EVALUATION OF CREDIT RISK MGT ON THE PERFORMANCE OF NIGERIAN BANKS: A STUDY OF SELECTED BANKS.

By

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BEING A PROJECT SUBMITTED TO THE POSTGRADUATE SCHOOL OF AHMADU BELLO UNIVERSITY, ZARIA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF BUSINESS ADMINISTRATION (MBA)

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Declaration

I declare that the work in the project report entitled *evaluation of credit risk management on the performance of banks: A study of selected banks* has been performed by me in the Department of Business Administration. The information derived from the literature has been duly acknowledged in the text and a list of references provided. No part of this project report has been previously presented for another degree or diploma in this or any other university.

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Certification

This is to certify that this project titled *evaluation of credit risk management on the performance of banks: A study of selected banks* written by Magnus Omeje Ejikeme meets the regulations governing the award of the degree of Master of Business Administration (MBA) of Ahmadu Bello University, Zaria and it is therefore approved for its contributions to knowledge, and literary presentation.

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Dedication

This project is dedicated to the Almighty GOD for His Mercies and Grace during the course of this programme and project work.

Acknowledgement

I must express my profound gratitude and appreciation to Almighty GOD Who made it possible for me to complete my course. I will like to also thank my supervisor, Mal. Ladan Sahnun for his patience, advice and assistance during the course of this project work. I will not fail to mention all my hardworking lecturers who also made this program a success I say thank you all.

To my wonderful parent Mr. and Mrs. Ejikeme for their love, care, support and encouragement throughout my studies. My gratitude also goes to my brothers and sisters.

Abstract

The study aims at assessing merger and acquisition as a tool for corporate restructuring. The objectives of the study are: to find out if the volume of assets of banks improved after survival strategies of restructuring were employed: to find out how restructuring adopted by the banks have affected deposit mobilizations; to find out if the volume of loans and advances improved after adopting the restructuring strategies through sanitizing and restructuring; to know whether profitability of banks improved as a result of mergers and acquisition strategies adopted by banks after sanitization and restructuring. Primary sources of data collection where questionnaire was distributed to respondent which was used to test the hypothesis of the study using chi-square. The study revealed that Merger and Acquisition is a vital tool for corporate restructuring in the banking organisations and Merger and Acquisition is effective in achieving corporate restructuring in the banking industry. It is recommended that,: businesses in Nigeria should continue to employ the mergers and acquisition strategy as a tool for restructuring and reorganizing to foster growth in business in particular, the financial sub-sector of the economy should use the strategy to remain in business; to popularize merger and acquisition as a strategic option in our economy, the government should enact a, regulatory framework for merger and acquisition to meet changing needs and international standard.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Credit risk refers to the probability of incurring losses resulting from non-payment of loans or other forms of credit by debtors. Credit risks are faced by lenders to consumers, lenders to business, business and even individuals. Credit risks, nevertheless, are mostly encountered in the financial sector particularly banking institutions. The biggest risk facing banking and financial intermediaries, however, remains credit risk, the risk of customer or counter party default. In between the late 1990s were years of financial boom, as the number of players increased substantially in the system. The banks witnessed rising non-performing credit portfolios in banks and these significantly contributed to the financial distress in the banking sector. Also identified was the existence of predatory debtor in the banking system whose modus operandi involved the abandonment of their debt obligations in some banks only to contract new debts in other banks. The increase in the number of banks over-stretched the existing human resources capacity of banks which resulted into many problems such as poor credit appraisal system, financial crimes, accumulation of poor asset quality among others (Sanusi, 2002). The consequence was the increase in the number of distressed banks.

In Nigeria, the rising cases of bank failures have also become a major source of concern for policy makers. It is not surprising to find banks to have non-performing loans that exceed 50 per cent of the bank's loan portfolio. The deregulation of the financial system embarked upon from 1986 allowed the influx of banks into the banking industry. As a

result of alternative interest rate on deposits and loans, credits were given out indiscrimately without proper credit appraisal Philip (1994). The resultant effects were that many of these loans turn of to be bad.

In 1990, the CBN issued the circular on Capital Adequacy which relate bank's capital requirements to risk-weighted assets. It directed the banks to maintain a minimum of 7.25 percent of risk-weighted assets as capital; to hold at least 50 percent of total components of capital in capital and reserves; and to maintain the ratio of capital to total risk-weighted assets as a minimum of 8 percent from January, 1992.

Despite these measure and reforms embodied in such legal documents as CBN Act No. 24 of 1991 and Banks and other financial institutions (BOFI) Act. No.25 of 9111 as amended, the number of technically insolvent banks increased significantly during the 1990s. Since the banking crisis started in the mid 1990's, the CBN has had to revoke the licenses of many distressed bank.

However, bank management, adverse ownership influences and other forms of insiders' abuse coupled with political considerations and prolonged court process especially as regards debts recovery created difficulties to reducing distress in the financial system Sanusi, (2002). This therefore calls for efficient management of loan and other advances, by banks to prevent reoccurrences.

Credit risk management therefore is both a solution and a necessity in the banking setting. Credit risk management on the other hand is all about identification of and mitigation against dangerous situations or obstacles (risks) likely to stand against the ability of someone that has been trusted to borrow money today and pay back tomorrow.

The enormous losses recorded by Nigerian banks stemmed from a failure of one of the core functions of banks which is Risk management. If out banks are to succeed, it is imperative that they adopt and maintain effective risk management practices. The banks will need to develop and institute strong risk management culture which will emphasis strict adherence to limits and skilful management of risk exposure. Since exposure to credit risk continues to be the leading sources of problems in banks, banks should now have a keen awareness of the need to identify, measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred. The recent global financial crisis also requires the banks to regain enough confidence by public not only for the financial institutions but also the financial system in general and not just rely on the financial aid by the governments and central banks. It is critical for the banks to engage in better credit risk management practices. Nigeria banks are not an exemption. The past decade has seen dramatic losses in the banking industry. Banks that had been performing well suddenly announced large losses due to credit exposures that turned sour, however interest rate positions taken or derivative exposures that may or may not have been assumed to hedge balance sheet risk. However, a lot remains to be done. To ensure the long-term success of our financial sector. We must consciously and consistently increase our risk management appetite in Nigeria. The Basel Committee on Banking Supervision (1999) asserts that loans are the largest and most obvious source of credit risk while others are found on the various activities that the bank involved itself with. Therefore, it is a requirement for every bank worldwide to be aware of the need to identify measure, monitor and control

credit risk while also determining how credit risks could be lowered. This means that a bank should hold adequate capital against these risks and that they are adequately compensated for risks incurred. This is stipulated in Basel II, which regulates a bank about how much capital banks need to put aside to guide against the types of financial and operational risks banks face. In response to this, the commercial banks have almost universally embarked upon an upgrading of their risk management and control systems. Also, it is in the realization of the consequence of deteriorating loan quality on profitability of the banking sector and the economy at larger that this research work is motivated.

1.2 Statement of Problems

The economic well being of a nation is a function of advancement and development of her banking industry. Thus, economic activity could not be advancing/growing without the continuing flow of money and credit facility. They provide the bulk of the money supply as well as the primary means of facilitating the flow of credit. Consequence of the new financial environment has been rapidly declining profitability of the traditional banking activities. Thus in a bid to survive and maintain adequate profit level in this highly competitive environment, banks have tended to take excessive risks on depositors fund. But then the increasing tendency for greater risk taking has resulted in insolvency and failure of a large number of the banks. Therefore, the banks are exposed to risk such as credit, market, operational, interest rate and liquidity risk.

The major cause of serious banking problems continues to be directly related to lax credit standards' for borrowers and counterparties, poor portfolio management, and a lack of attention to changes in economic or other circumstances that can lead to a deterioration in the credit standing of a bank's counter parties. For most banks, loans are the largest and most obvious source of credit risk. Thus, in a bid to survive and maintain adequate profit level in this highly competitive environment bank have tended to take excessive risks. But, then the increasing tendency for greater risk taking has resulted in insolvency and failure of a large number of banks. It becomes clear that banks use a high leverage to generate an acceptable level of profit.

Failure to adequately manage these risks exposes banks not only to losses, but may also threaten their survival as business entities thereby endangering the stability of the financial system. Apart from unbiased subscription to best practice in credit management solutions, there is also the problem of inadequate training of credit personnel in the nation's banking market.

In the past and perhaps until now, most banks in Nigeria do not have clearly defined and adherently implemented credit-lending policies. What exists is more or less discretion of good judgment lending, a practice which has fuelled unacceptable incidence of bad debt, leading to stresses and depletion on liquidity position of the banks. In view of the foregoing and in line with the global recognition of the imperative of effective credit risk management and control systems in banks, Central Bank of Nigeria (CBN) provides guidelines to enable banks develop their respective strategy for managing each risk element as part of the overall strategy for evolving efficient risk management systems.

