

**AN ASSESSMENT OF CREDIT RISK MANAGEMENT PRACTICES OF
AGRICULTURAL DEVELOPMENT BANK LIMITED**

KNUST

BY

BENJAMIN AGYEPONG, (BSc. Finance)

© 2015 Department of Accounting and Finance

A thesis submitted to Department of Accounting and Finance
Kwame Nkrumah University of Science and Technology School of Business
in partial fulfillment of the requirements
for the degree of

MASTER OF BUSINESS ADMINISTRATION FINANCE OPTION

School of Business, KNUST

College of Humanities and Social Sciences

AUGUST, 2015

DECLARATION

I hereby declare that this submission is my own work except for references which I have duly acknowledged towards the MBA degree and that to the best of my knowledge it contains neither materials previously published by another person nor materials which have been accepted for the award of any other degree.

Benjamin Agyepong
Student (PG **9608313**)

.....

Signature

.....

Date

Certified by:

Mr P.K. Oppong-Boakye
Supervisor

.....

Signature

.....

Date

Certified by:

Dr. K. O. Appiah
Head of Department

.....

Signature

.....

Date

DEDICATION

This project work is dedicated to my caring and loving wife, Mrs Ayesha Agyepong, and my children for their support and encouragement to me throughout the period of this work. I am forever indebted to them and pray God will abundantly bless and reward them.

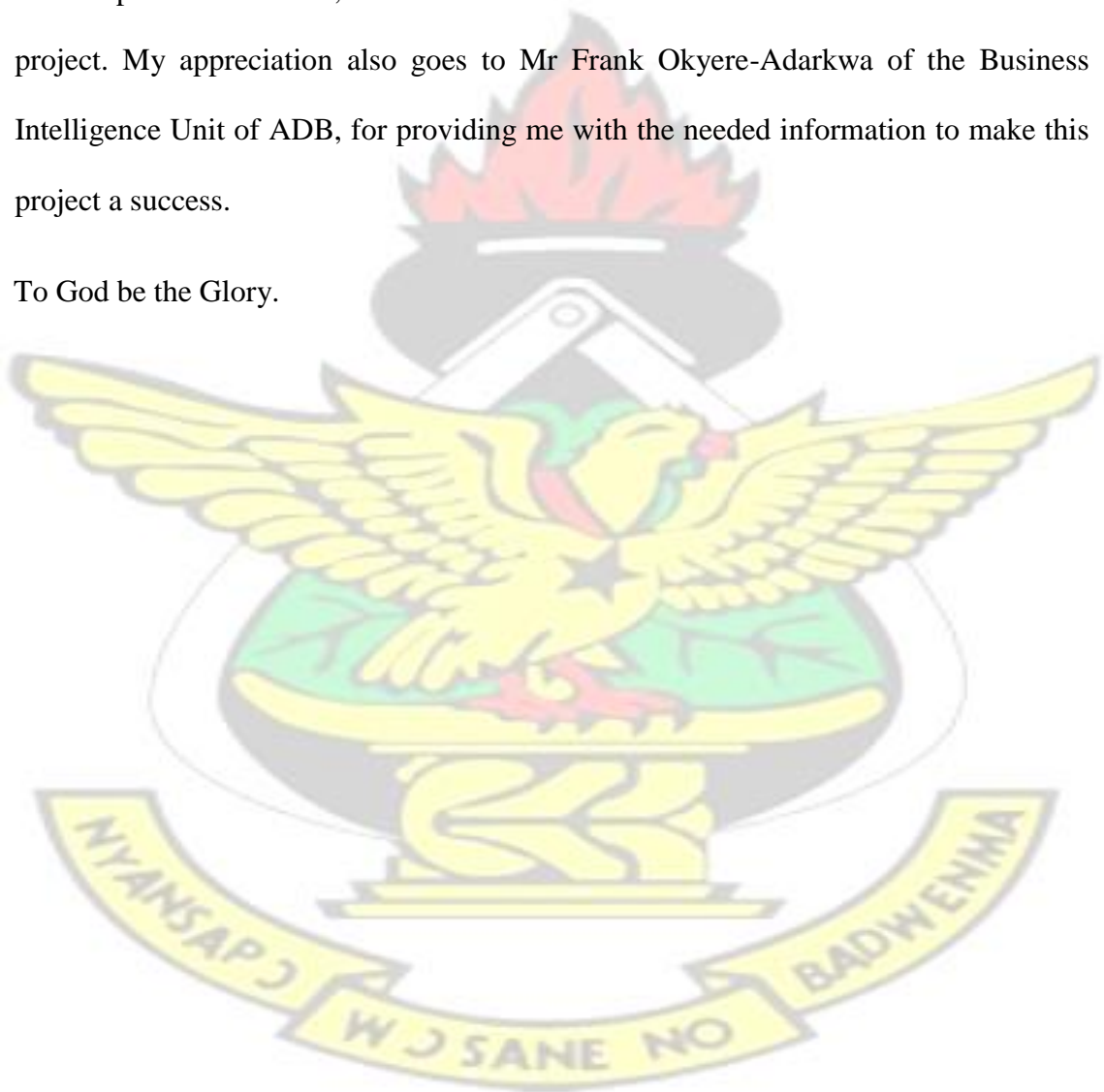


ACKNOWLEDGEMENT

I acknowledge my indebtedness and profound gratitude to my supervisor, Mr P.K. Oppong-Boakye of KNUST School of Business for offering constructive criticisms, suggestions and technical advice to ensure that this project is complete.

I also wish to record my heartfelt appreciation to staff and management of the Credit Risk Department of ADB, for their invaluable contribution towards the success of this project. My appreciation also goes to Mr Frank Okyere-Adarkwa of the Business Intelligence Unit of ADB, for providing me with the needed information to make this project a success.

To God be the Glory.



ABSTRACT

Credit risk management is a key concept in banking which is given much attention among banks across board. This study assessed the credit risk management practices of ADB Bank Ltd. The study employed a qualitative descriptive approach in its research methodology. The Head of Credit of ADB, head office, served as the respondent for the study. The credit portfolio of ADB from the years 2012 to 2014 also served as a key source of data for the study. The findings of the study proved that ADB has a good credit risk management practices which is being reflected in its loan granting, evaluation and monitoring processes. Per the findings of the study, loan applicants are assessed by credit officers based on their capacity, character, capital, conditions and collateral which is popularly referred to as the five C's of credit. Further the credit officers together with the relationship managers are responsible for ensuring the repayment of loans by clients. The study further showed that ADB Bank complies to all the regulations enshrined by the Bank of Ghana which comprises of provision of restrictions on lending and investment by banks (Bank of Ghana Act 2004, Act 673/ PART VI), regulation on Liquidity of banks (Bank of Ghana Act 2004, Act 673/PART IV), regulation on Capital and Reserve of banks (Bank of Ghana Act 2004, Act 673/PART III). The study concludes that to a greater extent ADB Bank Ltd has good credit risk management practices that ensure a considerable level of profitability. However, the researcher augments that there are key loopholes in the management of credit risk at ADB due to the fact that they are exposed to a considerable level of credit loss. The study therefore recommended the need for the training of credit officers on better ways of assessing the creditworthiness of clients in order to reduce the rate of repayment defaults among clients. Further the study recommended the need for management of ADB to come up with a policy that will ensure the disbursement of current

loans whiles cutting down drastically the approval of loans which have the potency of becoming doubtful or loss to the bank.

KNUST



TABLE OF CONTENTS

CONTENT	PAGE
DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	i
TABLE OF CONTENTS	i
LIST OF TABLES	iv

CHAPTER ONE1

INTRODUCTION.....1

1.1 Background to the Study
1

1.2 Problem Statement
6

1.3 Research Objectives
7

1.4 Research Questions
7

1.5 Justification of the Study
8

1.6 The scope of the Study
9

1.7 Limitations of the Study.....
9

1.8 Organization of the Study
10

CHAPTER TWO11

LITERATURE REVIEW11

2.1 Introduction
11

2.2 An Overview of Credit Risk
11

2.2.1 Pure or Speculative Risk
11

2.2.2 Diversifiable Versus Non-Diversifiable Risks.....	12
2.3 Types of credit risk	14
2.3.1 Credit default risk	14
2.3.2. The credit spread risk	15
2.4 Sources of credit risk	15



2.4.1 External Risk Factors	16
2.4.1.1 Economic Conditions	16
2.4.1.2 Competition.....	16
2.4.2 Internal Risk Factors	16
2.4.2.1 Underwriting Standards	16
2.4.2.2 Competence of Staff	17
2.4.2.3 Management Information Systems (MIS)	17
2.4.2.4 Inappropriate Evaluation of Credit Quality	17
2.4.2.5 Introduction of New Products or Services without Proper Risk Assessment ..	18
2.5 Control and Management of Credit Risks	18
2.6 Empirical Review.....	32
CHAPTER THREE	41
RESEARCH METHODOLOGY AND PROFILE OF ADB BANK LIMITED .	41
3.1 Introduction	41
3.2 Research Design.....	41
3.3 Sampling Design	42
3.3.1 Population	42
3.3.2 Sample Size and Sampling Techniques	42
3.4 Sources of Data and Instruments	43
3.5 Data Collection Instrument	43
3.6 Data Analysis	43
3.7 Profile of ADB Bank Limited	43
3.7.1 Overview	43
3.7.2 Vision	44
3.7.3 Mission	45
3.7.4 Values	45
3.7.4.1 Customer Excellence	45
3.7.4.2 Teamwork	45
3.7.4.3 Creativity.....	45
3.7.4.4 Aggressiveness (Market Place)	46

3.7.4.5 Accountability	46
3.8 Key Products and Services	46
3.8.1 Categorization of Segments	46
3.8.1.1 Retail Banking	47
3.8.1.2 Corporate Banking	47
3.8.1.3 SME Banking	47
3.8.1.4 Agricultural Financing	47
3.8.1.5 Treasury	47
3.8.1.6 Trade Finance.....	48
3.8.1.7 Transaction Banking	48
3.9 Risk Management and Supervision	48
CHAPTER FOUR	51
DATA PRESENTATION, ANALYSIS AND DISCUSSION	51
4.1 Introduction	51
4.2 Loan Granting, Evaluation and Monitoring Processes at ADB.	51
4.3 Difficulties in Compliance with Regulatory Policies issued by the Bank of Ghana	53
4.4 Assessment of ADB's Loan Recovery Rate from 2012 to 2014.	54
CHAPTER FIVE	58
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION	58
5.1 Introduction	58
5.2 Summary of Findings	58
5.3 Conclusion of the Study	59
5.4 Recommendations	60
5.5 Suggestions for Future Studies	61
REFERENCES	62
APPENDIX	68

LIST OF TABLES

TABLE	PAGE
Figure 1: Annual Credit Portfolio of ADB Bank for the years 2012-2014	54
Table 2: Annual Credit Portfolio of ADB Bank for the year 2013	55
Table 3: Annual Credit Portfolio of ADB Bank for the year 2014	56



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The idea of risk management is an exceptionally vital idea to numerous organizations as most financial choices spin around the corporate expense of holding risk on account of the critical risk it conveys regarding the survival of organizations. This issue is especially essential to banks since risk is a characteristic piece of their center business operations and activities. By it's extremely makeup, keeping money is an endeavor to deal with various and apparently restricting needs. Banks give liquidity on interest to investors through the present record and amplify acknowledge and in addition liquidity to their borrowers through lines of credit (Kashyap, Rajan & Stein, 1999). Because of these central parts, banks have dependably been worried with both dissolvability and liquidity. Generally, banks hold capital as a support against indebtedness, and they hold fluid resources to prepare for startling withdrawals by contributors (Saidenberg & Strahan, 1999). These have made banks effectively assess and take risks every day as a component of their center business forms. Given the focal part of business and credit risk in their center business, the banks' prosperity obliges that they find themselves able to recognize, survey, screen and deal with these risks in a sound and modern way.

Llewellyn (1992) affirmed that aggressive and administrative weights are prone to strengthen the focal key issue of capital and gainfulness and expense of value capital in molding managing an account system. Lately, banks' risk management has gone under expanding investigation in both the scholarly world and practice. Banks have endeavored to offer refined credit risk management frameworks that can represent borrower chance and maybe all the more critically, the risk decreasing advantages of

broadening crosswise over borrowers in a substantial portfolio. Controllers have even started to consider utilizing banks' global credit models to devise a capital sufficiency standard (Bank for International Settlements, 2004).

There is a far reaching view that a few organizations in the financial services industry had gone out on a limb before the onset of the late managing an account emergency. Financial developments empowering credit risk to be sold by the originator of a loan to an outsider are associated with having added to this risk taking. An expansive mixed bag of financial contracts and institutional setups can these days be utilized to exchange credit risk. Notwithstanding loan deals and securitizations, credit default swaps (CDS) assume a noteworthy part. Hedge Fund Manager George Soros alluded to acknowledge default swap contracts as "dangerous" and called for banning their utilization (Cullen, 2009).

With respect to the banks, the likelihood to exchange credit risk backings the "Originate to Distribute" (OTD) business model (Amidu, 2007). It frees capital, along these lines considering a more prominent volume of loans: "CDSs were made by J.P. Morgan's subordinate's bunch in 1994 to allow a bank to diminish its capital store necessity, which is in view of a bank's credit portfolio". In the meantime it made new routes for upgrading banks' benefit portfolios (Duffie, 2008). Banks have been utilizing these open doors and are accordingly the predominant players on both sides of businesses for CDS. An expanded significance of purchasing CDS keeping in mind the end goal to support banks' exchanging has been accounted for by the British Bankers Organization (Mengle, 2007).

Parallel to the quick development of credit risk exchange subsequent to the middle of 1990s', there has been a continuous talk about the part of capital ampleness regulation to impact bank conduct and make banks more hearty against stuns, along these lines, to "reinforce the soundness and solidness of banks" in the typical Basel parlance. Capital sufficiency regulation influences the most extreme volume of loans a bank can pass out under a given level of capital. Since credit risk exchange frees capital from administrative obligations, credit risk exchange and capital sufficiency regulation interact (Pausch & Welzel, 2012).

Pausch and Welzel (2012) additionally opined that measuring and overseeing credit risk has happened to focal significance for financial institutions. In many nations, banks' equity necessities are as of now attached to their presentation to credit risk. As indicated by the proposed Basel Accord II, the connection between credit risk and capital prerequisite will be managed in a great deal more detail. Banks will be permitted to ascertain their credit risk introduction and along these lines their value necessities on the premise of their internal rating models. Maybe much more essentially, the quest for shareholder quality obliges that banks can precisely measure their exposures to unforeseen credit misfortunes. This is an essential for a right allotment of financial funding to different loaning activities and along these lines for improving capital planning choices.

As per Maurin and Toivanen (2012), amid the most recent financial emergency, banks' center capital ended up being lacking to cover disability misfortunes emerging from

both loan and security portfolios. Subsequently, a few banks expected to reinforce their capital base and decrease their presentation. So as to decrease the risk of comparable emergencies later on and to improve the managing of an account's versatility division, another administrative structure, the supposed Basel III bundle, was set, inferring more stringent capital prerequisites for financial institutions (BIS, 2010a) and the Ghanaian banking industry was not left out either. The Bank of Ghana (BoG) has of late reported that banks working in Ghana would be obliged to have expressed capital of at the very least GH¢60million. For new banks entering the business sector, this would be a condition for the issuance of an operating license. For others already established, BoG has given timelines for full compliance as follows; End of 2009 for banks with majority foreign shareholding (foreign banks); and End of 2012 for banks with majority Ghanaian shareholding (local banks) (Ghana Banking Survey, 2008).

