industry	7,916	6,998
Core capital	74,972	58,601

Fixed asset revaluation reserve	2,379	2,379
Shareholders' funds	77,351	60,980
Total Liabilities	762,881	540,129

Source: First Bank of Nigeria PLC 2007 Annual report and account

FIRST BANK OF NIGERIA PLC

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED MARCH 31,

2007

	2007	2006
	₦M	₦M
Gross earning	79,299	61,243
Interest earning	51,245	37,218
Interest expenses	(13,237)	(7,750)
Net interest income	38,008	29,468
Commission and other income	28,054	24,025
	66,062	53,493
Overheads	(41,446)	(33,748)
Provision for bad and	(2,519)	(3,617)

doubtful account		
Profit on ordinary activities	22,097	19,831
Exceptional items	(3,822)	(3,038)
Profit before taxation after exceptional item	22,097	19,831
Current taxation	(3,882)	(3,038)
Differed taxation	80	(740)
Profit after taxation	(18,355)	16,058
Amortization of goodwill	(1,984)	(1,984)
Profit attributable to ordinary shareholder	16,371	14,069

FIRST BANK OF NIGERIA PLC
BALANCE SHEET AS AT MARCH 31, 2009

ASSETS	2009	2008
	₦M	₦M
Cash and balance with Central Bank	140,353	88,302
Due from bank and other financial institution	510,722	280,033
Treasury bills	17,697	115,480
Trading securities	151,111	93,396
Investments	65,336	71,532
Loans and advances	684,107	437,768
Advances under finance lease	11,769	10,292
Other assets	48,007	39,498
Fixed assets	38,320	29,155
Total Asset	1,667,422	1,165,461
LIABILITIES		
Deposit and current	1,071,836	661,624

account		
Due to other banks	78,980	44,281
Tax payable	6,777	5,091
Deferred taxation	12,758	6,712
Other liabilities	110,975	78,492
Long term liabilities	30,042	29,414
	1,316,368	825,614
Capital reserves	12,432	9,945
Share capital	254,524	254,524
Share premium	23,284	18,023
Statutory reserve	2,836	2,836
Exchange difference reserve	42,334	40,814
General reserve	2,072	2,487
Bonus issue reserve	11,193	9,439
Reserve for small/medium scale industry	348,675	337,468
Core capital	42,334	40,214
Fixed asset revaluation reserve	2,379	2,379



Shareholders' funds	351,054	339,847
Total Liabilities	1,667,422	1,165,461

Source: First Bank of Nigeria PLC 2009 Report and Account

FIRST BANK OF NIGERIA PLC

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED MARCH 31, 2009

	2009 NMI	2008 NMI
Gross earning	185,189	130,600
Interest earning	128,903	79,810
Interest expenses	(41,841)	(22,283)
Net interest income	87,059	57,527
Fees and commissions	29,114	23,418
Net interest income and commissions	116,173	80,945
Income on trading securities	16,194	16,447
Net income on trading securities	16,194	16,447
Other income	10,979	10,925
Operating expenses	(81,533)	(62,260)
Interest on long term borrowing	(1,744)	(2,218)
Provision for loans and	(12,469)	(6,152)

advance		
Provision for bad and doubtful accounts	(1,490)	333
	(97,236)	(70,292)
Provision on ordinary activities before exceptional item and before taxation	46110	38,020
Information technology development levy	(461)	(380)
Current taxation	(4,529)	(3,126)
Deferred taxation	(6,046)	(4,041)
Profit before taxation	35,074	30,473
Death with as follows		
Stat tory reserve	5,261	4,571
Reserve for small/medium scale industries	1,754	1,523
General reserve	28,059	24,279
	35,074	30,473

Source: First Bank of Nigeria PLC Annual Report and Account

4.3.1 LIQUIDITY RATIO

The adequacy of banks liquidity is measured by the ratio of loan and advance to deposit and the ratio of loan and advance to total deposit in insured banks. In banking system, liquidity can damage a bank's reputation and consequently threaten a run on the bank while excess liquidity can retard earning.