Despite the measures or Central Bank of Nigeria guidelines several banks have not put in place their respective strategy for management of risk element of their assets and other banks that have such strategies its seem it is not effective for the fact that they have a lot of troubled assets in their financial statements. These assets gave a false impression that balance sheet were stronger than they actually were. Most balance sheets were made up to reflect a sound financial position.

Since the emergence of 25 consolidated commercial banks in Nigeria in 2005, the industry players and other stakeholders have been faced with how best to manage the post-consolidation challenges, that confront the Nigerian banking industry and the economy. This perhaps is the compelling reason operators of the banking system in Nigeria are challenged to take more seriously the important issue of risk acceptance/rejection, which is often the point at which bankers fall into or escape the trap of greed Adedipe, (2005). The end of risk management for operators is risk mitigation, which emphasizes the protection of the bank's assets and by extension depositors' funds and capital. This study is directed at discussing the risk that banks face and how such risks affect their profitability.

1.3 Research Questions

This research work tries to address the problem stated. Therefore the following relevant questions need to be considered in order to achieve the desired result.

1. Is there relationship between credit risk management and the profitability of Nigerian banking system?
2. What is the impact of credit risk management on the profitability of Nigerian banking system?
3. What significant relationships between the non-performing loans and banks profitability?
4. What is the effect of loan and advance on banks profitability on Nigerian banks.

1.4 Objectives of the Study

The objectives of this study are:

1. To examine the relationship between credit risk management and the profitability of Nigerian banking system.
2. To examine the impact of credit risk management on the profitability of Nigerian Banking System.
3. To identify the significant relationships between the non-performing loans and banks profitability.
4. To evaluate the effect of loan and advance on banks profitability on Nigerian banks.

1.5 Hypotheses of the Study

This study considers the extent of relationship that exists between the core variables constituting Nigerian Bank default risk and the profitability. To achieve the study's objectives the following hypotheses were developed,

1. H_O: Credit risk management has no significant impact on the profitability of Nigerian banks.

   H_1: Credit risk management has significant impact on the profitability of Nigerian banks.

2. Ho: Loan and Advances does not have a significant influence on banks profitability.

   H_1 Loan and Advances have a significant influence on banks profitability.

1.6 Scope of the Study

The study is confined to the banking industry in Nigeria only. It is restricted to the benefits, and impact of credit risk management on the profitability of Nigerian banks. Therefore, considering the nature and characteristics of banking today our focus will be on commercial banks. The period covered for the study will be seven continues years of operation in the bank (2004 – 2010). Thus, enhancing a meaningful judgment on the subject matter.

1.7 Significance of the Study

The study will be able to depict clearly the benefits derived by every bank or financial institutions that employ required techniques in managing it credit risk and also reveal the relevance of coordinating effort that contribute to the overall financial institutions

ultimate goal in order to minimize risk and maximize return. The result of this study will be significant in the following areas;

It will equip bankers, staff and credit analyst with the knowledge to initiate and manage risk assets profitably with minimal losses both for structured and unstructured businesses in the corporate and middle market.

It will provide clear understanding of company and consumer risk that improves the understanding of credit decisions to financial analyst.

It will contribute to existing knowledge and area of future studies that will create a huge impact on the society by other researchers.

It will be helpful for other researchers who may be focusing on understanding the concept of credit risk management.

It will provide information to planners in coming up with strategies, plans and design that will strategically position them in the highly competitive, diverse and complex business environment that is experience at present.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The banking industry has achieved great prominence in the Nigerian economic environment and its influence on the economy today cannot be overemphasized. It also

play predominant role in granting credit facilities. Credit risk when an obligor fails to performs its obligations under a trading or loan contracts.

In view of the foregoing and in-line with the global recognition of the imperative of effective risk management and control systems in bank. It is important that banks needs to standardize the bank's credit operating procedures, raise operating efficiency, improve credit quality and minimize credit risks. This enables the bank to survive in the competitive environment and sustain the profit or gains from its business activities.

Credit risk management gives you critical information, tools, and techniques to ensure that credit portfolio-essential guidance on risk measuring, loan pricing and structuring, and portfolio diversification. The goal of credit risk management is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable limit.

In order to provide a framework of the understanding the impact of credit risk management on banks profitability. This chapter is divided into ten (10) section which include; concept of credit, principle of credit risk management, importance of credit risk management, bank and credit risk management, challenges to credit risk management and the theoretical framework.

2.2 Concept of Credit Risk

Credit inherently contains an element of the risk of default by the debtor. The bank granting the credit has no control over the inherent risk. Thus risk is determined by factor extraneous to the bank such as general unemployment levels, changing socio-economic conditions, debtors' attitudes and political issues.

Credit risk can be defined according to Basel Committee of Banking Supervision (BCBS) (2001) as the possibility of losing the outstanding loan partially or totally, due to credit events (default risk). According to the International Swaps and Derivatives Association (1999) credit events usually include events such as bankruptcy failure to pay and restructure.

According to BCBS (1999), banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transaction. Anthony (1997), credit risk arises from non-performance by a borrower. It may arise from either an inability or an unwillingness to perform in the pre-committed contracted manner.

Basel Committee on Banking Supervision in "Principles for the management of credit risk" (1999) defined credit risk as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. BIS (1999).

BCBS (1982) state that, lending involves a number of risks. In addition to risk related to the creditworthiness of the borrower, there are others including funding risk, interest rate risk, clearing risk and foreign exchange risk. International lending also involves country risk.

BCBS Working Paper No. 15 (2006), Historical experience shows that concentration of credit risk in asset portfolios has been one of the major causes of bank distress. This is true both for individual institutions as well as banking systems at large. It is therefore

important to measure concentration risk in credit portfolios of banks that arises from two sources, Systematic and Idiosyncratic**.** Systematic represents the effects of unexpected changes in macroeconomic and financial market conditions on the performance of borrowers. Idiosyncratic risk represents the effects of risks that are peculiar to individuals firms. The real risk from credit is the deviation of portfolio performance from its expected value. Accordingly credit risk is diversifiable, but difficult to eliminate completely. Counterparty risk comes from non-performance of a trading partner.

2.2.1 Types Credit Risk

According to Adedipe Associated Ltd (2008) first bank the following are types of credit risk.

- Industry risk
- Social risk
- Business/Economic risk
- Financial risk

Industry Risk:

These are the environmental factors vis-à-vis the borrowers industry such as economy, social, political, legal, technology, and government policies. The basis for the analysis of industry risk is as follows; Trend, cost structure, maturity, substitutes (domestic or imported); cyclicality (seasonality of the product or fortunes of the industry); profitability, dependence and regulation.

Social Risk

What are the trends in social, demographic and political factors; the social factors include;

- Demographic issues: - Population distribution, Geographical; age; education; occupation etc.
- Social issues: - Income categories and concentration; status; social and pressure groups, militias etc.
- Religion and culture: - Peculiarities, patterns etc.
- Political environment: - Democratic structures; institutions; direction; etc.
- Government policies: - Fiscal; monetary; commercial; reforms; legislation.

Business/Company Risk:

These are the company's future plans and the implications for; riskiness, profitability; financing needs and ability to repay loans.

Financial Risk

Look out for accounting risk, income recognition, expense capturing. Asset and liability categorization, asset and liability variation. Relate finding to non-financial risks to observe signs of over-trading.

Legal Risk

This is perhaps one of the most fundamental in commercial lending in Nigeria. There is yet some gap in setting and enforcement of the rule of law. That is why court cases involving banks and recalcitrant borrowers often last almost a lifetime!

Competition Risk

This is largely to do with how to compete successfully in the credit market, which has the following dimensions: -

- Winning new customers
- Retaining existing customers
- Basis for competition – rates, volume/capacity, complementary service, speed etc.

2.2.2 Objective for Creating Risk Assets

Credit, being the main avenue through which the bank's resources are deployed, as well as the foremost source of income generation, stands as a major contributor towards achieving the survival of the banking business. Accordingly, the Bank's Risk Assets mission is "to generate and manage a qualitative diversified loan portfolio that provides returns consistent with the bank's expectations in terms of assumed risk, return on assets and value added to individual credit transactions within the context of the overall regulatory requirements".