On the other hand, banks work above least capital proportions with an extra timefluctuating capital cradle which, together with the administrative capital, structures banks' inward target capital proportion. On account of a capital shortage, banks look to alter their asset report to close the gap and achieve the inward target. They do as such by expanding center capital, changing the security portfolio, decreasing the risk presentation or contracting loans giving to the economy. Since expanding capital is exorbitant, particularly amid downturns when it is most expected to ingest misfortunes, banks' conformity is prone to weigh contrarily on the supply of credit, movement up the expense of financing for the economy everywhere, and apply antagonistic impacts on monetary action. Subsequently, the observing of banks' capital hole and suggested deleveraging weights are of pertinence for the behavior of fiscal arrangement.

An exploration by Osei-Assibey and Bockarie, (2013) demonstrated that risk premium, the offer of non-performing loans in the banks' credit portfolio, level 1 capital ratio (leverage ratio) and local currency deposits levels decidedly and essentially influence the offer of loan supply to the private part in banks' procuring resources. Then again, loans to nearby local currency deposit and bank size have critical negative consequences for the offer of credits in banks resources. The study additionally discovers bank sort and the development rate of genuine Gross Domestic Product (an intermediary for financial action) to be essential determinants of the offer of credits in banks' procuring resources.

Cebenoyan and Strahan (2001) likewise led a comparable study where they tried how active management of bank credit risk exposure through the loan deals market influences capital structure, lending, benefits, and risk. The researchers found that banks that rebalance their C&I loan portfolio exposures by both purchasing and offering loans – that is, banks that utilize the loan deals market for risk management purposes as opposed to modify their possessions of credits - hold less capital than different banks; they likewise make more unsafe (loans to organizations) as a rate of aggregate resources than different banks. Holding size, leverage and lending activities constant, banks active in the credit deals business sector have lower risk and higher benefits than different banks.

Harping on this foundation, this study tries to uncover the credit risk management practices of ADB Bank Ltd.

1.2 Problem Statement

Strident risk management is critical for organizations; both vast and little, in light of the fact that a limitless number of money related choices tend to hang discriminatingly in an organization's capacity to deal with its risk exposures. Research using a loan risk has bloomed in the most recent five years (and in the new millennium) with a few researchers exploring and composing on different parts of risk management (Amidu & Hinson, 2006).

Bank-specific qualities have been demonstrated to impact bank credit supply (Maurin and Toivanen, 2012). German banks that were more influenced by the US money related emergency and misfortunes from the subprime exposures are demonstrated to have dismissed generally more loan applications and in this manner limited giving more than the less uncovered banks (Puri et al., 2010).

A lot of analysts have found that an individual bank's reaction to changes in capital is molded to bank's size. The after effects of Puri et al. (2010) are especially solid for smaller and more liquidity obliged banks and also for home loan credits. Hancock and Wilcox (1998) additionally demonstrate that small banks shrank their portfolios extensively more than vast banks because of the decrease in their own bank capital.

Houston et al. (1997) additionally found that loaning at large banks is less subject to changes in cash flow and capital. Jayaratne and Morgan (1999) found that moves in deposit supply influence loaning at small banks that don't have entry to the huge internal capital market.

A verifiable truth is that most banks tend to hold a lot of capital either for proficiency reasons or in light of the fact that the capital pad is set up as a safety measure against possibilities (unfriendly occasions or regulatory penalties); (Barrios and Blanco 2003 referred to in Zhu, 2008). The researcher likewise is of the perspective that banks are to hold enough capital cushions amid monetary downturns.

Notwithstanding the above expressed significance of credit risk management to banks as examined in different parts of the world, it is still a generally under-investigated region in the banking literature in Ghana hence the need for this study in attempt to fill the contextual gap.

1.3 Research Objectives

The main objective of the study is to examine the credit risks management practices employed by ADB Bank. Specifically, the study sought to:

- I. Evaluate ADB Bank's loan granting, evaluation and monitoring process.
- II. Ascertain the constraints, if any, faced by ADB Bank in conforming to the regulations of Bank of Ghana pertaining to credit risk management.
- III. Assess ADB Bank's credit or loan recovery rate from 2012 to 2014.

1.4 Research Questions

In line with this specific objectives stated above, this study intends to answer the following research questions:

- I. What are the processes for granting, evaluating, and monitoring loans granted by ADB Bank Ltd.?

- II. What are the constraints that ADB Bank faces in conforming to Bank of Ghana's regulations pertaining to credit risk management?
- III. What is the loan recovery rate of ADB Bank from years 2012 to 2014?

1.5 Justification of the Study

The study's relevance can be seen along three varying dimensions which incorporate research, practice and policy.

The present study contributes to the existing literature in at least three important ways. First, despite the importance of the banking sector to the domestic, regional, and international economies, there are only a few microeconomic studies performed in this area of research with respect to the relationship between credit risk management and lending decisions. Hence this serves as a model for further researches to be based on in the future.

With respect to policy making and practice, given the intense competition, the continued success of the banking sector depends critically on its productivity and efficiency. Furthermore, in view of the increasing competition resulting from the more liberalized banking sector, bank managements as well as the policymakers will be more inclined to find ways to obtain the optimal utilization of capacities, as well as making the best use of their scarce resources, so that these resources are not wasted during the production of banks' products and services. The intensification of competition is also expected to induce the interest in cost cutting, productivity, and efficiency of the banking sector. From the regulatory and policy making perspectives, it would be

reasonable to expect that the going forward policies will be directed towards enhancing the resilience, productivity, and efficiency of banks with the aim to intensify the robustness and stability of the financial system. This rendered the frontier-based approaches as attractive, since the methodology permits researchers to focus on productivity and efficiency.

1.6 The scope of the Study

This study was limited in its geographical scope to the Head Office of ADB. This is because, data was gathered from the Head Office of ADB, and therefore the findings of this study cannot be generalized to other banks in Ghana. On the contrary, the researcher has a good standpoint to generalize the findings to the branches of ADB across the country. This is because the bank operates a centralized integrated system which gives the indication that, what happens at the Head Office is a good measure of what happens at the branch level.

1.7 Limitations of the Study

This study had constraints which served as limitations to the study. Firstly, access to data posed a great challenge to the researcher. On numerous occasions, an interview appointment with the Head of Credit of the bank was unsuccessful because of the tight schedules of the respondent.

Moreover, scarcity of data was also another limitation to the study. The researcher requested for the credit portfolio of the bank from the years of 2010 to 2014. However, the bank only made available to the researcher the credit portfolio of the bank from the years of 2012 to 2014.

Time constraint was another limitation to the study. The time duration for the interview between the researcher and the interviewee was very short which made it difficult for the researcher to address all the items on the interview guide. Moreover, the time duration for the entire research process was not favorable to the researcher.

1.8 Organization of the Study

The study was organized into five chapters. Chapter one was made up of background to the study, problem statement, aims of the study, research questions, and justification of the study as well as scope and limitation of the study.

Chapter two constituted the literature review by providing theories related to the construct under study. And reviews of related studies to the topic under study were also made available here.

Chapter three deliberated on the methodology by providing the research design, population, sample size, sampling technique, materials for data collections, procedure involved in data collection as well as profile of ADB Bank Ltd.

Chapter four of the study constituted the presentation of data gathered, analysis and discussion. Data was analyzed and interpreted with respect to the aims and objectives of the study.

Chapter five constituted the summary of the findings, conclusion and recommendations for the study as well as recommendations for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The section embraces an overview of writing on the credit risk, the different credit risk sorts and the measures banks can utilize to hedge credit risk. The writing survey is done under two fundamental subtitles. Initially, the study gives a study of hypothetical writing with the perspective of conveying to the fore a review and a few models of credit risks. This would be trailed by the exact writing survey which is considered as the speculations' utilization to take care of issue.

2.2 An Overview of Credit Risk

As indicated by Calomiris & Wilson (2004), risk is a potential variety in results. Risk is available in each human attempt. At the point when risk is available the result can't be estimated correctly. Therefore the vicinity of risk is expected at whatever point the results of a demonstration give space for instability. Introduction to risk is made at whatever point a demonstration offers ascend to conceivable increase or misfortune that can't be anticipated (Machiraju, 2004). As indicated by Machiraju (2004) risk could take the type of pure or speculative, diversifiable and non-diversifiable risk.

2.2.1 Pure or Speculative Risk

Customarily, authors on risk management have recognized pure and speculative risks. Pure risk exists when there is a possibility of a misfortune however no shot of gain and a speculative risk exists when there is a possibility of gain and additionally a shot of misfortune.

As indicated by Calomiris & Wilson (2004), banks, similar to some other business organization, have the object of boosting profit for shareholders' ventures, in the wake of meeting every one of its commitments to different partners. The fundamental result of banks is credit; they then get enthusiasm for return for the utilization of their credit. Banks, in this way, confront speculative risk since they may pick up by accepting both principal and interest or lose either/both principal and interest.

2.2.2 Diversifiable Versus Non-Diversifiable Risks

A few risks influence about all people and firms in the meantime, different risks are confronted very nearly in isolation. Unless the appearance of a risk influences people and organizations in the same route and in the meantime, it is workable for the influenced elements to decrease their presentation to risks through pooling or sharing courses of action. A risk is diversifiable in the event that it is conceivable to decrease it through pooling or sharing courses of action. A risk is non-diversifiable if pooling courses of action are incapable in decreasing it for the members in the pool. In finance literature, these refinement are frequently utilized – "precise and non-orderly" or "market and unique" risk – and is vital in risk management in light of the fact that it influences the adequacy of pooling or risk sharing arrangements.

The field of credit risk as indicated by Polson (2008) has increased extensive energy because of the expanded rivalry in the field and the present difficulties in money related emergency. Credit risk is one of the primary risks of commercial banks that will influence the banks' capacity of practical operation since it structures parts of their obligations. Banks accept credit risk when they go about as mediators of trusts and credit risk management lies at the heart of commercial banking. Studies of banking

crises demonstrate that the most successive element in the disappointment of banks has been poor credit quality.

The credit risk management procedure of a bank is accepted to be a decent pointer of the bank's nature loan portfolio. Giesecke (2004) additionally embraced that credit risk is by a long shot the most significant risk confronted by banks and the accomplishment of their business relies upon exact estimation and productive management of this risk to a more noteworthy degree than whatever other risk. Increments in credit risk will raise the minimal expense of obligation and value, which thus builds the expense of trusts for the bank (Basel Committee on Banking Supervision, 1999). Researchers utilized various proportions to gauge credit risk. The proportion of Loan Loss Reserves to Gross Loan (LOSRES) is a measure of bank's advantage quality that demonstrates how a significant part of the aggregate portfolio has been accommodated however not charged off. Indicator demonstrates that the higher the proportion the poorer the quality and in this manner the higher the loan's risk portfolio will be. What's more, Loan misfortune provisioning as an offer of net interest income (LOSRENI) is another measure of credit quality, which demonstrates high credit quality by indicating low figures. Acknowledge risk developed as a critical risk management issue amid the 1990s. In progressively focused markets, banks started assuming more noteworthy credit risk in this period.

Overseeing credit risk will have to be supplemented with the distinguishing proof and estimation of credit risk. McNaughton (2001) declares that to align the default risk exposure of its credit and venture choice, and additionally to survey its credit risk introduction in off-balance sheet contractual arrangements, for example, loan

responsibilities, a financial institution's administrator needs to gauge the likelihood of borrower default. The capacity to do this to a great extent relies on the measure of data the financial institution has about the borrower.

Principally, banks' credit risk is isolated into two sections, each of which has the accompanying sub-parts:

1. Portfolio Risk

- a. Intrinsic Risk
- b. Concentration Risk

2. Transaction Risk

- a. The bank's credit organization for which it regulates the credit capacity.
- b. The bank's credit examination and investigation framework.
- c. The banks standard for guaranteeing credits.

2.3 Types of credit risk

As indicated by Dima and Orzea (n.d), there are two primary sorts of credit risk that a portfolio or position is presented to be specific, credit default risk and credit spread risk.

2.3.1 Credit default risk

This is the risk happening when an issuer of debt, obligor, is not able to meet its financial commitments. Where an obligor defaults, an investor for the most part acquires a loss

equivalent to the sum owed by the obligor less any recuperation sum which the investor recoups as a consequence of abandonment, liquidation or rebuilding of the defaulted obligor. All portfolios with credit introduction display credit default risk. The extent of credit default risk is portrayed by an organization's credit rating. The credit rating is declared after a formal investigation of the borrower. This examination is embraced by rating offices. The most known rating organizations are Fitch Ratings, Moody's and Standard & Poor's. To evaluate the investigation a few issues are examined. Among these issues there are: the balance sheet position and expected cash flows and revenues, quality of management, company's ability to meet scheduled interest and principal and an outlook of the industry as a whole.

2.3.2. The credit spread risk

This is the overabundance premium over the management or risk free rate needed by the business sector for tackling a certain accepted credit disclosure. Notice that the higher the credit rating, the smaller the credit spread. Along these lines, the credit spread risk is the risk of money related misfortune coming about because of changes in the level of credit spreads utilized as a part of the marking to-market of a fixed income product. Changes in observed credit spreads influence the portfolio's estimation and can prompt misfortunes for brokers or underperformance for portfolio managers.

2.4 Sources of credit risk

There are two primary sources of credit risk elements. These are external and internal risk factors.

2.4.1 External Risk Factors

2.4.1.1 Economic Conditions

Change in national income and unemployment will have sway using a loan risk through change in business cycle, exchange rate, interest rate, credit accessibility and credit quality. Liquidity crunch or money related issues can affect borrowers' capacity to satisfy their commitment. What's more legitimate and administrative change could bring about financial organizations to change how they manage an exchange, and in addition the quality and capacity of obligation accumulation.

2.4.1.2 Competition

Competition among financial establishments regarding development, gainfulness and the longing to be a business sector pioneer can bring about monetary organizations to bring down their gauges or dishonorably value their credit items. This could bring about higher expense of expanding non-performing credits.

2.4.2 Internal Risk Factors

2.4.2.1 Underwriting Standards

This is a procedure to figure out what sort of, to whom, for what reason and when credit ought to be allowed. Proper credit approbation procedure ought to include legitimate rules on both structure and philosophy in assessing borrowers' credit value, setting up of credit line and interest rate suitable to borrowers' risk and credits. Tolerant credit endorsing can bring about misfortunes to financial establishments particularly when obligation reimbursement can't be requested or security can't be seized in time. Numerous credit risks emerge from insufficiency in endorsing benchmarks and credit observing.

2.4.2.2 Competence of Staff

Credit officers without the important skill in the activities they are in charge of, be it credits, venture, management of problem assets or new products, can prompt poor loaning practice, incapable organization, and inevitably bring about loss to financial institutions.

2.4.2.3 Management Information Systems (MIS)

Risk will increment if management does not consistently get precise and auspicious reports on credits. The reports might involve essential data identifying with endorsing process, for example, monetary patterns, change in the structure of industry, or piece of the overall industry, ware costs, trade rates, including past due credits, credit focuses, and examination of problem loans.

