KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF HUMANITIES AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

ASSESSING THE IMPACT OF CREDIT RISK MANAGEMENT ON THE PERFORMANCE OF SELECTED COMMERCIAL BANKS IN ASHANTI REGION- (KUMASI METROPOLIS)

A THESIS SUBMITED TO THE BOARD OF GRADUATE STUDIES, KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, SCHOOL OF BUSINESS, IN PARITAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION (MBA STRATEGIC MGT & CONSULTING)

BY

MAVIS NTOW DJAN

NOVEMBER, 2015

DECLARATION

I hereby declare that except for specific references which have been dully acknowledged, this project is as a result of my own research and it has not been submitted either in part or whole for any other degree elsewhere.

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DEDICATION

I wish to dedicate this work to my Lovely Husband, Mr. Daniel Fokuo Boahene who took the responsibly to sponsor My Masters' Degree, Supported me in prayers and provided all my needs to make my Postgraduate education a success. I salute you

Husband May God bless you More

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ABSTRACT

Banks play a crucial role in the economy by connecting lenders to borrowers. The banks as well as other firms are exposed to several kinds of risk but seek ways to manage their risks while striving to maximize performance for this value to be created. This performance is as a result of the banks issuing credits to customers from money deposited by shareholders or savings from customers thus engaging them at risk in case of default. This project is geared towards assessing how selected commercial banks in Kumasi undertake their credit risk management activities with regards to non-performing loans ratio of the banking system, the requirements the Banks consider about companies and individuals before granting them credits, and how the results of credit granted affects the banks performance positively or negatively. This study was carried out using a quantitative research method, and a survey instrument of Questionnaires, were administered on a sample size of 60, out of a sample frame of 103 comprising branch managers, loan managers, loan officers and loan recovery officers, from a target population of about 720 which comprises all the workers of the four selected commercial banks in Ashanti region. The total population of the study is about10,000 representing the population of entire workers of all commercial banks in Kumasi. Stepwise multiple regression and SPSS were used in analyzing the data. The analysis of the empirical data showed that a credit risk exposure occupies an indispensable source of risk that can have adverse impact on the banks performance. It also goes ahead to show that the relationship between credit risk management policy and performance of the commercial banks was very strong. In order for greater results of credit risk management to be attained, banks must critically assess all information about the customer perfectly before granting them loans, and channel resources to application of credit monitoring tools to ensure that credit risk management technology are being fully utilized, to positively influence Banks' performance.

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LIST OF ABBREVIATIONS

ANOVA - Analysis of Variance

BOG - Bank of Kumasi

CAR - Capital Adequacy Ratio

CRE - Credit Risk Exposures

CRMP - Credit Risk Management Policy

CRM - Credit Risk Management

NIM - Net Interest Margin

NLP - Non-Performance Loan

ROA	-	Return on Assert
ROE	-	Return on Equity
UT Bank	-	Unit Trust Bank
SPSS	-	Statistical Package for Social Science
SOBs	-	State Owned Banks
SOEs	-	State Owner Enterprises

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Background to the Study

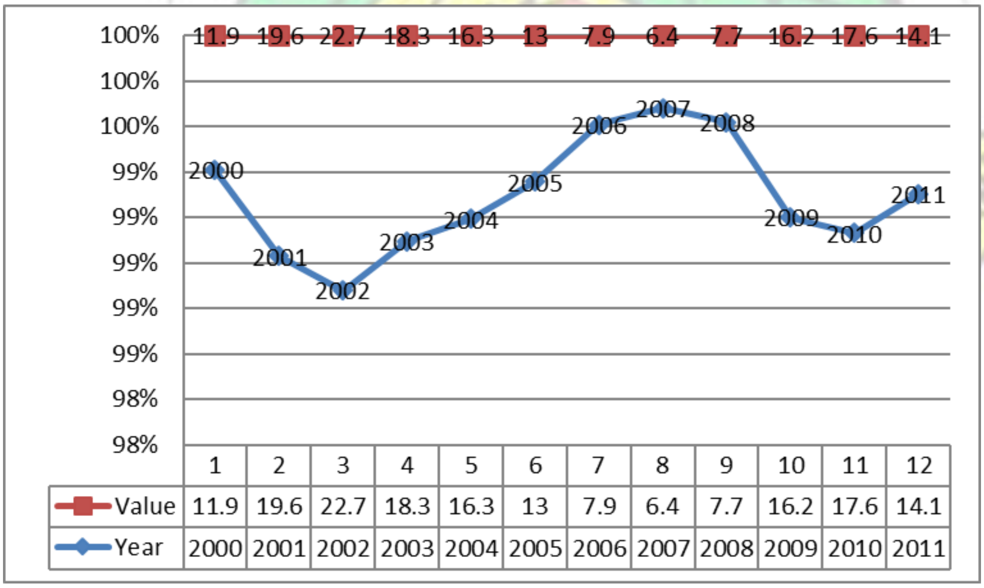
Financial institutions have two primary functions and one of such functions is to stretch out credit to the deficient financial units that consists of borrowers of different types. Bank loan is an impetus of economic growth. Economic development will not exist without sufficient finance to the majority of the sub-divisions of financial arena, which consists of Agriculture, businesses and industrial activities of a country. These units are simultaneously funded by bank lending which is very essential (Radhaswami and Vasudevan 2000). A bank should therefore circulate its credit among economic representatives in-deficiency in a way that will produce adequate income for it and simultaneously advantage the borrower to defeat the insufficiency being confronted with.

Risk is the impromptu events that may have a negative impact on the bank‘s capital or earnings. The borrower bears the expected loss and hence is taken care by adequately pricing the products through risk premium and reserves created out of the earnings. Whereas, the unexpected loss on account of individual exposure and the whole portfolio is entirely to be borne by the bank itself and hence is to be taken care by the capital (Arunkumar and Kotreshwar 2005). The eventual fate of banking will without a doubt lay on its risk management trend.

Banks that have proficient risk management framework will succeed in the industry over the long haul. The effective management of credit risk is a critical component of comprehensive risk management essential for long-term success of a financial institution (Caouette et al. 1998). Financial institutions play a dominant role in commercial lending (Allen & Gale, 2004). They usually perform venture provision, in order to create new debit to their client (Gande, 2008). The credit creation process works smoothly when funds are transferred from ultimate savers to borrowers (Bernanke, 1993). There are many potential sources of risk, including liquidity risk, credit risk, interest rate risk, market risk, foreign exchange risk and political risks (Campbell, 2007). However, credit risk is the biggest risk faced by banks and other financial intermediaries (Gray, Cassidy, & RBA., 1997). The credit risk‘s indicators include the level of non- performing loans, problem loans or provision for loan losses (Jimenez &Saurina, 2006). Credit risk is the hazard that a loan which has been conceded by a bank won't be either incompletely reimbursed on time or completely, reimbursed and this is where there is a danger of client or counterparty default.

Wampah (2015), stated in the Bank of Ghanas press briefing at Monetary Policy Committee, that proof from the Bank's study of credit conditions kept on indicating credit facilitation to both enterprises and household units. He said Small and Medium Enterprises' (SMEs) access to credit for home loans were marginally tight, pronouncing that, nonetheless, access to credit for expansive enterprises stayed at ease. He said in ostensible terms, that credit to the private sector developed by 42.1 in December 2014, contrasted with 28.6 in the same period the previous year. The Governor stated genuine credit development was 21.9 for each year contrasted with13.3 a year prior. He said the credit development was essentially financed by expanded mobilization of domestic deposits by the banking framework. Dr. Wampah said the non-performing loans (NPL) proportion of the banking framework, balance for completely provisioned loans, expanded to 5.6 toward the end of December 2014 contrasted with 4.6 percent in the comparing period in 2013. He said, nonetheless, the unadjusted NPL proportion declined to 11.3 in 2013.

According to IMF, (2013), bank nonperforming credits to aggregate gross loans (%) in Kumasi was 14.10 starting 2011. It‘s most elevated worth in the past 11 years was 22.70 in 2002, while its least esteem was 6.40 in 2007. Bank nonperforming loans to aggregate gross loans are the value of nonperforming loans separated by the aggregate estimation of the credit portfolio (including nonperforming loans before the deduction of particular credit loss provision). The credit sum recorded as nonperforming ought to be the gross estimation of the loan as recorded on the accounting report, not simply the sum that is past due.



Source: IMF, Global Financial Stability Report (2013).

Government's indebtedness to the development sector and others is connected to credit default rates. Dan Mensah, the Executive Director of the Association of Ghanaian Bankers has reprimanded the government for 20% of terrible loans at the nation's banks in light of unfulfilled loans to contractors, suppliers and municipal

Assemblies. As indicated by Mr. Mensah government's inability to reimburse its Loans has prompted roads construction being ended and has left schools and clinics struggling to pay for supplies". The absence of a focal database framework from which credit profiles of potential borrowers can be effectively gotten to know their credit value does not help banks.

Credit risk management procedures uphold the banks to set up an unmistakable procedure in affirming new credit and additionally for the expansion to existing credit. These procedures likewise take after checking with specific consideration, and other proper steps are taken to control or moderate the danger of associated giving (Basel, 1999). Credit conceding method and control frameworks are fundamental for the assessment of Loan application, which then ensures a bank's aggregate credit portfolio according to the bank's general respectability (Boyd, 1993). It is important to set up a legitimate credit risk environment, sound credit conceding procedures, proper credit organization, estimation, observing and control over credit danger, strategy and methods that plainly condense the degree and designation of bank credit facilities and in addition the methodology in which a credit portfolio is overseen i.e. how Loans are raised, assessed, directed and collected, a fundamental component for successful credit risk management (Basel, 1999). Credit granting techniques, assessment of negative event probabilities, and the subsequent misfortunes given these negative relocations or default events, are extremely vital elements included in credit risk management frameworks (Altman, Caouette, & Narayanan, 1998).

Regardless of the perennial challenges facing the banking industry, such as high cost of borrowing and increases in bad loans, these trends offer good prospects to banks (local and foreign) in Ghana. In the past, the banking system in Ghana was characterized by short-term perspective among both savers and lending institutions due to limited access by small and medium-sized enterprises to credit, debt-interest rate and price dynamics (Acquah, 2006). These limitations in the banking system, according to Acquah (2006), ―resulted in an unsustainable portfolio of nonperforming assets on the books of many commercial banks.‖ The always enhancing risk management practiced in the banks will make them more grounded, which thus would present upper hand among competitors in the industry.

1.1 Problem statement

The regulatory requirement for capital reserves has uncovered the significance of banks' credit risk management in relieving credit default risk as most banking issues worldwide have been created by shortcomings in credit risk management that incorporate high credit focus, lacking credit danger observing, inadequate credit danger measuring, poor credit risk rating, deficient loaning strategies, defenselessness to liquidity stresses and to market fluctuations

sensitivities(Aboagye-Debrah, 2007).

In a study conducted by Essien (2005), the failure of most banks in Ghana to accomplish their focus on benefits exude from enormous terrible bad debts which comes about due to credit reimbursement default. This position is collaborated by Adu-Mante (2007) who concluded that banks in Ghana are truly nursing gigantic terrible debts as the aftereffect of loan default by borrowers. He added that the inability to viably oversee credit danger made comparative issues in nations, for example, Mexico and Venezuela.

1.2 Objectives of the Study

1. To identify the sources of credit risk on performance of commercial banks in Kumasi.

2. To determine the impact that credit risk exposure indicators, have on the performance of commercial banks in Kumasi.

3. To assess the impact of credit risk management policy on the performance of commercial banks in Kumasi.

1.3 Research Question

1. What are the sources of credit risk on the performance commercial banks in Kumasi?

2. What is the impact of credit risk exposures on the performance of commercial banks in Kumasi

3. What is the influence of credit risk management policy and on the performance of commercial banks in Kumasi

1.4 Significance of the Study

Banks that have effective credit risk management framework will succeed in the market over the long haul. The successful management of credit risk is a critical part of exhaustive risk management, vital for long haul accomplishment of the commercial banks in Kumasi.

Besides, as commercial banks move into another powerful universe of monetary operations and trading with new risk, the need is felt for more advanced and flexible instruments for risk evaluation, observing and controlling risk exposures. It is, in this manner, time that commercial banks' management equip themselves completely to ponder the requests of making devices and frameworks equipped for surveying, checking and controlling risk exposures in a more exploratory way.

Again, it will help eliminate Economic predicaments and stagnation, company liquidations, infraction of principles in company bookkeeping and review. This will ensure that there is cost efficiency for the commercial banks. In the long run the banking system in Kumasi will be ―well-capitalized, profitable, liquid, sound and stable and more efficient.

Besides, it will serve as a rich source for research in similar area. It will paint a clear picture of the credit risk profile of commercial banks in the financial industry in Kumasi. The study will also add to the existing literature or on risk management in the commercial banking sector. It will likewise be an advantage to the scholastic community and decision makers who deal directly with the monetary institutions and serve as a reference point for making meaningful proposals and suggestion to improve the commercial banking sector in Kumasi.

Credit risk management comprises distinguishing proof, estimation, observing and control of the credit risk exposures. The effective management of credit risk is an urgent part of extensive risk management and key for the long haul achievement of a banking institution. To maintain a strategic distance from Loan losses and bank failures the uprightness and validity of the credit risk administration procedures ought to never be in uncertainty but instead, ought to rely on upon target credit choices that guarantee a satisfactory risk apatite level in connection to the guessed margin of profits.