Objective for creating risk assets are;

1. To generate income, while ensuring liquidity, safety, solvency and growth;
2. Market for and obtain credit businesses that are consistent with the bank's risk assets acceptance criteria as defined in the credit policy.
3. Manage credit risk to that the bank's portfolio performance measured by levels of non-performing assets and write-offs is consistently one of the best in the industry.
4. In a timely and professional manner avoid granting credit facility to customers not able to, on a sustainable basis, satisfy the Risk Asset Acceptance Criteria; and,

5. Maintain a deposit ratio within the levels provided by regulatory authorities as may be prevailing from time to time.

2.3 Evaluation of Credit

The devastating effect of credit loss which is the aftermath of non-performing loans and advances makes sound evaluation of credit request an amount in all our banks. The Credit Officers of banks need to properly evaluate and articulate the projects, the customers and the prevailing economic situations.

Mather (1962) described three basic principles for evaluating credit as safety, suitability and profitability. In the first instance, safety of any advance or loan is of utmost importance. Banks must emphasize among other things, the character (honesty, integrity and reliability) of borrowers.

The probability that the amount granted would be repaid from the cash flows generated from the operations of the company must as a matter of requirement be high. The borrower must be able to provide acceptable security, which will serve as something to fall back on if the expected source of repayment fails.

Secondly, the bank should be satisfied with the suitability of a loan/advance. The purpose of the loan must be legal and non-conflicting with the economic and monetary policies of the government, Central Bank of Nigeria (CBN) guidelines and Banks and Other Financial Institutions Decree (BOFID). Certain ventures such as gambling, pool betting and speculative investment should be avoided while giving credit facilities to customers.

Also, profitability is a guiding force to any operation of the bank, including credit extension. As profit oriented institutions, banks necessarily expect their facilities to yield certain level of profits with which they can declare dividends to make shareholders happy. The interest charged on loans and advances constitutes a major source of income to the banks among others.

However, the enumerated principles of lending identified by Mather were discovered to be inadequate. There are some other factors which must be considered when granting loans and advances.

The factors are usually described as 'the canons of lending' and according to Adekanye (1983) are presented in question forms as follows:

a. How much does the customer want to borrow?
b. Why does the customer want bank finance or
c. What does he want it for?
d. How long does he want it?
e. How does he intend to repay?
f. Is the customer's business financially strong enough to keep going if there is a setback?
g. What security can he offer?
h. What is your assessment of the customer?

Adekanye (1983) emphasized that the Manager must obtain satisfactory answers to those questions before agreeing to a loan request. This proposition also has its flaws as

comprehensive credit ratings and credit management and recovery procedures which are the essential requirements of modern lending were not emphasized.

2.4 New Credit Rating/Scoring

The inadequacies of the traditional approaches to loan processing with its attendant problems arising from repayment and recovery have been the concerns of banking professionals over time. This then calls for an approach that can take care of the inadequacies in the credit processing and administration procedures.

The CBN (2005) maintained that the credit framework of banks should be designed to serve as a tool for monitoring and controlling risk inherent in individual credits. The concept has been referred to as 'credit scoring' in some quarters.

Credit scoring is a statistical method used to predict the probability that a loan or an existing borrower will default or become delinquent (Loretta 1997). This model assigns scores for potential borrower by estimating the probability of default of their loans based on borrower and loan characteristic data (Myra 2000). Information on borrowers to be used are applicant's monthly income, outstanding debt, financial assets, duration on the job, lending history of the customer, collateral owned, type of bank accounts, among others. The aforestated are potential factors that may relate to loan performance and they may be used in the scorecard. The non establishment of a credit bureau has been a source of concern when it comes to good credit rating in Nigeria.

The account management structure and pricing of the advance must commensurate with the risk involved. There is going to be a cut-off score or grade below which any loan request will be approved.

Risk ratings should be assigned at the inception of lending and retrieved at least half-yearly and when adverse events occur (CBN 2005). However, whenever deterioration in risk is noted, the score assigned to a borrower facility should be immediately changed.

2.5 Principle of Credit Risk Management

Since exposure to credit risk continues to be the leading source of problems in banks world-wide, banks should now have a keen awareness of the need to identify measure, monitor and control credit risk as well as to determine that they hold adequate capital against these risks and that they are adequately compensated for risks incurred. Although the principles contained in this research are most clearly applicable to the business of lending, they should be applied to all activities where credit risk is present.

According to Basel Committee of Banking Supervision "principle for the management of credit risk" (1999) specifically addresses the following areas:

i. Establishing an appropriate credit risk environment;

ii. Operating under a sound credit-granting process;

iii. Maintaining an appropriate credit administration, measurement and monitoring process and

iv. Ensuring adequate controls over credit risk.

Although specific credit risk management practices may differ among banks depending upon the nature and complexity of their credit activities, a comprehensive credit risk management program will address these four areas.

This usually involves a detailed study of six aspects of loan applications character, capacity, cash, collateral, condition, and control. All these procedures can be taken care of by six C's of credit evaluation. These are;

i. **Character: -** These refer to the customer's willingness to honour his obligations (Kurfi, 2003). According to Peter (2008). The loan officer must be convinced that customer has a well defined propose or requesting credit and a serious intention to repay. Responsibility, truthfulness, serious purpose and serious intention to repay all monies owned make up what a loan officer call character. If the loan officers fells that customer is insincere in promising to use borrowed funds as planned and in repaying as agreed, the loan should not be made, for it will almost certainly become a problem credit.

ii. **Capital:-** This refers to the customers ability to pay what he owes when due. According to Peter & Silvia. (2008), the loan officer must be sure that the customer has the authority to request a loan and this legal standing to sign a binding loan agreement. This customer characteristic is known as the capital to borrow money. A loan agreement signed by unauthorized persons could prove to be uncollectible and, therefore, result in substantial losses for the lending institution. This is identity of customer and guarantor.

iii. **Cash/Capital: -** This feature of any loan application centers on the question: Does the borrower have the ability to generate enough cash-in the form of cash flow to repay the loan? In general, borrowing customers have only three sources to draw upon to repay their loans.

- Cash flows generated from sales or income.
- The sale of liquidation of assets or
- Funds raised by issuing debt or equity security.

Any of these sources may provide sufficient cash to repay a loan. However, lenders have a strong preference for cash flow as the principal source of loan agreement because assets sales can weaken a borrowing customer and make the lenders' position as creditor less secure. Moreover, shortfalls in cash flow are common indicators of failing business and troubled loan relationships. This is one reason current banking regulations requires that the lender document the cash flow basis for approving a loan.

iv. **Collateral: -** This refers to the assets, which the customer may offer as a pledge for security of the credit extended to him. The loan officer must in particularly sensitive to such features as the age, condition, and degree of specialization of the borrowers' assets. Technology plays an important role here as well. If the borrowers asset are technological obsolete, they will have limited value as collateral because of the difficulty of finding for those assets the borrowers' income falter.

v. **Conditions: -** Acoording to Aminu (2003), this refers to the impact of the general economic trends on the customer or to specific developments in certain

sectors of the economy which may affect the customers ability to meet his obligation. The loan officer or credit analyst must be aware of recent trends in the borrower's line of work or industry and how changing economic conditions might affect the loan. To assess industry and economic conditions, most lenders maintain files of information-newspaper chippings, magazine articles, and research reports, on the industries represented by their major borrowing customers.

vi. **Control: -** According to Peter & Silva (2008), the cast factor in assessing a borrower's credit worthy status is control. This factors centers on such questions as whether changes in law and regulation could adversely affect the borrower and whether the loan request meets the lender's and the regulatory authorities standards for loan quality.

2.6 The Benefits of Effective Credit Risk Management

The benefits for effective credit management span the credit management lifecycle improving processes from origination, underwriting, and credit approval to portfolio analysis and ongoing management. The benefits are;

2.6.1 Improve Origination Activities

Analysts have the ability to integrate data from financial data providers, as well as the ability to automatically spread financial to compile a comprehensive picture of the prospective borrower or lessee. They also have the use of generated or customized

forecasts to fully integrated financials to uncover any abnormalities or unhealthy trends in the potential customer's business. Finally, analysts have the capability to thoroughly comprehend the prospects capital structure so that they make better decisions about which potential customers might be the most profitable in the long term.

2.6.2 Enhance Underwriting Analysis

Analysts have the ability to perform unlimited scenario analyses of prospective loans and leases. They are also able to manipulate model details using near-real-time intelligence. Finally, they have the flexibility in account management and reporting to support customization and changes to models in order to predict multiple outcomes, based on available information and analysis.

2.6.3 More-Effective Credit Approval Process

The integrity of the financial models, as well as the overall credit approval process, is enhanced. There is improved financial transparency in reporting, which is the key to enhancing the integrity of financial models. When information is integrated enterprise wide, calculations, metrics, and account definitions are standardized, and analysis is based on consistent financial statement.

2.6.4 More-Efficient Portfolio and Risk Management

Portfolio managers have the ability to quickly and easily update actual and use them for forecasting. It also provides the ability for analysts to comprehensively assess and manage portfolio risk to reduce loan-loss.