2.4.2.4 Inappropriate Evaluation of Credit Quality

This problem may come about because of aggressive weight and credit development as they tend to put a period imperative on getting precise information. Besides, quick development and/or entry into new markets can entice the management to lend without adequate financial and monetary investigation. To encourage snappier decision making, management may reinforce credit choices by using basic indicators of credit quality which include borrowers' attributes, present and expected estimation of security or backing of a guardian organization or affiliated organizations.

2.4.2.5 Introduction of New Products or Services without Proper Risk

Assessment

Financial organizations that neglect to completely survey risk in the presentation of new credit products and don't introduce risk management framework preceding dispatch of new products speaks to another essential problem. With quick credit development and elevated rivalry, financial organizations are influenced to acquaint new products and services with the business without legitimate testing. Not in accordance with the standard of fitting credit endorsing, such practice can prompt many financial institutions to difficult problems. Financial institutions that practice legitimate credit endorsing typically test new products and services before acquainting with the general clients.

2.5 Control and Management of Credit Risks

The Basel Committee on Banking Supervision (1999; 2000; 2001) having surveyed the difficulties connected with banks management of credit globally, issued a few rules that have come to be viewed as benchmark credit risk management rehearses keeping in mind the end goal to loan sound practices for overseeing credit risk (NsiahAgyeman, 2010). The report of the Basel Committee on Banking Supervision (2000 referred to in Nsiah-Agyeman, 2010) on lay away risk concentrated around four fundamental zones as basic in each credit management process. These areas are:

- 1) Establishing a suitable credit environment.
- 2) Operating a sound credit granting process.
- 3) Ensuring satisfactory controls over credit risk.
- 4) Evaluation and implementation of protective covenants

The aforementioned components are explained underneath.

1. Establishing a suitable credit environment

The controlling and working spine of each organization is the top managerial staff as per (Wheehem & Hunger, 2008). As for every other area of a bank's dealings, the governing body has a genuine part to play in administering the credit granting and credit risk management elements of the bank. The governing body, as indicated by the report of the Basel Panel (2000) ought to have obligation regarding endorsing and intermittently (in any event every year) investigating the credit risk technique and critical credit risk strategies of the bank. Every bank ought to build up a credit risk methodology or arrangement that sets up the goals controlling its credit-giving activities and embrace the important strategies and techniques for directing such activities (Machiraju, 2004). The board needs to perceive that the system and strategies must cover the numerous activities of the bank in which credit introduction is a critical risk. Saunders (2007) likewise places that, these methods ought to mirror the bank's resilience for risk and the level of benefit the bank hopes to accomplish for bringing about different credit risks.

The technique ought to incorporate a bank's announcement readiness to allow credit taking into account exposure type (for instance, commercial, consumer, real estate) monetary part, geological area, currency, development and foreseen productivity (Matyszak, 2007). This may additionally incorporate the distinguishing proof of target markets and the general qualities that the bank would need to accomplish in its credit portfolio (including levels of enhancement and resistances).

The top managerial staff ought to occasionally survey the monetary consequences of the bank and, in light of these outcomes, figure out whether changes should be made to

the system. The board should likewise focus the bank's level capital amplexness (Boateng, 2004).

Wilson (1998) is additionally of the perspective that, the credit risk method of any bank ought to give progression in methodology. Henceforth, the system should contemplate the intermittent parts of the economy and the resultant changes in the structure and estimation of the aggregate credit portfolio. In spite of the fact that the procedure ought to be occasionally assessed and adjusted, it ought to be doable over the long haul and through different monetary cycles (Machiraju, 2004).

Fotoh (2005) upheld that the credit risk arrangements and methods ought to be successfully imparted all through the organization. All noteworthy faculty ought to be obviously made to comprehend the bank's way to deal with allowing and overseeing credit and ought to be considered responsible for agreeing to built-up approaches and methodology. The board ought to guarantee that senior management is completely fit for dealing with the credit activities directed by the bank and that those activities are done inside of the risk procedure, approaches and resistances endorsed by the board (Basel Council, 2001). The board ought to additionally frequently (i.e. in any event yearly), either inside of the credit risk system or inside of an announcement of credit strategy, favor the bank's general credit-allowing criteria (counting general terms and conditions). Furthermore, it ought to affirm the way in which the bank will sort out its credit-giving capacities, including autonomous audit of the credit granting and management capacity and the general portfolio (Nsiah-Agyeman, 2010).

While individuals from the directorate, especially outside directors, can be critical sources of new business open doors for the bank, once a potential credit is presented,

the bank's built up procedures ought to decide how much and at what terms credit is allowed (Machiraju, 2004), so as to stay away from irreconcilable circumstances, as declared by Wilson (1998). It is critical that board individuals don't override the credit-conceding and checking procedures of the bank.

Fotoh (2005) states that once the governing body has turn out with a sound credit management environment, senior management, led by the CEO, ought to have obligation regarding executing the credit risk method sanction by the directorate and for creating strategies and techniques for recognizing, measuring, observing and controlling credit risk. Such approaches and systems ought to address credit risk in the greater part of the bank's activities and at both the individual credit and portfolio levels. Senior management of a bank is in charge of executing the credit risk methodology endorsed by the top managerial staff. The obligation regarding actualizing the system incorporates guaranteeing that the bank's credit-giving activities fit in with the built up methodology, that composed techniques are produced and executed, and that loan approbation and audit obligations are obviously and appropriately allocated. Senior management should likewise guarantee that there is an intermittent autonomous inner appraisal of the bank's credit-granting and management capacities.

Credit strategies make the blueprint for giving and aide the credit-giving activities of the bank. Credit strategies ought to address such themes as target markets, portfolio blend, cost and non-value terms, the structure of cutoff points, and endorsement powers (Basel advisory group, 2001). As indicated by Boateng (2004), a foundation of sheltered and sound saving money is the outline and execution of composed strategies and techniques identified with recognizing, measuring, checking and controlling credit risk.

Harper (2008) additionally certified that such approaches ought to be obviously characterized, predictable with reasonable managing an account hones and significant administrative characterized, reliable with judicious saving money rehearses and important administrative necessities, and sufficient for the bank's way and this may be troublesome for little banks. Regardless, there ought to be satisfactory checks set up to loan sound credit choices. The arrangements ought to be composed and executed inside of the connection of inner and outer elements, for example, the bank's business sector position, exchange region, staff abilities and innovation. Strategies and techniques that are legitimately created and executed empower the bank to: (i) keep up sound credit-conceding measures, (ii) screen and control credit risk, (iii) appropriately assess new business opportunities; and (iv) identify and direct issue credits (Machiraju, 2004).

As indicated by Sinkey (1998 referred to in Nsiah-Agyeman, 2010), banks consider the involvement of the Chief Executive Officer (CEO), information generation and processing, and supervision as key elements of their risk management and reporting systems. The instruments of a bank's general risk management and reporting framework lay accentuation on variables, such as:

- I. Corporate organization structure
- II. Organization of risk management
- III. Organization of loaning
- IV. Approval procedure
- V. Credit organization
- VI. Risk management capacity
- VII. Loan quality reporting

The Chief Operating Officer (COO) must be effectively occupied with the detailing and execution of credit arrangements that should coordinate the general risk management and reporting arrangement of the bank. Once more, Sinkey (1998) posited that each bank must have a credit approach that will manage the credit activities and accordingly diminish credit risk and enhance benefit. As indicated by the analyst, for the most part a loan approach comprises of five noteworthy segments specifically;

A. General Policies

- i. Management
- ii. Trade area
- iii. Balance loan portfolio
- iv. Portfolio management
- v. Loan-to-deposit ratio
- vi. Legal loan limit
- vii. Lending authority
- viii. Loan responsibility
- ix. Interest Rates
- x. Loan repayment
- xi. Collateral
- xii. Credit information and documentation
- xiii. Delinquency ratio
- xiv. Loan loss
- xv. Reserves
- xvi. Charge-offs

Extensions of renewals of past due loans xvii.

Consumer laws and regulations

B. Specific Loan Categories

- i. Commercial loans ii. Agricultural loans iii. Mortgage loans iv. Installment and branch bank loans
- v. VISA and revolving credits vi. Mortgage banking subsidiary
- vii. Personal loans

C. Miscellaneous Loan Policies

- i. Loan to Executive Officers, directors and shareholders ii. Employee loans iii. Mortgage-Banking subsidiary iv. Conflict of interest

D. Quality Control

- i. Credit Department ii. Loan Review Department
- iii. Recovery Department

D. Committees

- i. Directors of loan committee
- ii. Officers of loan committee iii. Loan Review Committee

2. Operating a sound credit granting process

The Basel Board of trustees (2000; 2001) underlined that with a specific end goal to keep up a sound credit portfolio, it is fundamental a bank have set up a built up formal exchange assessment and support process for the conceding of credits. Regards ought to be made as per the bank's composed rules and conceded by the suitable level of management. There ought to be an unmistakable review trail reporting that the regard procedure was consented to and distinguishing the individual(s) and/or committee(s) giving data and also settling on the credit choice (Boateng, 2004). As per Wilson (1998), banks frequently profit by the foundation of expert credit gatherings to examine and sanction credits identified with noteworthy product offerings, sorts of credit offices and modern and geographic parts. Banks ought to put resources into sufficient credit choice making assets so they find themselves able to settle on sound acknowledge choices reliable for their credit procedure and meet aggressive time, estimating and organizing weights.

Every credit proposition ought to be subjected to cautious examination by a skillful acknowledge examiner for the ability comparing to the size and complexity of the exchange. In the expressions of Boateng (2004), a successful credit evaluation process builds up least prerequisites for the data on which the examination is based. There ought to be arrangements set up with respect to the data and documentation expected to sanction new credits, reestablish existing credits and/or change the terms and states of already affirmed credits.

An exploration by Machiraju (2008) uncovered that, one of the management rules that banks have utilized in their client data get-together process is screening. Screening as

indicated by the researcher includes the procedure of recognizing just solid and trustworthy clients from a pool of various candidates for money related help. Banks screen "good" credit risk from "bad" ones in order to make productive loans. Screening is typically done before a credit is conceded. Successful screening obliges banks to gather precise and dependable data from potential borrowers. The point is to assess the default risk of their clients. The potential borrower is regularly needed to supply the loan officer with data about their experience, salary and total assets. Distinctive credit risk models extending from subjective to quantitative ones may be utilized to encourage the screening procedure to land at an educated choice.

Machiraju (2004) opine that banks have generally centered on the five Cs standards in estimation of borrowers' financial soundness. He proposed the accompanying definitions for the five Cs;

- i. Character: This refers to the borrower's personal qualities, for example, trustworthiness, eagerness and responsibility to pay debt. Borrowers who show abnormal state of uprightness and responsibility to reimburse their obligations are viewed as qualified for credit.
- ii. Capacity: This additionally alludes to borrowers' capacity to contain and service debt judging from the achievement or generally of the endeavor into which the credit facility is utilized. Borrowers who display fruitful business execution over a sensible past period are likewise viewed as ideal for credit facility.

- iii. Capital: This alludes to the monetary state of the borrower. Where the borrower has a sensible measure of monetary resources in overabundance of his financial liabilities, such a borrower is viewed as ideal for credit facility.
- iv. Collateral: These are resources, typically portable or undaunted property, sworn against the execution of a commitment. Examples of collateral are buildings, inventory and account receivables. Borrowers with a great deal more assets to pledge as collateral are considered favorable for credit facility.
- v. Condition: This refers to the financial circumstance or condition winning at the credit's season application. In times of retreat borrowers discover it entirely hard to acquire credit facility.

Machiraju (2004) additionally accentuated notwithstanding the five Cs that bankers and analysts have utilized a wide range of models to survey the default risk on credits and bonds. These shift from moderately subjective to profoundly quantitative models. The analyst further made it clear that, these models are not fundamentally unrelated, in that a financial organizations administrator may utilize more than one to achieve a credit evaluating or loan amount proportioning choice.

Data got will be basic for any interior assessment or rating assigned out to the credit and the exactness and amplex of the data are discriminating to management for making suitable judgments about the credit's adequacy. Banks must add to a gathering of credit risk officers who have the experience, learning and foundation to practice commonsense judgment in assessing, affirming and overseeing credit risks. A bank's credit-giving and regard procedure ought to build up responsibility for choices taken and assign who has the total power to support credits or changes in credit terms.

3. Ensuring adequate controls over credit risk

As per Ganesan (2000), there must be credit points of confinement set for every officer whose expected set of responsibilities has a relationship with credit granting to guarantee sufficient controls over credit. Material exchanges with related gatherings ought to be liable to the board's endorsement of executives (barring board individuals with irreconcilable situations), and in specific circumstances (e.g. an extensive credit to a noteworthy shareholder) answered to the saving money supervisory powers.

Banks should likewise consider the time span for conceding credit since time is of specific significance to borrowers (Nsiah-Agyeman, 2010). Borrowers for the most part oblige credit inside of a given time, and for such credits to be significant they must be conceded inside of the period the office is needed. As indicated by Hubbard (2000), if a borrower obliges a credit inside of, say, one month, the giving bank must meet such time period without undue deferrals. This implies that lending institutions must make known in unequivocal terms to the borrowers the terms and conditions to allowing the credit. Having allowed credit there is the requirement for keeping up a proper credit organization, estimation and checking procedure. Once more, banks must build up an arrangement of autonomous, nonstop evaluation of customers' operational results, paying special mind to ahead of schedule cautioning indications of operational troubles.

4. Protective covenants of banks

In considering potential credits, banks must perceive the need of setting up provisions for recognized and expected misfortunes and holding sufficient funding to assimilate surprising misfortunes. The bank ought to calculate these contemplations acknowledge

conceding choices and in addition into the general portfolio risk management process. Banks can use exchange structure, insurance and assurances to assist alleviate with risks (both distinguished and characteristic) in individual credits however exchanges ought to be gone into fundamentally on the borrower's quality reimbursement limit.

Defensive contracts are provisions for insurance contained in credit understandings. A bank that loans credit to its clients will doubtlessly expect reimbursement later. The clients' reimbursement capacity relies on upon numerous variables. The most essential is money related condition, which may be liable to chance. To defend banks credit, the moneylender requires the borrower to keep up its monetary condition and, specifically, its present position at a level in any event great as when the dedication was made.

The imperative defensive pledge of a credit assertion may be characterized into general provisions, routine provisions and particular provisions.

1. General provisions:-General provisions are more or less universal in their use by lenders. They include:

- a. Working capital requirement.
- b. Dividend and share repurchase restriction.
- c. Capital expenditure limitation.
- d. Limitation on other indebtedness.

2. Routine provisions:-Routine provisions include routine restrictions, usually invariable provisions found in most loan agreements. They include:

- a. Furnishing the bank with financial statements.

- b. Maintaining adequate insurance.
- c. Restriction on the sale of a significant portion of the lenders assets.
- d. Payment of taxes and other liabilities when due, except those it contests in good faith.
- e. Pledging or mortgaging any of the borrower's assets to the bank.
- f. Not to discount or sell receivables.
- g. Prohibition from entering into any lease arrangement of property that will result in annual rental payment exceeding a certain amount.
- h. Restriction on other contingent liabilities.
- i. Restriction on the acquisition of other companies.