a. Current Assets Ratio $\frac{\text{current Assets}}{\text{Current Liabilities}}$

$$2006 \frac{488,740}{468,770}$$

$$2007 \frac{701,204}{609,930}$$

$$2008 \frac{1,076,874}{789,488}$$

$$2009 \frac{1,564,556}{1,268,568}$$

INTERPRETATION

The current asset ratio shows that the bank was solvent throughout the period of study. The bank investment in current assets increased by 30.28% from 2006-2007 and 34.89% from 2007-2008. However, this reduced to 31.17% in the 2009,

b. Loan to Deposit Ratio = $\frac{\text{Total loan and advance}}{\text{Total deposit}}$

$$2006 \frac{177,358}{390,846} \times 100 = 45.38\%$$

$$2007 \frac{222,228}{581,827} \times 100 = 38.19\%$$

$$2008 \frac{448,065}{661,624} \times 100 = 67.72\%$$

$$2009 \frac{695,876}{1,071,836} \times 100 = 64.92\%$$

INTERPRETATION

The loan-to-deposit ratio shows that the bank management makes proper use of the cash deposit with them as loan and advance and leasing of equipment, too much cash was not tied up, as much tied up of bank cash brings about idle investment which earns nothing.

4.3.2 EFFICIENCY (PROFITABILITY RATIO)

This section of the research discusses the different measures of corporate profitability and performance. These ratios much like the operational performance ratios give users a good understanding of how well the company utilized its resources in generating profit and shareholder value. The long-term profitability of a bank is vital for both the survival of the bank as well as the benefit received by shareholders, the last two ratios covered in this section- Return on capital employed and Return on investment detail how effective a bank is at generating income from it resources.

a. Return on capital Employed Ratio = $\frac{\text{Net profit after taxation}}{\text{shareholders Equity}}$

$$2006 \frac{16053}{60980} \times 100 = 26.33\%$$

$$2007 \frac{18,355}{77,351} \times 100 = 23.73\%$$

$$2008 \frac{30473}{339,847} \times 100 = 8.97\%$$

$$2009 \frac{35,074}{351,054} \times 100 = 9.99\%$$



INTERPRETATION

The return on capital employed (ROCE) ratio shows that the bank shareholders received more returns on their investment. The bank returns on shareholders' investment shows 26.33% in 2006 and 23.73% in 2007 which shows an increase of 2.6% in total shareholder funds of the previous year. The total shareholders fund increased from ₦339,847,000 in 2008 to ₦351,054,000 in 2009 representing an increase of 3.19%. the growth ensured a comfortable capital adequacy ratio.

b. Return on investment = $\frac{\text{Net profit after taxation}}{\text{Total asset}}$

$$2006 \frac{16053}{540,129} \times 100 = 2.97\%$$

$$2007 \frac{18,355}{762,881} \times 100 = 2.41\%$$

$$2008 \frac{30473}{1,165,461} \times 100 = 2.61\%$$

$$2009 \frac{35,074}{1,667,422} \times 100 = 2.10\%$$

INTERPRETATION

This measures the overall effectiveness of management in generating profit with the available assets. There was an increase of profit attributable to shareholders in the period of study. However there was an increase of 12.54% in 2007 compared to 2006 and 13.12% in 2009 compared to that of 2008. There was a tremendous increase of profit attributable to shareholders of the First Bank Nigeria PLC throughout the period of study.

4.4 TEST OF HYPOTHESIS

Chi-square will be used to determine if there is any statistical relationship between the variable in hypothesis which will be conducted at 5% (0.05) level of significance. The formula for computing the chi-square (χ^2) is given as

$$\chi^2 = \frac{\sum(o - x)^2}{\Sigma}$$

Where Σ = summation

O=observed frequency

E=Expected frequency

$\chi^2 = \text{Computed chi - square}$

The degree of freedom is arrived at:

$$\text{DOF} = (R-1)(C-1)$$

Where R= Row

C=Column

Expected frequency is computed as:

$$\text{EF} = \frac{\text{TR} \times \text{TC}}{\text{GT}}$$

Where TR= Total Row

TC=Total column

GT=Grand total

If the computed chi-square (χ^2) is greater than the critical value of the null hypothesis (H_0) is rejected in the favor of the alternative hypothesis and vice versa.

