CATHOLIC UNIVERSITY COLLEGE OF GHANA

ASSESSMENT OF CREDIT RISK MANAGEMENT PRACTICES AMONG RURAL BANKS IN THE KUMASI METROPOLIS: A CASE STUDY OF ODOTOBRI RURAL BANK

DIANA DUROWAAH KWARTENG

2020

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BY

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Dissertation submitted to the Faculty of Economics and Business Administration, Catholic University College of Ghana, in partial fulfilment of the requirements for the award of Master of Business Administration degree in Finance

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: ……………………………Date:…………………….

Name: Diana Durowaah Kwarteng

Supervisor's Declaration

I hereby declare that the preparation and presentation of the dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the Catholic University College of Ghana.

Supervisor's Signature:…………………………Date:…………………………

Name: Dr. Yaw Bediako

ABSTRACT

This study therefore assesses credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. The objectives of the study were; to examine the processes of approval and recovery of loans of rural banks in the Kumasi Metropolis, determine credit risk management practices of rural banks in the Kumasi Metropolis and suggest solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. Primary source of data was used to gather data for the study. The study adopted the census sampling method to arrive at samples from the Credit Department, Operations Department, Customer Advisers and the Manager. From the study, management of Odotobri Rural Bank files legal actions against defaulted customers as loan recovery strategy. Also, management of Odotobri Rural Bank disburses credit to borrowers takes a short time once approved. Similarly, management of Odotobri Rural Bank used collaterals to monitor loan in most cases. It is recommended that the board and management of Odotobri Rural Bank should provide severe sanctions to credit defaulters who do not meet their obligations agreed upon to serve as deterrent to potential defaulters. Likewise, it is recommended that the board and management of Odotobri Rural Bank should not make collateral securities be the only method used to recover debts. Further study should be based on the causes of loan failures and the assessment of the behavioural and environmental aspects from both the lenders' and borrowers' perspective.

KEYWORDS

Credit Risk Management Practices

Loan Portfolio

Loan Recovery

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DEDICATION

To my husband, children, family and friends.

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
KEYWORDS	iv
ACKNOWLEDGEMENTS	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	xi
LIST OF FIGURES	xii
CHAPTER ONE: INTRODUCTION	
Background to the Study	1
Statement of the Problem	5
Purpose of the study	7
Specific Objectives	7
Research Questions	7
Significance of the Study	8
Delimitation of the Study	8
Limitations of the Study	10
Definition of Terms	11
Organization of Study	11
CHAPTER TWO: LITERATURE REVIEW	
Introduction	13
Conceptual and Theoretical Framework	13
Concept of Credit Risk	13

Credit Risk Management 15
Evolution of Credit Risk Management 16
Theoretical Framework 17
Asymmetric Information Theory 17
Adverse Selection Theory 18
Agency Costs of Free Cash Flow Theory 19
Financial Intermediation Theory 19
Empirical Review 20
Processes of Approval and Recovery of Loans of Rural Banks 20
Loan Appraisal Process 20
Borrower Documentation Process 21
Loan Disbursement Process 23
Monitoring and Evaluation Process 24
Credit Risk Management Practices of Rural Banks 27
Solutions to Challenges of Credit Risk Management Practices of Rural Banks 36
Institutional Framework 44
Management Team 45
Conceptual Framework 46
CHAPTER THREE: RESEARCH METHODS
Introduction 50
Research Design 50
Study Area 51
Population 52
Sampling Procedure 53

Data Collection Instrument 53

Data Collection Procedures 54

Validity and Reliability of Research Instrument 55

Ethical Considerations 56

Data Processing and Analysis 57

Chapter Summary 57

CHAPTER FOUR: RESULTS AND DISCUSSION

Introduction 59

Background Characteristics of Respondents 59

Processes of Approval and Recovery of Loans of Rural Banks 61

Credit Risk Management Practices of Rural Banks 65

Solutions to Challenges of Credit Risk Management Practices of Rural Banks 69

Discussions 71

Processes of Approval and Recovery of Loans of Rural Banks 71

Credit Risk Management Practices of Rural Banks 72

Solutions to Challenges of Credit Risk Management Practices of Rural Banks 77

Summary of Key Findings 78

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Overview 80

Summary of Findings 80

Processes of Approval and Recovery of Loans of Rural Banks 80

Credit Risk Management Practices of Rural Banks 81

Solutions to Challenges of Credit Risk Management Practices of Rural Banks 82

Conclusions 82

Recommendations 83

Suggestion for Further Research 86

REFERENCES 88

APPENDIX A 100

LIST OF TABLES

Table		Page
1	Background Characteristics of Respondents	60
2	Processes of Loan Appraisal	61
3	Processes of Documentation of Borrowers	62
4	Processes of Loan Disbursement	64
5	Strategies for Credit Monitoring	65
6	Strategies of Loan Recovery	67
7	Solutions to Challenges of Credit Risk Management Practices	69

LIST OF FIGURES

Figure Page

1 Organizational framework of odotobri rural bank (Branch Level) 45

2 Conceptual framework 47

CHAPTER ONE

INTRODUCTION

Credit risk management practices and poor credit quality continue to be a dominant cause of bank failures and banking crises worldwide (Naceur and Omran, 2011). This therefore makes it important to effectively manage credit risk in banks. This study is important because it seeks to present solutions to the problem. Hence, this study seeks to assess credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study.

Background to the Study

According to Torben (2010), credit risk management is very essential to optimizing the performance of banks. Credit remains the core source of income for banks across the globe (Torben, 2010). Rural banks are very imperative in any economy. An important function of banks, in the process of financial intermediation, is making loans or credit available and accessible to individuals, enterprises and sovereign states for investment (Naveed et al., 2011). Bessis (2010) maintains that credit risk management practices, are often geared towards the management of credit concentrations, credit process issues, as well as market and liquidity-sensitive credit exposures. The concept of credit refers to deferred monetary payment, which involves a contractual agreement in which a borrower agrees to repay the bank at some date in the future, generally with interest (Abdulrahim, 2013).

Credit risk or default risk, therefore characterizes a situation in which the customer or counterparty is unable or unwilling to meet commitments in relation to lending, trading, hedging, settlement and other financial transactions

(Festic et al., 2011). Credit risk can, thus, be conceptualized as the potential for loss due to failure of a borrower to meet its contractual obligation to repay a debt in accordance with the agreed terms (Abiola, and Olausi, 2014). Credit management refers to the efficient blend of the four major credit policy variables to ensure prompt collection of loans granted to customers and at the same time boost their confidence in and loyalty to the bank (Kithinji, 2010). An effective credit management system, refers to one which minimizes single-obligator exposure, practices due diligence of debtors and counterparties and thoroughly tests and validates new lending techniques (Naceur and Omran, 2011). Credit problems, especially weakness in credit risk management, have been identified to be a part of the major reasons associated with banking difficulties. Loans constitute a large proportion of credit risk for banks of which banks in Ghana are no exception. Thus, the banking business is likely to face difficulties when there is a slight deterioration in the quality of loans. Poor loan quality has its roots in the information processing mechanism. The problem often begins right at the loan application stage and increases further at the loan approval, monitoring and controlling stages, especially when credit risk management guidelines in terms of policy and strategies or procedures for credit processing do not exist or weak or incomplete (Apanga et al, 2016).