3. Specific provisions:- Specific provisions are special provisions used by banks to achieve a desired total protection of its loans. They include:

- a. "Keyman" life insurance policy on executives who are essential to a firm's effective operations.
- b. Management clause under which certain key individuals must remain actively employed in the company during the time that the loan owes.
- c. Restriction on aggregate executive salaries and bonuses.
- d. Restriction on salary increases by large shareholders who are officers of the company.

Limitation provisions are details to guarantee the general liquidity and capacity to pay the credit. Since nobody procurement is capable without anyone else's input to give the

vital shields, the detailing of distinctive prohibitive provisions ought to be custommade to the particular loan circumstance.

One critical defensive agreement that banks have used is collateralization of the borrowers' advantage for the giving bank. Guarantee is any benefit utilized as security for a credit. In the expressions of Mishkin (2001) "security is property guaranteed to the loan specialist if the borrower defaults". Notwithstanding, security can't be a substitute for a thorough appraisal of the borrower or counterparty, nor would it be able to make up for lacking data. It ought to be perceived that any credit authorization activities (e.g. dispossession procedures) could wipe out the overall revenue on the exchange.

Furthermore, banks should be careful that the estimation of security may well be impeded by the same components that have prompted the reduced recoverability of the credit. Banks ought to have arrangements covering the agreeableness of different types of guarantee, methodology for the progressing valuation of such security, and a procedure to guarantee that insurance is, and keeps on being, enforceable and feasible. With respect to ensures, banks ought to assess the level of scope being given in connection to the credit quality and legitimate limit of the underwriter. Banks ought to be cautious when making suppositions about suggested backing from outsiders, for example, the management.

Resources utilized as insurance securities must be legitimately esteemed by experts who are well educated in such valuations (Brigham & Ehrhardt, 2002). Lending banks should again guarantee that all the legitimate systems that must be followed in

guaranteeing the move of enthusiasm for insurance securities moves from the borrower to the moneylender are completely depleted. This, as indicated by Teich (1997), will help prevent any future legitimate hindrances when the security solidifies. Banks must place accentuation on the power deal values as opposed to the business sector estimations of collateralized resources (Ferguson, 2001). Bielecki (2000) affirms that banks are profoundly secured where the power deal estimation of a benefit is equivalent or more than the credit sum conceded. An accomplished, devoted and an extremely productive legitimate division is a pre-essential for upholding defensive agreements.

2.6 Empirical Review

A study was led by Afriyie and Akotey (2011). Their study inspected the effect of credit risk management on the gainfulness of country and group banks in the Brong Ahafo Region of Ghana. By utilizing the financial proclamations of ten rural banks from the time of 2006 to 2010 (five years) for their investigation, the panel regression model was utilized for the estimation. In the model, meaning of Return on Equity (ROE) and Return on Asset (ROA) were utilized as profitability indicator while NonPerforming Loans Proportion (NLPR) and Capital Adequacy Ratio (CAR) as credit risk management pointers. The discoveries demonstrate a huge positive relationship between non-performing loans and rural profitability uncovering that, there are higher loan misfortunes yet banks still gain benefit. This demonstrates that, country banks don't have sound and viable credit risk management practices. Hypothetically, nonperforming loans decrease the benefit levels of rural banks however in circumstance where non-performing loans are expanding proportionately to productivity then it implies that rustic banks don't have compelling institutional measures to manage credit

risk. What the banks do is that they move the expense on loan default to different clients as higher premium rate on loans.

A comparative study was directed by Achou and Tengue (2008) on the Qatari saving money industry and their discoveries demonstrated that better credit risk management result in better bank execution. They presume that, "it is along these lines of pivotal significance for banks to hone reasonable credit risk management to shield the bank's benefit and secure financial specialists premium". Achou and Tengue (2008) further showed that keeping money with solid credit risk management approaches have a tendency to bring about lower loan default (debilitated loans) and net premium salary.

Nair and Fissha (2010) demonstrated in a comparable investigation of the Ghanaian rural banking industry that, the level of loan wrongdoings or hindered loans in a RCB's loan portfolio is frequently viewed as the best driving pointer of the institution's financial execution. Also Nair and Fissha found that the rate of loan portfolio that was in default (among the sample banks) for over one month was 16 percent. This is too high and unsuitable given the worldwide normal of 3 percent for the overall miniaturized scale managing an account industry as indicated by the researchers.

Onaolapo (2012) additionally directed a comparable study. His study investigated the relationship between proficiency of credit risk management and financial wellbeing in chosen Nigerian banks. Data Collections are for the most part auxiliary traversing a six-year period prior and then afterward solidification program of the Nigerian banking industry. The study hypothesized negative relationship between Efficiency of Credit Risk Management (ECRM); bank execution and operational viability. Gathered information was regressed and unit root test was conducted to confirm request of

combination for every time arrangement information utilized. Discoveries demonstrate negligible causation between Deposit Exposure (DE) (Surrogate of credit risk management) and execution yet more noteworthy reliance on operational productivity parameters. Test of stationary properties directed utilizing ADF showed all variables were non-stationary while the pair insightful Granger causality proposed that Deposit Exposure Performance impact does not hold for the Nigerian Commercial Banking Sector. Policy suggestions were made on these discoveries.

Another related study was done by Olausi and Abiola (2014). The objective of this study was to explore the effect of credit risk management on the execution of business banks in Nigeria. Financial reports of seven commercial banking firms were utilized to investigate for a long time (2005 – 2011). The panel regression model was utilized for the model's estimation. In the model, Return on Equity (ROE) and Return on Asset (ROA) were utilized as the execution indicators while Non-Performing Loans (NPL) and Capital Adequacy Ratio (CAR) as credit risk management indicators. The discoveries uncovered that credit risk management has a huge effect on the productivity of commercial banks' in Nigeria.

A research by (Tetteh, 2012) assessed the credit risk management methodologies of Ghana Commercial Bank Ltd for the period 2000-2010. The study's aim was to assess the degree to which the execution of different credit risk management techniques by the bank had lessened the measure of non-performing loans. The researcher utilized a case study approach where face to face interviews was conducted to collate views of senior credit officers at the Ghana Commercial Bank on credit risk management strategies. Besides, information on non-performing loans was obtained from the books of accounts while the researcher also relied on data from GCB annual reports and credit policy

documents for analysis. The results from the study showed that Ghana Commercial Bank has a clear, written guideline on credit risk management with the board of directors having an oversight responsibility for implementation. GCB realigns the amount of credit within various sectors grouped into a credit portfolio depending on environmental factors such as political regime, macroeconomic strategy of political regimes, new and existing regulations and legislation, social concerns of operating markets and technological developments within the banking industry in Ghana.

Likewise, Amidu (2006) looks at whether bank lending is compelled by monetary strategy in Ghana. Utilizing board cross-sectional information covering the period from 1998 to 2004, the study models the offer of credits and loans in banks' aggregate resources as a development's element rate of genuine GDP, the rate of expansion, the Central Bank of Ghana prime rate, wide cash supply, bank size measured as the logarithm of a bank's aggregate resources, and liquidity as measured by the offer of a bank's fluid advantages for aggregate resources. Among the discoveries, the study demonstrates that amid the examination's time, Ghanaian banks wanted to put resources into risk free government treasury bills and securities to secure higher gainfulness.

Be that as it may, in Sierra Leone, Bartholomew (2005 referred to in Amidu, 2006) utilizing a board of seven saves money with month to month information gathered between March 1999 and December 2004 discovers some blended results. Assessing three comparisons to test the intrigue theory, the effective business sector speculation and a joint speculation of conspiracy and productive business theories, he affirms support for the plot speculation for the predominant banks, proposing the part of syndication force in driving prevailing business banks' gainfulness in Sierra Leone, yet

rejects same for the periphery banks. His study however proposes that littler banks get benefits from effectiveness and not from restraining infrastructure rent. The study utilizes three measures of benefit; profit for value, return on capital, and profit for resources for investigative purposes.

Tracey (2011) utilizes a normal slightest square (OLS) model to discover the base and greatest limit focuses for NPLs at which business banks get to be risk unfavorable in the disbursal of loans. Utilizing the study by Hou and Dickinson (2007) as the takeoff platform, the study takes a gander at the risk avoidance of banks in supplying credits through the demonstrating of loan supply on monetary record variables, for example, the development rate of the proportion of NPLs to aggregate loans, its square, the development rates of stores, other procuring resources and capital. The study identifies some level of confirmation that at larger amount of NPLs/loan proportion, banks turn out to be more risk antagonistic in loan disbursal. It is likewise watched that the two nations utilized have shifting level of risk avoidance behavioral examples. The stores development rate is found to move in the same course as loan supply.

In an early commitment Santomero and Trester (1998) examine the impacts of enhanced liquidity in bank loan markets (because of, e.g., securitization, credit subsidiaries and so forth.) on banks' supply of loans and risk taking conduct in a model of topsy-turvy data. They find that diminishing expenses of transmitting bank particular data to the business causes a tradeoff between improved resource liquidity and expanding risk in banks as a result of more unsafe credits. Later discoveries considering lopsided data incorporate Duffee and Zhou (2001) who utilize a model with good risk and unfriendly determination to investigate whether credit subsidiaries may be utilized to exchange

leading up to now non tradable credit risk exposures. Notwithstanding, utilizing this chance to exchange credit risk exposures may pulverize other risk sharing instruments and raise a bank's introduction to credit risk as per (Morrison, 2005).

Another remarkable work with deference experimental side of credit risk management is that of Cebenoyan and Strahan (2001). The scientists explored experimentally how dynamic management of credit risk utilizing loan deals influences capital structure, loaning, benefits, and risk of banks. They find that banks which are dynamic in the loan deals business hold less capital and make more unsafe credits than different banks. They presume that loans in credit risk management upgrade credit accessibility as opposed to diminish risk in the keeping money framework.

Goderis et al. (2007) investigated whether the entrance to credit subsidiaries items markets influences banks' giving conduct. They find that banks which effectively utilize credit subsidiaries expand their objective loan volumes by around half contrasted with banks that don't take part in credit subordinates markets. Brewer III, Minton and Moser (2000) exactly break down the connection between bank supports in (premium rate) subordinates contracting and bank giving. They find that banks which make utilization of premium rate subsidiaries hold bigger volumes of loans than banks which don't utilize subordinates.

Maurin and Toivanen (2012) likewise led a comparable study by adding to a halfway modification model with a specific end goal to gauge the variables adding to banks' inner target capital proportion, loaning approach and holding of securities. The model is assessed on a board of recorded euro region banks and nation particular large scale

variables. Firstly, banks' inside target capital proportions are assessed by utilizing data on banks' risk and profit limit. Besides, the effect of banks' capital hole on the credit supply and the security portfolio is assessed while controlling for the macroeconomic environment. An increment in bank' monetary record risk is indicated to expand the objective capital proportions. The change towards higher harmony capital proportions has a huge effect on banks' advantages. The effect is observed to be more sizeable on security possessions than on credits, in this manner recommending a pecking request.

Amidu and Hinson (2006), in their paper likewise inspected how credit risk influences a bank's capital structure, benefit and giving choices. The study utilizes board relapse examination to explore the relationship between credit risk presentation and bank capital structure, gainfulness and giving choices. The outcomes show that less than 1% of Ghanaian banks are presented to credit risk, and that more than 86% of their advantages are financed by obligations. The banks' normal giving rate is around 28%. The outcomes additionally demonstrate that capital structure (value to aggregate resources) of banks is absolutely identified with banks' credit risk, benefit and risk and adversely identified with banks' size, fluid resources and giving.

Osei-Assibey and Bockarie (2013) additionally led an exceptionally key study on the subject. The points of their study were to research the components that impact banks' credit supply in Sierra Leone. All the more particularly, it tries to investigate the impacts of risk premium, influence proportion and credit risk on banks' loan supply in Sierra Leone. Utilizing yearly bank level information on an unequal board of 13 business banks information saw over a time of ten years (2002 to 2011), the study utilizes time and bank-particular settled impacts model for estimation. The discoveries demonstrate

that risk premium, the offer of non-performing credits in the banks' loan portfolio, level 1 capital proportion (influence proportion) and nearby coin store levels emphatically and fundamentally influence the offer of loan supply to the private area in banks' gaining resources. Then again, loans to nearby cash store proportion and bank size have huge negative impacts on the offer of credits in banks resources. The study additionally discovers bank sort and the development rate of genuine Gross Domestic Product (an intermediary for monetary action) to be essential determinants of the offer of loans in banks' winning resources.

Mas'ud, Subroto, Salim, &, Sutrisno (2013) with another related study likewise thought of some intriguing discoveries. The reason for this study are : (i) looking at impact of risk on resources development, salary expansion, capital structure and monetary execution, (ii) inspecting impact of advantages development and enhancement on capital structure (obligation to resources proportion) and money related execution (Profit for Normal Resources), (iii) analyzing impact of capital structure (DAR) on financial execution (Profit for Normal Resources).

Examination was led at bank recorded on Indonesia Stock Trade with perception period 2006-2010. There are 20 banks tests resolved taking into account populace criteria. Investigation system utilized is Way Examination. The study found that credit risk does not focus resources development, wage broadening, capital structure and money related execution. Resources development does not focus capital structure, wage expansion but rather deciding capital structure. Resource development decides capital structure and financial execution, while salary broadening does not focus money related execution.

Lower credit risk shows higher nature of open up to the world bank management so they more trusted by financial specialists.

CHAPTER THREE

RESEARCH METHODOLOGY AND PROFILE OF ADB BANK LIMITED

3.1 Introduction

This section of the study constitutes the study design and methodology as well as the profile of ADB Bank Ltd. The methodology of a study involves the types of data used in undertaking the study as well as the processes and procedures used in data collection. The chapter is categorized into the following sub-headings: research design, population, sampling technique and sample size, instruments for data collection, data collection procedure and the profile of Agricultural Development Bank Limited.

3.2 Research Design

As indicated by De Vaus (2001) a research design refers to the general method that a researcher decides to coordinate the diverse segments of the study in a lucid and consistent way. It constitutes the outline for the gathering, estimation, and investigation of information. A research design is likewise characterized as the plan, layout or arrangement that is utilized to create answers to research questions (Orodho, 2003). The research design in this manner turns into the key which directs the whole research process. It serves to comprehend the way of research being led by the researcher. The research design for this study is the descriptive qualitative design. The choice of a descriptive qualitative design is based on the premise that, the researcher seeks to gain an in-depth understanding of credit risk management practices of ADB Bank Limited. Per the descriptive qualitative approach, deductions can be made from data based on

descriptions given by the researcher which seeks to reflect the credit risk management practices of ADB Bank Ltd.

3.3 Sampling Design

The sampling design of a study is the procedure included in the determination of the proper populace and additionally the method included in the choice of the appropriate respondents for the study. According to Churchill and Iacobucci (2002), Malhorta and Birks (2007), five stages are included in examining outline. These five stages are as follows: define the target population, determine the sampling frame, select a sampling method, determine the sample size, and collect the data from the respondents. This study might not go through all the above stated procedures due to the nature of this particular research but the procedures are adequate nonetheless.

3.3.1 Population

According to Snijders and Bosker, (1999), a population is the entire group of persons having the characteristic or characteristics that interest a researcher. For this study, the population of the study comprised of forty (40) employees at the Credit Risk Management Department (CRMD) of ADB Bank Ltd.