1.5 Scope of the Study

The geographical scope of the study is Ghana and specifically Kumasi Metropolis. The subject area of study broadly falls under corporate finance and it is captured within financial risk. Bank management, from a finance hypothesis point of view, is by large extent recognized to include the management of four noteworthy balance sheet risk: liquidity risk, premium rate risk, capital risk and credit risk (Hempel et al, 1989). Of these, credit risk has generally been distinguished as the key risks as far as its impact on bank task performance is concerned (Sinkey, 1992) and bank failures

(Spadaford, 1988).

1.6 Limitations of the Study

There is the need for caution because, data were drawn from a single industry and even that only four commercial bank will be considered. Again, the study will rely on the perception of the employees and, does not include formal written sources received and documented by senior management and the head office. Thus, this is a perceptual study but not objective study (based on organizational records). So the possibility of perceptual bias cannot be ruled out. Thus there is the possibility for some respondents to lie. It follows that this study on credit risk does not rely on formal or documented data (e.g., organizational documentations of credit risk) to prove results. Again, this is a cross-sectional study not longitudinal study. The crosssectional nature of the information averts solid derivations with respect to casual suggessions or changes after some time. Finally, the measurement items used in this study are not absolute as there are other items worth considering when it comes to employee credit risk.

1.7 Organization of the Study

This study is comprised of five chapters. Section one served as the prologue to the exploration and it gave an outline of the method of reasoning for the study, its targets, importance and determines the problem statement. Chapter two audits writing relating to the branch of knowledge under study. The third part gives a point by point record of the system utilized as a part of landing at the conclusions.

In chapter four, the data collected is analyzed, presented and the results discussed in connection to the expressed objectives. The last chapter talks about the summary, conclusion and proposals of the study.

CHAPTER TWO

LITERTURE REVIEW

2.0 Introduction

This chapter is devoted to the review of extant literature that relate to the topic. Saunders et al (2007) characterize literature as a definite and defended investigation and discourse of the benefits and flaws of writing in a picked territory which shows nature with what is so far thought around a research topic.

2.1 Historical framework on lending

Lending has been the most principal business transaction by commercial banks and other financial institutions, the loan portfolio has become the predominant source of revenue and largest asset by financial institutions, but also the greatest source of risk to financial institutions (Amos et al, 2014). Historically gaps created due to poor portfolio risk management, lax credit standards, weakness in the economy and poor risk management makes loan portfolio a major cause of banks losses and failures (Amos et al, 2014). For a bank to be profitable given an interest margin of 2%, the default of a loan has to be less than 1 % (Sheppard, 1991). The idea of bank lending is link far back in history and was well acknowledge after the Second World War in Europe and later in Africa (Kiiru, 2004). Before the Economic boom in USA IN 1885 most borrowers were discourage in borrowing due to it high lending rate by banks , this continued until the banks had adequate liquidity and were ready to lend the excess cash at a lower rate (Ditcher, 2003).

The concept of credit in Africa was largely appreciated in the 50's at a period when financial institutions created a credit section and department in bid to lend to white settlers. In the 1990s there was an intervention in loans being given to customers due to non-performance as loan defaults continued (Modurch, 1999). This drills to the concept of credit management as the ability to efficiently and intelligently managing a customer credit line, in order to curb bad debt, bankruptcies and over-reserving with banks having a greater insight to customers financial strength, changing payment patterns and credit score (Haron et al, 2012).The failure of 162 banks in

USA reported by office of the controller of currency in the 1979's, revealed 98% of such financial institution failure was due to asset quality issues and poorly followed loan policy (Spadaford, 1988). Brice (1992) stipulated that, successful banks in the

1990's were built on innovative structure, systems and process that could manage risk in a more pro-active way.

2.2 Overview of Non-Performing Loans (NPLs) in the Banking System in Kumasi

The issue of non-performing Loans (NPLs) in the banking frameworks of numerous rising economies has increased expanding consideration in the recent decades. A lot of NPLs in the banking system of numerous economies have resulted into bank failures. Various studies on the reasons for bank failures observed that, asset quality is a measurably critical indicator of indebtedness, and that falling flat banking institutions dependably had abnormal amounts of non-performing Loans preceding failures. A straightforward meaning of non-performing loans (NPL) is a Loan that is not gaining returns and for which either full installment of principal and interest is no more foreseen; the principal or interest is 90 days or more reprobate; and the due date has passed while installment in full has not been made Demirguc-Kunt, et al (2009).

Subsequently by international practice, Ghana's non-performing Loans are categorized into three separate constituent classifications: 1) substandard — i.e. loans whose interest or initial investments are longer than three months in arrears if borrowing terms are eradicated; 2) dicey — full liquidation of unpaid debts seem dubious and the records propose that there will be a loss, the precise amount of which can't be estimated as yet; and 3) virtual losses and losses (unrecoverable) — i.e., unpaid debts are considered not collectable, usually loans to firms which apply for lawful resolution and protection under the bankruptcy laws (Kumasi Economic Review and Outlook,2012)

Pricewaterhousecoopers (2012) reports that banking sector data of Ghana demonstrate that unrecoverable credit losses have expanded over the previous years from GH¢205 million toward the end of December 2008 to GH¢937.6 million toward the end of December 2010 and have regularly taken the overwhelming share of aggregate NPLs in Ghana. At end-May 2011, the share of unrecoverable Loan losses in totality, NPLs added up to 61.6 percent, trailed by unrecoverable Loans with an offer of 22.7 percent of total NPLs, while sub-standard loans made up for the rest of 15.7 percent [see Table 2.1]

Table 2.1: Non-Performing Loans and its Differentiated Constituents (GH¢ million)

	Dec-08	Dec-09	Dec-10	Feb-11	May-11
Total Non-Performing Loans (GH¢ million)	**458.2**	**1,121.2**	**1,445.6**	**1,230.2**	**1,278.5**
Sub-Standard Loans	124.0	322.8	265.7	267.1	200.5
Doubtful Loans	129.2	321.3	242.3	220.4	290.3
Loan Loss	205.0	477.1	937.6	742.7	787.7
Percentage Shares in Total NPLs					
Sub-Standard Loans	27.1	28.8	18.4	21.7	15.7
Doubtful Loans	28.2	28.7	16.8	17.9	22.7
Loan Loss	44.7	42.6	64.9	60.4	61.6

Figure 2.1 presents the direction of two indicators frequently used to recognize and gage the nature of banks credit portfolios: Non- performing Loans (NPL) proportion — computed the value of NPLs as numerator and the gross value of the aggregate credits portfolio (in addition to NPLs, and before deduction of particular loan losses provisions) as denominator; and Loan provisions to gross Loan proportion — likewise alluded to as the ―valuation allowance. This proportion mirrors the nonmoney cost put aside by banks to cook for future misfortunes on advance defaults. It is measured as the combined procurement offsets of banks at a specific due date to gross credits and advances. The proportion measures the degree to which a bank has made provision against anticipated losses on loan defaults of its credit portfolio and consequently ensures a bank's solvency and capitalization if and when credit defaults happen. The

loan losses provision apportioned every month or year rises with the risk of credits that banks make. Subsequently a bank making a little number of unsafe credits will have a low loan loss provision contrasted with a bank taking higher risk.

As indicated, the proportion of NPL increased sharply from about 7.7 percent of gross loans at the end of December 2008 to reach a highest level of 20 percent by February 2010; afterwards it had gradually steadily declined reaching a level of 16.6 percent in February 2011 but had since increased to 17.6 percent, after two months in May 2011.

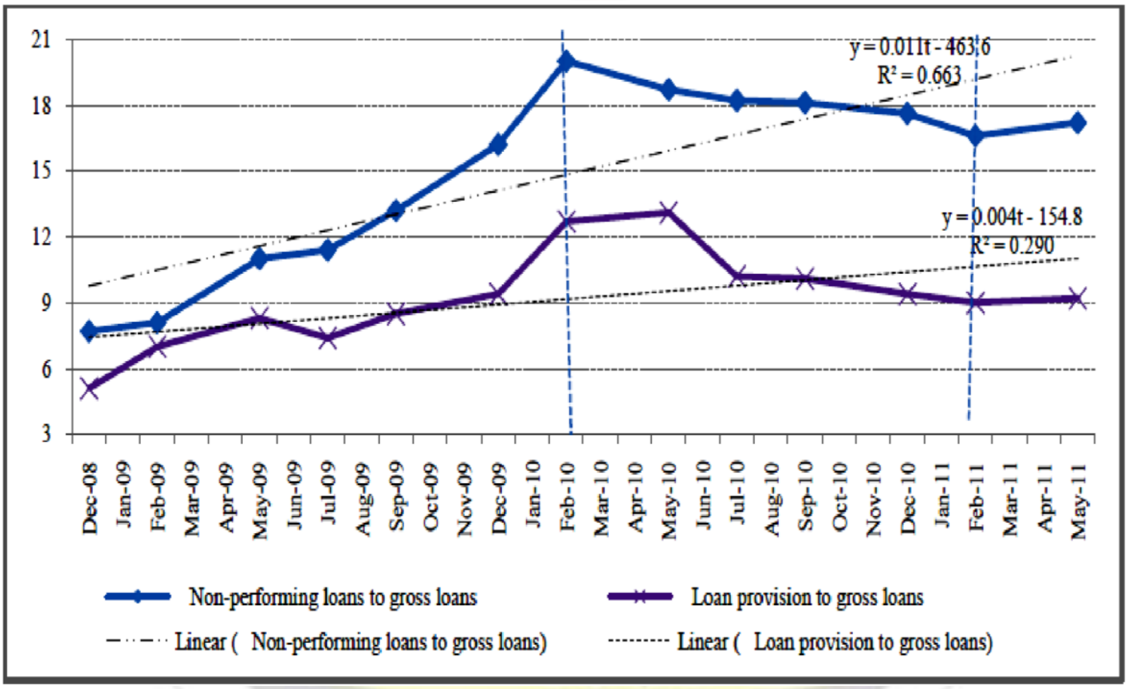


Figure 2.1: Non-Performing Loans and Loan-Loss Provisions to Gross Loans in the Banking System (%)

Data sources**:** Based on data obtained from Bank of Kumasi Financial Stability Reports (February 2010-July 2011 editions)

The second indicator — the loan-loss provision to gross loan proportion — also followed a likely increasing trend path as the NPL proportion, even though at a gradual pace. It reached a peak of 13.1 percent in May 2010 but decreased steadily to 9.2 percent a year later.

A late study by the IMF (2012) observed that, in total the NPL proportion has encountered a decrease, it had been much higher than most companion gathering nations. Kumasi is positioned third among twenty ally nations in Africa with high NPL proportions — with Nigeria and Senegal being the main two countries with higher NPL proportions than that of Ghana (Figure 2.2). The study likewise recommended that few banks in Ghana — including systemically vital household banks and subsidiaries of respectable international banks — reported high NPL proportions in the scope of 20 percent to 40 percent

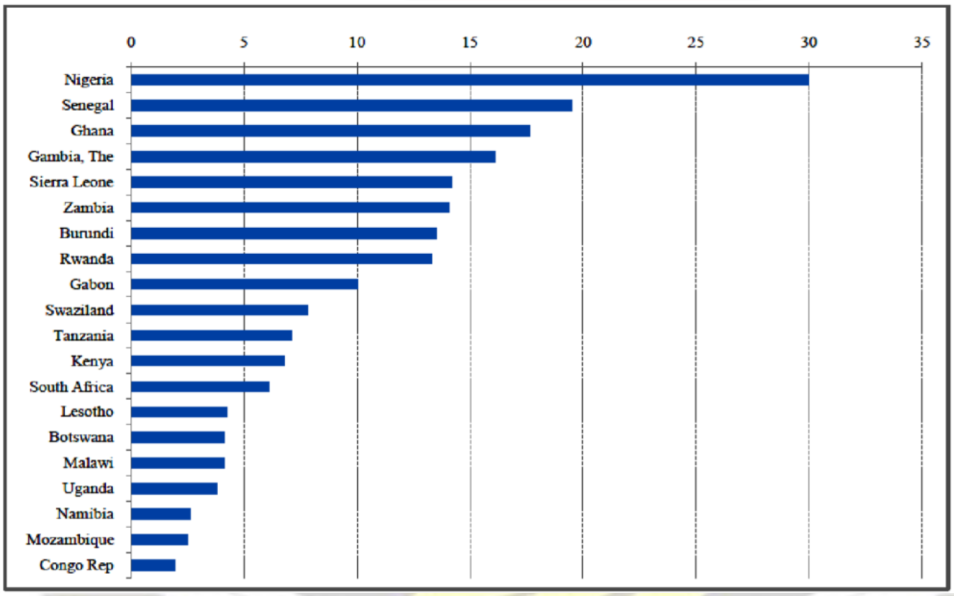


Figure 2.2: Comparative Non-Performing Loan Ratios in Africa (%)

Data sources: IMF Country Report, (2011)

This situation mirrors the interchange of a few variables, a standout amongst the most critical being the state's contribution in bank's operations. It is contended, for instance, that the state has controlling interest in five banks, which together record for 29 percent of the banking framework resources. The performance of these stateowned banks (SOBs) has however been unsatisfactory, because of borrowing practices that emphasis on goals other than prudential contemplations.