Credit risk management is a very important area for the banking sector and there are wide prospects of growth and other financial institutions also face problems which are financial in nature. Also, banking professional have to maintain a balance between the risks and the returns. For a large customer base banks needs to have a variety of loan products. If bank lowers the interest rates for the loans it offers, it will suffer.

Credit risk management is risk assessment that comes in an investment. Risk often comes in investing and the allocation of capital. The risk must be assessed so as to derive a sound investment decision. And decision be made by balancing the risk and returns. The risk of losses that result in the default of payment to the debtors is a kind of risk that must be expected. A bank to keep substantial amount of capital to protect its insolvency and to maintain its economic stability. The greater the bank is exposed to risk, the greater the amount of capital must be when it comes to its reserves, so as to maintain its solvency and stability.

Credit risk management must play its role then to help banks be in compliance with BASEL II Accord and other regulatory bodies. Banks must be active in managing the risk in various securities and derivatives; still progress has to be made for analyzing the credit and determining the probability of defaults and risk of losses. So credit risk management becomes a very important tool for the survival of banks. Gray & Brain (2002). Credit risk managements gives you critical information, tools, and techniques you need to ensure stable credit portfolios-essential guidance on risk measurement, loan pricing and structuring, and portfolio diversification.

2.7 Banks and Credit Risk Management.

The greater emphasis on credit risk is the continually greater globalization of financial markets. This contributes to the narrowing of risk premia in many markets. Lower returns demands a better understanding of risks. Integration is key to credit risk management, as banks measure credit risk by combining market exposures measures with default probability and recovery analysis. The importance of bank profitability can be appraised at the micro and macro levels of the economy. Hence, the basic aim of a banks management is toe4 achieve a profit as the essential requirement for conducting any business. (Bobakovia 2003). Bank credit has since recovered in a number of countries, and there have been significant changes in banking structure, performance and risk management capacity (BIS 2006).

Earlier Fama (1997) state that if the asset portfolio of bank is deemed too risky or its capital inadequate, the relevant supervisory agency will attempt to camped a charge in the banks' balance sheet. Regulators however, give more attention to regulating banks capital than the detail of assets portfolio because capital adequacy is seen as the most important single indicator of banking distress. Under the new dispensation, non-performing assets are dying or dead assets and do not yield any income, rather costs such as administrative expenses incurred on bad debt are to incurred at the banks expenses. As a result, many banks assets base kept divinely as well as their profit. However, bank mismanagement, adverse ownership influences and other form of insiders abuse coupled with political

considerations and prolonged court process especially as regards debt recovery created difficulties to reducing distress in the financial system (Sanusi 2002).

2.8 Nigerian Central Bank Role in Future Credit Provisioning Rules.

According to Andre (2009). Current CBN credit risk assets classification rules date back to the early 90's and is in serious need of reform. The CBN is in the fortunate position that it has not been an early adopter of standards that are now undergoing revision. Other than in many international jurisdictions, existing loan loss provision rules impacting banks. Profit and Loss in Nigeria are based on regulatory and not accounting standards. This enables the CBN to set the future standard for loan loss provisioning for Nigerian banks.

In line with the New CBN risk approach to regulation, one would expect that a dynamic provisioning approach based on expected loss. Irrespective of how the revised IFRS credit provisioning rules play out. In this way, the Nigerian banking industry can be accrued of through the cycle sustainable profit growth and country out performance during the next global economic down turn.

2.9 Credit Risk Mitigants

Credit risk can be moderated by enhancing the loan structure. Parties to a loan can arrange for mitigants such as collateral, guarantees, letter of credit, credit derivatives, and insurance during or after the loan is underwritten. Although these mitigants have similar effects, there are important distinctions, including the amount of loss protection, that

must be considered when assigning risk ratings. According to comptrollers' handbook (2000). Credit mitigants primarily affect loss when a loan default and, expect for certain guarantees, generally do not lessen the risk of default. Therefore, their impact on a rating should be negligible until the loan is classified. The following are the primary forms of mitigation provides guidance for determining an appropriate rating for a credit with a weak or potentially weak borrower and a credit mitigant.

1. **Collateral: -** Collateral, the most common form of credit risk mitigation, is any asset that is pledge, hypothecated, or assigned to the lender and that the lender has the right to take possession of the borrower defaults. The lender's rights must be perfected through legal documents. Once the lender has taken possession of the collateral, loan losses can be reduced or eliminated through sales of the assets. The level of loss protection is a function of the assets value, liquidity and marketability.

   The portion of the loan covered by the process from liquidating conservatively valued collateral normally should be classified substandard. Any remaining loan balance should be classified doubtful or loss depending on other factors.

2. **Securitization: -** Securitization of loans and other assets is a simple idea for raising new funds and reducing risk exposure. This securitization is using the security markets to fund a portion of a lenders' loan portfolio, allocate capital more efficiently, diversity fund sources and lower the cost of fund raising.

3. **Loan Guarantees: -** One of the most rapidly growing of all risk-focused markets is recent years has been the market for financial guarantees. Instrument used to

enhance the credit standing of a borrower to help insure lenders against default and to reduce the borrowers' financing costs. (Peter and Sylvia, 2008).

If a guarantee is to enhance a credit's risk, rating, the guarantor must display the capacity and willingness to support the debt. Once demonstrated, a strong guarantee can mitigate the risk default or loss and justify a more favourable rating, despite an obligor's well-defined weaknesses.

4. **Letter of Credit:** - Peter & Sylvia (2008). A letter of credit is a legal notice in which a financial institution guarantees the credit of one of its customers who is borrowing from another institution. A letter of credit (L/C) is a form of guarantee issued by a financial institution. A letter of credit rarely protects against default risk, unless it specifically can be drawn on for loan payments. A letter of credit issues is typically more credit worthy than a guarantor.

   When a letter of credit that protects against default is obtained from a high-quality institution, it may affectively prevent defaults and losses. The issuers low credit risk substantially mitigates the borrower's higher credit risk. Before a loss scenario could develop, both the borrower and the letter of credit issuer would have to default.

   A standby letter of credit pays only when the obligor fails to perform. It is a contingent obligation of the letter's issuer. Managers can use various devices to reduce risk exposure from standby, they have issued such as:-

- Frequently renegotiating the terms of any loans extended to customers who have standby L/C's.

- Diversifying standby L/Cs issued by region and by industry to avoid concentration of risk exposure.
- Selling participations in standby in order to share risk with other lending institutions.

5. **Credit Derivatives: -** Securitizing assets, loan guarantees, and issuing letter of credit can help to reduce non only interests-rate risk exposure but also exposure to credit risk. The credit derivative-is an over-the counter agreement offering protection against loss when default occurs on a loan, bond, or other debt instrument. The credit derivative market today is one of the fastest growing in the world. Peter Silvia (2008). Credit derivatives can be used to manage capital, manage loan portfolios, and mitigate risk in individual transactions. Most of these credit derivatives mitigate loss, but they do not materially mitigate default risk. Standard types of derivation are: -

a. **Credit Swap: -** Where two lenders agree to exchange a portion of their customers' loan agreement.
b. **Credit Default Swaps:** - Usually aimed at lenders able to handle comparatively limit declines in value, but wanting insurance against serious losses.
c. **Credit Option:** - Which guards against losses in the value of a credit asset or helps to off-sets higher borrowing costs that may occur due to changes in credit rating.
d. **Credit Linked Notes:** - Fuses together a normal debt instruments, such as a bond, plus a credit option contract to give a borrower greater payment flexibility.

6. **Credit Insurance: -** This is a recent innovation for commercial loans, is not yet used extensively. Examiners should for coverage-limiting insurance underwriting specifications. Such as deductible amounts and exclusion of certain loss events. Additionally, the issuers' financial strength and default risk should be evaluated. If the underwriting is acceptable and the insurer is strong, insurance can enhance a credit risk rating in much the way the letter of credit (L/C) dues.

2.10 Review of Related Literature

BCBS (1999) observed that banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transaction. Anthony (1997) asserts that credit risk arises from non-performance by a borrower. It may arise from either an inability or an unwillingness to perform in the pre-committed contracted manner. Brownbridge (1998) claimed that the single biggest contributor to the bad loans of many of the failed local banks was insider lending. He further observed that the second major factor contributing to bank failure were the high interest rates charged to borrowers operating in the high-risk. The most profound impact of high non-performing loans in banks portfolio is reduction in the bank profitability especially when it comes to disposals.

BCBS (1982) stated that lending involves a number of risks. In addition to risk related to the creditworthiness of the borrower, there are others including funding risk, interest rate

risk, clearing risk and foreign exchange risk. International lending also involves country risk. BCBS (2006) observed that historical experience shows that concentration of credit risk in asset portfolios has been one of the major causes of bank distress. This is true both for individual institutions as well as banking systems at large.