3.3.2 Sample Size and Sampling Techniques

With regards to the sample size of this study, the Head of Credit of ADB was used as a representative of the entire department. In this regard a purposive sampling technique was used in the choice of the Head of Credit to be the representative of the entire Credit Department. The purposive sampling technique was most appropriate because, the researcher was in need of the most appropriate personnel of the bank who has in-depth

knowledge of the credit risk management practices of the bank and can therefore provide adequate information useful for research analysis purposes.

3.4 Sources of Data and Instruments

This study made use of both primary and secondary sources of data. Primary data for the study was collected with the help of an interview. The interview was granted by the Head of Credit of the bank. Data from the secondary sources involved the gathering of information on credit operations from financial statements of ADB Bank Ltd. These secondary sources provided some useful statistics and information used in supporting the literature review.

3.5 Data Collection Instrument

The instrument used for data collection purposes was structured interviews. The use of structured interviews enabled the researcher with pre-determined questions that are in congruence to achieve the objectives of the study.

3.6 Data Analysis

Because of the qualitative nature of the study, the researcher made use of content analysis. In content analysis, the researcher focused on giving a description of responses attained from the interview conducted in order to make meaningful deductions that fits the research objectives and questions.

3.7 Profile of ADB Bank Limited

3.7.1 Overview

ADB is a leading financial institution in Ghana operating with a universal banking license. ADB was established by Act 286 in 1965 as the Agricultural Credit and

Cooperative Bank to provide and administer credit and other banking facilities in the agricultural sector. The Bank's name was later changed to Agricultural Development Bank in 1967 by the National Liberation Council (NLC Decree 182). ADB received its universal banking license in 2004 and subsequently appointed a new Managing Director in August 2009. Pursuant to the appointment of the new Managing Director, a new management team was established to implement a restructuring exercise aimed at repositioning the bank's market orientation to focus on agriculture and more in January 2010. In August 2014, the bank was converted into a public limited company as part of the process of listing on the Ghana Stock Exchange.

ADB has grown consistently over the years to become one of the leading universal banks, in terms of assets, deposits and loans. Due to its steady performance, ADB has consistently remained in the top ten (10) banks, across key metrics, despite increasing competition from new entrants. As at the end of 2013, ADB was the 7th largest lender and the 8th largest bank by total assets. The bank has one of the largest distribution channels in Ghana spread across the ten (10) regions of the country. As at December 2014, ADB's distribution channels comprised of a network of 78 branches and a broad range of electronic banking operations, including internet banking, mobile banking and other electronic payment systems. This has enabled the bank to efficiently serve its retail, corporate, small and medium scale enterprises (SME) and agricultural financing clients.

3.7.2 Vision

ADB's medium term objective is to be among the top-tier performing banks in the country.

3.7.3 Mission

ADB is committed to building a strong customer-oriented bank, run by knowledgeable and well-motivated staff, providing profitable financial intermediation and related services for a sustained and diversified agricultural and rural development.

3.7.4 Values

The values of the bank are customer excellence, teamwork, creativity, aggressiveness (market place), and accountability.

3.7.4.1 Customer Excellence

To enable its customers to have an efficient, productive, and enjoyable banking experience by providing them with what they want when they need it.

3.7.4.2 Teamwork

To build effective teams with members who have complimentary competencies, hold themselves mutually accountable, exhibit effective communication and continually challenge each other to strive for excellence.

3.7.4.3 Creativity

To create the environment that encourages its employees to generate a new idea and/or rethink an old idea and develop the idea into practical implementable products, processes, or solutions.

3.7.4.4 Aggressiveness (Market Place)

To be fearless, bold, energetic and enterprising in pursuing actions or decisions in the market place that will ensure that the bank is competitive, satisfies its customers and achieves sustainable growth.

3.7.4.5 Accountability

To perform in a manner at all times that makes the bank accountable, responsible, and answerable to its customers, partners, leaders, and other employees as well as external stakeholders.

3.8 Key Products and Services

ADB offers an extensive range of products and services to its existing and prospective clients in line with making banking more convenient and affordable. The bank's main business lines include retail banking, corporate banking, SME banking, agricultural financing and treasury activities. The bank also provides transaction banking activities to its clients. ADB serves its clients through a diversified multichannel system comprising a network of ATMs and POS terminals, branches, internet banking, mobile phone banking (including SMS services and smartphone banking applications) and call center.

3.8.1 Categorization of Segments

In its core banking business, ADB categorizes each customer as falling within one of its retail, corporate, SME, transaction and investment banking segments and uses the following definitions for this purpose:

3.8.1.1 Retail Banking

Provide services targeted at individual and retail clients. It includes providing loans, receiving deposits from individuals, call center operations, customer relations, complaints and enquiries to ensure customer satisfaction.

3.8.1.2 Corporate Banking

Provide financial solutions to corporate clients to sustain profitable growth for their businesses. This includes local corporate institutions, multinationals, and public sector institutions.

3.8.1.3 SME Banking

Provide services to small and medium scale businesses and customers that are not included in the corporate segment, with focus on providing support and improving productivity of small and medium businesses.

3.8.1.4 Agricultural Financing

Focus on providing financial solutions to customers in the agricultural sector to support production, processing, and marketing of products.

3.8.1.5 Treasury

Undertake funding and risk management activities via placements, and investing in liquid assets. It provides both retail and wholesale banking clients a wide array of money and foreign exchange market products such as time, call and savings deposits,

treasury bills and funds management, spot and forward contracts as well as correspondent banking services.

3.8.1.6 Trade Finance

Facilitate international trade payments by providing services for import and export businesses. Undertakes handling and processing on behalf of businesses including import/export letters of credits, import/export documentary collection, invoice discounting, guarantees, bonds and indemnities and direct payments.

3.8.1.7 Transaction Banking

Provide state-of-the-art IT infrastructure to create convenience for clients and enable them become more efficient and profitable. This includes internet and mobile banking services and debit cards.

3.9 Risk Management and Supervision

ADB as a universal banking institution is exposed to potential risks including market risk, credit risk, operational risk, liquidity risk, and financial risk. The Board of ADB has the overall responsibility for the establishment and oversight of the bank's risk management framework. The Board has established an Audit and Risk Management Committees and a risk department to assist in the discharge of this responsibility. The Board has also established the Credit Committee, which is responsible for developing and monitoring risk management in their respective areas.

The bank's risk management policies are established to identify and analyze the risks faced by the bank, to set appropriate risk limits and controls and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to

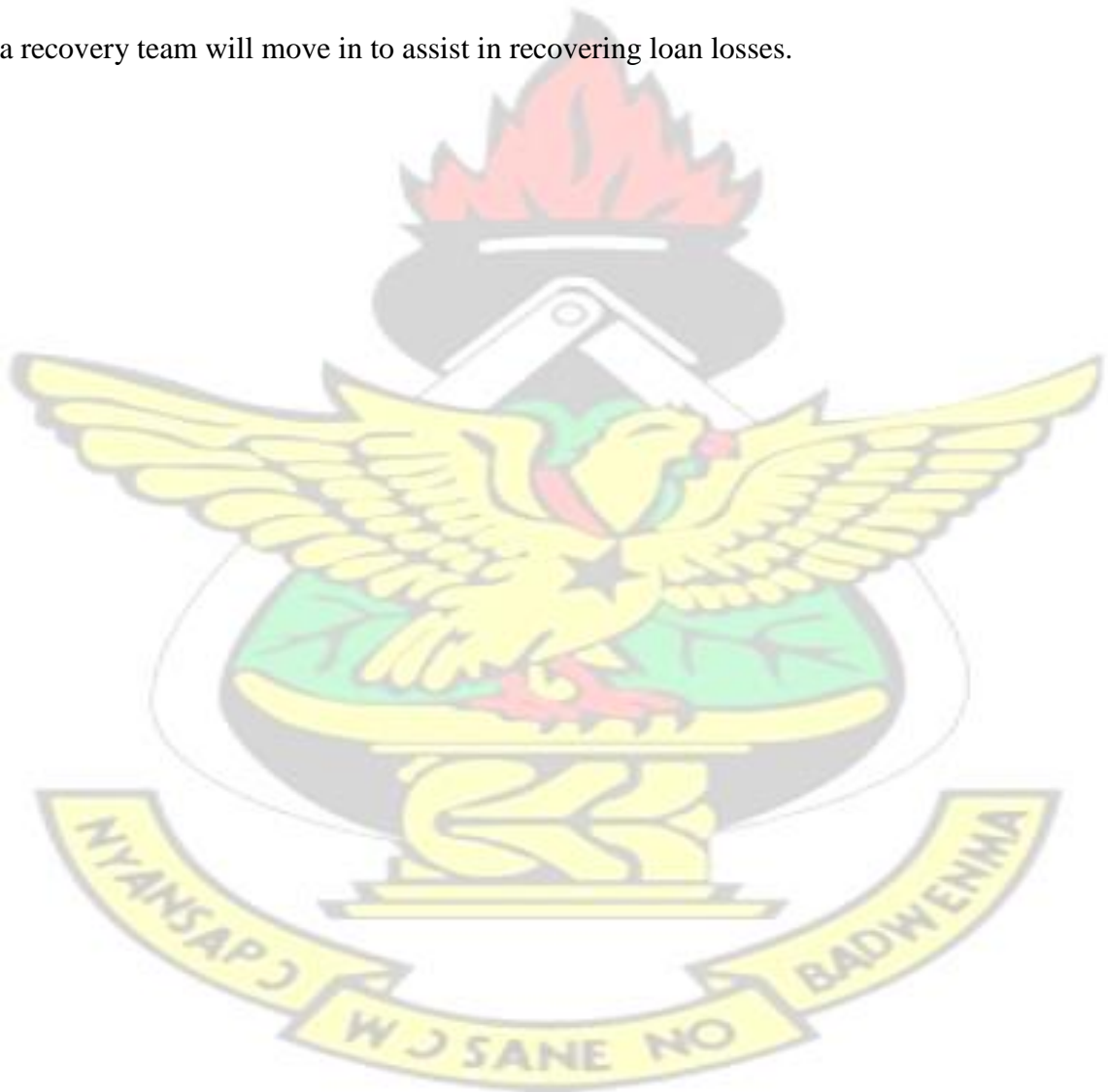
reflect changes in market conditions, products and services offered. The bank, through training and management standards and procedures, aims to develop a disciplined and constructive control environment, in which all employees understand their roles and obligations.

The bank's Audit and Risk Management Committees are responsible for monitoring compliance with the bank's risk management policies and procedures, and for reviewing the adequacy of the risk management framework in relation to the risks faced by the bank. The Audit and Risk Management Committees are assisted in these functions by the Internal Audit and the risk management departments. Internal Audit undertakes both regular and ad-hoc reviews of risk management controls and procedures, the results of which are reported to the Sub-Board Audit Committee.

The bank has a risk management department organized into credit control, recoveries and operational control. Under the credit control department, it has credit administration, credit risk appraisal and credit monitoring. The department is responsible for managing all risk to which the bank is exposed (operational risk, credit risk, liquidity risk, interest rate risk and foreign currency risk). The risk management department is currently developing a risk management framework for the bank.

The bank treats all branches as independent business units which generate their own income, run their own profit and loss and statement of financial position. The head office consolidates these and exercises oversight responsibility over all the branches. Credit is generated at the branch level and is then channeled through the credit control unit of the Risk Management Department where a credit risk appraisal is performed to

assess whether to engage the client or not. The client's file is then moved to the head of risk management and to other appropriate levels (Credit Committee, Board and other groups) for final approval before credit is granted. There is also the monitoring aspect where the head office credit monitoring team monitors the loans and their performance in addition to the monitoring performed at the branch level. Where a loan goes beyond current, it is classified as either other loans especially mentioned (OLEM), substandard, doubtful or loss, as recommended by Bank of Ghana. Where a loan goes beyond current, a recovery team will move in to assist in recovering loan losses.



CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This part of the study presents the results derived from the study. The Head of Credit of ADB Bank was interviewed on issues pertaining to credit risk management practices of the organization. Further the researcher was also given access to the category of loans disbursed over the years of 2012 to 2014 and the extent of credit exposure encountered in each of the years. The following sub-headings give a description of the content of the responses provided by the interviewee (Head of Credit).

4.2 Loan Granting, Evaluation and Monitoring Processes at ADB.

This section of the data analysis gives a description of the loan granting, evaluation and monitoring processes employed by ADB in its operations.

According to the Head of Credit the requirements that a borrower must provide when accessing a loan is dependent on three key factors. These key factors include whether the borrower is a personal or corporate client, whether the borrower is a new or old customer and then the nature of business of the borrower. Based on these three factors, the borrower is accessed based on the five Cs of credit which comprises of character, capacity, capital, collateral and conditions in order to evaluate the probability of default by the borrower.

According to the respondent, loan pricing is not exercised by the credit officer. There are higher level persons at the bank whose responsibility is to ensure that the loan interests and terms are properly recommended to customers. The role of the credit

officer thereby is to monitor the loan repayment process and also credit or collateral quality of the borrower.

Further, the respondent asserted that on quarterly basis, the credit officer undertakes monitoring activities by re-examining the loan repayment process and the credit collateral quality. This re-examination is done in accordance to the credit policies of ADB. Apart from the credit officer, the relationship manager of the borrower also contacts the client on regular basis to remind them of their repayment dates when they are due. The interviewee further explained that, the collection of debt is the function of credit officers either at the branch level or at the headquarters. In the debt collection process, the relationship manager plays a crucial role by providing the credit officers with insightful information about the borrower.

When asked if all credit applications are processed in accordance with the lending procedures, the interviewee replied that, procedures are established for credit officers to follow but they are usually flexible to the implementation of such procedures to high-profile customers. He explained that, the high profile customers have usually saved with the bank for so many years and hence the bank seem to appreciate them by being flexible in both the loan granting and monitoring processes.

When the respondent was confronted with the question of collateral acceptance and lending decisions at ADB, he reiterated that, at ADB not all lending decisions are based on collaterals. That notwithstanding, when collateral is demanded by the bank, the credit officers only make contracts and send reports regarding the collaterals to their direct manager. Valuation of the collaterals is conducted by specialist persons in the

branch or the headquarters. But once the collateral has been valued, the postvaluation procedures such as finalizing the loan amount, completing the collateral contract and filing the documents are done by the credit staffs at the branch level.

From the responses given above, it is clear that, ADB has prescribed credit processes and procedures that ensure the effective granting, monitoring and evaluation of credit to borrowers of different categories. The researcher therefore opines that, with these procedures in place, the bank is able to adequately ascertain the creditworthiness of borrowers and hence make lending decisions to mitigate credit risk to the barest minimum.

4.3 Difficulties in Compliance with Regulatory Policies issued by the Bank of Ghana

This section of the analysis is sought to find out if ADB is coupled with challenges in complying with regulatory policies issued by the Bank of Ghana regarding credit risk management practices of Banks in Ghana.

In order to ascertain the issues on the ground, the interviewee was asked of the difficulties that ADB normally encounters in complying with regulatory policies issued by the Bank of Ghana regarding credit risk management practices of ADB. In his response, he emphasized that the bank of Ghana has issued legislations concerning credit activity of banks which comprises of the provision of restrictions on lending and investment by banks (Bank of Ghana Act 2004, Act 673/ PART VI), regulation on Liquidity of banks (Bank of Ghana Act 2004, Act 673/PART IV), regulation on Capital and Reserve of banks (Bank of Ghana Act 2004, Act 673/PART III).