Lending has been, and still is, the backbone of banking business, and this is truer to emerging economies like Ghana where capital markets are not yet well developed. To most of the transition economies, however, and Ghana in particular, lending activities have been controversial and a difficult matter (Afriyie and Akotey, 2012). This is because business firms on one hand are complaining about lack of credits and the excessively high standards set by

banks, while banks on the other hand have suffered huge losses on bad loans. It has been found out that in order to minimize loan losses and so as the credit risks, it is essential for banks to have an effective credit risk management system in place (Apanga et al.,2016). According to Tetteh (2012), some rural banks in Ghana have a clear, written guideline on credit risk management with the board of directors having an oversight responsibility for implementation. These realign the amount of credit within various sectors grouped into a credit portfolio depending on environmental factors such as political regime, macroeconomic strategy of political regimes, new and existing regulations and legislation, social concerns of operating markets and technological developments within the banking industry in Ghana (Tetteh, 2012). Similarly, Return on Equity (ROE) and Return on Asset (ROA) were utilized as profitability indicator while Non-Performing Loans Proportion (NLPR) and Capital Adequacy Ratio (CAR) as credit risk management pointers (Afriyie and Akotey, 2010). Banks usually move the expense on loan default to different clients as higher premium rate on loans (Afriyie and Akotey, 2010).

For smaller or less sophisticated banks, such as rural or community banks, more stringent approaches to credit risk management may be adopted because these banks often do not have adequate reserves to cover huge credit defaults (Nair and Fissha,2010). Moreover, smaller banks tend to be less diversified in their income sources, thus, relying to a great extent on lending (Nair, and Fissha, 2010) and further making effective credit risk management more important. Consequently, a number of smaller or less sophisticated banks such as rural or community banks have collapsed or encountered financial harms due to poor credit risk management systems coupled with high levels of

insider lending, and high concentration of credit in a particular sector of the economy among other issues (Garr, 2013).

According to Aboagye and Otieku, (2010), rural banks evolved as an economic development approach intended to benefit low income, micro and small-scale entrepreneurs in the rural areas. They are created to perform financial intermediation to the rural people. Rural banking concept is a developmental tool that can be used to alleviate poverty by providing financial services to low income clients including the self-employed. The importance of savings mobilization and granting of loans to individuals, and small-scale enterprises for a long time ranked low in the debate for economic development especially in Ghana and Sub Saharan Africa Region. According to Aboagye and Otieku, 2010, the prevailing opinion was that the able Ghanaian salary worker, farmer, artisan and trader cannot make ends meet and are therefore neither able nor willing to save towards his/her future. Those who can make ends meet have rather not developed the culture and practice of saving at the bank. Besides, the provision of credit to individuals and households willing to turn it around was regarded as the main engine of growth of the economy. As the deficiencies of this concept became apparent with the passage of time, the relevance of a comprehensive financial system was generally acknowledged. Today, not only is the need for the efficient allocation of resources paramount but also the transformation through financial intermediaries is. The other half of financial development that is, savings mobilization and granting of loans and advances are being given the priority it deserves.

Over a decade, many Rural and Community Banks (RCBs) have been closed down by the Bank of Ghana due to reasons identified as management

incompetence, embezzlement and fraud, negligence and ineffective board of directors, ineffective accounting procedures, non-compliance with regulations in granting credits, persistent operational losses, poor loan recovery and corruption, low deposits mobilization, use of unqualified staff, non-submission of prudential returns, high unearning assets and high non-performing credit portfolios (Aboagye & Otieku, 2010). Aside the forgoing, ineffective credit risk management practices and poor credit quality continue to be a leading cause of bank failures and banking crises (Afriyie and Akotey, 2010), hence, this study sought to assess the credit risk management practices among rural banks and suggest measures to solving challenges facing credit risk management in the Kumasi Metropolis.

Statement of the Problem

Over the years, there have been increased number of substantial bank problems in both matured and emerging economies. Usually, loans are the prime and most apparent source of credit risk of banks (Amos et al, 2014). Nowadays, smaller or less sophisticated banks such as rural or community banks are increasingly prone to reasonably higher credit risk levels (Nsiah-Agyeman,2010). Effective Credit Risk Management involves establishing a suitable environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as satisfactory controls over credit risk (Gaitho, 2010). According to Afriyie and Akortey (2010), high credit default is a general problem for banks in Ghana. It also found from a study of 20 rural banks in Brong Ahafo region that rural banks do not have effective institutional measures to deal with credit risk management (Afriyie and Akortey,2010).

In Ghana, rural banks are important for economic development, given that the population is mostly rural. Rural banks are, therefore, keen to the financial needs of rural-based enterprises (Bank of Ghana, 2012). Thus, the credit risk management practices of rural banks are important for both the banking sector and rural enterprise development. Afriyie and Akortey (2010) also found that rural banks do not have effective institutional measures to deal with credit risk management. In this regard, rural and community banks therefore require very efficient system of credit risk management in order to prevent and recover defaulted loans. Credit problems, especially weakness in credit risk management (CRM), have been identified to be a part of the major reasons associated with banking difficulties. Loans constitute a large proportion of credit risk as they normally account for highly significant in the equity of a rural bank. Thus, the banking business is likely to face difficulties when there is a slight deterioration in the quality of loans. Credit risk is the possibility of losing the outstanding loan partially or totally, due to credit default risk (BCBS, 2010). Credit events usually include bankruptcy, failure to pay a due obligation, repudiation/moratorium or credit rating change and restructure. Banks generate income mainly through credit creation, which also results in huge risks to the lender and the borrower. The smooth functioning of the bank can be greatly jeopardized by a failure of the trading partner to fulfill their contractual obligation in due date.

According to Montana (2012), a rural bank with a high credit risk has high bankruptcy risk that puts the depositors in jeopardy. Interest rates charged by rural banks are fast overtaken by inflation and borrowers find it difficult to repay loans in unstable economic environments because real income falls,

leading to increased insider loans and over-concentration in certain types portfolios giving rise to credit risk. But in a bid to survive and maintain profits in this highly competitive environment, rural banks have the tendency to take unnecessary risks. It is on the back of this that this study used Odotobri Rural Bank as a case study to assess credit risk management practices among rural banks and suggest measures to improving challenges facing credit risk management in the Kumasi Metropolis.

Purpose of the study

The objective of this study assesses credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study.

Research Objectives

The research sought to:

1. Examine the processes of approval and recovery of loans of rural banks in the Kumasi Metropolis.
2. Determine credit risk management practices of rural banks in the Kumasi Metropolis.
3. Suggest solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis.