Robert and Gary (1994) state that the most obvious characteristics of failed banks is not poor operating efficiency, however, but an increased volume of non-performing loans. Non-performing loans in failed banks have typically been associated with regional macroeconomic problems. DeYoung and Whalen (1994) observed that the US Office of the Comptroller of the Currency found the difference between the failed banks and those that remained healthy or recovered from problems was the caliber of management. Superior mangers not only run their banks in a cost efficient fashion, and thus generate large profits relative to their peers, but also impose better loan underwriting and monitoring standards than their peers which result to better credit quality.

Koehn and Santomero (1980), Kim and Santomero (1988) and Athanasoglou et al. (2005), suggest that bank risk taking has pervasive effects on bank profits and safety. Bobakovia (2003) asserts that the profitability of a bank depends on its ability to foresee, avoid and monitor risks, possible to cover losses brought about by risk arisen. This has the net effect of increasing the ratio of substandard credits in the bank's credit portfolio and decreasing the bank's profitability (Mamman and Oluyemi, 1994). The banks supervisors are well aware of this problem, it is however very difficult to persuade bank mangers to follow more prudent credit policies during an economic upturn, especially in

a highly competitive environment. They claim that even conservative mangers might find market pressure for higher profits very difficult to overcome.

The deregulation of the financial system in Nigeria embarked upon from 1986 allowed the influx of banks into the banking industry. As a result of alternative interest rate on deposits and loans, credits were given out indiscrimately without proper credit appraisal (Philip, 1994). The resultant effects were that many of these loans turn out to be bad. It is therefore not surprising to find banks to have non-performing loans that exceed 50 per cent of the bank's loan portfolio. The increased number of banks over-stretched their existing human resources capacity which resulted into many problems such as poor credit appraisal system, financial crimes, accumulation of poor asset quality among others (Sanusi, 2002). The consequence was increased in the number of distressed banks.

However, bank management, adverse ownership influences and other forms of insider abuses coupled with political considerations and prolonged court process especially as regards debts recovery created difficulties to reducing distress in the financial system (Sanusi, 2002). Since the banking crisis started, the Central Bank of Nigeria (CBN) has had to revoke the licenses of many distressed bank particularly in the 1990's and recently some banks has to be bailout. This calls for efficient management of risk involving loan and other advances to prevent reoccurrences.

A high level of financial leverage is usually associated with high risk. This can easily be seen in a situation where adverse rumours, whether founded or precipitated financial panic and by extension a run on a bank. According to Umoh (2002) and Ferguson (2003) few banks are able to withstand a persistent run, even in the presence of a good lender of

last resort. As depositors take out their funds, the bank hemorrhages and in the absence of liquidity support, the bank is forced eventually to close its doors. Thus, the risks faced by banks are endogenous, associated with the nature of banking business itself, whilst others are exogenous to the banking system.

Owojori et al (2011) highlighted that available statistics from the liquidated banks clearly showed that inability to collect loans and advances extended to customers and directors or companies related to directors/managers was a major contributor to the distress of the liquidated banks. At the height of the distress in 1995, when 60 out of the 115 operating banks were distressed, the ratio of the distressed banks' non-performing loans and leases to their total loans and leases was 67%. The ratio deteriorated to 79% in 1996; to 82% in 1997; and by December 2002, the licences of 35 of the distressed banks had been revoked. In 2003, only one bank (Peak Merchant Bank) was closed. No bank was closed in the year 2004. Therefore, the number of banking licences revoked by the CBN since 1994 remained at 36 until January 2006, when licences of 14 more banks were revoked, following their failure to meet the minimum re-capitalization directive of the CBN. At the time, the banking licences were revoked, some of the banks had ratios of performing credits that were less than 10% of loan portfolios. In 2000 for instance, the ratio of non-performing loans to total loans of the industry had improved to 21.5% and as at the end of 2001, the ratio stood at 16.9%. In 2002, it deteriorated to 21.27%, 21.59% in 2003, and in 2004, the ratio was 23.08% (NDIC Annual Reports- various years).

In a collaborative study by the CBN and the Nigeria Deposit Insurance Corporation {NDIC} in 1995, operators of financial institutions confirmed that bad loans and

advances contributed most to the distress. In their assessment of factors responsible for the distress, the operators ranked bad loans and advances first, with a contribution of 19.5%.

In 1990, the CBN issued the circular on capital adequacy which relate bank's capital requirements to risk-weighted assets. It directed the banks to maintain a minimum of 7.25 percent of risk-weighted assets as capital; to hold at least 50 percent of total components of capital and reserves; and to maintain the ratio of capital to total risk-weighted assets as a minimum of 8 percent from January, 1992. Despite these measure and reforms embodied in such legal documents as CBN Act No. 24 of 1991 and Banks and other financial institutions (BOFI) Act No.25 of 1991 as amended, the number of technically insolvent banks increased significantly during the 1990s.

The role of bank remains central in financing economic activity and its effectiveness could exert positive impact on overall economy as a sound and profitable banking sector is better able to withstand negative shocks and contribute to the stability of the financial system (Athanasoglou et al, 2005). Therefore, the determinants of bank performance have attracted the interest of academic research as well as of bank management. Studies dealing with internal determinants employ variables such as size, capital, credit risk management and expenses management. The need for risk management in the banking sector is inherent in the nature of the banking business. Poor asset quality and low levels of liquidity are the two major causes of bank failures and represented as the key risk sources in terms of credit and liquidity risk and attracted great attention from researchers to examine the their impact on bank profitability.

Credit risk is by far the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risk (Giesecke, 2004). Increases in credit risk will raise the marginal cost of debt and equity, which in turn increases the cost of funds for the bank (Basel Committee, 1999).

To measure credit risk, there are a number of ratios employed by researchers. The ratio of Loan Loss Reserves to Gross Loans (LOSRES) is a measure of bank's asset quality that indicates how much of the total portfolio has been provided for but not charged off. Indicator shows that the higher the ratio the poorer the quality and therefore the higher the risk of the loan portfolio will be. In addition, Loan loss provisioning as a share of net interest income (LOSRENI) is another measure of credit quality, which indicates high credit quality by showing low figures. In the studies of cross countries analysis, it also could reflect the difference in provisioning regulations (Demirgiic-Kunt, 1999).

Assessing the impact of loan activities on bank risk, Brewer (1989) uses the ratio of bank loans to assets (LTA). The reason to do so is because bank loans are relatively illiquid and subject to higher default risk than other bank assets, implying a positive relationship between LTA and the risk measures. In contrast, relative improvements in credit risk management strategies might suggest that LTA is negatively related to bank risk measures (Altunbas, 2005). Bourke (1989) reports the effect of credit risk on profitability appears clearly negative This result may be explained by taking into account the fact that the more financial institutions are exposed to high risk loans, the higher is the accumulation of unpaid loans, implying that these loan losses have produced lower

returns to many commercial banks (Miller and Noulas, 1997). The findings of Felix and Claudine (2008) also shows that return on equity ROE and return on asset ROA all indicating profitability were negatively related to the ratio of non-performing loan to total loan NPL/TL of financial institutions therefore decreases profitability.

The Basel Committee on Banking Supervision (1999) asserts that loans are the largest and most obvious source of credit risk, while others are found on the various activities that the bank involved itself with. Therefore, it is a requirement for every bank worldwide to be aware of the need to identify measure, monitor and control credit risk while also determining how credit risks could be lowered. This means that a bank should hold adequate capital against these risks and that they are adequately compensated for risks incurred. This is stipulated in Basel II, which regulates banks about how much capital they need to put aside to guide against these types of financial and operational risks they face.

In response to this, commercial banks have almost universally embarked upon an upgrading of their risk management and control systems. Also, it is in the realization of the consequence of deteriorating loan quality on profitability of the banking sector and the economy at larger that this research work is motivated.

2.11 Summary

This chapter explains the concepts of credit risk and describes the types of credit risk that affects banks profitability. It explains the process of developing credit risk management procedures, measuring of credit risk taking into consideration the probability of default,

exposure of credit and estimated rate of recovery. The principles and importance of credit risk management in bank were also explained. However, the banking sector and credit risk management were analyzed considering loans as either performing loans or non-performing loans.

Credit risk can be reduced or moderated by enhancing the loan structure. Such as collaterals; guarantees, letter of credit; credit derivatives and insurances can be use to mitigate risk. In conclusion the failure to adequately manage these risks exposes banks not only to losses, but many also threaten there survival as business entities thereby endangering the stability of the financial system.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methodology used in the study. This includes the basic research methods, methods of data collection, techniques of data analysis and the justification of the techniques.