Also, government household unpaid debts have been a repeating contributory factor of banking framework helplessness as they undermine ability of suppliers of service to government to reimburse their bank loan in a convenient way. The IMF has assessed that 46 percent of the NPLs at end-March 2010 were specifically or indirectly brought on by the government's aggregation of domestic unfulfilled debts and were intensely amassed in state-owned banks. Government-related NPLs is generally comprised of the high and increasing informal debts — evaluated at around 9 percent of GDP toward the end of 2010 — consisting of (i) impaired resources because of the non-installment payment to builders, merchants and suppliers of merchandise and services to the government, (ii)delays in the conveyance to statutory funds — for example, the District Assemblies Common Fund (DACF), Ghana Education Trust Fund (GETFund), the Road Fund, and

liabilities to the Social Security and National Insurance Trust (SSNIT); and NPLs by vitality related state-claimed enterprises (SOEs) — including the Tema Oil Refinery (TOR) and the Volta River Authority (VRA) — that had not got subsidies for the under-recuperations on petroleum items at the mandate of government.

Moreover, since transient deposits are benchmarked to Treasury bill rates, high fiscal deficits influence banks' funding expenses, add to high loaning rates, and disintegrate ability of contractors to benefit their commitments to banks. It is assessed that default rates on bank credits — measured by the extent of credits impaired for every sector of operation — are more affirmed in the Mining and

Quarrying (M&Q), Agriculture, Forestry and Fishing, Manufacturing, and Commerce and Financial Services divisions. These segments had shares of nonperforming credits in abundance of 20 percent as at end-May 2011 (Figure 2.3). The various segments of financial operations in Ghana — specifically, Construction, Services, Transport and Communications, and Electricity, Gas and Water — represented under 20 percent of the aggregate NPLs in banking sector

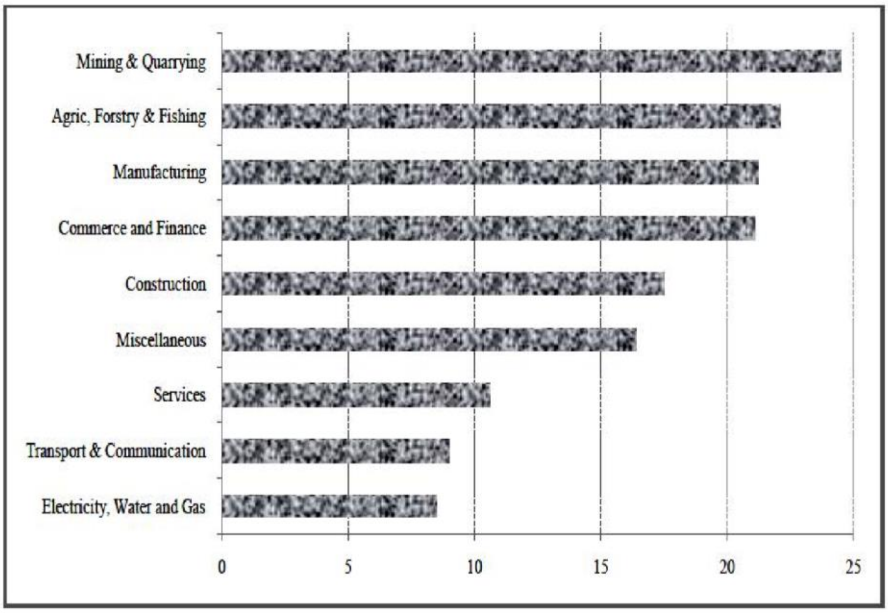


Figure 2.3: Proportion of Loans Impaired in each Sector of Economic Activity in Kumasi (%)

Data sources: Bank of Kumasi Financial Stability Reports (2011)

2.3 Economic Impact of Lending by Commercial Banks

A significant impact on an economy boils down to the function of capital, human capital and technological innovations (Solow and Swan, 2002). The financial sector through it loan distribution has contributed in many significant role in ensuring a high economic performance being indicated by higher Gross Domestic Product (Jung, 1986). Loans, foreign direct investment, domestic direct investment are very important factors in production. Commercial banks regardless of its negative or positive effect, plays a significant role to economic growth.

These among other factors was establishing the impact of commercial banks to the economic growth as these institutions mostly extend financial assistance enterprises and such enterprises are the key promoters to economic growth as they serve as the source of livelihood to the citizens with employment creating opportunities breeding income which contribute enormously to the economic growth (Isaac et al, 2014). According to Hallberg (2001), unlike the advanced countries where the stock market is well developed, commercial banks serves as the engine to economic development in most developing countries. This establishes the impact to employment, income and economic growth (GAB, 2013).

Levine, et al, (1999) establish that economic growth in less develop countries is as a result of financial development while in develop countries financial develop is attained by economic growth. To ensure inadequate investment for social and physical infrastructure will be made successful through sufficient national savings of adequate long term funding in real economic activities.

2.4 Risk Associated with Lending by Commercial Banks

Commercial banks serve as the engine to economic development by providing essential credit (Hallberg, 2001). Commercial banks are increasingly becoming the central source of financial support for the economic activities in many countries (Rosenberg, 1999), but the adverse effect of it is the inability of borrowers not fulfilling their contractual agreement of avoiding default payment, in the long term. Such default practices of borrowers affect the operational capital reducing their scope of lending. Lack of willingness to pay loans in addition to wrongly disbursement of funds, wayward negligence and wrongly evaluation by credit officials are factors that can be attributed to loan default Ahmad, (1997).

Certain key pressing issues which are factors in loan default are shortages in loan, delay in loan delivery to customers, Balogun and Alimi (1988). According to Evans et al (2014), in order to bridge this gap of loan default there should be proper management practices and culture of loans to customers or client, there should be a significant coordination between recoveries on overdue of loans, proper project viability of borrower should be of a great concern. In the view of those key studies on credit, credit risk, credit process practices and credit management is very significant in helping banking institutions to be more effective and efficient in lending to minimize the rate of default in lending.

2.5 Credit

Credit has been one essential facility that plays important roles in our live on a daily basis. In every aspect of life either being a student, working professional, a parent ensuring a good credit is very important. As a good credit history could ensure the ability of acquiring a house or a car and even opportunity in employment (Experian Group 2015).

A Latin word _Credo‘ meaning,‖ I believe ―was a generating seed in deriving the word "Credit"(Sumon and Shilpi, 2007). On a wider basis credit is a fund allocated to one party (lender, seller, or shareholder/owner) liable to be paid by (borrower, customer, company or non-corporate firm) (Woelfel, 1994). According to (Investopedia, 2015) when a borrower gets anything of significant value now and agreed to repay the debt obligation with interest on an agreed future that can be acknowledged as credit. In the field of accounting it‘s identified as an entry that could increase liabilities or decrease asset and equity on the balance sheet of a company. The opposite of debt finance is credit finance. The obligation to make future payment is categorized as debt, but the claim to receive this payment is credit.

According to (Johan and John 1994) credit is ―The right to receive payment or an obligation to make payment on demand or at some future time on account of the immediate transfer of goods (securities)‖.Credit on the contrary stipulate a loan capital in the purchase of goods and services as to when is needed (Experian Group 2015)

2.6 Types of Credit lending

According to Experian Group (2015) credit can be categories into four different types namely:

Revolving credit*:* In such credit scheme the borrower is given a maximum limit of credit and charges are applicable to that limit. As for each month hold a balance (or rotate the debt) and ensure a payment. A typical example of such is the use of most credit cards. Charge cards**:** This is similar to the revolving credit but in this instant there is a different in the charge account as total payment are made every month which involve the capital and the interest. Service credit**:** These are credit endured through the provision of services such as electricity, cellar phone service or gym membership with the agreement for paying for them each month. Installment credit**:** Such is taken place when a borrower takes an agreed amount payable on a monthly installment of a fixed amount with interest over a set period of time. Mortgages and car loans are typical example of installment credit.

2.7 Factors Affecting Lending

According to Albert 2011 the provision of credit have become very essential in the Socio-economic activity of individuals and organization as enormous benefit such as the following are derived: Credit enables the exploit of produce or services by not making instant payment. Credit enables a manufacturer to overpass the space between the production and sale of goods. Credit enables a real estate company to build a project before the units are sold. In short, credit rules the economy. Without banks providing credit (―willing and able‖), the economy will not develop. As credit is a potent tool for economic development (Albert, 2011)

2.8 Loan Processing Guidelines

For effective credit management (Spring, 2005) have in practice a proactive approach in lending loan approval process, with that certain cultural policies are to be observed to avoid failure to loan recovery: Loans choices are completed and permitted by suitable officers, with the proper endorsement and responsibility. Creditors should have documented credit limits in accordance with their lending recommendation/experience. Loans pursue a pre-established loan processing criteria, defines the accurate operation of loan applications within the credit department.

Credit data and credit assessment are appropriately archived on standardized forms. . Credit applications are assessed against set up credit criteria. Credit funds are dispensed through legitimate channels, with fitting protections against burglary or Fraud. To a large extent, credit renewals are liable to the same criteria and credit assessment process as when initially affirmed. While the degree for these procedures and controls must be recorded in approach, the real detail or substance do not. Because of the extent of detail and the relevance for flexibility, this detail can be recorded in operational procedures

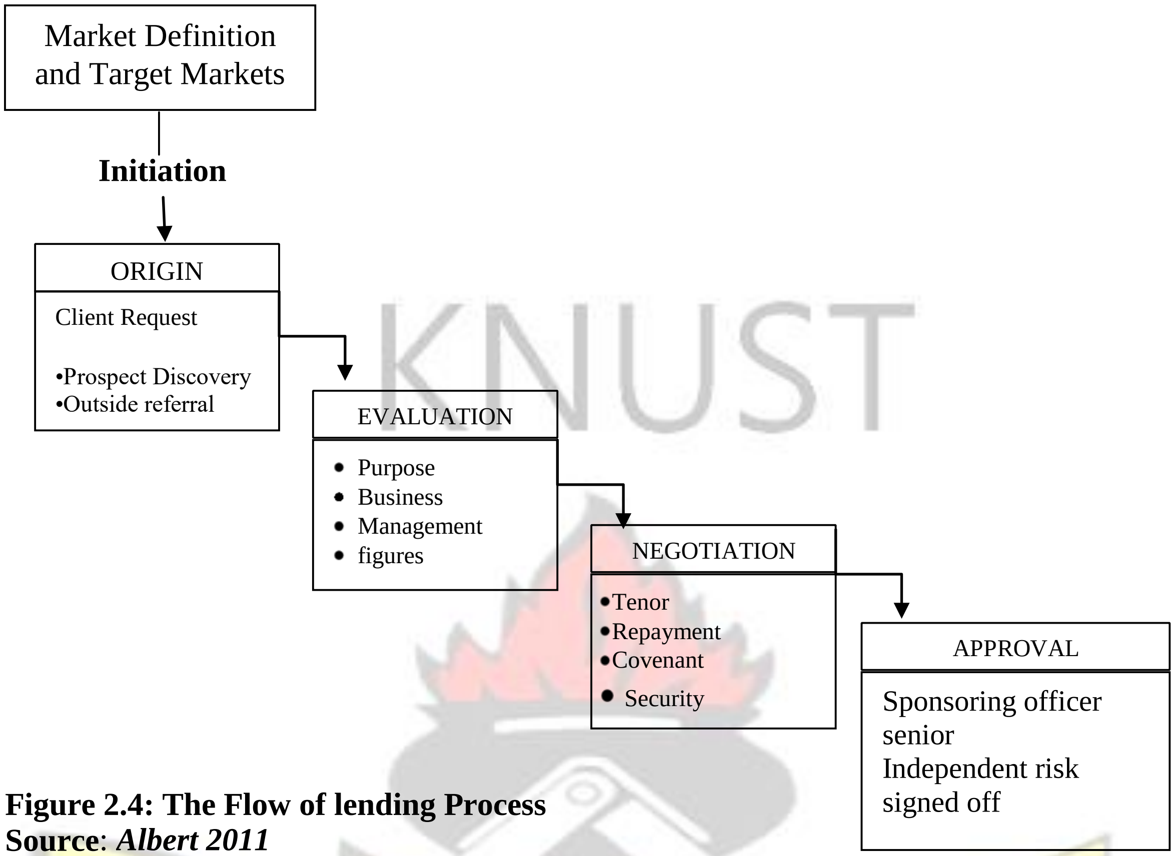


Figure 2.4: The Flow of lending Process
Source: ***Albert 2011***

2.9 Effective Credit Cultural Practices

The current paradigm shifts in the banking field has led to the set up and maintenance criteria that administrate the management of credit. They create laid down principles and benchmarks for staffs to work within to ensure a high quality loan portfolios. With a professional and informed credit policies banks create a practical ― credit culture'' which serve as a road map in ensuring accountability to any recommendation being made (Omega 2015). According to McKinley and Brickman (1994) credit culture is how things are done within an outfit or set-up which is the incarnation of the bank's approach to underwrite, administration, and evaluating credit risk. Credit culture is the bond that links the credit procedure and forms the groundwork for credit discipline.

Credit culture could be formally assigned by top management or could be created through a period of evaluation and experimented period (Strischek, 2002). Basically rampant training do not associate to better training but a well return in training investment is achieved when is bench mark to the right people at the right time.

Enterprise E-learning Access: An effective learning must provide learners with information that is linked to their professional development. An enterprise E-learning base on a cultural foundation of the said outfit creates interactive know how, ensuring a learning base on understanding and application of the material. Enterprise E-learning create s convenient platform of training across organization reducing the time spent in the class room, with uninteractive static books and work shop (omega

2015).