Research Questions

The study delved into answering subsequent question:

1. What processes are involved in the approval and recovery of loans of rural banks in the Kumasi Metropolis?
2. Which credit risk management is practiced by rural banks in the Kumasi Metropolis?

3. Which solutions are suitable to solving challenges of credit risk management practices of rural banks in the Kumasi Metropolis?

Significance of the Study

The dominant importance for this study is that by studying the trends in the credit exposure of the bank, inferences can be made about the approval and recovery of loans of rural banks which can help to improve the performance of loan portfolio of rural banks. This study is also justified by the fact that assessing the approval and processes of loans and the challenges involved in the credit risk management of the Bank could help the management of the Bank to adjust its practices for further improvements. Furthermore, the study would recommend to the rural banks appropriate policy measures that will help them to improve on their credit management performance. Lastly, this research served as a useful literature for others who want to work in this field of study.

Delimitations

This study covered the assessment of credit risk management practices among rural banks in the Kumasi Metropolis. The study focused on the objectives which include: processes of approval and recovery of loans of rural banks in the Kumasi Metropolis, determining credit risk management practices of rural banks and suggest solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. Kumasi is the administrative capital of the Ashanti Region and the Kumasi Metropolitan Assembly of Ghana. It is located between latitude 6.35˚N and 6.40 ˚S and longitude 1.30˚W and 1.35˚E. It is also elevated 250 to 300 meters above sea level. The metropolis shares boundaries with Kwabre East, and Afigya Kwabre Districts to the north, Atwima Kwanwoma and Atwima Nwabiagya Districts to the West, Asokore

Mampong and Ejisu-Juaben Municipality to the east and Bosomtwe District to the south.

The Kumasi Metropolis was selected for the study stemming from the finding of Asiedu-Mante (2011) who indicated that rural banks in the Kumasi Metropolis are contending with huge challenges in managing their loan loss reserves due to bad loans and poor management systems applied by the banks. As a result, majority of these Rural and Community Banks have been rendered insolvent and could soon fold up if austerity measures were not taken to reverse the trend. The article indicated that the poor performance of Rural and Community Banks stemmed from both unfavourable operating environment and capacity constraints. Rural banks have unfavorable environment to mobilize scattered rural incomes at a high cost into savings, and lend to the people with virtually no collateral to support such credits (Asiedu-Mante, 2011).

Similarly, the study chose Odotobri Rural Bank resulting from its enormous financial performance in the market since its entrance into the rural banking space.

The Odotobri Rural Bank, during the year under review, received a number of awards both locally and internationally. The awards included being 51st in the Ghana Club 100 rankings, International Award for Business Excellence and Prestige in the Platinum Category presented by the Business Initiative Directions (BID) in New York (2016), Outstanding Rural Bank of the year received at the West African Regional Magazine Achievers Awards (2016) and Gold Award in Advisory Services and Silver Award in Deposit Mobilisation at the 13th Ashanti Financial Services Excellence Awards (2016). The bank posted a pre-tax profit of approximately GH¢3.9 million in

2016 as against a little over GH¢3.6m in the previous year, representing a growth of 7.63 per cent. This comes with the improved revenue generation, raising total income from a little over GH¢15.9 million to approximately GH¢17.9 million, which is a reasonable improvement in the bank's income generation activities. The bank's total deposits grew from GH¢62.3 million to GH¢68.5 million in the 2016 year under review, representing 9.96 per cent of the 2015 performance even though government's domestic borrowings resulted in high interest rates on treasury bills during the year under review. This was as a result of the hardworking staff and the mobilisation drive pursued by management. During the year under review, the bank extended total loans and overdraft facilities of GH¢24,848,000 to customers, representing an increase of 19.20 per cent.

Limitations

The researcher is optimistic of experiencing the following challenges:

1. Budget Constraints: this included finance needed to type and print questionnaires and the study and all other expense to incurred in the course of the study. To overcome this, the researcher used his own finances to execute these duties.
2. Time: Time factor was one of the setbacks of this study, owning to combination of academic work and office duties as well as parental controls.
3. Availability of respondents to respond quickly to the questionnaire.
4. Despite these limitations, even though the above factors may have influenced the quality of the research; they were however not to a greater extent, able to degrade the quality of the research.

Definition of Terms

Credit risk

Credit risk is the losses incurred in the event of the bank's counter party inability to pay the loan or in the event of deterioration in the client's credit quality.

Credit management

It involves establishing formal legitimate policies and procedures that will ensure that: the proper authorities grant credit to the right people, and granted for productive activities or businesses.

Credit Risk Management

Credit risk management is described as management tool which attempts to eradicate, reduce and manage risks, increase the benefits and avoid large losses in a firm.

Credit Risk Management Process

It involves identification of possible risk factors, evaluate their consequences, monitor activities and institute control measures to prevent or reduce the unwanted effects.

Performance of Loan Portfolio

Loan portfolio performance is the process by which risks that is inherent in the credit process are managed and controlled and measured in both short and long-term by a number of financial indicators.

Organization of Study

This study was organized into five chapters. The organization of the study was orderly organized in a more concise manner. Chapter one constituted an introduction to the background of the study, statement of problem, purpose

of the study, objectives, research questions, significance of the study, delimitations of the study, limitations and organization of the study. Chapter two included literature review that looks at the related literatures in relation to the study. There was an extensive consultation of already existing materials from textbooks, magazines, journals and periodicals, which have direct relation to the study. Also, publications by stakeholders at seminars and workshops, which were relevant to this study, were consulted to make this work complete and comprehensive. Chapter three captured the study methodology, which contains full and detailed description of the study area, population, sample size, study type and design and procedures used to collect and analyze data. The fourth chapter of the study captured the presentation, analysis of data and discussions. The final chapter provided the summary and conclusion as well as the relevant recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

Introduction

The study assessed credit risk management practices of rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. This chapter covered a review of the existing literature on the study. It included both theoretical, conceptual and empirical aspects of the study. Related literature was reviewed on the specific objectives of the study: credit risk management practices confronting rural banks in the Kumasi Metropolis, processes of recovering loans from customers of rural banks in the metropolis; and solutions to challenges of credit risk management practices in the Kumasi Metropolis.