3.2 Research Method

Deciding the primary method of investigation concerning a problem is an important consideration for a researcher to validate his conclusion. The method(s) adopted by a researcher in a particular study depends on the problem and the nature of investigation to be undertaken. This study is descriptive in nature, therefore, employs descriptive research method.

Descriptive research is a study that is concerned with the collection of data for the purpose of describing and interpreting existing conditions, prevailing practices, beliefs, attitudes and ongoing processes (Ndagi, 1999). It centers on the discovery of meaning.

Descriptive research is used when a description of a situation is needed. It is aimed at assessing situations as a prerequisite to inference and generalizations. In this accordance, this study is concerned with the collection of relevant data for the purpose of describing and interpreting the effect of credit risk management on the performance of commercial banks in Nigeria.

3.3. POPULATION AND SAMPLES OF THE STUDY

Population refers to a whole group of people or things of interest the research intends to investigate (Cavana et al. 2001). The target population of this study is the commercial banks on management of credit risk in Nigeria. A total of twenty five (24) banks operate in Nigeria and these constitute the population of the study. Osuala (2005) describe population as, the totality of units having certain defined characteristics in common. A population is that body of individuals in which the researcher is interested and to which he/she will generate his/her findings.

3.4 Sample Size of the Study

A sample is a portion of the population and is formed by selecting some members from a population. (Cavana et al. 2001). Osuala (2005) describe sample as a group of units drawn from the larger population that is a smaller representation of the whole group that is being studied. Therefore, during sampling design, the most important attributes under

investigation have to be observed to ensure that the most representative sample population to the study is used.

The target population of this research was all commercial bank in Nigeria. It has been suggested that a range of a minimum sample size of five (5) banks would be observed.

The sample used is restricted to commercial banks only. The banks chosen are five (5) in number and the choice of the banks is hinged on the availability of consistent data-set over the period. Therefore, select representations of the population that will give the true characteristics of the population.

3.5 Sources of Data

The sources of data describe those avenues in which data use for the conduct of the research. Osuala (2005) prescribe the two basic sources of collecting a valid data as the primary and the secondary sources.

a. The primary sources of collecting data involve the gathering of facts and figures relating to a particular phenomenon to enable the obtaining of exact information. Primary sources include interviews, questionnaire, observation etc.
b. The secondary sources of data describe those avenues in which data are collected for some purpose usually for administrative reasons. Data collected from these sources must be used with great caution. Secondary sources consist of text books, journals, related literatures for review and also written reports.

   However, for the purpose of this research the secondary sources are use in order to optimize qualitativeness in the finding and to enable acceptability.

3.6 Method of Data Collection

For every type of research there is a common requirement, which is data. The use of appropriate data and collection of such determines to a large extent the result of such a study research. To this effect there are various ways of collection data. Usually data are collected in the normal course of the research administration. Data collection could be grouped into primary and secondary sources. This study makes use of the secondary sources.

Relevant data and facts are also gathered in the form of reports, review of texts and other useful materials. Journals, official reports, statistics, newspaper, e.t.c.

In order to carry out the study, data was collected from the various issues of the Statement of Accounts and Annual Reports of the chosen banks, Central Bank of Nigeria Statistical Bulletin. The data include time series and cross section data on Loans and Advances, Non-performing Loan, Provision for loan loss, Income or Profit.

3.6 Techniques of Data Analysis

In order to analyze data with a view of resolving the problem and achieving the stated objectives of a study, there are various techniques that can be used. The techniques of analysis used in this study include; descriptive statistics, correlation and regression.

Descriptive statistics is used in research for the purpose of bringing the data into order. It aid data preparation, tabulation and summarization. Descriptive statistics is used to summarize mass data generated in the study, so that appropriate analytical methods could be used to further discover relationship among the variables in the study. Quantitative

descriptive analysis includes frequency distribution, measures of central tendency and measure of dispersion.

In this study, measure of central tendency is used to describe the distribution, or describe their profiles by condensing the data into a single figure which helps the researcher to know what is typical about the distribution.

The Pearson product moment correlation is used to measure the strength of association between two variables; one the dependent and the other independent variable (Lucey, 2002). The correlation coefficient can range from 1 indicating perfect positive correlation where variables change in the same direction as each other to -1 indicating perfect negative correlation where the dependent variable decrease linearly as the independent variable increases. When the value is close to (0) it implies that the linear relationship between the variables is weak.

3.6.3 Inferential Statistics

Regression is a tool used to forecast relationship between variables and estimate the line of "best fit" of the observed data. Koutsoyiannis (1977) observed that "regression analysis shows exact relationship whose meaning is that the variations in the dependent variable are fully explained by changes in the independent variables". Regression provides numerical estimates for the influence of each explanatory variable to the dependent variable. The primary task on this study is to consider the extents of relationship that exist between the core variables constituting Non-performing loan, loan & Advances and the Profit of banks.

The multiple regression model adopted in this study uses Ordinary Least Square (OLS) method in estimating the parameter of the model and is expressed as;

$$\Pi = \alpha_0 + \alpha_1 LA + \alpha_2 NPL + e$$

Where;

Π	=	Level of Commercial bank profitability in the study period.
α_0	=	Intercept.
LA	=	Rate of loan & Advances.
NPL	=	Rate of Non-performing loan.
e	=	error term.

3.7 Justification of Method and Techniques use

Techniques employed for the analysis of data in this study are descriptive statistics and inferential statistics. Descriptive statistics is used in the research to summarize the data generated for the study for the purpose of bringing it into order that can ease analysis. Mean as a measure of central tendency is the quantitative descriptive tool used in the study. Mean is a typical value that represents the value of every observation.

The Pearson product moment correlation is used in the study because it is very appropriate for measuring the extent of relationship between variables which the objective of the study seeks to address.

Inferential statistics is employed in the study to forecast relationship between variables and estimate the influence of each explanatory variable to the dependent variable.

3.8 Summary

Research methodology has been proven to be great importance to any research work. This is because it determines the appropriate procedures employed to the conduct of the research. The research method specifies the process use in the gathering, analyzing and interpreting of data. The research methods used for the research are the historical method, descriptive method, and case study method. Data source is from secondary sources. The techniques use for the collection of data relevant to the study includes both the questionnaire and interview. This instrument was chosen because it provides relevance, accurate, sufficient and adequate data for this topic. However, in this study, the inferential statistical tool is use in analyzing the data.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 Introduction

This chapter presents and analysis data collected from secondary sources. Data collected were analyzed by means of correlation and multiple regressions techniques. The hypotheses stated in chapter one is tested in the chapter.

4.2 Data Presentation and Test of Hypotheses

4.2.1 THE EFFECT OF LOANS AND ADVANCES AND NON PERFORMING LOANS ON THE PROFITABILITY OF NIGERIAN BANKS

The first and second hypotheses are tested in this section. To test these hypotheses the multiple regression model technique is employed. The average data is presented in table 4.1 while the complete data is in the appendix.

Table 4.1: Dependent and Independent Variables of the Regression Model

Year	Dependent Variable	Independent Variables	
	Profit After Tax (PAT)	Loans and Advances (LA)	Non Performing Loans (NPL)
2004	4,388.6	39,596	14,555.6
2005	4797.2	50.004.4	12,948.6
2006	6,573.6	87,078.2	11,821.6
2007	9,497	132,761.8	13,991.8
2008	15,867.8	238,288.4	33,239.8
2009	17511.8	267,452.8	65,992.7
2010	16,237.1	212,456.0	67,723.9

Source: Annual Reports and Accounts of the Sampled Banks (2010)

Table 4.2 Descriptive Statistics

Variable	Mean	Std Deviation	Minimum	Maximum	N	Label
PAT	8226.64	4726.60	4388.60	15876.80	6	Profit After Tax
NPL	17311.48	8965.21	11821.60	33239.80	6	Non Performing Loans
LA	109545.76	80710.26	39596.00	238288.4	6	Loans and Advance

Source: SPSS Output File

Table 4.2 indicates that on average the profit after tax for the sampled banks is about N8,226.64 million while Non performing loan and loans and advances have a mean of about N17,311.48 and 109,545.76 million respectively. Loans and advances has the highest standard deviation signifying its low contribution to the model, while profit after tax has the lowest standard deviation which indicates its significant contribution to the model.

The profit after tax during the study period lies between N4,388.60 million and N15,876.80 million. The non performing loan for the cross section of firms lies between N11821.61 and N33239.80 Million while loans and advances lies between N39,596 and 238,288.4 million Naira.