HYPOTHESIS 1

(H_0) :First Bank have no credit and liquidity in place

Table 4.3.1

Observed frequency

Year	2006	2007	2008	2009	Total

Current assets	488,740	701,204	1,076,874	1,564,556	3,831,374
Current liabilities	468,770	609,930	789,488	1,268,568	3,136,766
Total	957,510	1,311,134	1,866,362	2,833,124	6,968,140

Source: financial statement

NOTE: The expected frequency is treated as

$$EF = \frac{TR \times TC}{GT}$$

Current asset

$$EF = \frac{3,831,374 \times 957,510}{6,968,140} = 526,479$$

Current liabilities

$$EF = \frac{3,136,766 \times 957,510}{6,968,140} = 431,031$$

Table 4.3.2

Expected frequency

Year	2006	2007	2008	2009	Total
Current assets	526,479	526,479	526,479	526,479	526,479
Current liabilities	431,031	431,031	431,031	431,031	431,031
Total	957,510	957,510	957,510	957,510	957,510

Source: Financial statement

Table 4.3.3

Chi-square

S/N	OF	EF	OF-EF	(OF-EF) ²	$\frac{(OF - EF)^2}{EF}$
1	488,740	526,479	-37739	1,424,232,121	2705.20
2	701,204	526,479	174,725	3,052,882,563	5798.68
3	1076874	526,479	550,395	30,293,465,600	5753.97
4	1564556	526,479	1,038,077	1,077,603,858	2046.81
5	468770	431,031	37,739	1,424,232,121	3304.25
6	609930	431,031	178,899	3,200,485,220	7425.19
7	789488	431,031	358,457	1,284,914,208	2981.03
8	1268568	431,031	837,537	7,014,682,264	16274.19
Total					$x^2 46289.32$

Source: Table 4.3.1 and 4.3.2

$$(R-1)(c-1) = (4-1)(2-1)$$

$$df=3$$

Let assume 5% under 3 = 7.815

Decision Rule

This study assume that 5% level of significance DOF= 3 under 0.05%, critical value = 3.420. The above table shows that the computed chi-square (x^2) value of 46289.32 is greater than the critical value of 7.815 which we could reject the null

hypothesis which state that First Bank has no credit and liquidity in place and the alternative hypothesis (H1) could be accepted.

HYPOTHESIS 2

(Ho2) First Bank has no credit appraisal and techniques in place

Table 4.3.4

Observed frequency

Year	2006	2007	2008	2009	Total
Total loan and advance	177,358	222,228	448,065	695,876	1,543,527
Total deposit	390,846	581,827	661,624	1,071,836	2,706,133
Total	568,204	804,055	1,109,689	1,767,712	4,249,660

Source: financial statement

Total loan and advance

$$EF = \frac{1543527 \times 568204}{4249660} = 206378$$

Total deposit

$$EF = \frac{2706133 \times 568204}{4242660} = 361,826$$

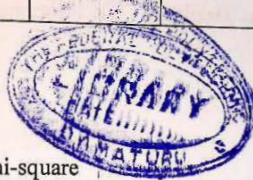
Table 4.3.5

Expected frequency

Year	2006	2007	2008	2009	Total
Total loan and advance	206378	206378	206378	206378	825512
Total deposit	361826	361826	361826	361826	1447304
Total	568204	568204	568204	568204	2272816

Source: Financial statement

Table 4.3.6



Chi-square

S/N	OF	EF	OF-EF	(OF-EF) ²	$\frac{(OF - EF)^2}{EF}$
1	177,358	206,378	-29020	842,160,400	4080.67
2	222,228	206,378	15,850	251,222,500	1217.29
3	448,065	206,378	241,687	5,841,260,597	28303.69
4	695,876	206,378	489,498	23,960,829,200	11610.17
5	390,846	361,826	29,020	842,160,400	2327.53
6	581,827	361,826	220,001	4,840,044,000	13376.72
7	661,624		299,798	8,987,840,800	28368.38
8	1,071,836		710,010	50,411,420,000	13932.50
Total					$\chi^2 103216.95$

Source: Table 4.3.4 and 4.3.5

$$(R-1)(C-1) = (4-1)(2-1)$$

DF =3

Let assume 5% under 3 = 7.815

Decision Rule

The above shows that the computed chi-square (χ^2) value of 103216.95 is greater than the value of 7.815 which we could reject the null hypothesis which states that First Bank has no credit appraisal and techniques and the alternative hypothesis (H2) could be accepted.