Conceptual and Theoretical Framework

Concept of credit risk

According to Asiedu-Mante (2011), credit risk is a type of risk that causes insolvency and bankruptcy to financial institutions; affects financial performances of institutions. Similarly, credit risk is defined as the risk of loss due to a party in an agreement not meeting its contractual financial obligation in a timely manner (Gestel, 2010). This denotes that defaulters fail to make payments on agreed terms. There has been always scope for borrowers to default from commitments for one or two reasons resulting in illustration of credit risk to the banks. These losses could take the form of outright default or alternatively, losses from changes in portfolio value arising from actual or perceived deterioration in credit quality that is short of default. Credit risk is inherent to the business of lending funds to the operations linked closely to market risk variables (Bart and Tony, 2011). Credit risk occurs when a defaulter

or bank borrower fails to meet obligations in accordance to the terms agreed upon. Another cause of credit risk is the existence of fake collateral of borrowers and inappropriate documentation (Nair and Fissha, 2010). Furthermore, credit risk can be seen in the various activities of a bank, which includes transactions performed both in the banking book, trading book, and both on and off the balance sheet (Nair and Fissha, 2010). Moreover, banks are increasingly facing credit risk (or counterparty risk) in various financial instruments other than loans, including acceptances, interbank transactions, trade financing, foreign exchange transactions, financial futures, swaps, bonds, equities, options, and in the extension of commitments and guarantees, and the settlement of transactions (Amadi, 2012). Since banks hold little owners' capital relative to the aggregate value of their assets, only a small percentage of total loans need to go bad to push a bank to the brim of failure (Bart and Tony, 2011). Thus, management of credit risk is very important and central to the financial health of banks and indeed the entire financial system. Credit risk can be defined as the potential that a contractual party will fail to meet its obligations in accordance with the agreed terms. Credit risk is also variously referred to as default risk, performance risk or counterparty risk (Bichanga and Aseyo, 2013). Bichanga and Aseyo (2013) define credit risk according to three characteristics:

1. Exposure (to a party that may possibly default or suffer an adverse change in its ability to perform).
2. The likelihood that this party will default on its obligations (the default probability).
3. The recovery rate (that is, how much can be retrieved if a default takes place).

Credit risk management

Credit risk management is a management tool that helps to minimize the rate of credit risk. However, the goal of credit risk management is to maximize a bank’s risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters (Kithinji, 2010). Banks need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits and transactions (Amadi, 2012). Furthermore, credit risk management is responsible for the establishment of credit policies and procedures in financial institutions. Internationally, bad debts and Non-Performing Loans (NPLs) are the most noticeable cause of credit risk among financial institutions; however, other sources of credit risk exist throughout the activities of a bank as mentioned earlier (Singh, 2013). Losses among banks are attributed to guarantees, that is either from third parties or any posted collateral, of recovery after bankruptcy and the liquidation of assets. Similarly, it is also responsible for the implementation of actions that limit the lending exposure of an organization and performs several functions aimed at reducing the risk associated with company financial assets and banks. Credit policies and procedures, credit analysis and credit review help to prevent poor lending decisions and protect company investments (Franklin, 2012).

Likewise, Office of the Comptroller of the Currency (2011) however defined Loan portfolio management as the process by which risks that is inherent in the credit process are managed and controlled. It involves evaluating the steps bank management takes to identify and control risk throughout the credit process. The assessment focuses on what management does to identify issues before they become problems. Office of the Comptroller of the Currency

identified nine elements that should be part of a loan portfolio management process. The nine elements are:

1. Assessment of the credit culture,
2. Portfolio objectives and risk tolerance limits,
3. Management information systems,
4. Portfolio segmentation and risk diversification objectives,
5. Analysis of loans originated by other lenders,
6. Aggregate policy and underwriting exception systems,
7. Stress testing portfolios,
8. Independent and effective control functions,
9. Analysis of portfolio risk/reward trade-offs

Evolution of credit risk management

According to Kono and Takahashi, (2010), credit risk can be traced back thousands of years. To them, credit is much older than writing. This literature goes on by arguing that the Bible had archives of enslavement for debt without discontentment; for example, the story of Elisha and the widow's oil concerns the threatened enslavement of two children because their father died without paying his debts. But the Bible also goes further than Hammurabi in limiting the collection rights of creditors–purely as a matter of mercy. The modern bankruptcy concepts of protection from creditors and extinguishment of debt are entirely absent from both the Bible and Hammurabi. Historically, credit avoidance was a misconduct which was punishable by death, torture etc.

Credit risk is a necessary consequence of a vibrant economy. Everyone involved in complex production processes must wait for payment until the goods or services are delivered to the final consumer. When there is a failure in

the process, the loss must be allocated among producers or between producers and investors. These intermediaries can reduce the amount of risk through fractional reserves and the amount of risk through diversification. However, the delays in paying of credits led to the promotion of credit risk. "From the 18th century to the 19th century, Lewis Tappan founded the Mercantile Agency which became Dun & Bradstreet. This company provided commercial information on businesses throughout the United States" (Kono & Takahashi, 2010).

About the same time, specialized financial press arose. This firm merged with Standard Statistics which became Standard & Poor's. During 1916 Standard & Poor's got its official credit ratings (Bessis, 2010). The first major attempt at quantification was W. Braddock Hickman's three-volume study of US corporate bonds, published between 1953 and 1960. Due to his economics field, all his facts about finance led him to wrong conclusions. Also, Bessis (2010) argues that, as older practitioners took Hickman's wrong turn, the field of credit risk management opened up to young innovators and during the period of 1965 to 1975, people under the age of thirty were interested in credit risk management and performed jobs pertaining to credit risk.

Theoretical Framework

Asymmetric information theory

Moti et al., (2012) indicated that the theory states that there is often an imbalance of information between sellers and buyers (between lenders and borrowers). In this perspective, one party has more or better information that the other. The foregoing results in an imbalance of power in transactions. Information asymmetry can lead to moral hazard, adverse selection and

information monopoly. It is asserted that information asymmetry can lead to misinforming and is also essential in every communication process. In the context of mobile lending by commercial banks, it is very likely that the borrowers have greater and better information regarding commercial banks than the latter. This is a case of information asymmetry which is potentially detrimental to banks since they may fail to accurately appraise the creditworthiness of prospective borrowers on mobile platform. It is thus possible for commercial banks to lend out loans to customers on mobile platform with high degree of defaulting (Moti et al, 2012).

Adverse selection theory

The theory states that adverse selection occurs when the seller lacks information regarding the buyer (Moti et al, 2012). It is opined that in respect to addressing the foregoing challenges, a firm should adjust the price in order to manage the tradeoff between sales and adverse selection. It is thus true to state that adverse selection if linked to information asymmetry, the choice of the price limits the benefits to one party in a transaction. Adverse selection theory can be employed to explain the documentation process in mobile lending among commercial banks. The challenges associated with mobile lending relative to credit information of the borrowers may lead to adverse selection. The bank may make wrong credit documentation of the borrower which may be detrimental to either the bank or the borrower. Adverse information may lead to the bank failing to lend out the applied credit or lend the same at a high interest rate in order to caution any against credit risk (Moti et al, 2012). On the other hand, the borrower may miss out on the credit from the bank due to wrong documentation of their credit history.

Agency costs of free cash flow theory

The theory states that free cash flow (FCF) describes the cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital (Omina,2010). It was also indicated free cash flow describes the sum of the cash flow to equity and cash flow to debt holders after interest-tax-shield. The free cash flow theory holds that when dividends are replaced with debts, managers of a firm are likely to be obliged to transfer excessive cash flows to investors and as such limit the allocation of resources to low-return projects (Omina, 2010). The theory justifies substitution of debt for equity. The theory also emphasizes on the provision of additional benefits to reduce the agency costs of a firm and reallocation of resources. The free cash flow theory can be used to illustrate how commercial banks can disburse loans to borrowers who stand lower chances of defaulting in loan repayment (Moti et al, 2012). It can also be used to demonstrate the essence of avoiding high risk borrowers.