Skills Application Labs: This approach in learning is very dynamic where student are engage in a brain storming. Approach involving group of peers where each other learns from their background, knowledge and experience and become partners in learning. This is elevated from traditional lecture base workshop into an environment of shared accelerate and intensive studies in less time (omega, 2015).

Credit Coaching & Mentoring**:** This level of coaching are designed for experts and involves that which enhances knowledge transfer and ensures credit skills sustenance. This involves a supportive tool, guide and script designed to authorize administrators and trainers with required principles which will ensure sustainment road map. (Omega, 2015).

Table 2.2: Alliance involving Corporate Priorities and Credit Culture

Corporate Priority	**Credit Culture**
Asset quality; long-term consistent performance	Values driven.
Immediate earnings, stock price.	Immediate-performance driven.
Market share, market domination, Loan growth, volume.	Production driven
No clear priorities.	Unfocused.

Source: Strischek, (2002)

2.10 Credit Risk Associated with Commercial Banking

According to (Brown et al, 2012) Credit risk involve the failure of a borrower not meeting its obligations in its contractual agreement to repay a debt which record a lost to its lender. Credit risk also term as the primary financial risk within the banking system is identified in all income producing activities (Comptroller, 2001). The approach used by banks to critically manage its credits risk is a critical success factor of its performance over a period of time; indeed loan losses through capital depletion ascertain causes of most institution failures. Credit risk identification and rating is an essential first step in effective management of credit risk. In Comptroller, (2001), credit risk which also referred to as performance risk, or counterparty risk, or default risk can be characterize into three:

1. Exposure to party possible of defaulting.
2. The default probability on its obligation.
3. The recovery rate of how much can be retrieve.

Base on the above statement an equation can be derive to formulate an equation on credit risk Credit Risk = Exposure x Probability of default x (1(less Recovery rate)), (Brown et al, 2012).The possibility of a contractual agreement not reaching it said agreement signal a possibility risk of non-performance. Hence credit risk and credit risk management are key issues for most institutions (Brown et al, 2012). This goes a long way in affecting firm‘s objective. As lenders loses their capital when borrowers fails to pay institution where money is deposited goes bankrupt (Brown et al, 2012). The sub-prime mortgages in the United States which begun in 2006 had a link to the world credit crunch which started within the same period of year. The setback in the said mortgages revealed unrealizable credit decisions being made regarding effective management in credit risk (Brown et al 2011).

These gave a significant fact of most losses by financial being attributed to poor decision lending. According to (Brown et al 2011) the losses by financial institution caught in the credit crunch has enlighten lenders the need of effective credit risk management ensuring profitability of financial institutions therefore being able to manage risk has become a prerequisite in making lending decision. In making a lending decision factor such as experience, range of analytic and evaluative techniques and prior judgment as such becomes a determine factor that the money will be repaid or will be lost by the credit not being paid (Brown et al 2011).

2.11 Lending Risk

Risk in lending can be link to a default threshold that signified the point in the borrower‘s repayment records where 3 installment payment plans within 24 month have been missed, Pearson and Greeff (2006). This indicates a behavioral character at a point in time demonstrating increase risk of borrower suddenly ceasing all repayment. Default by borrowers has become a primary concern for financial institution as such precisely assessing associated risk to loans contributes a positive impact in their market efficiency (Lee and Liu, 2002). Banking institutions are set up with the idea of collecting savings and making advance loans to enterprises which goes in accordance to (Bank of Ghana ACT, 1970). In addition to that savings and loan institutions are task to carry out social services such as (i) time deposit, checking and savings, (ii) intermediary to other financial institutions in the country (iii) recognize discounted bill of exchange and rediscount its papers, (iv) being implementers and trustees of wills of small scale enterprises (vi) practice other related activities,(Bank of Ghana Act, 1970).The impact to the socio-economic life‘s to citizenry have been extremely tremendous through the role of banking institutions in the supply of financial assistance over the past decades, especially to small medium enterprise.

The outcome to banks has not worth much, due to the default in loans even though its impact has been positive to the economy of a country **(**Samuel et al 2012). In the effect of this risk to banking institutions there have been continuous growths of expansion in their area of bank services, with the employment of sale personnel who are employed on full time in selling bank loans. In ensuring the credit worthiness there are various approaches to the valuation process to access customer‘s worthiness to credit (Antwi et al, 2012).

This in a bid, an important role in recovering loans when time is due (Antwi**,** et al 2012), as most bank setup a credit department that are tasked to such important functions of credit management. But above all such approach by banking institutions the record of large number of defaulted customer in the payment of the principal and interest on their loan is very alarming (Samuel, et al 2012). This leads to banks with alternative approach in retrieving these loans. According to (Ameyaw, 2011) income earned from interest on loans and overdraft, represented 80% of the total income of the banks. This signified that the healthy the portfolio the higher the profit being earned. The same report also recorded a decorating portfolio of the bank as a total allocation for bad and doubtfully debt. Such is a real concern to stake holders for the need to address issues of loan default with seriousness (Myjoyonlinebusines, 2011).

A report by the Monetary Policy Committee (MPC) of the Bank of Ghana on the economy indicate a deterioration from 16.2 percent in December 2009 to 17.6 as at December 2010 on the Non- Performing Loans (NPL). This situation could lead to financially intermediaries not lending to both individuals and enterprises.

As loan portfolio is usually the greatest resource and the principal source of income for banks. According to Aballey (2009) this huge portion of bank loans goes bad affecting the financial performance of these institutions. In all commercial banks are set up with the idea of collecting savings and making advance loans to enterprises which goes in accordance to (Bank of Ghana ACT, 1970). In addition to that banking institutions are task to carry out social services such as (i) time deposit, checking and savings, (ii) intermediary to other financial institutions in the country (iii) recognize discounted bill of exchange and rediscount its papers, (iv) being implementers and trustees of wills of enterprises (vi) practice other related activities,(Bank of Ghana Act, 1970). The impact to the socio-economic lives to citizenry have been extremely tremendous through the role of microfinance institutions in the supply of financial assistance over the past decades, especial to enterprises.

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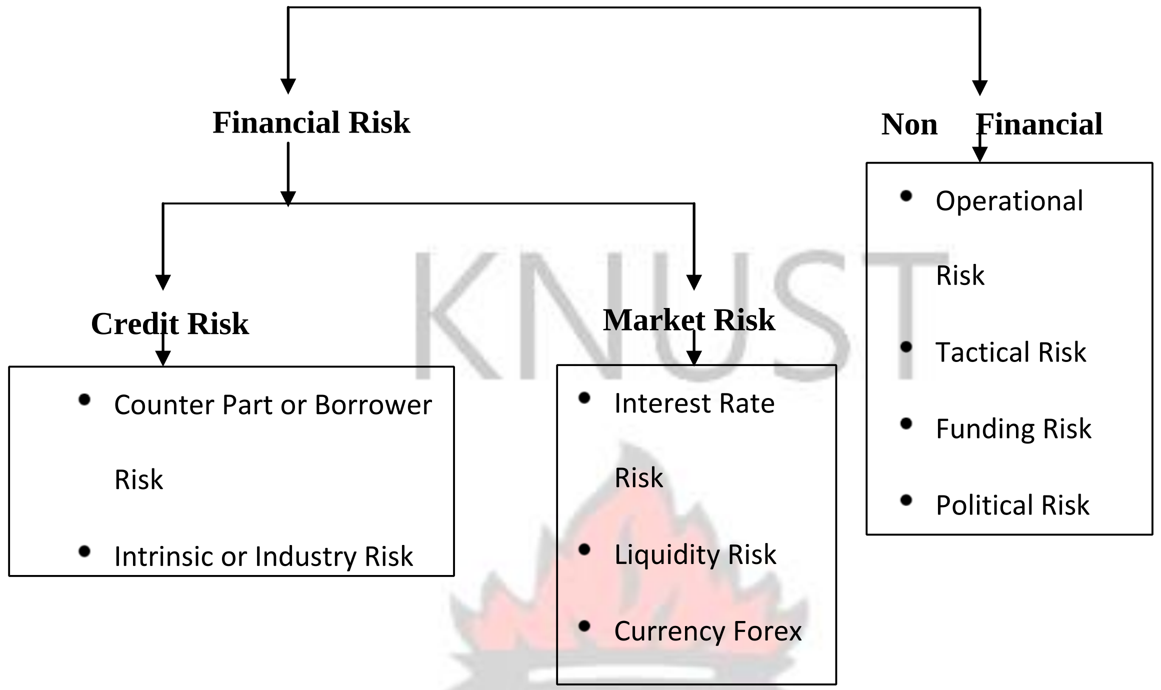
This leads to banks using alternative approaches in retrieving these loans. Pandy and Muralidharan (1979) in reference to data from the Uttar Pradesh State in India made a significant approach in developing criteria as to the willingness to repay their loans. By using data from the Uttar Pradesh State in India, they attempted to develop a criteria for classifying borrowers as to their willingness to repay their loans on the foundation on differences in their socio-economic characteristics. In accordance to Quercia et al., (1995), lower Loan-to-value ratio at originated time (i.e. higher down payment) result to lower default rates for lower income borrowers.

A discovery by Oni O.A et al., (2005) on conditions attributing to default payment of loans among poultry famers in Ijebu Ode Local Government Area of Ogun State Nigeria. Stated that the flock size of famers affect default in loan payment at ($P < 0.10$) level in reference to age its default in loan at ($P < 0.01$) level and income and educational level of farmers in affecting in default in loan payment at ($P < 0.05$). Defaulted loans are always a worry to lender when there is too much of it in the balance



sheet as its affect operations in terms of Profitability, liquidity, debt servicing ability, lending ability and ability to raise additional capital (Evans, et al

2014).

2.11.1 Types of risk in the field of lending

The types of risk in lending are operational risk, tactical risk, funding risk, political risk, legal risk, financial risk, non-financial risk, interest rate risk, liquidity risk, currency forex risk, hedging risk, counterparty or borrower risk, intrinsic or industry risk, portfolio or concentration risk, credit risk, market risk

Figure 2.5: Diagrammatic representation of types of risk in the field of lending
Source: Kanchu and Kumar (2013)

The concern of every lender should be the safety of his money, usually every loan application by customers are to be repaid with a stipulated interest within a given frame of period. But always there is the risk of financial loss if default in payment of a customer failing to meet its contractual obligation. An approach which could avoid the exposure to bad debts is through the implementation of effective credit management.

2.12 Credit Risk Management

The risk that money owed not paid has been rampant in the banking history contemporarily referred to as credit risk. Principally it is the most delicate risk currently identified in finance, commerce and trade transaction from ancient cultures till present (Bart and Tony, 2009). The desire for the practice of credit risk management was as a result of frequent small and large failures associated with economic and social impact derived the need for management of credit risk. In definition credit risk management is the stages around the identification of potential risks, the measurement, required treatment and implementation of the risk models. (Bart and Tony, 2009). This has become a vital tool to the exceptional expansion in consumer credit during the last 50 years; thriving credit risk management must then poise priorities for: 1. productivity, 2. Asset quality, 3. Growth and market share (Strischek 2002). A requirement for financial institutions in ensuring continue stability and profitability is based on a sound credit management as worsening credit quality is attributed to a poor financial performance and conditions.

2.13 Framework for Credit Risk Management

Credit risk management component is always significant as it signifies top management cultural approach in managing risk and as such encompasses certain factors in it process. Singh (2013) in a collective approach outline critical factors that encompasses credit risk management to involve: 1.The ascertaining of risk through credit rating / scoring. 2. Using a scientific bases to price risk. 3. Using efficient loan portfolio management and review strategies and to control the risk. 4. Using estimated loan losses in quantifying the risk i.e. the sum of credit Losses that bank would encounter over a selected time horizon.

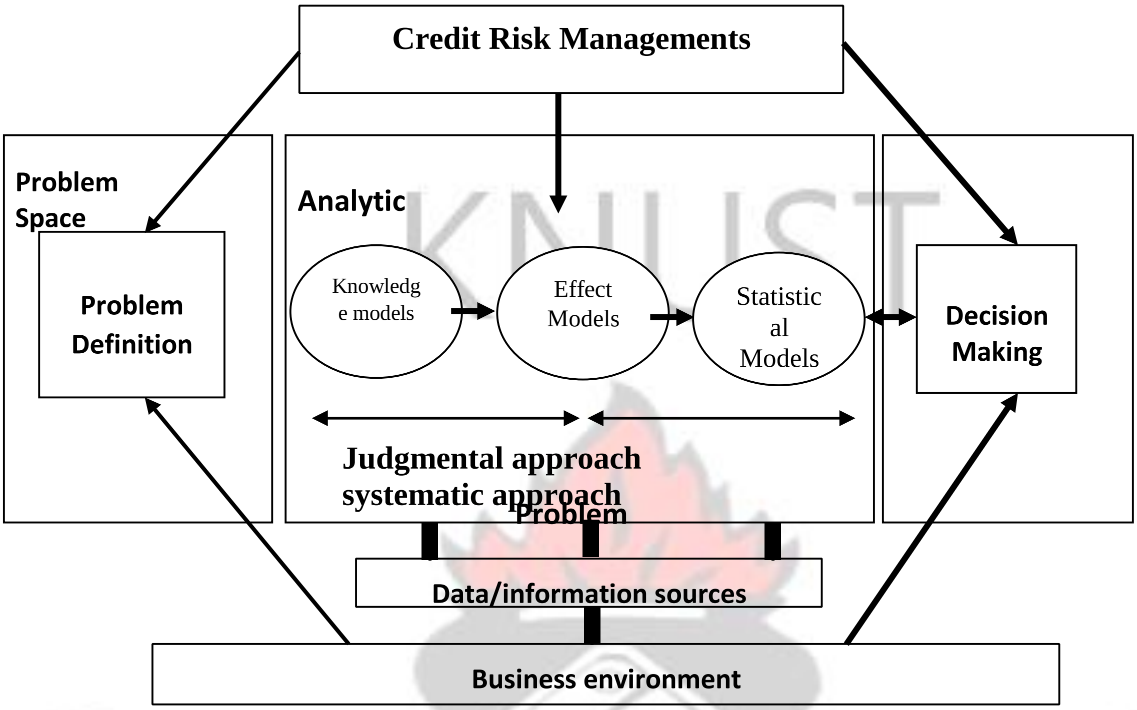
Therefore to minimize operational risk and securing rational returns, a prudent credit management is of a necessity (Spring 2005). Organizations including banks requires adequate allocated capital as a mitigating factor to absorb credit and other losses (Bart and Tony, 2009). Singh (2013) in a bid of eliminating risk through the effective application in the use of credit risk management stipulated certain key areas as a set objective to be achieved in managing risk: There is the need to categorize various type of loans advanced by establishing implications on quality of credit and risk. Establishment of business level strategies to achieve the required level /quality of exposure and issue procedures to Strategic Business Units (SBUs). Performance and exposure performance must be periodically reviewed. Ensuring a measure of suitable mechanism for review and control.