HYPOTHESIS 3

(Ho3) Illiquidity has no influence on the liquidity position of First Bank

Table 4.3.7

Observed frequency

Year	2006	2007	2008	2009	Total
Net profit after taxation	16,053	183,557	30,473	35,074	99,955
Total asset	540,129	762,881	1,165,461	1,667,422	4,135,893
Total	556,182	781,236	1,195,934	1,702,496	4,235,848

Source: financial statement

Net profit after taxation

$$EF = \frac{99,955 \times 556,182}{4,235,848} = 13,124$$

Total asset

$$EF = \frac{4,135,893 \times 556,182}{4,235,848} = 543,058$$

Table 4.3.8

Expected frequency

Year	2006	2007	2008	2009	Total
Net profit after taxation	13,124	13,124	13,124	13,124	52,496
Total asset	543,058	543,058	543,058	543,058	2,172,232
Total	556,182	556,182	556,182	556,182	2,224,728

Source: Financial statement

Table 4.3.9

Chi-square

S/N	OF	EF	OF-EF	(OF-EF)	$\frac{(OF - EF)^2}{EF}$
1	16,053	13,124	2929	8,579,041	653.69
2	18,355	13,124	5231	27,363,361	2048.99
3	30,473	13,124	17,349	300,987,801	22934.15
4	35,074	13,124	21,950	481,802,500	36711.56
5	540,129	543,058	-2929	8,579,041	15.80
6	762,881	543,058	219,823	48,322,151,330	88981.57
7	1,165,461	543,058	622,403	38,738,549,440	71334.09
8	1,667,422	543,058	1,124,364	126,419,440,400	232791.78
Total					$\chi^2 455471.63$

Source: Table 4.3.7 and 4.3.8

$$(R-1)(C-1) = (4-1)(2-1)$$

$$DF=3$$

Let assume $S\%$ under 3 = 7.815

Decision Rule

The above table shows that the computed chi-square (χ^2) value of 455471.63 is greater than the critical value of 7.815 which we could reject the null hypothesis (H_0) which states that illiquidity has no influence on the liquidity position of First Bank and the alternative hypothesis could be accepted.

HYPOTHESIS 4

(H_0): Credit risk and liquidity has no influence on customer's default

Table 4.3.10

Observed frequency

Year	2006	2007	2008	2009	Total
Net profit after taxation	16,053	18,355	30,473	35,074	99,955
Shareholders' Equity	60,686	77,151	139,847	351,054	829,232

Total	77,033	95,706	370,320	386,128	929,187
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Source: financial statement

Net profit after taxation

$$EF = \frac{99,955 \times 77,033}{929,187} = 8,287$$

Shareholders' equity

$$EF = \frac{829,232 \times 77,033}{929,187} = 68,746$$

Table 4.3.11

Expected frequency

Year	2006	2007	2008	2009	Total
Net profit after taxation	8,287	8,287	8,287	8,287	33,148
Shareholders' equity	68,746	68,746	68,746	68,746	274,984
Total	77,033	77,033	77,033	77,033	308,132

Source: Financial statement

Table 4.3.12

Chi-square

S/N	OF	EF	OF-EF	(OF-EF) ²	$\frac{(OF - EF)^2}{EF}$
1	16,053	8,287	7,766	60,301,756	7277.76
2	18,355	8,287	10,068	101,364,624	12231.76
3	30,473	8,287	22,086	487,791,396	58862.24
4	35,074	8,287	26,787	717,513,369	86586.63
5	60,980	68,746	-7,766	60,310,756	872.06
6	77,351	68,746	8,605	74,046,025	1077.10
7	339,847	68,746	271,101	7,349,257,250	106104.51
8	351,054	68,746	282,308	7,973,846,440	115989.97
Total					$\chi^2 389007.03$

Source: Table 4.3.10 and 4.3.11

$$(R-1)(c-1) = (4-1)(2-1)$$

$$Df = 3$$

Let assume 5% under 3 = 7.815

Decision Rule

The above table shows that the computed chi-square(χ^2) value of 389007.03 is greater than the critical value of 7.815 which we could reject the null hypothesis (H_0) which states that credit risk and liquidity has no influence on customer's default and the alternative hypothesis could be accepted.