Financial intermediation theory

The financial intermediation theory holds that financial intermediaries do exist since they are able to reduce information and transaction costs that are occasioned by information asymmetry between borrowers and lenders (Singh, 2013). In this sense, therefore, financial intermediaries enable there being of an efficiently functioning market. Moreover, the theory indicates that all factors that affect the amount of credit channeled through financial intermediaries are likely to have macroeconomic effects. The theory of financial intermediation is premised on two major foundations. The first one explains the importance of financial intermediaries in provision of liquidity to financial institutions. The

second one demonstrates the ability of financial intermediaries to transform the risk characteristics of assets. The foregoing two premises have the potential to minimize the cost of channeling funds between borrowers and lenders, thus resulting in more efficient allocation of resources. It is stated that financial intermediaries' ability to transform the risk characteristics of assets enables them to circumvent a market failure and as such address information asymmetry problem. The moral hazard part of the financial intermediation theory can be used to demonstrate the difficulties of banks to monitor how the funds borrowed on mobile platform is utilized which may lead to a likelihood of default in loan repayment, hence increased non-performing loans (Brown and Moles, 2011).

Empirical Review

Processes of approval and recovery of loans of rural banks

Empirical review focuses on loan appraisal process, documentation process, disbursement process, and monitoring and evaluation process in line with credit risk management.

Loan appraisal process

An empirical study by Amit and Krishnamay (2010) examined appraisal of a rural cooperative with the thrust on rural development. The study relied on both primary and secondary data on loan appraisal. However, the study did not divulge much information relative to loan appraisal system. In the same vein, Niaz and Azimun (2015) studied credit risk grading model and loan performance of commercial banks in Bangladesh. The study noted that as a result of rising number of non-performing loans and competition in the banking sector, majority of commercial banks have strongly focused on credit risk assessment, the initial stage is the loan appraisal process. It was acknowledged

that indeed bankers preferred sophisticated financial techniques in credit appraisal process with the object of assessing both the borrower's business and financial position. In Agu and Basil (2013) conducted a study on credit risk management (CRM) and loan performance. The study was interested in microfinance banks (MFBs) in the country. The primary aim of the study was to investigate how credit risk management practices influence performance of loans. The dimensions of CRM practices considered in the study included credit terms and policy (CTP), client appraisal, collection policy (CP), and also credit risk control (CRC). The results of the study revealed that both credit terms and client appraisal impacted significantly on the loan performance (LP). This implies that credit appraisal is one of the major aspects that lending institutions ought to factor in order to enhance the performance of loans. A study conducted in Nigeria empirically investigated effects of credit risk on profitability of commercial banks (Olalere and Wan, 2016). The study involved a total of 8 commercial banks where data for the period between 2011 and 2014 was employed. While citing the results of an earlier study by Sanusi (2012) on banking reform and their impact on the Nigerian economy, the study noted that the increased number of commercial banks has overstretched their existing workforce capacity.

Borrower documentation process

An investigation on the state of small business lending was conducted by Mills and McCarthy (2014). The study observed that small banks and community lenders had greater success when they relied on more conservative underwriting including having experienced bankers, review extensive documentation on sales, cash flow and collateral considerations of borrowers.

The study also noted that in the US, there is weak securitized loan market. The foregoing scenario is supported by the postulation that unless underwriting standards and documentation for loans become more uniform and information for estimating the risk of loss more available, markets for securitized small business loans was bound to remain small. Small business loans have failed to be securitized as a result of lack of standardized documentation and data on their financial performance.

A study by Wondimagegnehu (2012) examined the determinants of non-performing loans of commercial banks in Ethiopia. In the study it has been reported that credit approval followed a number of considerations. This was premised on the assumption that advancing credit should carefully balance limiting of risks and maximizing profits while at the same time maintaining a competitive edge over rival entities. Credit approval entails determination of whether or not credit should be advanced to a given borrower. This process involves gathering relevant information and also determining the credit worthiness of the prospective borrower. Documentation process is postulated to be important. This is despite presenting a hard choice to the lending firm to either advance or refuse to advance credit. Documentation is found to be crucial during the legal follow -up done by the lending institution. The legal follow-up consists of obtaining proper documentation and keeping relevant documents alive. A study by Essendi (2013) looked at the effect of credit risk management on loans portfolio among Saccos in Kenya. The study involved 106 Saccos drawn from Nairobi County. The study revealed that the existing credit policy of a Sacco is the primary document which is employed to formulate credit policy. The study further indicated that reduction of bad loans has immense

benefits particularly to lending institutions. Moreover, it was noted that a sound credit risk management system facilitates identification of potential risks related to loan restructuring, underwriting and documentation. In addition, it was established that credit restructuring ought to be fully documented and recorded (Essendi, 2013).

Loan disbursement process

According to Central Bank of Iraq (CBI, 2010), the credit process begins with an extensive analysis of the creditworthiness of the borrower or the capacity and willingness of the borrower to repay the credit facility. The study further indicated that loan disbursement should be affected upon signing and delivering of requisite documents to the bank. These documents serve as the primary protection for banks once the loan has been disbursed. Prior to loan disbursement, a loan agreement, which is a legal document binding both parties, must be signed by both the bank representatives and the borrower. Once the credit facilities have been disbursed to borrowers, the monitoring process begins in order to ensure that the banking institution does not suffer from non-performing loans. Relative to loan disbursement process, Agu and Basil (2013) examined credit management and bad debt in commercial banks and their implication on development. The study was done in Nigeria. The study relied on both primary and secondary data to unearth the possible causes for bad debts or non-performing loans. The study acknowledged that credit management is integral to lending which implies that failure to its adherence is bound to convert good loans to bad. In this respect, therefore, corporate credit appraisal, disbursement process, monitoring and repayment must be adequately affected

in order to ensure the success of commercial banks and other lending institutions (Agu & Basil, 2013).

Monitoring and evaluation process

A study by Haneef et al., (2012) analyzed the impact of risk management on non -performing loans and profitability of the banking sector in Pakistan. The study revealed that commercial banks in Pakistan lacked proper risk management mechanism. This led to the inference that NPLs are increasing as a result of lack of risk management which has ultimately resulted in threats to profitability of the banking sector. The nascent stage of risk management procedures and policies in the country necessitate arranging for effective monitoring procedure in order to keep NPLs in check. Monitoring is further underscored by the assertion that poor risk management implies that there exist weak monitoring mechanisms for credit quality of customers which has a likelihood of resulting in huge capital losses.