Develop and improve logical mechanisms to analyse risk profiles, for ensuring healthy portfolios and guarding against risk. The foot print of credit management starts with sale and continues till full recovery of any capital lend have been fully received. As a fact, sale is not closed or completed until money has been collected (Heron et al 2012). The successful credit lending relies upon the applied methodology in evaluation and awarding of the credit (Ditcher, 2003), which implies that credit decision should be based on adequate evaluation of the lenders risk condition and the borrower‘s characteristics. According to (Heron et al 2012) most banking institution lending decisions are based on thought about the risk in relation to the borrowers expected repayment plan, this approaches are adopted by banking institutions due to its simplicity and inexpensiveness. But (Edward, 1997) said the following client assessment concept are necessary for decisive decisions, and as such can be term as the 5^C Character, Capacity, Collateral, Capital and Condition.

According to (Amadi, 2012) attitude adjustment can be the resolution to credit crisis and high indebtedness of consumers, there should be paradigm shift from the giving out of easy credit. As debt and credit it should be investment driven not consumption. Therefore in other to critically evaluate a risk in credit certain characteristic of the borrower must be observed which include its economic, legal as well as the relevant environmental factors such as e.g. industry, economic growth. Two factors are also observed during the credit approval process which is transparent and comprehensive presentation of the risks in one face and adequate evaluations of those risks (Oesterreichische 2004). Administering credit risk is a complicated conventional issue and hence involves numerous approach in dealing with that, while some will be quantitative others drive on qualitative judgment (ken and peter, 2011). In any of the approach the key factor is to get the behavioral understanding in determining the likelihood particular difficultness‘ in credit on their obligations.

2.14 Credit Decision Process for Lenders

For a decisive decision by managers this among others are very important in managerial decisions, according to Rouse (2002). On bank lending he suggests the following bank lending principles to a professional credit risk manager: Do not rash in taking a



decision. Do not be overconfidence to ask for a second option. Require adequate data from the customer and do not use assumptions. Do not take a customer‘s statements and representations for granted, analyze them critically. You should have full understanding of any business you lend to. Always make a clear distinction between facts, values and views when making a judgment. Take a second thought when the ‗gut reaction‘ suggests caution, even though the truth may be clear, Rousse further stated that the principles above promotes vivid information, thoroughly assessed and written supported credit decisions. It also takes in consideration the avoidance of bureaucracy and unnecessary delays.

Figure 2.6 Credit Evaluation Process

Source: Brown and Moles 2008, 2011

The schematic above shows the credit risk management process. The initial stage is defining the problem where the risk that money owed and liability of not being paid has been identified after identification of the problem. The next stage is to analyze, (Brown and Moles 2011). In analyzing the diverse method given on the chart above acknowledge the need of data and information from the business environment (e.g. company report, news report, financial statement, market prices of the firm‘s Securities, payment history, and so on). With the diverse diagnostic or analytical approaches can be loosely grouped into (1) knowledge models, where a degree of subjectivity is required through the use of expert judgment by an analyst. (2) Effect models: this combine element of subjective and systemic analysis which will involve the use of ratio analysis. (3) Statistical models: this is more systematic in approach involving the use of credit scoring models. The outcome of the analysis are then used in the conclusion space, where a decision of granting or not granting a credit is determine. In which a decision whether to grant, or not grant credit is establish. In the credit approval process there is always the need to segment each stage of the process in other to critically assess each stage in identifying and dealing with risk. Oesterreichische, (2004) took into account key risk in the segmentation of credit approval process. These approaches acknowledge four key areas in the process: 1. category of borrower. 2. Source of cash flows. 3. Worth and category of collateral. 4. Amount and type of claim

2.15 Connection between Credit risk Management Systems and Loan Performance

Credit Terms**:** These identify the situation under which savings and loans institution will advance credit to a customer, which basically stipulate the credit period and the interest attached. Credit period give a definite period within which the credit is will be

granted. Mostly such period is prejudiced by security value, Credit risk, in addition to the account and market competition (Ross, Westerfield & Jordan, 2008).
The interest rate being a cost on the lend fund which affect the performance of the loan.

Credit Risk Control**:** This is a control measure pipeline to avoid a loan default which could arise from nonpayment of loan from a borrower, where the lender loses its principal and interest. This is mitigated through the use of risk based pricing, covenants, acclaim insurance, tightening and diversification (Ross et al, 2008).Collection Policy**:** Due to the diverse characteristics nature in loan payment of customers who could be either a slow payer or non-payers as most will not pay their bills in time, therefore in such approach there should be accelerating approach to eliminate bad debt losses (Kariuki, 2010).

Economic Cycles**:** These are the volatiles in production or economic activities over a period of months or years. According to Pandey (2008) approximately a long-term expansion development, typically occurs over time in relatively dramatic economic growth, periods of relative stagnation or decline (a contraction or recession). The choice by a MFI to issue or not issuing loans has a significant deciding factor on the economic cycles.

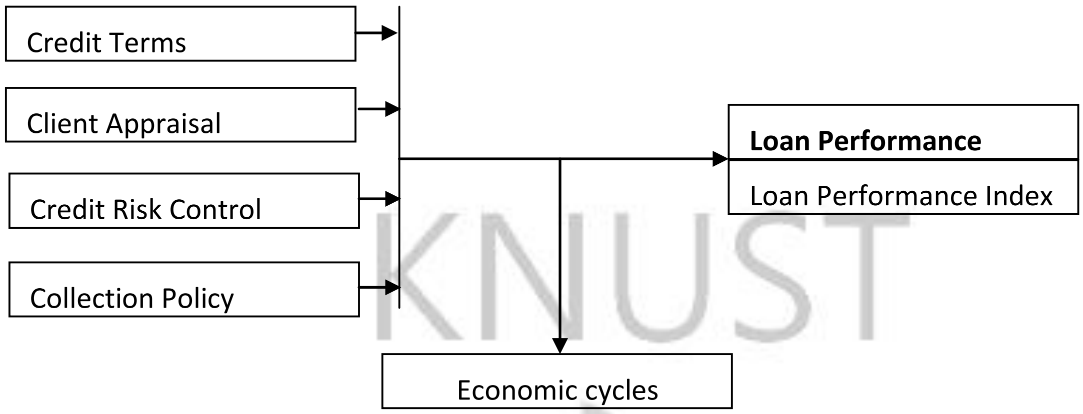


Figure 2.7: Connection between Credit Management Systems and Loan Performance

Source: Brown and Moles 2008, 2011

In a more collaborative manner to gain the full out come through effective credit risk management most corporate / commercial banker must observe these key critical factors (Albert 2011): 1. Be acquainted with the customer; 2. Be familiar with the industry; 3. Be an efficient cross seller; 4. Be a good team player; 5. Acquire investigative aptitude; 6. Encompass uprightness; 7. Be keen to take risk; 8. Know when to say ―no‖; 8. Identify problem before it surfaces.

2.16 Transfer of credit Risk from the Lender to a Third Party Through Credit Derivatives

In a study by Gunter and Florian (2009), credit subsidiary is an agreement between two financial related business partners, called "counterparties," the principle of which includes the exchange of credit or default risk from one party to another. Credit risk indicates the probability of borrowers‘ default financial claims, whether the party is not able or unwilling to pay. The credit derivative empowers the exchange of this risk from the loan specialist to the third party, in this way making provision to build a mechanism against the debtors default. Truly, credit subsidiaries are one of various financial developments initially presented in the 1990s.

They were created as methods for banks to stretch out extra credit to their most gainful and vital customers, regardless of having come to the furthest reaches of credit exposure to these entities as directed by standards of reasonable

diversification. By selling the credit risk to an outsider, banks were presently ready to keep on stretching out credit volume to such customers while at the same time supporting endlessly the implanted credit hazard, commonly without the knowledge or even information of the customer. Credit subsidiaries were initially tantamount to credit risk insurance. To plainly characterize "credit events" is not straightforward. The fundamental issue is to quantify and legitimately characterize "credit risk" in essence. As of now, there exists no basic valuing model for credit risk, nor arrives a record for credit risk identical to LIBOR for interest rates, for instance. With credit subsidiaries, the quality cost of loans or bonds is generally utilized as "the basic." The difficulty with credits is that they are once in a while traded. Consequently, there is no market cost for such an instrument, to the point that could be unbundled. By and by, the best indicator for credit risk is the credit spread between a default free yield—i.e., yields of government securities issued by major industrialized nations— and the yield of credit risky securities, securities exposed to default risk—for instance, developing market sovereign debts or corporate securities. Utilizing this market sector information empowers one to ascertain the "inserted" or "suggested" immaculate credit risk and through estimating make it tradable.

2.17 Bank Performance

Performance relates to the measure of efficiency in carrying out the activities of an organization. Bank performance in relation to credit risk is the extent to which a bank is able to recover the amount of loans issued out to its customers in the appropriate time scheduled for repayment.

According to Olawal Lugman (2013) there are different ways of measuring bank performance, but all measures should be taken in aggregation. Line items such as revenue from operations can be used as well as total unit sale. Again, the bank may look into financial statements and seek out margin growth rates or any declining debt. The performance of a bank can be assessed by the percentage of credits issued out to customers and the percentage that will yield a return of interest and paid back.

(Investopedia).

A bank is said to be performing when a higher percentage of credit issued out is paid back plus interest on a timely basis. The performance of a bank can be assessed by its credit risk management, operations management, Marketing management, financial management and etc.

2.18 Bank Performance Indicators

Profit maximization is the ultimate goal of commercial banks. All the strategies designed and activities performed thereof are meant to realize this grand objective. However, this does not mean that commercial banks have no other goals. Commercial banks could also have additional social and economic goals. However, the intention of this study is related to performance resulting from the influence of credit risk. To measure the performance of commercial banks there are variety of ratios used of which Return on Asset, Return on Equity and Net Interest Margin are the major ones (Murthy and Sree, 2003; Alexandru et al., 2008).

2.18.1 Return on Equity (ROE)

ROE is a financial ratio that refers to how much profit a company earned compared to the total amount of shareholder equity invested or found on the balance sheet. ROE is what the shareholders look in return for their investment. A business that has a high return on equity is more likely to be one that is capable of generating cash internally. Thus, the higher the ROE the better the company is in terms of profit generation and credible performance. It is further explained by Khrawish (2011) that ROE is the ratio of Net Income after Taxes divided by Total Equity Capital. It represents the rate of return earned on the funds invested in the bank by its stockholders. ROE reflects how effectively a bank management is using

shareholders' funds. Thus, it can be deduced from the above statement that the better the ROE the more effective the management in utilizing the shareholders capital.

2.18.2 Return on Asset (ROA)

ROA is also another major ratio that indicates the profitability of a bank. It is a ratio of Income to its total asset (Khrawish, 2011). It measures the ability of the bank management to generate income by utilizing company assets at their disposal. In other words, it shows how efficiently the resources of the company are used to generate the income. It further indicates the efficiency of the management of a company in generating net income from all the resources of the institution (Khrawish, 2011). Wen (2010), state that a higher ROA shows that the company is more efficient in using its resources.

2.18.3 Net Interest Margin (NIM)

NIM is a measure of the difference between the interest income generated by banks and the amount of interest paid out to their lenders (for example, deposits), relative to the amount of their (interest- earning) assets. It is usually expressed as a percentage of what the financial institution earns on loans in a specific time period and other assets minus the interest paid on borrowed funds divided by the average amount of the assets on which it earned income in that time period (the average earning assets). The NIM variable is defined as the net interest income divided by total earnings assets (Gul et al., 2011).

Net interest margin measures the gap between the interest income the bank receives on loans and securities and interest cost of its borrowed funds. It reflects the cost of bank intermediation services and the efficiency of the bank. The higher the net interest margin, the higher the bank's profit and the more stable the bank is. Thus, it is one of the key measures of bank profitability. However, a higher net interest margin could reflect riskier lending practices associated with substantial loan loss provisions (Khrawish, 2011).