4.5 Research Finding

From the presentation of data, analysis of tabulated data and the test of hypothesis, it is highly evident that the survival of deposit banks is anchored on the strategies formulated and implemented to managed both credit risk and liquidity risk. From the tested hypothesis, the following were observed:

1. There is a significant relationship between credit management and bank profitability because the higher the cost of credit management and bad debt to loan portfolio, the higher the charge to the profit of the bank and vice versa.
2. There is an effective relationship between bank liquidity and profitability due to the fact that a liquid bank attracts investors and investment which earns income to the bank.

3. From the analysis, I observed that First Bank Nigeria PLC are solvent enough throughout the period as current ratio shows that the bank investment in current asset has been increasing from 2006 to 2009.
4. Based on my research, I discovered that First Bank Nigeria PLC has effective credit liquidity policies.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

This study has adequately discussed the consolidated impact of credit risk and liquidity risk management on the profitability of deposit banks in Nigeria. From the study, it has been observed that the survival of banks as financial intermediaries depends largely on the credit risk liquidity risk policies adopted by such banks. Having discussed the relevant literature and tested the formulated hypotheses, the finding from the study are summarized below.

Deposit money banks that have experienced institutionalized distress and unintentional collapse over the years had loopholes in risks assessment and control policies. Both credit risk and liquidity risk were not adequately and efficiently managed and this in turn affected the profitability and overall performance of these banks. The increase in loss of profit (accumulated profit) reduces the liquidity of these banks which eventually led to liquidation.

Findings revealed that credit risk and liquidity risk are positively related that is to say that there is a direct relationship between credit risk and liquidity risk. If credit risk increases liquidity risk increase in same proportion and if credit risk falls, liquidity risk also falls. They also jointly contribute to bank profitability of

default. If these risks are not properly managed and controlled, banks will have an increasing potential of default in meeting their financial obligation as they fall due.

The findings on profitability revealed that among all the factors influencing the level of profitability in deposit banks, credit risk and liquidity risk exposure have more significant impact on profit. Bank specific factor such as bank activity mix, capital adequacy and market power or market shares and macroeconomic control variable such as inflation, level of economic development etc have little impact on the bank profits. These do not mean that the latter should be disregarded as these factors should also be given attention.

5.2 Conclusion

For effective and efficient performance of banks, there is need for strategic credit risk and liquidity risk policy formulation and implementation in full. Liquidity risk and credit risk management are the most important factor for bank survival. This study investigates their relationship in selected deposit bank in Nigeria. It has been shown that each category of risk has a significant impact on bank profitability. It has also been documented that the interaction of both risk categories significantly determines banks profitability of default. The result of this study suggests that a joint management of liquidity risk and credit risk in a bank could reduce on uncertainties and substantially increase bank stability.

From the study, credit risk and liquidity risk can be effectively managed and reduced through the adoption of a sound risk assessment and control policy as the process entails the definition of the philosophy and mission of the bank, the development of credit policy and liquidity policy on related risks, the development mechanisms for implementing both credit and liquidity policies and finally monitoring this mechanisms and making adjustment where necessary.

Finally, it can be concluded that since banks exist to make profit, these objectives of profitability are achieved at optimum level where both credit and liquidity risk are both managed and controlled in full.

5.3 Recommendation ↪

The stability of the bank is a function of the admixture of credit risk management hence these two should be administered. The following recommendation have been made for implementation.

1. Deposit bank should set up effective system of internal controls to monitor the risk control mechanisms in use. This would help ensure complete compliance with bank philosophy and also make adjustment where necessary.
2. Deposit bank should also maintain a balance between loan-to-deposit ratio. This is because an excess in any would result in asset liabilities mismatch.

Also, if excess loan are granted out of the available deposits, liquidity stand is threatened thereby resulting to a run on the bank.

3. Bank should maintain excess liquidity simply because they want to effectively manage their liquidity position. This would help to reduce the incident of cash sterility in the asset of banks.
4. Internal loan and credit monitoring strategies should be implemented in full to ensure that loan and credit granted to customers and collected in full plus interest.