An empirical study by Olalere and Wan (2016) examined how credit risk affects performance of commercial banks. The study was conducted in Nigeria among 8 commercial banks. In the study, it is asserted that the ability of a bank to monitor risks influences its profitability. The study further indicated that banking institutions are supposed to focus on effective management of financial risks. Effectively monitoring and management of financial risks can prove the difference between success and survival of lending institutions. This is due to the prevailing dynamic banking environment where there is stiff competition, volatile economic conditions and rising default rates. A study conducted by Nakayiza (2013) examined interest rates and loan portfolio performance in commercial banks. The study was delimited to the Centenary

Bank in Uganda. The study sought to establish how the bank had ensured that its loan portfolio was maintained within acceptable limits. In the study, it is postulated that effective and good loan portfolio managers have focused most of their efforts on appraising loan prudently and also carefully monitoring the performance of advance d loans. Adoption of computerized system has facilitated more effective monitoring and recovery of loans. The daily, weekly and monthly reports generated by the system are employed for monitoring and control of arrears rate (Nakayiza,2013).

Similarly, Van Greuning and Brajovic-Bratanovic (2010) indicated that tools that have been considered useful in the lending process which helped to control losses are loan securitization, covenants, credit rationing, collateral and loan syndication. In as much as these tools help controls and reduce credit risk, they also serve as interventions to recover overdue credit. From their view, once these tools are adopted, a measure of success is guaranteed. Likewise, Ogboi and Unuafe (2013) indicated that several methods exist for the effective collection of loans, which include borrower education, establishing mutually-agreeable payment dates, using positive reinforcement, improving internal productivity of the collections area, determining the appropriate collections procedures, establishing internal methodological control units, and ensuring quality of client information.

According to Nikolaidou and Vogiazas (2014), borrowed education involves training the client and guarantor about the implications of obtaining a loan, how the product works, the benefits of paying on time and the payment schedule, while also providing information about the closest and easiest way f or this particular client to make loan payments. Festic et al., (2011) maintained

that a critical factor during the client-education stage is establishing client awareness of both the benefits received due to punctual payments as well as the costs incurred by the client for late payments. Also, in practice, client education, is believed to encourage early and punctual payment, but the issue of moral hazard among clients may counter the aims and goals of client education.

According to Djiogap and Ngomsi (2012), borrowers can be classified into four categories, namely, clients willing and able to pay; clients willing but unable to pay; clients able but unwilling to pay; and client neither able nor willing to pay. With the exception of the first category of clients, all the other clients are at risk of moral hazard, which may defeat the purpose of client education. The educational process can be reinforced by another approach in which the lender and the client establish mutually-agreeable payment dates. Generally, this date must match the date on which the client experiences peaks in revenue or liquidity. At the same time, it should be far enough away from payment dates for other important obligations, such as rent, school fees, and other debts. The payment dates, according to Ngerebo (2011), can be reinforced whereby the lending institution recognizes and rewards clients who pay on time by offering them immediate access to renewals, larger loan amounts, preferential (lower) interest rates, certificates of good payment, training, and prizes.

Additionally, methodological control is an important tool for obtaining ongoing feedback and assessment (Kirschenmann, 2016). It is used to keep management informed regarding the quality of operations in the branches and the correct application of credit policies and processes. Methodological control should then prevent deviations from the established methodology that could

potentially have a negative impact on portfolio quality (Taiwo et al., 2017). In Ghana, Gyamfi (2012) found that rural banks usually review the creditworthiness of borrowers by their net worth in terms of cash and cash equivalents, other business assets, guarantors, shops/business premises, household appliances and stocks and their stock of mortgages. Equally, Takyi (2011) and Gyamfi (2012) have also found that the credit worthiness of borrowers in rural banks in Ghana have been based on some basic issues as the applicant possessing a national identity card, being in business for not less than six months, being an active account holder for at least 3-6 months depending on the organisation. Employees from the rural banks also visit the business premises of the applicants to assess the client's stocks (inventories), sales books, the business operation cycle (stock – cash replenishment cycle), the viability and permanency of the location and the financial statements.

Credit risk management practices of rural banks

According to Omega (2015), the current paradigm shifts in the banking field has led to the setup and maintenance criteria that administrate the management of credit creating laid down principles and benchmark for staffs to work within to ensure a high-quality loan portfolio. With a professional and informed credit policies banks are elevated at all staff level, in a bid to 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 (2011), 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 monitoring credit risk. Credit culture is the bond that binds 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, 2012). Basically, rampant training does not associate to better training but a well return in training investment is achieved when bench mark to the right people is at the right time.

Also, effective credit risk management involves establishing a suitable environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as satisfactory controls over credit risk (Gaitho, 2013). Top management is mandated to ensure that appropriate and clear credit risk management guidelines. They plainly outline the scope and allocation of the bank credit facilities and the mode in which a credit portfolio is managed, i.e. how loans are initiated, evaluated, supervise and collected. In view of this, the guidelines should be well communicated throughout the organization; and that all and sundry involved in credit risk management is obliged to understand them. This will enhance better application of those guidelines in the interest of the banking organization. Effective system ensures that loan repayment by borrowers is critical, thereby reducing the amount of loan losses to boost long-term success of the bank. Screening borrowers is a strategic activity that has generally been implemented (Philippon, 2015) in the banking sector in terms of credit assessment.

Again, gathering of reliable information from probable borrowers is imperative in carrying out effective screening (Paseda, 2017). The assessment of borrowers can be performed through the use of qualitative or quantitative techniques. Borrowers' characteristics assessed through qualitative models can

be assigned numbers with the sum of the values matched up to a threshold. This method is termed as credit scoring. The modus operandi cannot only reduce processing costs but also reduce prejudiced judgments and possible biases. However, quantitative models make it possible to numerically establish which factors are critical in explaining default risk. The models evaluate the relative degree of importance of the factors, improve the pricing of default risk, be more able to screen out bad loan applicants and be in a better position to compute any reserve needed to meet anticipated future loan losses (Paseda, 2017). The meaningful rating systems signal changes in the expected level of loan losses of the bank. While managing credit risk, clearly established process for approving new credits and extending the existing credits should be seen as very significant.

According to Churchill (2010), the failures of formal banks in rural sector especially the bad repayment of unsecured micro-loans and subsidized agricultural loans to rural farmers have given rise to the innovative credit risk management practices in the microfinance sector. According to Armendariz and Morduch (2010), microfinance institutions implement multiple mechanisms that overcome the screening and enforcement problems, which reduce the default risk and improve repayment rates, by permitting the lender to bypass adverse selection and moral hazard. Kono and Takahashi (2010) argued that different elements of microcredit, such as group lending solve the problems of asymmetric information in the credit market. However, they acknowledged that most MFIs do not offer group but just individual loans. This gives rise to a very important question regarding how MFIs manage their credit risk when they offer unsecured loans to individuals. In this regard, Armendariz and Morduch (2010) have highlighted several important mechanisms that allow MFIs to generate

high repayment rates of unsecured loans without using group lending contracts. These mechanisms included the use of non-refinancing threats, regular repayment schedules, collateral substitutes, and the provision of nonfinancial services, as discussed in the subsequent sections. One of the major mechanisms that most effective credit risk management mechanisms, which MFIs employ is by making arrangements with individuals without collateral who get together and form groups with the aim of obtaining loans from a lender (Armendariz and Morduch, 2010).