2.18.4 Determinants of Bank Performance

The determinants of bank performances can be classified into bank specific (internal) and macroeconomic (external) factors (Al-Tamimi, 2010; Aburime, 2005). These are stochastic variables that determine the output. Internal factors are individual bank characteristics which affect the banks performance. These factors are basically influenced by internal decisions of management and the board. The external factors are sector-wide or country-wide factors which are beyond the control of the bank and affect the profitability of banks. Studies have shown that bank specific macroeconomic factors affect the performance of commercial banks (Flamini et al. 2009). In this regard, the study of Olweny and Shipho (2011) in Kenya focused on sector-specific factors that affect the performance of commercial banks. Yet, the effect of macroeconomic variables was not included

2.18.5 Bank Specific Factors/Internal Factors

As explained above, the internal factors are bank specific variables which influence the profitability of specific bank. These factors are within the scope of the bank to manipulate them and that they differ from bank to bank. These include capital size, size of deposit liabilities, size and composition of credit portfolio, interest rate policy, labor productivity, and state of information technology, risk level, management quality, bank size, ownership and the like. CAMEL framework often used by scholars to proxy the bank specific factors (Dang, 2011). CAMEL stands for Capital

Adequacy, Asset Quality, Management Efficiency, Earnings Ability and Liquidity. Each of these indicators are further discussed below.

2.18.6 Capital Adequacy

Capital is one of the bank specific factors that influence the level of bank profitability. Capital is the amount of own fund available to support the bank's business and act as a buffer in case of adverse situation (Athanasoglou et al. 2005). Banks capital creates liquidity for the bank due to the fact that deposits are most fragile and prone to bank runs. Moreover, greater bank capital reduces the chance of distress (Diamond, 2000).

However, it is not without drawbacks that it induce weak demand for liability, the cheapest sources of fund Capital adequacy is the level of capital required by the banks to enable them withstand the risks such as credit, market and operational risks they are exposed to in order to absorb the potential loses and protect the bank's debtors. According to Dang (2011), the adequacy of capital is judged on the basis of capital adequacy ratio (CAR). Capital adequacy ratio shows the internal strength of the bank to withstand losses during crisis. Capital adequacy ratio is directly proportional to the resilience of the bank to crisis situations. It has also a direct effect on the profitability of banks by determining its expansion to risky but profitable ventures or areas (Sangmi and Nazir, 2010).

2.18.7 Asset Quality

The bank's asset is another bank specific variable that affects the profitability of a bank. The bank asset includes among others current asset, credit portfolio, fixed asset, and other investments. Often a growing asset (size) related to the age of the bank (Athanasoglou et al., 2005). More often than not the loan of a bank is the major asset that generates the major share of the banks income. Loan is the major asset of commercial banks from which they generate income. The quality of loan portfolio determines the profitability of banks. The loan portfolio quality has a direct bearing on bank profitability. The highest risk facing a bank is the losses derived from delinquent loans (Dang, 2011). Thus, nonperforming loan ratios are the best proxies for asset quality. Different types of financial ratios used to study the performances of banks by different scholars. It is the major concern of all commercial banks to keep the amount of nonperforming loans to low level. This is so because high nonperforming loan affects the performance of the bank. Thus, low nonperforming loans to total loans shows that the good health of the portfolio a bank. The lower the ratio the better the bank performing (Sangmi and Nazir, 2010).

2.18.8 Management Efficiency

Management Efficiency is one of the key internal factors that determine the bank profitability. It is represented by different financial ratios like total asset growth, loan growth rate and earnings growth rate. Yet, it is one of the complexes subject to capture with financial ratios. Moreover, operational efficiency in managing the operating expenses is another dimension for management quality. The performance of management is often expressed qualitatively through subjective evaluation of management systems, organizational discipline, control systems, quality of staff, and others. Yet, some financial ratios of the financial statements act as a proxy for management efficiency. The capability of the management to deploy its resources efficiently, income maximization, reducing operating costs can be measured by financial ratios. One of this ratios used to measure management quality is operating profit to income ratio (Rahman et al. in Ilhomovich, 2009; Sangmi and Nazir, 2010). The higher the operating profits to total income (revenue) the more the efficient management is in terms of operational efficiency and income generation. The other important ratio is that proxy management quality is expense to asset ratio. The ratio of operating expenses to total asset is expected to be negatively associated with profitability. Management quality in this regard, determines the level of operating expenses and in turn affects profitability (Athanasoglou et al. 2005).

2.18.9 Liquidity Management

Liquidity is another factor that determines the level of bank performance. Liquidity refers to the ability of the bank to fulfill its obligations, mainly of depositors. According to Dang (2011) adequate level of liquidity is positively related with bank profitability. The most common financial ratios that reflect the liquidity position of a bank according to the above author are customer deposit to total asset and total loan to customer deposits. Other scholars use different financial ratio to measure liquidity. For instance Ilhomovich (2009) used cash to deposit ratio to measure the liquidity level of banks in Malaysia. However, the study conducted in China and Malaysia found that liquidity level of banks has no relationship with the performances of banks

(Said and Tumin, 2011).

2.18.10 External Factors/ Macroeconomic Factors

The macroeconomic policy stability, Gross Domestic Product, Inflation, Interest Rate and Political instability are also other macroeconomic variables that affect the performances of banks. For instance, the trend of GDP affects the demand for banks asset. During the declining GDP growth the demand for credit falls which in turn negatively affect the profitability of banks. On the contrary, in a growing economy as expressed by positive GDP growth, the demand for credit is high due to the nature of business cycle. During boom the demand for credit is high compared to recession

(Athanasoglou et al., 2005).

2.19 Conceptual framework

Figure: 2.8 Indicators of Credit Risk Source: Researchers field work

The conceptual framework is a framework of the relationships between the components of credit risk management indicators that contribute to the reduction of credit risk in commercial banks. The figure above also shows a chart of the components of credit risk management indicators. However, these components contribute to the reduction of the impact of the risk factors. They constitute: adherence to the credit risk management policy, loan appraisal policy, credit staff quality, credit management technology, exposure to credit risk, application of credit monitoring tools, and monitoring quality of credit portfolio.

Figure 2.8 above depicts the various factors influencing the credit risk of the selected banks involved in the study.

In a study by Ugoani (2013) it was pointed out that the situation is not different in Nigeria, where many commercial banks failed to poor credit risk management. The empirical result of these studies implicates the hypothesis that poor credit risk management is basic to bank failures. This implies that a sound credit risk management is an essential component for the survival and benefit of a bank or, poor credit risk management is critical to bank failures. The results of Ugoani (2013) is very relevant but his study fall short at indicating which specific factors led contributing to the poor performance of those banks involved in his study. Thus his work in connection with the hypothesis of this project is not strong.

Again Njanike (2009) reported that the quantity of financial organizations in Zimbabwe declined from forty as at 31 December 2003 to twenty nine (29) as at 31 December 2004 because of poor credit risk management the bank, epitomized by higher amounts of insider loans, speculative loaning, and high convergence of credit in specific segments among different issues. The empirical result of this study connect the hypothesis that poor credit risk management is fundamental to bank failures. From the work of Njanike (2009) there is indication that a poor insider loans which can be attributed to poor credit staff quality and also and ineffective loan appraisal process contributed to the risky nature of their credit and to the poor performance the banks leading to their decline in number. Work, the relationship between the results and the hypothesis strongly correlated.

Having this detailed knowledge about factors influencing the credit risk nature of the four selected banks in Kumasi, this research will help understand better the mechanisms and how to establish an efficient and effective credit risk management system that would help the commercial banks and the banking industry as whole to manage their credit portfolio.

The banks credit policy should explicitly provide a procedural guideline that intensifies the factors that reduce the impact on credit risk on the banks performance. At minimum there should be laid down process relating to:

a) To minimize credit risk, credit staff quality needs to be improved and be abreast with the latest technology on credit monitoring through frequent on the job

   training.

b) Commercial banks would need to intensify the support to their borrowers, so as to minimize the risk of funds mismanagement.

c) Commercial banks would have to increase the frequency of monitoring.

d) The banks should stick to the credit management policy which should be fair and firm

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter comprises a depiction of the design of the study, the population of the study, sampling and sampling technique, data collection technique, research procedures, analysis of data and presentation of results.

3.2 Research Design

Research design links up all the parts of the research project together. A design is used to structure the research, to show how all of the major parts of the project - the samples or groups, measures, treatments or programs, and methods of assignment - work together in an attempt to address the central research questions According to Brown, Askew, Baker, Denvir and Millett (2003). The purpose of this study is to assess the impact of credit risk management among selected commercial banks in Kumasi. This will be done through data collection from the perspective of the bank managers, credit managers and credit officers of commercial banks. Research methodologists, such as Saunders et al (2007), generally classify research design into three, thus Explanatory, Descriptive and Exploratory However, according to the authors Malhotra and Birks (2007) considering theirs as one of the best distinguished so far made, continue that explanatory study is always advanced by descriptive and Casual studies. Essentially, exploratory studies are usually less structured allowing information flow for the researcher to gather more information (Saunders et al,

2007).
From the above breakdown this study can be considered as explanatory. This owes to the fact that, the phenomenon in respect to the impact that credit risk management have on commercial banks, already exist and this project is looking into this phenomenon further for more explanation about the hypothesis. In answering the research questions, this study need to Support or refute an explanation or prediction concerning the impact of credit risk management on the performance of commercial banks. There are eight main assumptions or hypothesis that this study will support or refute at the end of the study.

3.3 Population

The population of this study would be the total number of workers in all the commercial banks in Kumasi. According to Bank of Ghana website (2015) there are 27 commercial banks in Ghana with approximately 10,000 workers, representing the total population. For the purpose of this research, the target population is the total population of the four (4) selected commercial banks in the Ashanti Region with approximately 720 workers. The sample frame is about 103 workers comprising branch managers, loan managers loan officers and loan recovery officers of Barclays, Fidelity, Stanbic and UT Banks. The sample size of 60 was drawn from the sample frame since Managers, loan Managers, loan officers, are targeted to collect adequate information.

3.4 Sampling Technique and Sample Size

The sampling frame is the list of ultimate sampling entities, which may be people, households, organizations, or other units of analysis (Yin, 2004For purposes of this study, the sampling frame is the four selected commercial banks, in Ashanti region.

Simple random sampling technique was used to select the commercial banks that represented the target population. The respondents from each of the banks selected, was selected by stratified random sampling. Thus each bank in the sample serves as one strata and for each strata simple random sampling will be used to select the managers and the officers who are going to be the respondents. According to Coleman and Briggs (2004) stratified sampling is used where there might be a purpose to evaluate that some specific attributes of the sample members is of such relevance that, it is necessary to impose further control over how it is distributed or represented in the sample. This procedure is deemed appropriate because each commercial bank has a chance of being selected for the study. Survey instrument was administered on a sample of size of 60, comprising credit risk managers, loan managers, loan officers, branch managers and loan recovery officers. Response rate of 90% is anticipated. The respondents will be chosen from within the top, middle and lower management levels the banks. They will be selected with the intention that only those people who are acquainted with the issues of credit risk are involved in the responding.

3.5 Sources of Data

To achieve the objectives of this study there is a need to acquire suitable information from various sources to facilitate achieving the study objectives as well as answer the research questions. Data will therefore be attained from two sources namely:

secondary and primary sources

3.5.1 Primary Data

Yin (2003) defines primary data as original data collected by the researcher for the research problem being detected. In this project, the researcher collected primary data through questionnaires. Questionnaires were administered to employees of the banks personally by the researcher. Staff answered the questionnaire in order to discover their observation on credit management in respect of their banks.

3.5.2 Secondary Sources

Secondary data was obtained from the websites of the banks including their administrative documents. Other sources included books, journals, internet sources and on-library and physical library.

3.6 Data Collection Methods

The survey method will be employed to collect data. A questionnaire consisting of two sections, Section ―A‖ and section ―B‖ will used. Section ―A‖ consist of variables pertaining to profile of the respondents while section ―B‖ consist of variables pertaining to the subject under study. To meet the objectives of the study, the various categories of risks identified from literature review were listed and respondents asked to indicate the type of risk they faced by ticking as appropriate. Subsequently, a listing credit management practices were listed and the respondents asked to indicate the extent to which they have adopted each of the practices by ticking as appropriate along a five-point scale. In order to fully meet the objectives of the study factors that determine the effectiveness of CRM will be identified from literature review and respondents will be requested to point out the extent to which they agree or disagree along a five point scale, in relation to their specific banks. Finally, the opinion of the respondents regarding the performance of their bank will be sought along a fivepoint scale.

3.7 Research Procedures

The questionnaires will be tested on a pilot basis on five randomly selected respondents before they are administered. The purpose of the pilot testing was to guarantee that the questionnaires are clear to understand in their correct perspective, to ensure meeting the research objectives. The process that will be followed in collecting data will be through distribution of the questionnaires thus; dropping and picking questionnaires from respondents in their own convenience time, agreed to both parties. A letter of introduction was to be attached but the researcher found it easy to convince branch managers about the research without the introductory letter. In addition, the researcher made telephone calls to the respective respondents to check on the questionnaires that had been delivered to the respondents. Once completed, the researcher personally picked up the questionnaires. This created the chance, clarifying issues arising from the various responses.