According to the respondent, ADB bank has no option than to adhere to the regulations of the Bank of Ghana. This is because the Bank of Ghana conducts periodic assessments into the operations of the Bank and that if the Bank is found to be not complying with the regulations of Bank of Ghana regarding its credit risk management practices, the consequences are very demanding. Therefore ADB bank operates in full compliance to the Bank of Ghana regulations regarding credit risk management. The respondent therefore concludes that, the Bank does not give room for difficulties in complying with these regulations because such difficulties can affect the entire operational competencies of the Bank in the eyes of the Bank of Ghana.

4.4 Assessment of ADB's Loan Recovery Rate from 2012 to 2014.

This section of the analysis sought to evaluate the level of loan recovery of ADB from the years 2012 to 2014. Figure 1 depict Annual Credit Portfolio of ADB Bank limited from 2012-2014

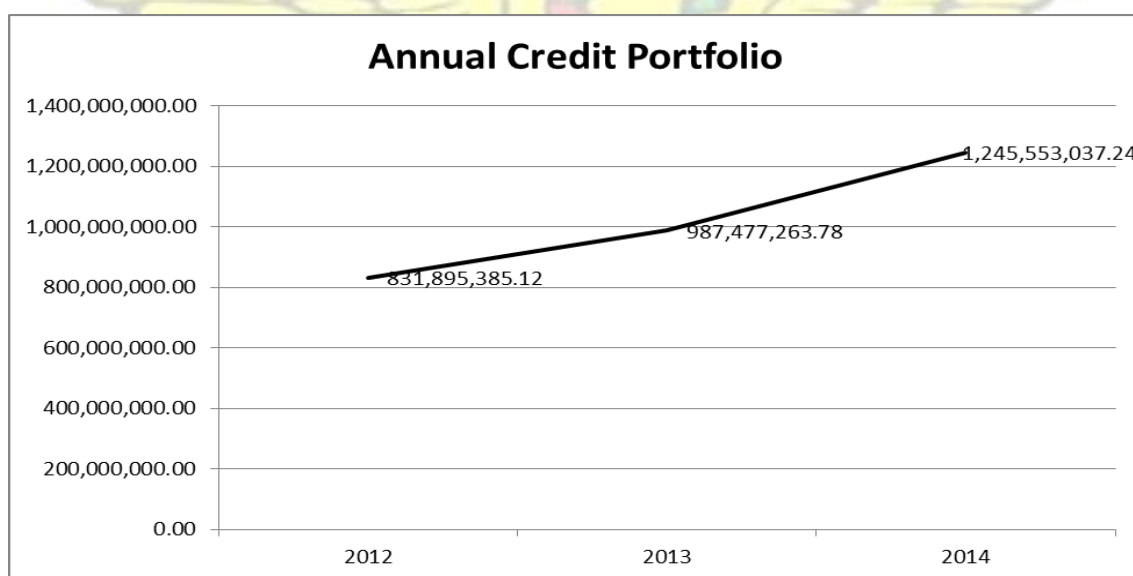


Figure 1: Annual Credit Portfolio of ADB Bank for the years 2012-2014

Table 1: Annual Credit Portfolio of ADB Bank for the year 2012

	Loan Category	No. of days	No. of Accts	ProvisionGH¢	ExposureGH¢
--	---------------	-------------	--------------	--------------	-------------

A	Current (1%)	Less than 30 days	136060	7,079,552.27	707,955,227.29
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	11,054	3,634,248.03	36,342,480.28
C	Sub-Standard (25%)	90 days to less than 180days	477	3,979,220.04	15,916,880.14
D	Doubtful (50%)	180 days to less than 360 days	2,680	5,100,756.09	10,201,512.18
E	Loss (100%)	360 days and above	57,715	61,479,285.23	61,479,285.23
	Total Exposure				831,895,385.12

Source: Annual Credit Portfolio of ADB, 2012

Table 2: Annual Credit Portfolio of ADB Bank for the year 2013

	Loan Category		No. of Accts	ProvisionGH¢	ExposureGH¢
A	Current (1%)	Less than 30 days	110279	7,153,499.42	715,349,942.15
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	16822	14,950,988.30	149,509,882.97
C	Sub-Standard (25%)	90 days to less than 180days	183	3,795,772.57	15,183,090.29
D	Doubtful (50%)	180 days to less than 360 days	562	2,365,716.78	4,731,433.56
E	Loss (100%)	360 days and above	9,608	102,702,914.81	102,702,914.81
	Total Exposure				987,477,263.78

Source: Annual Credit Portfolio of ADB, 2013

Table 3: Annual Credit Portfolio of ADB Bank for the year 2014

	Loan Category		No. of Accts	ProvisionGH¢	ExposureGH¢
A	Current (1%)	Less than 30 days	121065	8,587,066.63	858,706,662.70
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	5842	9,676,962.38	96,769,623.83
C	Sub-Standard (25%)	90 days to less than 180days	13330	10,912,140.22	43,648,560.87
D	Doubtful (50%)	180 days to less than 360 days	5468	70,136,617.05	140,273,234.41

E	Loss (100%)	360 days and above	3070	106,154,955.43	106,154,955.43
	Total Exposure				1,245,553,037.24

Source: Annual Credit Portfolio of ADB, 2014

As indicated by table 1, in the year 2012 current loans disbursed by ADB was GH¢ 707,955,222.29. In the year 2013 however, the amount of current loans disbursed was GH¢715,349,942.15 while in the year 2014, the amount increased to GH¢ 858,706,662.70. For the current loans, the level of default is as low as 1% which gives the indication that as much as 99% of such loans are being recovered by ADB. This therefore testifies that ADB makes a lot of profit from interest paid by their customers on loans disbursed.

Other loans especially mentioned are loans whose level of default/risk is 10% of the principal. In the year 2012, the bank disbursed GH¢36,342,480.28. In the year 2013, there was a dramatic increase in loans disbursed from GH¢36,342, 480.28 to GH¢ 149, 509,882.97. In the year 2014 there was a reduction in loans in that category to GH¢96,769,623.83. Because such loans are also exposed to lower risks, it could be concluded that, ADB could recover as much as 90% of such loans that were disbursed to their borrowers.

With regards to substandard loans with a risk rate of 25%, per table 1, in the year 2012, ADB disbursed GH¢15,916,880.14. In the year 2013, the bank disbursed GH¢15,183,090.29. Then in the year 2014, the bank disbursed GH¢43, 648,560.87. The figures show a dramatic increase in the disbursement of sub-standard loans in the year

2014. 75% of sub-standard loans were recovered by ADB which is a moderate indicator of effective credit risk management.

As indicated by table 1, in the year 2012, ADB disbursed GH¢10,201,512.18 of loans categorized as doubtful to its borrowers. From table 2 however, it could be deduced that doubtful loans disbursed was reduced considerably to GH¢4,731,443.56. It was surprising to see that, the figure for doubtful loans increased dramatically in the year 2014 from GH¢4,731,443.56 to GH¢140,273,234.41. This gives the indication, much of the credit categorized as doubtful were exposed to higher risk because only 50% of such credit could be retrieved by ADB.

With regards to loans that are categorized as loss, there is the implication that such loans are at complete risk and hence there is no recovery at all for such loans. In the year 2012 ADB disbursed GH¢61,479,285.23 of such loans. In the year 2013 as indicated by table 2, ADB disbursed GH¢102,702,914.81 and in 2014 the amount disbursed increased to GH¢106,154,955.43.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSION

5.1 Introduction

This section of the study is concerned with the summary of findings, conclusion and recommendations for the study as well as directions for future studies.

5.2 Summary of Findings

This study sought to assess the credit risk management practices of ADB bank Limited. However more specifically, the study sought to ascertain the processes involved in loan granting, monitoring and evaluation. Further the study sought to examine the difficulties encountered by ADB in complying with regulations enshrined by the Bank of Ghana regarding its credit risk management practices. The study also sought to evaluate the loan recovery rate of ADB from the years 2012 to 2014. The study was qualitative in nature and hence the Head of Credit of ADB Bank (Head Office) was interviewed. The summary of the findings are therefore presented in the following paragraphs.

With regards to the processes involved in loan granting, evaluation and monitoring, the study found that ADB grants loans to borrowers based on three key factors which include as to whether the borrower is a personal or corporate client, the nature of business of the borrower and as to whether the borrower is an old or new client. Per the findings, loan applicants are assessed by credit officers based on the five C's of credit which is made up of character, capacity, capital, collateral and conditions. According to the findings of the study, the credit officer in collaboration with the relationship manager of the client ensures the recovery of loans from clients. The study also showed that the credit officer also monitors the business operations of the client on quarterly basis to re-examine the loan repayment process and also the credit collateral quality.

In terms of difficulties encountered by ADB in the compliance with regulatory policies enshrined by the Bank of Ghana, the respondent made mention of a number of regulatory policies which guides the credit activities of banks in Ghana which comprised of the provision of restrictions on lending and investment by banks (Bank

of Ghana Act 2004, Act 673/ PART VI), regulation on Liquidity of banks (Bank of Ghana Act 2004, Act 673/PART IV), regulation on Capital and Reserve of banks (Bank of Ghana Act 2004, Act 673/PART III). According to the study, ADB does not make room for difficulties in terms of complying with the regulations of the Bank of Ghana on credit risk because it has the potential of significantly affecting the overall legibility of the Bank to operate in the country when they are found to go against the regulations of the Bank of Ghana in any way.

The findings of the study also showed that generally, ADB has a good recovery of their loans. From the assessment of the category of loans, it was found that the current loans were the ones which were often given since they are able to recover 99% of such loans. However, comparatively, loans which are categorized as loss and doubtful are not anywhere closer to current loans disbursed by the bank.

5.3 Conclusion of the Study

This study has assessed the credit risk management practices of ADB bank. Dwelling on the findings of the study, the researcher concludes that, to a greater extent ADB bank has good credit risk management practices that ensure a considerable level of profitability. That notwithstanding, the researcher augments that, there are key loopholes in the management of credit risk at ADB due to the fact that, they are exposed to a considerable level of credit loss.

5.4 Recommendations

Based on the findings of the study, the researcher recommends the following:

Firstly, credit officers of ADB must be exposed to training programs that enables them to properly evaluate the creditworthiness of clients before loans are disbursed to them. This is because the study found that, the figures of loans in the category of loss were considerably high although they were nowhere closer to current loans. There is therefore the need to equip credit officers properly in order to reduce the risk of loan defaults as a result of improper assessment of loan applicants.

Secondly, the management of ADB must come up with a credit risk management policy that is geared towards the granting of current loans whiles cutting down drastically the approval of loans which has the potency of becoming doubtful or loss in the long run. Through such a policy, the amount of risk associated with the granting of credit facility to borrowers will be greatly reduced.

Lastly, the management of ADB must continually enhance the knowledge of its employees about the compliance standards of the Bank of Ghana regulations regarding credit risk management. That is to say, ADB must continually remind its employees and most especially credit officers on the need to constantly comply with Bank of Ghana's regulations in the quest to ensure the continuity of the operations of the Bank.

5.5 Suggestions for Future Studies

This study has assessed the credit risk management practices by using ADB Bank Ltd. as case study. The researcher therefore recommends future researchers to replicate this study by assessing the credit risk management practices of selected rural banks in the country. Further, future researchers can also conduct a similar study among microfinance as well as savings and loans institutions in the country.

REFERENCES

- Abiola, I. and Olausi, A. S. (2014). The impact of credit risk management on the commercial banks performance in Nigeria. *International Journal of Management and Sustainability*. Vol. 3, No.5, pp. 295-306. Retrieved from <http://pakinsight.com/?ic=journal&journal=11>
- Achou, F.T. and Tengue, N.C. (2008). *Bank performance and credit Risk management*. (Master's Degree Thesis). University of Skovde. Retrieved January 13, 2015. pdf
- Afriyie, O. H. and Akotey, J. O. (2010). Credit risk Management and profitability of selected Rural Banks in Ghana. Retrieved January 13, 2015. Pdf
- Amidu, M. & Hinson, R. (2006). Credit risk, capital structure and lending decisions of banks in Ghana. *Banks and Bank Systems*. Vol. 1, Iss. 1
- Amidu, M. (2007). Determinants of capital structure of banks in Ghana: an empirical approach. *Baltic Journal of Management*, Vol.2, No.1, pp.67–79. Retrieved from <http://dx.doi.org/10.1108/17465260710720255>. Pdf
- Bank for International Settlements. (2004). BIS 74th Annual Report. Basel, Switzerland.
- Basel Committee on Banking Supervision (2008). *Principles for sound liquidity risk management and supervision*. Basel: Bank for International Settlements. Retrieved from <http://www.bis.org.pdf>
- Basel Committee on Banking Supervision (1999). *Credit risk modeling: current practices and applications*, Bank for International Settlements, Basel.
- Barrios, V. E. and J. M. Blanco. (2003). The Effectiveness of Bank Capital

- Adequacy Regulation: A Theoretical and Empirical Approach. *Journal of Banking and Finance*, Vol. 27, Iss. 1935–58.
- Bielecki, T. (2000). Probabilistic aspect of default risk modeling. Research paper, Northeastern Illinois University. Technical University of Warsaw.
- Boateng, G. (2004). Credit risk management in banks: The case of Scandinaviska Enskilda banking. (Unpublished Master's thesis), University of Skovde, Stockholm.
- Brigham, E. F. and Ehrhardt, M. C. (2002). Financial management theory and practice (10th edition), Harcourt College Publishers.
- Calomiris, C.W., & Wilson, B. (2004). Bank capital and portfolio management: The 1930s „capital crunch“ and scramble to shed risk. *Journal of Business*, 77,421-455
- Cebenoyan, A. S. and. Strahan, P. E. (2001). Risk Management, Capital Structure and Lending at Banks. The Wharton Financial Institutions Center working paper series.
- Churchill, G. A. and Iacobucci, D. (2002). Marketing research: methodological foundations. 8th ed. Mason, Ohio: South-Western/Thomson Learning
- Duffee, G.R. and Zhou, C. (2001). Credit derivatives in banking: Useful tools for managing risk?
- De Vaus, D. (2001). Research Design in Social Research. www.google.com
- Duffie, D. (2008). Innovations in Credit Risk Transfer: Implications for Financial Stability, BIS Working Papers, No. 255
- Ferguson, R. (2001). Credit risk management models and judgment. Speech, Federal

Reserve Board.