Table 4.3 Correlation Matrix

		Profit After Tax	Loans and Advances	Non Performing Loans
Profit	Person Correlation	1	0.9989	0.8982
After	Sig (2 tailed)		0.000	0.038
Tax	N	6	6	6
Loans	Pearson correlation	0.9989	1	0.8808
And	Sig (2-tailed)	0.000		0.048
Advances	N	6	6	6
Non	Pearson correlation	0.8982	0.8808	1
Performing	Sig (2-tailed)	0.038	0.048	
Loans	N	6	6	6

Source: SPSS Output File

Table 4.3 above shows that there is a positive relationship between profit after tax and loans and advances and non performing loans. The correlation coefficients between profit after tax and the explanatory variables are: loans and advances 99% and non performing loans 89%.

4.2.1.3 REGRESSION RESULT

Table 4.4 Variables in the Equation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig t
	B	Std Error	Beta		
(Constant)	1533.344985	208.766208		7.345	0.0180
LA	0.054261	0.002430	0.926550	22.329	0.0020
NPL	0.043279	0.021877	0.082089	1.978	0.1865

Source: SPSS Output File

From data in table 4.4, the regression model for this study is

Π = 1533.34 + 0.05**LA** + 0.04 **NPL**

In table 4.4 the coefficient for loans and advances is 0.054261 and it is highly statistically 0significant at the 5% level of significance while the coefficient for non performing loan is 0.043279 and it is not statistically significant at the 5% level of significance.

Table 4.5 Model Summary

Model	R	R Square	Adjusted R Square	Std error of the Estimate	Durbin - Watson
1	0.99961	0.99923	0.99846	185.69909	2.8614

Source: SPSS Output File

The Multiple R in table 4.5 is 0.99961. This indicates that, there is a strong positive correlation between banks profit after tax and their loans and advances and non performing loans. The R square of 0.99923 shows the percentage of the variance of banks profit after tax explained by the changes in loans and advances and non performing loans. The adjusted R^2 is 0.99846. This compliments the high explanatory power of banks loan

and advances and non performing loans on profitability. The Durbin Watson statistics is 2.86140. This indicates that the regression model is perfect and is free from the problem of autocorrelation, since the value is close to two

Table 4.6 Analysis Of Variance (significance of the Regression)

Model	DF	Sum of Squares	Mean Square	F*	SIGN F
Regression	2	89293945.24805	44646972.62403	1294.70989	0.008
Residual	2	68968.30395	34484.15197		
Total	4	89362913.5519			

Source: SPSS Output File

Testing the overall significance of the regression implies testing the null hypothesis against the alternative hypothesis.

The test of overall significance is also the F* = 1294.70989 which is compared with the critical F at the 5% level of significance with V1 =2 and V2 = 2 degrees of freedom.

Decision: Since the calculated F*(1294.70989) is greater than the critical F (19.00) obtained from the F- tables, we reject the first and second null hypotheses. Accordingly, we conclude that the regression is significant and that a linear relationship exists between the dependent and the independent variables. This conclusion corroborates the outcome of the correlation analyses in table 4.3.

4.3 Discussion of Findings

The results show the extent to which credit risk management, loans and advances and non performing loans affects the profitability of Nigerian banks. The message is that the

profitability of Nigerian banks has been highly responsive to credit risk management, loans and advances and non performing loans by banks both in the short and long run.

Additionally the result also reveals the extent to which credit policy by Nigerian banks have a significant effect on the profit. This means that the profit after tax has been responsive to the credit policy of Nigerian banks both in the short run and long run.

The findings is in support of Olajide (2000), Rhoades and Rutz (1982) and Mammanu and Olayemi (1994).

4.5 Summary

This chapter presents and analyses secondary data collected for the study. The regression analysis revealed that the profitability of the sampled banks can also be explained by the loans and advances and non performing loans. The study established that the profitability of Nigerian banks is responsive to credit risk management, loans and advances and non performing loans. Therefore base on these findings the two null hypotheses of the study were rejected.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

The purpose of this study was to determine the impact of credit risk management on the banks profitability. The scope of the study was for a period of six years (2004 – 2010) and it covers five sampled banks. Secondary data was used for the research work and the data was obtained from the financial Statement of the sampled banks for all the years covered by the study. The data used was Profit after tax, loans and advances and non performing loans. Profit after tax was the dependent variable while loans and advances and non performing loans served as the independent variables.

The analytical technique used was the descriptive, correlation and regression analysis. The regression results provided the estimate for the model. The estimate was used to interpret the relationship between the dependent and independent variables. The findings revealed that all the two independent variables have significant effect on the profitability of the sampled banks.

5.2 Conclusion

The following conclusions can be deduced from the findings of the study:

The credit policies of the sampled banks are basically influenced by various factors. The factors though may be similar in most banks but they are uniquely determined by the nature of the banks.

The credit risk, loans and advances and non performing loans are important variables in determining the profitability banks in Nigeria. Where a bank does not effectively manage its risk, its profit will be unstable.

Therefore, management need to be cautious in setting up a credit policy that will not negatively affects profitability and also they need to know how credit policy affects the operation of their banks to ensure judicious utilization of deposits and maximization of profit. Improper credit risk management reduce the bank profitability, affects the quality of its assets and increase loan losses and non-performing loan which may eventually lead to financial distress.

5.3 Recommendations

1. Central Bank of Nigeria for policy purposes should regularly assess the lending attitudes of financial institutions. One direct way is to assess the degree of credit crunch by isolating the impact of supply side of loan from the demand side taking into account the opinion of the firms about banks' lending attitude.
2. Strengthening the securities market will have a positive impact on the overall development of the banking sector by increasing competitiveness in the financial sector. When the range of portfolio selection is wide people can compare the return and security of their investment among the banks and the securities market operators. As a result banks remain under some pressure to improve their financial soundness.

3. Appropriate measures should be taken in mitigating high credit risk for banks to maximize their profits.
4. There is need for ensuring appropriate regulation in the banking sector since it contributes to the development of the economy.
5. The government should favorably control interest rate so that borrowers can be able to pay their loan when due.
6. Bankers and credit officers must not and ought not to absolutely rely on the information and data supplied by customers, inviting the customer for an approval discussion to obtain information on performance and prospect of the business and it should not only be done when an account wants to become bad.
7. An efficient credit department should be established to develop facts that are both timely and accurate, permitting more credit decisions. In addition interest rate should be responsive to maturity of the facility, gross yield and fees for commitments.
8. Allocation of authority is a must for any credit administration plan so also recruitment, training and retention of capable officers. However with advent of competition and more complex and specialized kinds of credit advance coupled with unpredictable nature of human character, there is the need to use experts and higher lending limits should be given.

Bibliography

Altunbas R.A. (2005): Mergers and Acquisitions and Bank Performance in Europe - The Role of Strategic Similarities. European Central Bank, working paper series, No.398

Anthony M.C. (1997): "Commercial Bank Risk Management; An analysis of the Process". The Wharton school. University of Pennsylvania. Financial institutions centres.

Athanasoglou, P., Brissimis, S N., and Delis, M D. (2005): ''Bank-specific, industry specific and macroeconomic determinants of bank profitability''. MPRA Paper No.153

Banking Supervision and Regulation (1998): "Sound Credit Risk Management and the use of Internal Credit Risk Ratings at Large Banking Organisations", Sr 98-25. Sup September 21, 1998. Washington D.C. www.federalreserve.gov.

Basel Committee on Bank Regulation (2004): "International Convergence on Capital Measurement and Capital Standards", BIS, June.

Basel Committee on Banking Supervision (1982): "Management of Banks' International Lending", Country Risk Analysis and Country Exposure Measurement and Control. www.bis.org

Basel Committee on banking Supervision (1999): "Principles for the Management of Credit Risk", CH – 4002 Basel, Switzerland Bank for International Settlements.

Basel Committee on banking Supervision (2001): "Risk Management Practices and Regulatory Capital: Cross-sectional Comparison". Basel Committee on Banking Supervision, www.bis.org

Basel Committee on Banking Supervision (2006): "Studies on Credit Risk Concentration", An Overview of the Issues and a Synopsis of the Results' from the research Task Force Project. www.bis.org

Basel Committee, (1998): ".International convergence of capital measurement and capital standards", Basel Committee on Banking Supervision

Basel Committee, (1999): ".Principles for management of credit risk", Basel Committee on Banking Supervision.

Bessis, J. (2002): Risk Management in Banking, John Wiley & Sons,

Bobakovia, I. V. (2003): "Raising the Profitability of Commercial Banks", BIATEC, Volume XI, retrieved on April, 2005 from http//www/nbs.SK/BIATEC/

Bourke, P., (1989): ''Concentration and other determinants of bank profitability in Europe, North America and Australia''. Journal of Banking and Finance 13, 65-79.

Brewer, Elijah III, and Thomas H. Mondschean. (1994): "An Empirical Test of the Incentive Effects of Deposit Insurance." Journal of Money, Credit, and Banking 26(1): 146-64.