3.8 Data analysis and Presentation

There are various methods by which we can analyze the data that have been gathered (Williamson, 2002). The collected data from the questionnaire and other secondary sources were organized systematically in a way to facilitate analysis. Data relating to the objectives of the study will be analyzed by using inferential statistics. Specifically, simple linear regression analysis will be used to analyze the data collected. Statistical

Package for Social Sciences (SPSS) was used as an aid in the analysis. Based on the literature by Carifio & Perla (2007) we can observe several advantages of SPSS. It is efficient and has high rate of accuracy; it‘s inexpensive and reliable. The results from the SPSS were presented and discussed in line with the objectives and research questions of the study. The analysis performed using SPSS, enabled independent variables determine whether they are significant to the dependent variable or not. The regression analysis method (simple Linear) was used to describe the statistics of the sources of credit risk arranged in order of their critical impact on the performance of commercial banks in Kumasi.

3.9 Research quality

The quality of any research work is primarily judged on two criteria. They are validity and reliability. Validity is the chosen method measuring what it was supposed to measure. Reliability is the chosen method which is reliable in terms of measure and can be repeated with the same measure of results (Williamson, 2002).

3.9.1 Validity and reliability of the research

Validity of a research can be achieved in two steps they are internal and external validity. Internal validity is accuracy or the quality of the research work, external validity is the degree at which results or findings can be generalized (Yin, 2008). Given the fact that questionnaires will be piloted and administered personally, the data collection method will accurately measure what they were intended to measure and that the study is convinced that the findings are going to be what they profess to be about. The theoretical framework developed will be broad and in that sense it will validate the survey internally and the respondent‘s answers that will be carefully collected will enable us to observe the degree of external validity. The theoretical framework will encompass certain theories which will enable us to validate the survey which is validated with other similar research within the domain of our thesis; hence we can say that the survey which has been developed is validated to a certain extent as it has been developed from several research works.

Reliability is the extent the study can be repeated with same results (Williamson, 2002). The reliability for the survey can be seen as receiving quality answers for the questions, and how you are able to get the respondents to understand the questionnaire. To achieve this we are using simple questions with a scaling system. This questionnaire will be targeted at the required sample who is credit management employees of the banks. The survey which has been developed in a careful manner to ensure that the respondents can answer in the best possible manner and also the companies have been carefully selected to ensure a high response rate. Therefore, the data collection technique will yield consistent findings and there can be transparency in how sense will be made from the raw data.

3.9.2 Ethical Issues

Several ethical issues will be considered before, during and after the study. All articles, journals, books among others that will be used in this study will be properly referenced. Before the administration of the questionnaires and interviews to the bank officials, letters will be sent to the managers of the company for permission to be granted. Not only that but the sanctity and privacy of the respondents of the questionnaire will be considered. Respondents will be asked if they have the luxury of time to fill the questionnaires. More importantly, the purpose for which the research is conducted will be explained to respondents before they will be handed with the questionnaire to fill.

The identity of the individual respondents to the questionnaire is another ethical issue that has critically been considered in this study.

CHAPTER FOUR

ANALYSIS AND PRESENTATION OF FINDINGS

4.0 Introduction

The chapter deals with the analysis and presentation of findings**.** In an attempt to achieve the objectives of the study, the chapter has statistically assessed the impact of credit risk management policy and credit Risk Exposures on the performance of commercial banks in Kumasi.

4.1 Profile of Respondents

A response rate of 85% was achieved for the 60 questionnaires administered on the employees of four commercial banks. The employees comprises branch managers, credit manager, loan officers, accountants, auditors, loan recovery officers .As high as 52.5% of the commercial banks studied have been operating in Kumasi for the past six to ten years. The remaining 47.5% of the banks have been operating beyond fifteen years. Regarding their years of experience 41.2% had one to five years of experience, 41.2% had six to ten years of experience, another 5.9% had eleven to sixteen years of experience and 11.8% had seventeen years of experience and above.

All the banks studied have a minimum of 10 branches.

Table 4.0: Name of bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fidelity bank	10	47.1	19.61	19.61
	Barclay Bank	16	52.9	31.37	50.98
	Stanbic bank	14	27.45	27.45	78.43
	UT bank	11	21.57	21.57	100
	Total	51	100.0	100.0	

Table 4.1: Years of operation in Kumasi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6 - 10years	24	47.1	47.1	47.1
	11 - 15years	27	52.9	52.9	100.0
	Total	51	100.0	100.0	

Table 4.2: Number of fulltime employees of the bank

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 25	24	47.1	47.1	47.1
	101 and above	27	52.9	52.9	100.0

Total	51	100.0	100.0	

Table 4.3: Years of experience of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 - 5years	21	41.2	41.2	41.2
	6 - 10years	21	41.2	41.2	82.4
	11 - 16years	3	5.9	5.9	88.2
	17years and above	6	11.8	11.8	100.0
	Total	51	100.0	100.0	

Table 4.4: Number of branches of the bank in Kumasi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 5	1	2.0	2.0	2.0
	6 - 10	3	5.9	5.9	7.8
	11 - 20	4	7.8	7.8	15.7
	Above 20	43	84.3	84.3	100.0
	Total	51	100.0	100.0	

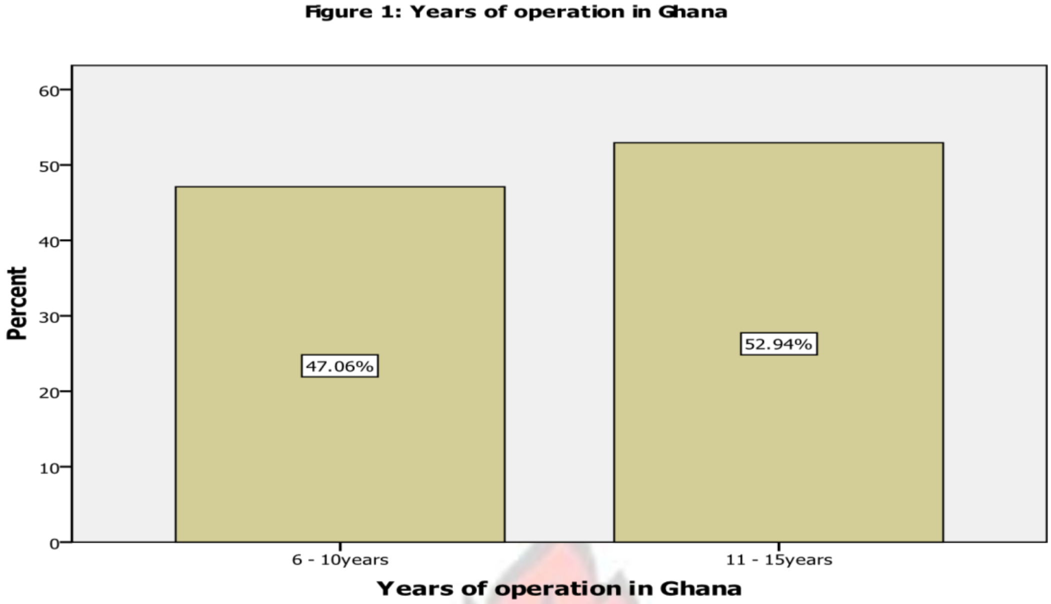


Figure 4.1: Years of operation in Kumasi

Source: Field Survey, 2015

Figure 4.2: Number of fulltime employees of the bank

Source: Field Survey, 2015

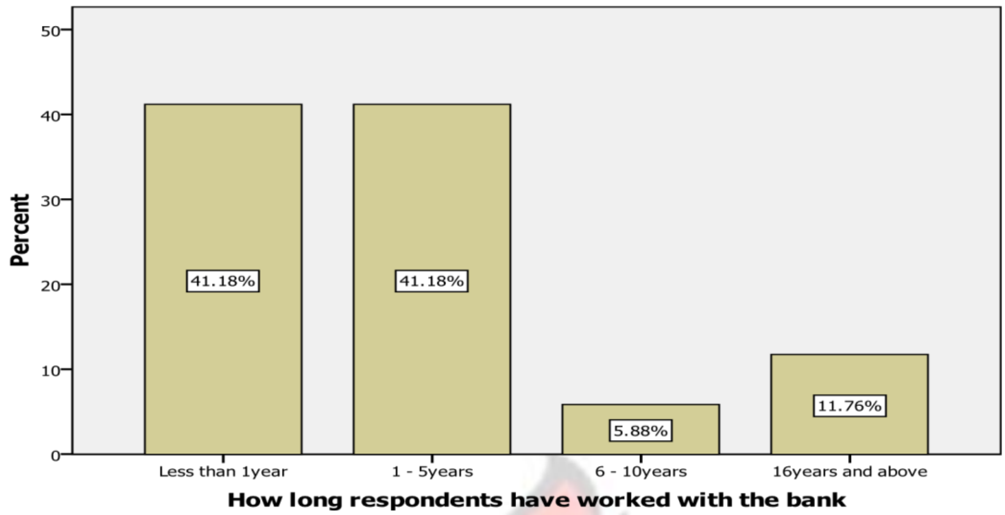


Figure 4.3: Years of experience of respondents

Source: Field Survey, 2015

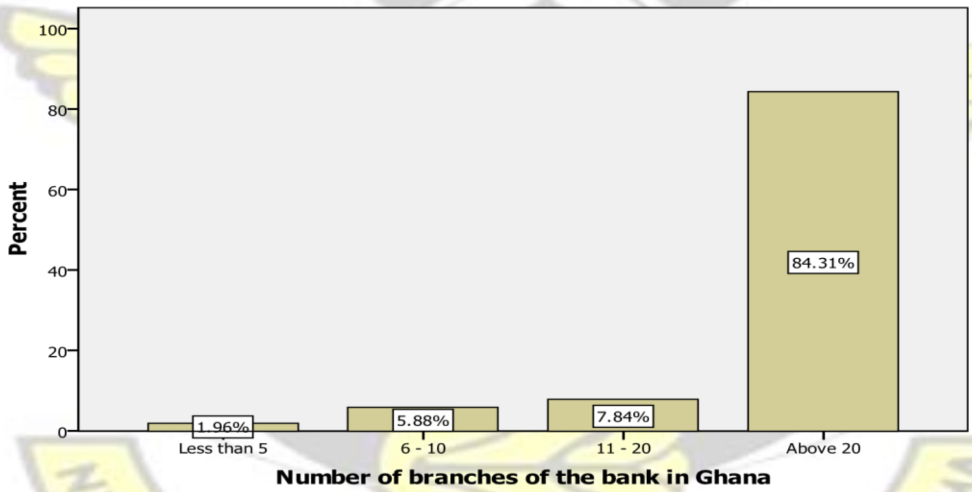


Figure 4.4: Number of branches of the bank studied

Source: Field Survey, 2015

4.2 Assessing the Sources of credit Risk on the performance of commercial

Banks in Kumasi

The credit risk sources were assessed to the most important factors of risk that can have adverse impact on the banks with the highest mean of 3.6716 and an associated standard deviation of 0.93183. According to the respondents, application of credit monitoring tools by commercial banks and loan appraisal process of commercial banks were the next most important source of risk that can have adverse impact on the banks with means of 2.7529 and 1.9176respectively. Their corresponding standard deviations are 2.06750 and .48527 accordingly.

Credit staff quality of commercial banks was the least important source of risk that can have adverse impact on the commercial banks with a mean of 1.4118 and a standard deviation of .49705. Table 4.1 presents the most important sources of risk that can have adverse impact on the banks arranged in descending order with the most important risk appearing first and the least risk appearing last. These help point to the commercial banks the direction of which credit risk deserve greater attention in their attempt to manage the major credit risk listed in table 4.1 below.

Table 4.5: Descriptive Statistics of Sources of Credit Risk arranged in order of their importance to Commercial Banks in Kumasi

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
CREDIT RISK EXPOSURES OF COMMERCIAL BANKS	48	1.73	4.73	3.6716	.93183	.868
APPLICATION OF CREDIT MONITORING TOOLS BY COMMERCIAL BANKS	51	1.00	10.60	2.7529	2.06750	4.275
LOAN APPRAISAL PROCESS OF COMMERCIAL BANKS	51	1.00	2.60	1.9176	.48527	.235
MONITORING QUALITY OF CREDIT PORTFOLIO OF COMMERCIAL BANKS	48	1.00	2.91	1.7764	.54095	.293
ADHERENCE TO CREDIT MANAGEMENT POLICY BY COMMERCIAL BANKS	51	1.00	2.88	1.7332	.58550	.343
CREDIT MANAGEMENT TECHNOLOGY OF COMMERCIAL BANKS	51	1.00	3.00	1.4118	.60585	.367
CREDIT STAFF QUALITY OF COMMERCIAL BANKS	51	1.00	2.00	1.4118	.49705	.247
Valid N (listwise)	48					

Source: Field Survey, 2015

From Table 4.1, it‘s made evident that on the average 4 and 3 respondents opined that their institutions had prevailing factors that act as sources of credit risk exposures and applications of credit monitoring tools, respectively. Also, 2 respondents opined that for loan appraisal process, monitoring quality of credit portfolio, adherence to credit management policy, credit management technology and credit staff quality of commercial banks does have an impact on the institutions

credit risk.

4.3 Impact of credit risk management policy on the performance of commercial banks in Kumasi

In establishing the impact of credit risk management on performance of commercial banks in Kumasi, two main factors were considered as independent variables (credit risk exposures (CRE) and Credit Risk Management Policies (CRMP) and bank performance (P) of the selected banks was the dependent variable and correlation and regression analysis were employed.

The two main independent variables considered: CRE was replaced with ―A‖ and CRMP with ―B‖ respectively; while the dependent variable is Bank Performance (P).