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APPENDIX I

FIRST BANK OF NIGERIA PLC

BALANCE SHEET AS AT MARCH 31, 2007

ASSETS	2007	2006
	NM	NM
Cash and short-term fund	60,881	49,444
Due from bank and financial institution	137,864	94,029
Bills discounted	159,832	108,316
Trading securities	71,477	
Investments	64,048	63,729
Loans and advances	219,185	175,657
Advances under finance lease	3,043	1,701
Other assets	29,701	31,317
Fixed assets	16,850	13,952
Goodwill	-	1,984
Total Asset	762,881	540,147
LIABILITIES		



Deposit and current account	581,827	390,846
Due to other banks	14,448	323
Tax payable	5,710	4,148
Deferred taxation	2,671	2,751
Dividend payable	-	5,238
Other liabilities	58,773	75,843
Long term borrowing	22,101	-
	685,530	549,149
CAPITAL AND RESERVE		
Share capital	5,238	2,619
Share premium	15,858	15,858
Statutory reserve	13,452	10,699
Exchange difference	2,836	2,836
reserve		
General reserve	28,799	16,972
Bonus issue reserve	873	2,619

Reserve for small/medium scale industry	7,916	6,998
Core capital	74,972	58,601
Fixed asset revaluation reserve	2,379	2,379
Shareholders' funds	77,351	60,980
Total Liabilities	762,881	540,129

Source: First Bank of Nigeria PLC 2007 Annual report and account

FIRST BANK OF NIGERIA PLC

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED MARCH 31,

2007

	2007	2006
	₦M	₦M
Gross earning	79,299	61,243
Interest earning	51,245	37,218
Interest expenses	(13,237)	(7,750)
Net interest income	38,008	29,468
Commission and other income	28,054	24,025

	66,062	33,493
Overheads	(41,446)	(33,748)
Provision for bad and doubtful account	(2,519)	(3,617)
Profit on ordinary activities	22,097	19,831
Exceptional items	(3,822)	(3,038)
Profit before taxation after exceptional item	22,097	19,831
Current taxation	(3,882)	(3,038)
Differed taxation	80	(746)
Profit after taxation	(18,355)	16,152
Amortization of goodwill	(1,984)	(1,984)
Profit attributable to ordinary shareholder	16,371	14,169

APPENDIX II

FIRST BANK OF NIGERIA PLC

BALANCE SHEET AS AT MARCH 31, 2009

ASSETS	2009	2008
	NM	NM
Cash and balance with Central Bank	140,353	88,302
Due from bank and other financial institution	510,722	280,033
Treasury bills	17,697	115,480
Trading securities	151,111	93,396
Investments	65,336	71,532
Loans and advances	684,107	437,768
Advances under finance lease	11,769	10,292
Other assets	48,007	39,498
Fixed assets	38,320	29,155
Total Asset	1,667,722	1,165,461

LIABILITIES

Deposit and current account	1,071,838	661,624
Due to other banks	78,976	44,281
Tax payable	6,777	5,091
Deferred taxation	12,758	6,712
Other liabilities	116,975	78,492
Long term liabilities	30,642	29,414
	1,316,966	825,614
Capital reserves	12,492	9,945
Share capital	254,524	254,524
Share premium	33,284	18,023
Statutory reserve	2,836	2,836
Exchange reserve	42,334	40,214
General reserve	2,072	2,487
Bonus issue	11,193	9,439
Reserve for depreciation	348,675	337,468
scale indicator		

FIRST BANK OF NIGERIA PLC

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED MARCH 31, 2009

	2009	2008
	₦M	₦M
Gross earning	185,189	130,600
Interest earning	128,902	79,810
Interest expenses	(41,843)	(22,283)
Net interest income	87,059	57,527
Fees and commissions	29,114	23,418
Net interest income and commissions	116,173	80,945
Income on trading securities	16,194	16,447
Net income on securities trading	16,194	16,447
Other income	10,979	10,925
Operating expenses	(81,533)	(62,260)
Interest on long term borrowing	(1,744)	(2,218)

Provision for loans and advance	(12,469)	(6,152)
Provision for bad and doubtful accounts	(1,490)	333
	(97,236)	(70,292)
Provision on ordinary activities before exceptional item and before taxation	46110	38,020
Information technology development levy	(461)	(380)
Current taxation	(4,529)	(3,126)
Deferred taxation	(6,046)	(4,041)
Profit before taxation	35,074	30,473
Death with as follows		
Statutory reserve	5,261	4,571
Reserve for small/medium scale industries	1,754	1,523
General reserve	28,059	24,279
	35,074	30,473

Source: First Bank of Nigeria PLC Annual Report and Account