According to Kono and Takahashi (2010), in the typical group lending scheme, each member is jointly liable for each other's loan, so that if any members do not repay, all the members are punished (often in the form of denial of future credit access). Moreover, the prospective borrowers are required to form groups by themselves (Gine et al., 2010). Several studies have proven that group lending enforces joint liability mechanisms, involves borrowers in sharing information and then reduces asymmetric information (Kono and Takahashi, 2010). Zeller (2010) also studied 168 credit groups in Madagascar and showed that the group effectively generates insurance, transfer screening and monitoring costs from the bank to borrowers, providing an effective way for MFIs to overcome adverse selection, moral hazard, and enforcement problems, which leads to a better repayment performance. However, Kono and Takahashi (2010) advance that group lending alleviates the problem of moral hazard only if the group can coordinate its members' decisions and achieves higher repayment rates only if the returns are sufficiently high.

Furthermore, on theoretical ground and drawing on contract theory, group lending is an innovative credit contract that essentially allows each

borrower to act as a guarantor for another in the same group (Kono and Takahashi, 2010). In a group lending contract, borrowers are required to form groups and the entire group is responsible for repaying the loan of any member who is unable to pay. Each borrower obtains a loan for her individual project but the liability is joined, which induces group members to self-select each other and provides incentive for peer monitoring, such each borrower in the group will have information about the other's actions. However, group lending in practice suffer from some disadvantages such as domino effect or risk of contagion if one of the members is unable to meet repayments (Armendáriz and Morduch, 2010).

Cebenoyan and Strahan (2012) indicated that dynamics incentives mechanism boils down to the threat not to refinance a borrower who defaults on her debt obligations. This incentive has a large effect on microfinance borrowers' behaviour because they have considerable needs for future loans to develop their business. Morduch (2015) notes that the repeated nature of the interactions and the credible threat to cut off any future lending when loans are not repaid can be exploited to overcome information problems. Indeed, this mechanism allows lenders to build a long-term relationship with borrowers over time, to generate reputation mechanisms and screen out the worst prospects before expanding loan scale. However, as noted by Macaver and Ehimare, (2010), competition and increasing mobility of borrowers will diminish the power of this mechanism against moral hazard since borrowers will have the opportunity to take a loan elsewhere.

Additionally, individual loans, in classic financing theory, uses a guarantee to reduce the risk attached to the loan, but MFIs often do not require

their clients to provide any physical collateral that traditional commercial banks do (Cebenoyan and Strahan,2012). However, in order to maintain high repayment rate, MFIs can use important mechanism that is collateral substitutes (Padmalatha, 2011). A common collateral substitute used by many MFIs especially during their initial years of operation is to require borrowers to pay a percentage of every unit borrowed (beyond a given scale) in order to collect an emergency fund, which serves as insurance against loan default, death or disability (Hull, 2011). Other banks also request that the borrowers pay an additional five percent of the loan that mistaken out as a 'group tax', which may be deducted from the members' loans or which may form part of weekly contributions as forced savings. These forced savings can be withdrawn upon leaving, but only after the banks have taken out what they are owed (Padmalatha, 2011). Babu and Singh (2010) presented the case of banks in Indonesia using accepting the borrower's degree certificate, driver's license, marriage certificate and such other documents as collateral substitutes in individual lending. In Russia and rural areas of Albania, household items may be considered as collateral if they have sufficient personal value for borrowers (Armendariz & Morduch, 2010).

In addition, MFIs providing individual microcredit may require guarantor agreeing to guarantee the borrower's loan. However, Godquin (2014) cautioned that the essential role of a guarantor is to be a decisive factor for granting the credit and not a secondary repayment source. The presence of a guarantor primarily acts as an ex-ante signal that can reduce adverse selection problem, given that the request for guarantors requires costly efforts for the potential borrower to find one or more guarantors and hence bad borrowers will

be discouraged (Ibtissem and Bouri, 2013). Also, Ibtissem and Bouri (2013) indicated that the presence of a guarantor is also an ex-post sanction mechanism, such that, in case of default of payment, the co-signer who may lose his reputation to the same extent as the borrower can put pressure on the borrower to meet its obligations. In the absence of collateral, there are other disciplines that can ensure regular repayment of loans. The idea is to commence repayment almost immediately after disbursement and then occurs on a weekly or monthly basis. Morduch (2015) argues that regular repayment schedules screens out undisciplined borrowers at an early stage and also gives early warning to loan officers and peer group members about potential future problems. In addition, the banks to get hold of cash flows before they are consumed or otherwise diverted and also requires that the borrowers have an additional income source on which to rely since the repayment process begins before investments mature.

Likewise, Field and Pande (2010) noted that regular payment schedule provides clients a credible commitment device, which enables them to form the habit of saving regularly. They note also that frequent meetings with a loan officer may improve client trust in loan officers and their willingness to stay on track with repayments. However, this early regular repayment schedules may exclude potential borrowers who have a single source of income from the market (Ibtissem and Bouri, 2013). Regular payments may also be underscored by the provision of nonfinancial services (Edgcomb and Barton, 2010). In this sense, microfinance institutions usually use nonfinancial services also named Business Development Services (BDS) as a form of adult literacy or training that go beyond financial services. Edgcomb and Barton (2010) observed that the provision of nonfinancial services as a complement to credit and saving

services not only develops the economic ability of the borrower to repay but also makes the relationship with the MFI more valuable to him.

Vogelgesang (2013) mentioned that information on the composition and quality of the various portfolios should permit management to assess quickly and accurately the level of credit risk that the bank has incurred through its various activities and determine whether the bank's performance is meeting the credit risk strategy. 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:

1. There is the need to categorize various type of loans advanced by establishing implications on quality of credit and risk.
2. Establishment of corporate level strategies to attain the required level /quality of exposure and issue guidelines to Strategic Business Units (SBUs).
3. Performance and exposure performance must be periodically reviewed
4. Ensuring a measure of suitable mechanism for review and control
5. Develop and improve logical tools to assess risk profiles, for ensuring healthy portfolios and guarding against sickness.

According to Olalere and Wan (2016), most savings and loans institution lending decisions are based on thought about the risk in relation to the borrowers expected repayment plan, these approaches are adopted by savings and loans institutions due to its simplicity and inexpensiveness. Managing credit risk is a complex multi-dimensional issue and as such involves numerous approaches in dealing with that, while some will be quantitative others drive on quantitative judgment (Olalere and Wan (2016). According to

Montana (2012), customer relationship relates to distinguishing line between treating the borrower as a client and as friend to the business. The relationship between defaulters and the bank also counts, as word-of-mouth also serves as an important tool for corporate image.