Brownbrigde, M. (1998): "The Causes of Financial Distress in Local Banks in Africa and Implications for Prudential Policy", UNCTAD OSG/DP/132

Central Bank of Nigeria (2005): "Guidelines for Developing Risk Management Framework for Individual Risk Elements in Banks". Part of General Guidelines for the Development of Risk Management Processes issued in September.

Central Bank of Nigeria (2005): "Guidelines for Developing risk management: Framework for individual risk element in banks" retrieved from www.cenbank.org

Central Bank of Nigeria (2007): "Banking Supervision Annual Report". www.cenbank.org

Central Bank of Nigeria (2007): "Statistical Bulletins". www.cenbank.org

Central Bank of Nigeria/Nigerian Deposit Insurance Corporation (1995): "Distress in the Nigerian Financial Services Industry." CBN/NDIC Collaborative study.

Demirguc-Kunt, A., Huizinga, H., (1998): ''Determinants of commercial bank interest margins and profitability: some international evidence''. World Bank Economic Review 13, 379-408.

Demirguc-Kunt, A., Huizinga, H., (2000): "Financial structure and bank profitability". World Bank Mimeo.

DeYoung R. And Whalen G. (1994): "Banking Industry Consolidation: Efficiency Issues", Working Paper No. 110 A Conference of The Jerome Levy Economics Institute, Office of the Comptroller of the Currency, Washington, DC.

Felix A.T. and Claudine T.N. (2008): “Bank Performance and Credit Risk Management”, Unpublished Master Dissertation in Finance, University of Skovde retrieved from http://www.essays.se/essay/55d54c0bd4/

Gastineau G. L.(1992): Dictionary of Financial Risk Management, Swiss Bank Corporation, Chicago.

Gieseche, K., (2004),: ‘Credit risk modeling and valuation: an introduction’, Cornell University, Credit Risk: Models and Management, Vol. 2, London

Golin, J., (2001), The Bank Credit Analysis Handbook: A Guide for Analysts, Bankers and Investors, (John Wiley & Sons (Asia) Pre Ltd)

Guru, B.K., J. Staunton and B. Balashanmugam, (1999): “Determinants of Commercial Bank Profitability in Malaysia”, Paper presented at the 12th Annual Australian Finance and Banking Conference, Sydney, Australia, 16-17 December.

Heffernan, S., (1996), Modern banking in theory and practice, John Wiley and Sons, Chichester

Kim I. J, Ramaswamy K., Sunderesan S. (1993): “Does Default Risk in Coupons Affect the Valuation of Corporate Bonds? A Contingent Claims Model”. Journal of Financial Management, 22 No.3, 117-131

Kim, D. and Santomero, A. M. (1988): “Risk in Banking and Capital Regulation”, The Journal of Finance, 43(5)

Koehn, M. and Santomero A. M. (1980): “Regulation of Bank Capital and Portfolio Risk”, Journal of Finance 35(5).

Kosmidou K., F. Pasiouras, M. Doumpos and C. Zopounidis, (2003): “Assessing Performance Factors in the UK Banking Sector: A Multicriteria Methodology”, paper presented at the 4th annual conference of International Economics and Finance Society on "Finance and the International Economy" 28-29 November, London.

Kosmidou, K., F. Pasiouras, (2005): “The Determinants of Profits and Margins in the Greek Commercial Banking Industry: evidence from the period 1990-2002.”, Working Paper (Financial Engineering Laboratory, Department of Production Engineering and Management, Technical University of Crete).

Mamman, H. and Oluyemi, S. A. (1994): "Bank Management Issues and Restoring the Health of Nigerian Banks through Improving the Quality of Management/Employee", NDIC Quarterly, 4(4)

Miller, S.M., Noulas, A.G., (1997): "'Portfolio mix and large-bank profitability in the USA". Applied Economics 29 (4), 505-512.

Molyneux, P. and J. Thorton, (1992): "The determinants of European bank profitability", Journal of Banking and Finance 16 (6), 1173-1178.

Nigerian Deposit Insurance Corporation (1991). "Report on manpower satiation in the Nigerian naming Industry." NDIC Annual Report.

Nigerian Deposit Insurance Corporation (2007): Annual Reports and Accounts of Banks submitted to NDIC.

Owojori A. A., Akintoye I. R. And Adidu F. A. (2011): "The challenge of risk management in Nigerian banks in the post consolidation era", Journal of Accounting and Taxation Vol. 3(2), pp. 23-31

Philip, D. (1994): "Panacca to Distress in Banking", A paper presented at the UBA Management Retreat.

Robert D. and Gary W. (1994): "Banking Industry Consolidation: efficiency Issues", working paper No. 110 presented at the financial system in the decade ahead: A Conference of the Jerome Levy Economics Institute April 14-16, 1994.

Sanusi, J. (2002): "Central Bank and The Macroeconomic Environment in Nigeria", Quarterly Review, Vol. 03, No. 3 December.

Umoh P. N. (1994): "Bank Loans' Recovery: The Roles of the Regulatory / Supervisory Authorities". Judiciary Law Enforcement Agencies and the Press, NDIC Quarterly, 4(3): 8.

APPENDIX I

IME Series Data on Profit after Tax (Pat) of the Sampled Banks and their Average in Millions of Naira (Dependent Variable)

Year/Firms	Zenith Bank Plc	First Bank Plc	GTB Plc	UBA Plc	Diamond Bank Plc	Sum	Average
2004	5190.0	11483.0	4056.0	4525.0	833.0	26087.0	4388.6
2005	7156.0	12184.0	5330.0	4921.0	1021.0	30612.0	4797.2
2006	11489.0	14069.0	8677.0	11550.0	6930.0	52715.0	6,573.6
2007	17509.0	16371.0	13013.0	21441.0	11822.0	80156.0	9497
2008	45252.0	30473.0	21489.0	40825.0	6931.0	144970.0	15867.8
2009	18365.0	31734.0	27999.0	46149.0	4883.0	129130.0	17511.8
2010	26687.0	30419.0	31111.0	45923.0	6522.0	140662.0	16237.1

Source: Nigerian Stock Exchange Fact book (2010)

Appendix II

Time Series Data on Non Performing Loans (NPL) of the Sampled Banks and their Average in Millions of Naira (Independent Variable)

Year/Banks	Zenith Bank Plc	First Bank Plc	GTB Plc	UBA Plc	Diamond Bank Plc	Sum	Average
2004	229.0	2114.0	300.0	425.0	468.0	3536.0	14,555.6
2005	513.0	2642.0	830.0	510.0	378.0	4873.0	12,948.6
2006	923.0	3811.0	750.0	1148.0	205.0	6837.0	11,821.6
2007	1083.0	5429.0	1050.0	1530.0	230.0	9322.0	13,991.8
2008	2167.0	6325.0	2183.0	1830.0	270.0	12775.0	33,239.8
2009	4200.0	5238.0	2100.0	7060.0	390.0	18598.0	65,992.7
2010	6600.0	9431.0	4120.0	8944.0	421.0	29095.0	67,723.9

Source: Nigerian Stock Exchange Fact book and Annual Report (2010)

Appendix III

Time Series Data on Loans and Advances (LA) of the Sampled Banks and their Average in Millions of Naira (Independent Variable)

Year/Firms	Zenith Bank Plc	First Bank Plc	GTB Plc	UBA Plc	Diamond Bank Plc	Sum	Average
2004	33940.0	41605.0	12967.0	18059.0	6480.0	113051.0	39,596
2005	42100.0	44672.0	36168.0	17702.0	5932.0	146574.0	50.004.4
2006	100643.0	60980.0	40645.0	47621.0	4699.0	254588.0	87,078.2
2007	114586.0	77351.0	47433.0	164821.0	6579.0	410770.0	132,761.8
2008	344347.0	339847.0	161053.0	193041.0	7237.0	1045525.0	238,288.4
2009	335570.0	339847.0	170890.0	193041.0	7237.0	1046585.0	267,452.8
2010	341351.0	339847.0	176833.0	193041.0	7237.0	1058309.0	212,456.0

Source: Nigerian Stock Exchange Fact book and Annual Report (2010)

Appendix IV

Dependent and Independent Variables of the Regression Model

Year	Dependent Variable	Independent Variables	
	Profit After Tax (PAT)	Loans and Advances (LA)	Non Performing Loans (NPL)
2004	4,388.6	39,596	14,555.6
2005	4797.2	50.004.4	12,948.6
2006	6,573.6	87,078.2	11,821.6
2007	9,497	132,761.8	13,991.8
2008	15,867.8	238,288.4	33,239.8
2009	17511.8	267,452.8	65,992.7
2010	16,237.1	212,456.0	67,723.9

Source: Nigerian stock exchange fact book and annual (2010)