- Fotoh, D. M. (2005). *Commercial bank management and profitability. The case of Cameroon bank*. (Unpublished Master's thesis). University of Skovde, Stockholm.
- Ganesan, V. (2000). Good credit culture to enhance confidence. *Journal of Financial and Quantitative Analysis*, Vol. 25, No.4 pp. 469-490.
- Giesecke, K. (2004). Credit risk modeling and valuation: An introduction.
- Goderis, B., Marsh, I. and Castello, J.V. (2007), Bank behavior with access to credit risk transfer markets, bank of Finland research discussion papers 4/2007
- Hancock, D., & Wilcox, J. A., (1998). The "credit crunch" and the availability of credit to small business. *Journal of Banking and Finance*, Vol. 22, pp. 983-1014.
- Houston, J. James, C. and Marcus, D. (1997). Capital Market Frictions and the Role of Internal Capital Markets in Banking, *Journal of Monetary Economics*, 35, 389-411.
- Hou, Y. and Dickinson, D. (2007). The non-performing loans: some bank-level evidences, paper presented at Research Conference on Safety and Efficiency of the Financial System and Capital Markets in Banking", *Journal of Monetary Economics*, 35, 389-411.
- Jayaratne, J. and Morgan, D.P. (1999), „Capital Market Frictions and Deposit Constraints on Bank“, *Journal of Money, Credit Banking*.
- Kashyap, A.K., Rajan, R. and Stein, J.C. (1999), „Banks as Liquidity Providers: An Explanation for the Co-existence of Lending and Deposit-Taking“, NBER Working Paper Series, No. 6962

Llewellyn, D.T (1992), „Bank Capital: The Strategic Issue of the 1990s“, Banking World, January, pp. 20-5.

Machiraju, H. R. (2004). Modern commercial banking. Vikas publication House PVT.

Machiraju, H.R. (2008). Modern commercial banking, 2nd edition, New Delhi: New Age International (P) Ltd. Publishers

Malhorta, N. K. and Birks, D. F. (2007). Marketing research: an applied approach. 3rd ed. Harlow: Prentice Hall Inc.

Matyszak, P. (2007). Ancient Rome on five denarii a day. New York Thames & Hudson publication.

Maurin, L. and Toivanen, M. (2012). Risk, capital buffer and bank lending a granular approach to the adjustment of euro area banks. Working paper series No. 1499 / November 2012

Mas'ud, M. H, Subroto, B., Salim, U. and Sutrisno (2013). Risk, corporate strategy, capital structure and financial performance: Empirical evidence of bank listed in Indonesia stock exchange. *International Journal of Business and Management Invention*. Vol. 2, Iss.5, pp. PP.27-39. Retrieved from <http://www.ijbmi.org>

Mengle, D. (2007), Credit Derivatives: An Overview, Federal Reserve Bank of Atlanta Economic Review 92/4,124

Mishkin, F. S. (2001). Managing risk in the funds management sector proceedings. Prudential regulatory authority, Australia.

Morrison, A. (2005). Credit derivatives, disintermediation, and investment decisions. *Journal of Business*, Vol. 78, pp.621 647

- Nair, A. and Fissha, A. (2010). Rural Banking: The Case of Rural and Community Banks in Ghana. Agriculture and Rural Development Discussion Paper 48, the World Bank, Washington, D.C
- Nsiah-Agyeman (2010). *Assessment of the credit risk management practices of Kakum Rural Bank Limited*, (Unpublished Master's Thesis). University of Cape Coast, Ghana
- Onaolapo A. R. (2012). Analysis of credit risk management efficiency in Nigeria commercial banking sector, (2004-2009). *Far East Journal of Marketing and Management*, Vol. 2, No. 1, pp. 1-14.
- Osei-Assibey, E. and Bockarie, B., A. (2013), Bank risks, capital and loan supply: evidence from Sierra Leone. *Journal of Financial Economic Policy*, Vol. 5, No. 3, pp. 256 – 271. Retrieved from. <http://dx.doi.org/10.1108/JFEP-09-2012-0041>. Pdf
- Puri, M., Rocholl, J. and Steffen, S. (2010). Global retail lending in the aftermath of the US financial crisis: distinguishing between supply and demand effects. *Journal of Financial Economics*, Vol. 100 No.3, pp.556-578.
- Pausch, T. and Welzel, P. (2012) Regulation, credit risk transfer with CDS, and bank lending. Discussion Paper
- Saidenberg, M.R. and Strahan, P.E. (1999). Are Banks Important for Financing Large Businesses? *Current Issues in Economics and Finance* 5 (12)
- Santomero, A.M. & Trester, J.J. (1998). Financial innovation and bank risk taking. *Journal of Economic Behavior and Organization*, Vol.35, pp. 25 37

- Saunders, M., Lewis, P. and Thornhill, A. (2007). Research methods for business students (4th Ed.). Harlow: Prentice Hall
- Sinkey, J. F. (1998) Commercial bank financial management. 6th edition. Prentice hall USA.
- Teich, I. (1997). Holding on to customers: the bottom-line benefits of relationship building. Bank Marketing Association, Vol. 29, No. 2, pp.12-18.
- Tetteh, F.L. (2012). *Evaluation of Credit Risk Management Practices in Ghana Commercial Bank Limited*. (Unpublished master's thesis). Kwame Nkrumah University of Science and Technology, Kumasi.
- Wheehem, T. L. and Hunger, D. J. (2008). Strategic management and business policy, New Jersey; Pearson education Inc.
- Wilson, J. S. G. (1998). Bank asset and liability management. Magazine of Bank Administration, p.20-22.
- Yueh-hsiang, L. (2005). Managerial Optimism and Corporate Investment: Some Empirical Evidence from Taiwan, ScienceDirect.com.
- Zhu, H. (2008). Capital Regulation and Banks' Financial Decisions. *International Journal of Central Banking*, Vol. 4, No. 1, pp. 165-208

APPENDIX

INTERVIEW GUIDE QUESTIONS

1. What are the processes involved in the granting of loans to customers?
2. Under what criteria do customers become eligible to access loans from the bank?

3. What measures are put in place at the bank to ensure that clients who access loans from the bank do not default in the repayment of their loans?
4. How does ADB bank evaluate its success in the granting and recovery of loans?
5. To what extent does ADB bank conform to the guidelines for sectorial allocation of credit issued by the bank of Ghana?
6. What are some of the constraints encountered by ADB in conforming to the guidelines for sectorial allocation of credit issued by the Bank of Ghana?
7. What role does the Board of Directors of ADB bank play in managing the bank's exposure to credit risk?
8. From this table, please indicate the rate of credit or loan recovery of your branch from the years 2010 to 2014

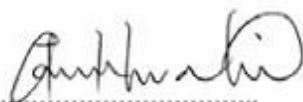
Years	Loans Granted	Recovery Rate (%)
2010		
2011		
2012		
2013		
2014		

Consolidated Statement of Financial Position

AT 31 DECEMBER 2012

	Note	The Group		The Bank	
		2012	2011	2012	2011
Assets		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Cash and balances with Central Bank of Ghana	15	127,945	81,660	127,945	81,660
Investment in Government Securities	16	342,808	209,542	342,808	209,542
Deposits and balances due from					
Banking Institutions	17	47,564	90,248	47,564	90,248
Investment in other securities	18	45,018	35,899	45,018	35,899
Investment in associate companies	19	640	737	640	737
Investment in subsidiaries	20	-	-	14,493	14,493
Loans and advances to customers	21	773,694	678,747	773,694	678,747
Other assets	22	77,535	73,560	66,506	64,870
Intangible assets	23	8,481	11,974	8,481	11,974
Property and equipment	24	31,461	31,304	17,074	17,587
Total Assets		1,455,146	1,213,671	1,444,223	1,205,757
Liabilities					
Customer deposits	25	965,018	827,718	965,018	827,718
Borrowed funds	26	214,154	161,387	214,154	161,387
Other liabilities	27	68,250	42,859	67,852	40,488
		1,247,422	1,031,964	1,247,024	1,029,593
Capital Resources					
Share capital	28	75,000	75,000	75,000	75,000
Revaluation surplus	29	1,748	1,748	1,748	1,748
Income surplus	30	28,059	9,529	17,534	3,986
Credit risk reserve	31	30,752	25,773	30,752	25,773
Statutory reserve	32	58,750	52,076	58,750	52,076
Available for sale reserve	33	13,415	17,581	13,415	17,581
Shareholders' funds		207,724	181,707	197,199	176,164
Total liabilities and Shareholders' Funds		1,455,146	1,213,671	1,444,223	1,205,757

These financial statements were approved by the Board of Directors on 21st March, 2013 and signed on its behalf by:


 DIRECTOR


 DIRECTOR

Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2012

		The Group		The Bank	
	Note	2012 GH¢'000	2011 GH¢'000	2012 GH¢'000	2011 GH¢'000
Interest income	7	199,456	119,189	199,456	119,189
Interest expense	8	(41,166)	(38,891)	(41,166)	(38,891)
Net interest income		158,290	80,298	158,290	80,298
Fees and commission income	9	43,958	39,665	43,958	39,665
Fees and commission expense	9	(2,373)	(2,221)	(2,373)	(2,211)
Net fees and commission income		41,585	37,444	41,585	37,454
Net trading income	10	32,511	27,996	32,511	27,995
Other operating income	11	9,179	17,854	9,179	17,854
Net non-interest revenue		83,275	83,294	83,275	83,303
Operating income		241,565	163,592	241,565	163,601
Impairment charge on loans and advances	21	(26,087)	7,610	(26,087)	7,610
Net Operating Income		215,478	171,202	215,478	171,211
Operating expenses	12	(186,447)	(132,984)	(188,764)	(135,508)
Operating profit		29,031	38,218	26,714	35,703
Share of post-tax loss of Associated Company	19	(97)	(411)	(97)	(411)
Profit from disposal of non-current assets	24	3,324	5,656	64	2,961
Profit from disposal of associate companies	19	15	6,088	15	6,088
Profit from disposal of subsidiary	20	-	1,562	-	1,562
Profit before National Stabilization Levy		32,273	51,113	26,696	45,903
National Fiscal Stabilization Levy		-	(2,556)	-	(2,295)
Profit after national stabilization levy		32,273	48,557	26,696	43,608

Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2012 (Cont'd)

	Note	The Group		The Bank	
		2012	2011	2012	2011
		GH¢'000	GH¢'000	GH¢'000	GH¢'000
Profit after national stabilization levy		32,273	48,557	26,696	43,608
Net change in value of available for sale investment securities	16,18	(5,110)	14,654	(5,110)	14,654
Total comprehensive income for the year		27,163	63,211	21,586	58,262
Profit for the year attributable to:					
Equity holders of the Bank		32,273	48,557	26,696	43,608
Total comprehensive income attributable to:					
Equity holders of the Bank		27,163	63,211	21,586	58,262
Earnings per share					
Basic and diluted (in Ghana pesewas)	14	1.291	1.942	1.068	1.744

Consolidated Statement of Changes In Equity

FOR THE YEAR ENDED 31 DECEMBER 2012

The Bank	Stated capital GH¢'000	Revaluation surplus GH¢'000	Available for sale reserve GH¢'000	Income surplus GH¢'000	Regulatory Credit reserve GH¢'000	Statutory reserve GH¢'000	Total GH¢'000
At 1 January 2011	50,000	1,979	2,943	3,611	17,474	30,272	106,279
Fair value adjustment	-	-	14,654	-	-	-	14,654
Release from credit risk reserve	-	-	-	(8,299)	8,299	-	-
Disposal of investment	-	-	-	12,374	-	-	12,374
Transfer to statutory reserve	-	-	-	(21,804)	-	21,804	-
Release of surplus	25,000	-	(16)	(25,000)	-	-	(16)
Surplus written off due to depreciation	-	(231)	-	231	-	-	-
Other adjustment	-	-	-	(735)	-	-	(735)
Profit for the year	-	-	-	43,608	-	-	43,608
Balance at 31 December 2011	75,000	1,748	17,581	3,986	25,773	52,076	176,164
At 1 January 2012	75,000	1,748	17,581	3,986	25,773	52,076	176,164
Fair value adjustment	-	-	(5,110)	-	-	-	(5,110)
Release from credit risk reserve	-	-	-	(6,474)	6,474	-	-
Disposal of investment	-	-	944	-	-	-	944
Transfer to statutory reserve	-	-	-	(6,674)	-	6,674	-
Release from credit risk reserve (loan write off)	-	-	-	-	(1,495)	-	(1,495)
Profit for the year	-	-	-	26,696	-	-	26,696
Balance at 31 December 2012	75,000	1,748	13,415	17,534	30,752	58,750	197,199

Consolidated Statement of Changes In Equity

FOR THE YEAR ENDED 31 DECEMBER 2012 (Cont'd)

The Group	Stated capital GH¢'000	Revaluation surplus GH¢'000	Available for sale reserve GH¢'000	Income surplus GH¢'000	Regulatory credit risk reserve GH¢'000	Statutory reserve GH¢'000	Non-controlling interest GH¢'000	Total GH¢'000
At January 2011	50,000	1,979	2,943	3,685	17,474	30,272	119	106,472
Fair value adjustment	-	-	14,654	-	-	-	-	14,654
Release from credit risk reserve	-	-	-	(8,299)	8,299	-	-	-
Disposal of PPE	-	-	-	12,374	-	-	-	12,374
Disposal of subsidiary	-	-	-	521	-	-	(119)	402
Transfer to statutory reserve	-	-	-	(21,804)	-	21,804	-	-
Release of surplus	25,000	-	(16)	(25,000)	-	-	-	(16)
Surplus written off due to depreciation	-	(231)	-	231	-	-	-	-
Other adjustment	-	-	-	(736)	-	-	-	(736)
Profit for the year	-	-	-	48,557	-	-	-	48,557
Balance at 31 December 2011	75,000	1,748	17,581	9,529	25,773	52,076	-	181,707
At January 2012	75,000	1,748	17,581	9,529	25,773	52,076	-	181,707
Adjustment	-	-	-	(595)	-	-	-	(595)
Fair value adjustment	-	-	(5,110)	-	-	-	-	(5,110)
Release from credit risk reserve	-	-	-	(6,474)	6,474	-	-	-
Disposal of investment	-	-	944	-	-	-	-	944
Transfer to statutory reserve	-	-	-	(6,674)	-	6,674	-	-
Release from credit risk reserve (loan write off)	-	-	-	-	(1,495)	-	-	(1,495)
Profit for the year	-	-	-	32,273	-	-	-	32,273
Balance at 31 December 2012	75,000	1,748	13,415	28,059	30,752	58,750	-	207,724

Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2012

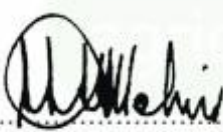
	Note	The Group		The Bank	
		2012 GH¢'000	2011 GH¢'000	2012 GH¢'000	2011 GH¢'000
Operating activities					
Cash generated from operations	34	72,283	111,357	74,334	113,086
Investing activities					
Purchase of property and equipment	24	(6,735)	(13,616)	(5,451)	(12,437)
Proceeds from disposal of property and equipment		3,518	6,444	182	3,560
Acquisition of Intangible assets		(1,092)	(12,590)	(1,092)	(12,590)
Proceeds from disposal of associated company		348	10,200	348	10,200
Proceeds from disposal subsidiary		-	2,713	-	2,713
Increase in other investment securities		(9,119)	(9,292)	(9,119)	(9,316)
Decrease in associates		96	185	96	185
Net cash used in investing activities		(12,984)	(15,956)	(15,036)	(17,685)
National Stabilization Levy		-	(2,169)	-	(2,169)
Financing activities					
Receipts/ (payments) in borrowed funds		52,767	(60,013)	52,768	(60,013)
Dividend Income		1,885	1,298	1,885	1,298
Net cash generated/ (used in) from financing Activities		54,652	(58,715)	54,653	(58,715)
Increase in cash and cash equivalents		113,951	34,517	113,951	34,517
Cash and cash equivalent at 1 January		171,908	137,391	171,908	137,391
Cash and cash equivalents at 31 December	34	285,859	171,908	285,859	171,908