The regression estimate was given as:

$$P = b_0 + b_1A + \varepsilon b_2B$$

Where, $b_0 =$ *constant of proportionality*

$=$

$=$

$\varepsilon =$

b_1 coefficient of CRE independent var *iable*
b_2 coefficient of CRMP independent var
iable errorterm

P = Organizational Performance

Table 4.7 Correlations of Variables

Correlations					
			CRE	CRMP	PERF
Spearman's rho	CRE	Correlation Coefficient	1.000	.354*	.322*
		Sig. (2-tailed)	.	.012	.023
		N	51	51	51
	CRMP	Correlation Coefficient	.354*	1.000	.340*
		Sig. (2-tailed)	.012	.	.016
		N	51	51	51
	PERF	Correlation Coefficient	.322*	.340*	1.000
		Sig. (2-tailed)	.023	.016	.
		N	51	51	51
*. Correlation is significant at the 0.05 level (2-tailed).					
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Field Study, 2015

The correlation results shown in Table 4.7 above generally revealed that staffs of the selected banks partly attribute their bank performance to credit risk exposure and credit risk policies. Though the association between various independent variables and the dependent variable is significant at 0.01 or 0.05, the relationships are not strong since most of the coefficients (r) is less than 0.5.

Table 4.8 Model Summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.646[a]	.417	.365	.88877

a. Predictors: (Constant), CRE, CRMP

Source: Field Study, 2015

Table 4.9 ANOVA Results

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	25.434	4	6.358	8.050	.000[b]
	Residual	35.546	45	.790		
	Total	60.980	49			

a. Dependent Variable: PERF

b. Predictors: (Constant), CRE, CRMP

Source: Field Study, 2015

Table 4.10 Model Estimates

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.339	.767		1.745	.088
	CRE	.119	.139	.161	.852	.399
	CRMP	.459	.200	.403	2.299	.026

a. Dependent Variable: PERF

Source: Field Study, 2015

The model summary (refer to Table 4.8) shows the result of entering the dependent variable (P) against the independent variables (A and B) and the R (.646) is the overall correlation between the dependent variable and the independent variables.

The model indicates an R-square value of .417, which means that about 41.7% of variance in the bank performance is explained by the independent variables. This means that about 41.7% of changes in bank performance of selected banks in Kumasi can be explained by credit risk management parameters of exposure and policies.

The test for the differences in the performance as given by the ANOVA table (table 4.9) is however significant at 1%.

The estimated regression equation is could now be estimated as follows;

$$P = 1.339 + 0.285A + 0.119B + \varepsilon$$

.

CHAPTER FIVE

SUMMARY OF FINDINGS, RECOMMENDATIOS AND CONCLUSION

5.0 Introduction

This chapter involves a presentation of the summary of findings from the analysis done so far. Recommendations based on the findings have been provided to improve credit risk management of commercial banks in Kumasi. The study is concluded and a statement of the way forward is made.

5.1 Summary of Findings

- **Determining the impact that credit risk exposure indicators have on the performance of commercial banks in Kumasi**

The credit risk exposure indicators of commercial banks surfaced was the most critical source risk that can have adverse impact on the banks with the highest mean of 3.6716 and an associated standard deviation of 0.93183.in relation to the objectives of this study, it means that, credit risk exposures have been determined as the greater source of risk to commercial banks, with regards to the regression analysis. The risk exposure indicators; which includes; difficult macroeconomic environment, poor insider loans, chronic liquidity challenges, unsuitable earnings, among others are a significant source of risk to commercial banks in Kumasi, whilst the quality of Credit staff of commercial banks was the least important source of risk that can have adverse impact on the commercial banks with a mean of 1.4118 and a standard deviation of 0.49705.

- **Assessing the impact of credit risk management policy on the performance of commercial banks in Kumasi.**

Credit risk management policy emerged statistically significant to performance of commercial banks in Kumasi ; and the analysis of variance (ANOVA) reports the significance of credit risk management policy of commercial banks in Kumasi at p = 0.000[l.] In relation to the objectives, credit risk management policies enacted by the selected banks, have been assessed to be a significant contributory factor towards the performance of the commercial Banks .The relationship between credit risk management and the performance of the commercial banks was not that strong.

- **Ascertaining the sources of credit risk on performance commercial banks in Kumasi**

Per the study sources include Monitoring of the quality of credit portfolio and it was statistically significant to the performance of commercial banks ·In relation to the objectives it is the third most critical credit risk source.

It can be observed from the coefficient tables that the relationships of the betas of the credit risk management variables have positive or negative relationship with the performance of commercial banks in Kumasi.

5.2 Conclusion

The study set out to assess the impact of credit risk management on the performance of commercial banks in Kumasi. In an attempt to do this, 60 questionnaires were administered on key employees of four commercial banks in Kumasi. A response rate of 85% was achieved. The data collected was analyzed using stepwise regression. It was found that credit risk management was statistically significant to the performance of commercial banks studied. Again, it was observed that credit risk exposures was the most important source of risk to the banks, whereas the quality of Credit staff of the banks was the least important source of risk to the commercial banks.

5.3 Recommendations

- From the findings, since credit risk exposure indicators surfaced the most important source of risk, it was statistically significant to the performance of the commercial banks. It is therefore recommended that the commercial banks should implement the XDS data system to determine the credit worthiness of loan applicants, to minimize risk of exposures

- Again the commercial banks in Kumasi are entreated to institute effective corporate governance to monitor the operations specifically Loan portfolio

- Again the application of credit monitoring tools should be strictly adhered to.

Some of the credit risk management variables reported in the regression co-efficient tables were statistically significant and these contributed to the performance of commercial banks in Kumasi. It is recommended that those credit risk variables must be considered by the banks in their credit risk process include:

Adherence to credit management tool: (1) we have writing off policy for our loans (2). we have robust and transparent processes, policies and procedures

Loan appraisal process and performance: (3) borrowers Capacity, (4) borrowers credit History, (5) borrowers condition.

Credit management technology and performance: (6) we make use of management information system (7) software are used in credit monitoring

Significant variables under credit risk management policy **:(**8) adequate risk management systems (9) The risk and responsibilities of individuals responsible for credit risk have been laid down, (10) Our frequency of site visits to borrowers is very high.

5.4 Suggestion for further research

Further research could be undertaken to find out the impact of monitoring toots, credit management technology, loan appraisal and credit monitoring quality of credit portfolio on the performance of commercial banks in Kumasi.

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APPENDIX

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY

COLLEGE OF ART AND SOCIAL SCIENCE

SCHOOL OF BUSINESS

MASTER OF BUSINESS ADMINISTRATION

DEPARTMENT OF MARKETING AND CORPORATE STRATEGY

QUESTIONNAIRE

Topic: Assessing the Impact of Credit Risk Management on the Performance of Commercial Banks In Kumasi: A Case Study of Selected Banks in Ashanti Region

This questionnaire has been designed to collect information from selected staff of commercial banks in Kumasi and is meant for academic purposes only. The

questionnaire is divided into sections. Please complete each section as instructed. Do not write your name or any other form of identification on the questionnaire. All the information in this questionnaire will be treated in confidence.

SECTION A: PROFILE OF RESPONDENTS

1. Name of bank (Optional) ____________________________________ 2.

For how long has this bank been in operation in Kumasi? (Tick as appropriate)

(a). Less than 1 year [ ]

(b). 1 to 5 years [ ]
(c). 6 to 10 years [ ]

(d). 16 years and above [ ]

3. How many full time employees does the bank have? (Pleas tick as appropriate)

(a). Less than 25 [ ]

(b). 26 to 50 [ ]

(c). 51 to 75 [ ]

(d). 76 to 100 [ ]

(e). 101 years and above [ ]

4. For how long have you worked in the bank? (Tick as appropriate)

(a). Less than 1 year [ ]

(b). Between 1 and 5 years [ ]

(c). Between 6 and 10 years [ ]

(d). Between 11 and 15 years [ ]

(e). 16 years and above [ ]

5. Using the categories below, please indicate the number of branches you have in Kumasi

(a). Less than 5 [ ]

(b). Between 5-10 [ ]

(c). Between 11-20 [ ]

(d). Above 20 [ ]

1. MONITORING QUALITY OF CREDIT PORTFOLIO ON DAY TO DAY BASIS & BANK PERFORMANCE **Please, indicate the extent to which you agree or disagree to the following statement by ticking the appropriate boxes below.**		**Strongly Agree** **1**	**Agree** **2**	**Not Sure** **3**	**Disagree** **4**	**Strongly Disagree** **5**
M1	The risks and responsibilities of individuals responsible for credit risk monitoring has been laid down					
M2	We regularly assess procedures and analysis techniques for our credit					
M3	Our frequency of monitoring is very high					
M4	We periodically examine collaterals and loan covenants					
M5	Our frequency of site visits (borrowers' visit) is very high					
M6	Any identified deterioration in any loan is dealt with immediately					

M7	We create an environment that the bank can be seen as a solver of problems and trusted advisor in matters of credit					
M8	Our bank is known for being supportive to borrowers wherever they are in difficulties and are striving to deal with the situation					
M9	We monitor the flow of borrower‘s business through the bank‘s account					
M10	We regularly review reports about our borrower					
M11	We update borrowers credit files and periodically review the borrowers rating assigned at the time the credit was granted					

2. CREDIT RISK EXPOSURES & BANK PERFORMANCE	**Strongly Agree**	**Agree**	**Not Sure**	**Disagree**	**Strongly Disagree**

Please, indicate the extent to which you agree or disagree that you encounter the following situations in your bank **by ticking the appropriate boxes below**		**1**	**2**	**3**	**4**	**5**
CRE12	Difficult macro economic environment;					
CRE13	Inadequate risk management systems;					
CRE14	Poor corporate governance;					
CRE15	Poor performing insider loans;					
CRE16	Chronic liquidity challenges;					
CRE17	Diversion from core banking to speculative activities;					
CRE18	Foreign exchange shortages;					
CRE19	Rapid expansion drives;					
CRE20	Unsustainable earnings;					
CRE21	Creative accounting;					
CRE22	Insufficient regulatory framework.					

3. APPLICATION OF CREDIT MONITORING TOOLS & BANK PERFORMANCE		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
Please, indicate the extent to which you agree or disagree that your organization uses each of the listed tools in controlling credit losses **by ticking the appropriate boxes below**		**1**	**2**	**3**	**4**	**5**
CMT23	Covenants					
CMT24	Collateral					
CMT25	Credit rationing					
CMT26	Loan securitization					
CMT27	Loan syndication					

4. ADHERENCE TO CREDIT MANAGEMENT POLICY & BANK PERFORMANCE	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree

Please, indicate the extent to which you agree or disagree that your bank make use of the following credit policies by ticking the appropriate boxes below		1	2	3	4	5
CP28	We follow all the necessary lending criteria					
CP29	Our Credit portfolio is graded					
CP30	We make use of management information systems					
CP31	We have types of facilities, credit products and borrowers					
CP32	We identify, measure, monitor and control our credit risk					
CP33	We have specialized approach for managing problem credits					
CP34	Our organizational structure is such that it enhances credit administration					
CP35	We have a well balanced concentration of lending					
CP36	We have excellent credit risk mitigation techniques					
CP37	We have robust and transparent processes, policies and procedures					
CP38	There are clear guidelines on insider lending policies;					
CP39	There is a laid down policy on pricing of credit					

CP40	There is a laid down policy of credit security;					
CP41	Approval processes and delegated limits are clearly stated in our bank					
CP42	We have a solid position on high risk credits					
CP43	We have measurement methodologies for our credit					
CP44	We are very clear on all key risk factors of our credits					
CP45	We have a stated risk-reward ratio for our loans					
CP46	We have a writing off policy for our loans					
CP47	Our new credit products policies are well structured					
CP48	We have a thorough risk assessment culture					
CP49	Our Know Your Customer (KYC) policy is very effective					
CP50	We undertake periodic reviews of our credits limits					
CP51	Delegation of authority during the extension of credit is prohibited					
CP52	We have plans for international credit exposures and controlling facility.					

		Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
5. LOAN APPRAISAL PROCESS & BANK PERFORMANCE **Please, indicate the extent to which you agree or disagree** that each of the following factors are considered important in loan appraisal and subsequent approval**. (tick the appropriate boxes below)**		**1**	**2**	**3**	**4**	**5**
LA53	Borrower‘s capacity					
LA54	Borrower‘s character					
LA55	Borrower‘s condition					
LA56	Borrower‘s credit history					
LA57	Borrower‘s collateral					
6. CR EDIT STAFF QUALITY AND BANK PERFORMANCE		**1**	**2**	**3**	**4**	**5**
CS58	High quality staff are critical to ensure that the depth of knowledge and judgment needed is always available					

7. CR EDIT MANAGEMENT TECHNOLOGY & BANK PERFORMANCE		**1**	**2**	**3**	**4**	**5**
T59	Supportive technologies and equipment such as computers and softwares are useful in credit analysis, monitoring and control, as they make it easy to keep track on trend of credits within the portfolio					

8. INDICATORS OF BANK PERFORMANCE **Please, indicate the extent to which you agree or disagree by ticking the appropriate boxes below**		**Strongly Agree**	**Agree**	**Not Sure**	**Disagree**	**Strongly Disagree**
		1	**2**	**3**	**4**	**5**
	Investors are assured of the safety of investment and confident of receiving higher returns from us					
	Bank of Kumasi is confident in our operations					
	Our bank has a reduced non-performing loans (NPL) ratio					

	Our bank has Improved liquidity position					
	Minimal bad debt as a result of minimal loan default					
	The credit risk rating of my bank is low					