Consolidated Statement of Financial Position


AT 31 DECEMBER 2013

		2013	2012
Assets	Note	GHC'000	GHC'000
Cash and cash equivalents	16,18	275,354	175,509
Investment in Government Securities	17	271,857	342,808
Loans and advances to customers	22	914,350	773,694
Investment in other securities	19	53,368	45,018
Investment in associate companies	20	640	640
Investment in subsidiaries	21	-	14,493
Property and equipment	25	29,769	17,074
Intangible assets	24	8,211	8,481
Other assets	23	<u>68,212</u>	<u>66,506</u>
Total Assets		<u>1,621,761</u>	<u>1,444,223</u>
Liabilities			
Customer deposits	26	1,061,102	965,018
Borrowed funds	27	208,914	214,154
Other liabilities	28	<u>70,750</u>	<u>67,852</u>
		<u>1,340,766</u>	<u>1,247,024</u>
Capital Resources			
Share capital	29	75,000	75,000
Revaluation surplus	30	1,748	1,748
Retained earnings	31	44,962	17,534
Credit risk reserve	32	59,982	30,752
Statutory reserve	33	78,907	58,750
Available for sale reserve	34	<u>20,396</u>	<u>13,415</u>
Shareholders' funds		<u>280,995</u>	<u>197,199</u>
Total liabilities and Shareholders' Funds		<u>1,621,761</u>	<u>1,444,223</u>

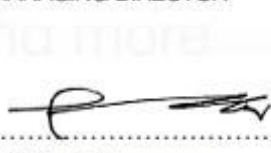
These financial statements were approved by the Board of Directors on, 2014 and signed on its behalf by:


CHAIRMAN


MANAGING DIRECTOR


DIRECTOR


EXECUTIVE HEAD-FINANCE & PLANNING


SECRETARY

Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2013

		2013	2012
	Note	GH¢'000	GH¢'000
Interest income	8	230,648	199,456
Interest expense	9	(55,687)	(41,166)
Net interest income		174,961	158,290
Fees and commission income	10	47,240	43,958
Fees and commission expense	10	(3,320)	(2,373)
Net fees and commission income		43,920	41,585
Net trading income	11	24,534	32,511
Other operating income	12	36,618	9,179
Net non-interest revenue		105,072	83,275
Operating income		280,033	241,565
Other Income	20, 25 (ii)	2,926	79
Impairment loss on financial assets	22 (c)	(19,860)	(26,087)
Impairment loss on investment		(14,493)	-
Personnel expenses	14	(117,793)	(106,803)
Depreciation and Amortization	24, 25	(7,409)	(10,155)
Other operating expenses	13	(39,476)	(71,806)
Operating profit		83,928	26,793
Share of post-tax loss of Associated Company	20	-	(97)
Profit before National Stabilization Levy		83,928	26,696
National Fiscal Stabilization Levy	40	(3,299)	-
Profit after national stabilization levy		80,629	26,696

Consolidated Statement of Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2013 (Cont'd)

	Note	2013 GH¢'000	2012 GH¢'000
Profit after national stabilization levy		80,629	26,696
Other comprehensive income			
Items that are or may be reclassified to profit or loss			
Net change in value of available for sale			
Investment securities	19	<u>6,981</u>	<u>(5,110)</u>
Total comprehensive income		87,610	21,586
Profit attributable to:			
Equity holders of the Bank		<u>80,629</u>	<u>26,696</u>
Total comprehensive income attributable to:			
Equity holders of the Bank		<u>87,610</u>	<u>21,586</u>
Earnings per share			
Basic and diluted (in Ghana pesewas)	15	3.225	1.068

Consolidated Statement of Changes In Equity

FOR THE YEAR ENDED 31 DECEMBER 2013

	Stated capital GH¢'000	Revaluation surplus GH¢'000	Available for sale reserve GH¢'000	Income surplus GH¢'000	Regulatory Credit reserve GH¢'000	Statutory reserve GH¢'000	Total GH¢'000
At 1 January 2012	75,000	1,748	17,581	3,986	25,773	52,076	176,164
Fair value adjustment	-	-	(5,110)	-	-	-	(5,110)
Release from credit risk reserve	-	-	-	(6,474)	6,474	-	-
Disposal of investment	-	-	944	-	-	-	944
Transfer to statutory reserve	-	-	-	(6,674)	-	6,674	-
Release from credit risk reserve (loan write off)	-	-	-	-	(1,495)	-	(1,495)
Profit for the year	=	=	=	26,696	=	=	26,696
Balance at 31 December 2012	75,000	1,748	13,415	17,534	30,752	58,750	197,199
At 1 January 2013	75,000	1,748	13,415	17,534	30,752	58,750	197,199
Fair value adjustment	-	-	6,981	-	-	-	6,981
Release from credit risk reserve	-	-	-	(29,409)	29,409	-	-
Dividend	-	-	-	(3,635)	-	-	(3,635)
Transfer to statutory reserve	-	-	-	(20,157)	-	20,157	-
Release from credit risk reserve (loan write off)	-	-	-	-	(179)	-	(179)
Profit for the year	-	-	-	80,629	-	-	80,629
Balance at 31 December 2013	75,000	1,748	20,396	44,962	59,982	78,907	280,995

Consolidated Statement of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2013

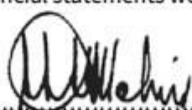
	Note	2013 GH¢'000	2012 GH¢'000
Operating activities			
Cash generated from operations	35	31,830	76,219
Investing activities			
Purchase of property and equipment	25(i)	(5,568)	(5,451)
Proceeds from disposal of property and equipment	25(ii)	4,162	182
Acquisition of Intangible assets	24	(2,537)	(1,092)
Proceeds from disposal of associated company		-	348
Increase in other investment securities		(8,350)	(9,119)
Increase in associates		=	96
Net cash used in investing activities		<u>(12,293)</u>	<u>(15,036)</u>
Financing activities			
(Payments)/Receipts of borrowed funds		(5,240)	52,767
Dividend Paid		<u>(500)</u>	<u>-</u>
Net cash (used in)/generated from financing Activities		<u>(5,740)</u>	<u>52,767</u>
Increase in cash and cash equivalents		13,797	113,950
Cash and cash equivalent at 1 January		285,859	171,909
Effect of exchange rate fluctuations on cash and cash equivalent		<u>4,516</u>	<u>-</u>
Cash and cash equivalents at 31 December	16	<u>304,172</u>	<u>285,859</u>

Statement Of Financial Position

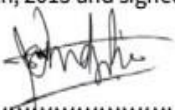
FOR THE YEAR ENDED 31 DECEMBER 2014

		2014	2013
	Note	GH¢'000	GH¢'000
Assets			
Cash and cash equivalents	16	462,089	275,354
Derivative assets held for risk management	17	2,220	-
Investment in Government Securities	18	370,458	271,857
Loans and advances to customers	19	1,124,139	914,350
Investment in other securities	20	78,636	53,368
Investment in associate companies	21	539	640
Asset held for sale	22	3,844	-
National Fiscal Stabilization Levy	23	1,872	-
Property and equipment	24	34,862	29,769
Intangible assets	25	7,203	8,211
Deferred tax asset	23	12,994	-
Other assets	26	57,884	68,212
Total Assets		2,156,740	1,621,761
Liabilities			
Derivative liabilities held for risk management	17	2,142	-
Borrowed funds	27	279,355	208,914
Deposits from customers	28	1,462,139	1,061,102
Corporate Tax Liability	23	1,746	-
National Fiscal Stabilization Levy	23	-	1,572
Other liabilities	29	67,543	69,178
		1,812,925	1,340,766
Equity			
Stated capital	30	75,000	75,000
Statutory reserve	31	84,891	78,907
Credit risk reserve	32	92,533	59,982
Available for sale reserve	33	35,351	20,396
Revaluation reserve	34	1,748	1,748
Retained earnings	35	54,292	44,962
Shareholders' funds		343,815	280,995
Total liabilities and Shareholders' Funds		2,156,740	1,621,761

These financial statements were approved by the Board of Directors on 26th March, 2015 and signed on its behalf by:



CHAIRMAN



MANAGING DIRECTOR

Statement of Profit or Loss and Other Comprehensive Income

FOR THE YEAR ENDED 31 DECEMBER 2014

		2014	2013
	Note	GH¢'000	GH¢'000
Interest income	7	308,137	230,648
Interest expense	8	(100,405)	(55,687)
Net interest income		207,732	174,961
Fees and commission income	9	43,323	47,240
Fees and commission expense	9	(5,118)	(3,320)
Net fees and commission income		38,205	43,920
Net trading income	10	67,221	24,534
Other operating income	11	14,689	36,618
Net non-interest revenue		120,115	105,072
Revenue		327,847	280,033
Other (Expense)/ Income	24	(2)	2,926
Impairment loss on loans and advances	19	(59,080)	(19,860)
Impairment loss on investment		-	(14,493)
Personnel expenses	12	(130,485)	(117,793)
Depreciation and amortization		(9,503)	(7,409)
	24, 25		
Other operating expenses	13	(94,006)	(39,476)
Operating profit		34,771	83,928
Share of associate loss after tax	21	(101)	-
Profit before Tax		34,670	83,928
Income tax	23	14,929	-
National Fiscal Stabilization Levy	23	(1,734)	(3,299)
Profit after Tax		47,865	80,629

Statement of Profit or Loss and Other Comprehensive Income (cnt'd)

FOR THE YEAR ENDED 31 DECEMBER 2014

		2014	2013
	Note	GH¢'000	GH¢'000
Profit after tax		47,865	80,629
Other comprehensive income			
Items that are or may be reclassified to profit or loss			
Net change in value of available for sale			
Investment securities	33	26,371	6,981
Deferred tax on equity investment		(11,416)	-
Total comprehensive income		62,820	87,610
Profit attributable to:			
Equity holders of the Bank		47,865	80,629
Total comprehensive income			
attributable to:			
Equity holders of the Bank		62,820	87,610
Earnings per share			
Basic and diluted (in Ghana pesewas)	15	1.915	3.225

Statement Of Changes In Equity

FOR THE YEAR ENDED 31 DECEMBER 2014

	Stated Capital GH¢'000	Statutory Reserve GH¢'000	Regulatory Credit Reserve GH¢'000	Available for Sale Reserve GH¢'000	Revaluation Reserve GH¢'000	Retained Earnings GH¢'000	Total GH¢'000
At 1 January 2013	75,000	58,750	30,752	13,415	1,748	17,534	197,199
Total Comprehensive income							
Profit	-	-	-	-	-	80,629	80,629
Other Comprehensive income, net of tax							
Fair value reserve (available-for-sale financial assets):							
Net change in fair value	-	-	-	6,981	-	-	6,981
Total Other Comprehensive income	-	-	-	6,981	-	-	6,981
Transaction with equity holders							
Dividend	-	-	-	-	-	(3,635)	(3,635)
Total contribution to equity holders	-	-	-	-	-	(3,635)	(3,635)
Regulatory and Other reserves							
Transfer to credit risk reserve	-	-	29,409	-	-	(29,409)	-
Transfer to statutory reserve	-	20,157	-	-	-	(20,157)	-
Release from credit risk reserve (loan write off)	-	-	(179)	-	-	-	(179)
Net transfer to reserves	-	20,157	29,230	-	-	(49,566)	(179)
Balance at 31 December 2013	75,000	78,907	59,982	20,396	1,748	44,962	280,995

Statement Of Changes In Equity (cnt'd)

FOR THE YEAR ENDED 31 DECEMBER 2014

	Stated Capital GH¢'000	Statutory Reserve GH¢'000	Regulatory Credit Reserve GH¢'000	Available for Sale Reserve GH¢'000	Revaluation Reserve GH¢'000	Retained Earnings GH¢'000	Total GH¢'000
At 1 January 2014	75,000	78,907	59,982	20,396	1,748	44,962	280,995
Total Comprehensive income							
Profit	-	-	-	-	-	47,865	47,865
Other Comprehensive income, net of tax							
Fair value reserve (available-for-sale financial assets):							
Net change in fair value	-	-	-	14,955	-	-	14,955
Total Other Comprehensive income	-	-	-	14,955	-	-	14,955
Regulatory and Other reserves							
Transfer to credit risk reserve	-	-	32,551	-	-	(32,551)	-
Transfer to statutory reserve	-	5,984	-	-	-	(5,984)	-
Net transfer to reserves	-	5,984	32,551	-	-	(38,535)	-
Balance at 31 December 2014	75,000	84,891	92,533	35,351	1,748	54,292	343,814

Statement Of Cash Flows

FOR THE YEAR ENDED 31 DECEMBER 2014

		2014	2013
	Note	GH¢'000	GH¢'000
Operating activities			
Cash generated from operations	36	206,042	31,830
Investing activities			
Purchase of property and equipment	24	(19,572)	(5,568)
Proceeds from disposal of property and equipment	24	84	4,162
Acquisition of Intangible assets	25	(2,002)	(2,537)
Net cash used in investing activities		(21,490)	(12,293)
Financing activities			
Receipts / (Payments) of borrowed funds		70,440	(5,240)
Dividend Paid		(3,135)	(500)
Net cash generated from / (used in) financing Activities		67,305	(5,740)
Increase in cash and cash equivalents		251,857	13,797
Cash and cash equivalent at 1 January		304,172	285,859
Effect of exchange rate fluctuations on cash and cash equivalent		(13,218)	4,516
Cash and cash equivalents at 31 December	16	542,811	304,172

			2014		
			NO of Accts	PROVISION	EXPOSURE
				GH¢	GH¢
A	Current (1%)	Less than 30 days	121065	8,587,066.63	858,706,662.70
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	5842	9,676,962.38	96,769,623.83
C	Sub-Standard (25%)	90 days to less than 180days	13330	10,912,140.22	43,648,560.87
D	Doubtful (50%)	180 days to less than 360 days	5468	70,136,617.05	140,273,234.41
E	Loss (100%)	360 days and above	3070	106,154,955.43	106,154,955.43
TOTAL EXPOSURE					1,245,553,037.24

			2013		
			NO of Accts	PROVISION	EXPOSURE
				GH¢	GH¢
A	Current (1%)	Less than 30 days	110279	7,153,499.42	715,349,942.15
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	16822	14,950,988.30	149,509,882.97
C	Sub-Standard (25%)	90 days to less than 180days	183	3,795,772.57	15,183,090.29
D	Doubtful (50%)	180 days to less than 360 days	562	2,365,716.78	4,731,433.56
E	Loss (100%)	360 days and above	9,608	102,702,914.81	102,702,914.81
TOTAL EXPOSURE					987,477,263.78

			2012		
			NO of Accts	PROVISION	EXPOSURE
				GH¢	GH¢
A	Current (1%)	Less than 30 days	136060	7,079,552.27	707,955,227.29
B	Other loans Especially Mentioned (10%)	30 days to but less than 90 days	11,054	3,634,248.03	36,342,480.28
C	Sub-Standard (25%)	90 days to less than 180days	477	3,979,220.04	15,916,880.14
D	Doubtful (50%)	180 days to less than 360 days	2,680	5,100,756.09	10,201,512.18
E	Loss (100%)	360 days and above	57,715	61,479,285.23	61,479,285.23
TOTAL EXPOSURE					831,895,385.12

KNUST