Weber et al. (2010) also indicated that the process of credit risk management can be structured into the five phases, namely; rating, costing, pricing, monitoring and work-out phase. The main purpose of the rating is to verify the borrower's default risk. A credit rating comprises of an assessment of the creditworthiness of a borrower, to avoid the risk of default which could lead to financial losses. The borrower information is relevant to the lending decision. With this, loan managers conduct a credit assessment before lending money to the client. In addition to the personal credibility check, a credit merit appraisal is done to determine default probability of the loan. However, the rating officers must take a balanced and objective view of the borrower's financial condition and ability to repay the debt (Weber et al. 2010). Costing is needed in the process to quantify the expected loss from the loan in case the borrower becomes insolvent or bankrupt. The cost of risk includes two components: the statistical loss, or average loss as a result of default (expected loss), and the cost of losses in excess of the average loss. The statistical loss is the average loss due to defaults (or expected loss) as a percentage of the balance of the loan. In the pricing phase, the identified costs are incorporated into the credit conditions. By charging every borrower a premium based on the expected loss, the average loss in loan through lending can be compensated for. Therefore, the bank will not suffer much in an event of loss (Weber et al. 2010).

Monitoring involves frequent contact with clients, creating a conducive environment that the bank can be seen as a problem solver and a trusted adviser (Weber et al. 2010). Loan administrators are supposed to keep an eye on repayment rates and processes. Regular review of the borrower's loan information, as well as frequent on-site visit, updating borrower's credit files, enhance the extent at which the loan is remitted. During the loan period, the credit is decisively observed and changes in credit risk are examined. The purpose in the work-out phase is to trim down losses and if feasible get the borrower back on track. If a borrower's expected loss increases, the reason(s) accounted for this should be investigated and corrective measures taken to avert the situation. Bad credits (indicating credits that can partly be paid back or not at all by the borrower) are managed in the work-out division of the bank (Weber et al. 2010).

Solutions to challenges of credit risk management practices of rural banks

The primary goal of credit risk management is to increase a bank's risk-adjusted rate of return (Eckles et al., 2014) by managing credit risk exposure within acceptable structures. The sound practices seek to strive for integrated actions to specifically manage risk. The practices include: (i) identifying a potential credit risk; (ii) measuring the intensity of the risk; (iii) assigning an appropriate treatment to the credit risk detected; and (iv) monitoring and ensuring suitable control over credit risk. For these practices to be realized, principles for the management of credit risk cannot be circumvented. When a customer to whom a bank lends credit defaults on the payment; the bank is at a major risk, because its growth plans are based on the investments it makes out of the interest earned on this loan. However, regulatory requirements on loans

should be more stringent, and banks are expected to become more circumspect in their lending activities. This will reduce indiscriminate and reckless lending, which could increase default rate. Implementing a risk solution is very significant when a sound financial model runs through the entire business, as well adhering to real-time monitoring of credit scores (Eckles et al., 2014).

Also, in collections, Hosna et al., (2010) asserted that client contact is essential and rural banks often train personnel to handle issue concerning how to approach clients, what product to offer, how to deal with broken promises, how to deal with lost or missing clients, what to do in cases of tragedies or natural disasters, and many other decisions that cannot be entirely delegated onto the experience of a loan officer. Hosna, et al, (2010) also indicated that just as regular client contact is essential to an effective collections process, so is the collection of quality client information necessary for successful client location. Similarly, during the initial application process, most rural banks could request several pieces of information, including the client's full name, address and clear instructions on how to locate the client (map of location), telephone number and personal and commercial references.

Wheehem and Hunger (2010) however, argued that most rural banks fail to update client information in order to facilitate seamless contact with the client. However, rural banks are required to develop tools and strategies for updating client information in the database, without compromising secure access controls or quality of information. Padmalatha (2011) added that one possible way to ensure integrity of the information is through the development of an incentive system for staff to encourage timely and accurate database updates. The database supports internal methodological control units, or

methodological audit units, which are created within rural banks as monitoring and control systems for the specific products and services (Gaitho, 2013). To add, the report of Eastern Caribbean Central Bank (2010) further stated that financial institutions should have comprehensive procedures and information systems to effectively monitor and control credit risk. These procedures should incorporate prudent measures for identifying problems, reporting existing problems and accounts with potential problems, thereby ensuring that such accounts are reviewed, adequately monitored and the necessary rectifications are made. The effectiveness of the credit risk management framework depends largely on the adequacy of management information systems (Gaitho, 2013).

Similarly, debt recovery unit is involved in the day today role of ensuring that the loans issued to the bank’s customers are repaid as per the schedule of contract signed by the customer and bank (Bichanga and Aseyo, 2013). This unit is equally charged with the role of liaising with lawyers to draft demand letters to the loan defaulters and sending the same to the customers who are defaulting. There are various credit monitoring and recovery strategies that have been adopted by many commercial banks. Many of the agonies and frustrations of slow and distresses credits can be avoided by good loan supervision. Supervision helps keeping a good loan good. It may be visiting the borrowers' premises to investigate the general state of affairs and maintenance of plant and equipment. Again, keeping track of deposits and balances gives clue to the affairs of the borrowers. Debt rescheduling signifies a change in the existing terms of a loan. A financial institution should consider rescheduling a debt when it has determined that the rescheduling is in the government's

interests and that recovery of all or a portion of the debt is reasonably assured (Maphartia, 2010).

Furthermore, as with installment payments, before rescheduling a debt, the agency should reassess the debtor's financial position and ability to repay the debt if rescheduled (Mureithi, 2010). The agency should also determine if it should require the debtor to use pre-authorized debit to make payment. In regard to any repayment arrangement, the terms and conditions of the rescheduling, including the acceleration clause, must be in writing and signed by the debtor. The bank should discourage informal workout arrangements with debtors. Each bank should establish uniform policies, procedures and criteria for rescheduling and other types of workouts for each program area. Its policies and procedures should provide for the recognition of gains and losses on rescheduled accounts in accordance with the provisions of credit management standards (Maphartia, 2010).

Likewise, credit scoring systems can be used by the banks a credit recovery strategy (Bessis, 2010). A credit score is a number that is based on a statistical analysis of a borrower’s credit report, and is used to represent the creditworthiness of that person. A credit score is primarily based on credit report information. Lenders, such as banks use credit scores to evaluate the potential risk posed by giving loans to consumers and to mitigate losses due to bad debt. Using credit scores, financial institutions determine who are the most qualified for a loan, at what rate of interest, and to what credit limits (Umoh, 1994). While written communication, telephonic reminders or visits by the bank’s representatives to the borrowers’ place or residence will be used as loan follow up measures, the bank will not initiate any legal or other recovery measures

including repossession of the security without giving due notice in writing. The bank will follow all such procedures as required under law for recovery / repossession of security (Umoh, 1994).

Additionally, financial institutions should create internal controls that will ensure that credit initiation, approval, review, administration, payments and work-out functions are kept as separate as possible (Kono and Takahashi, 2010). Breaches of internal controls and practices should be reported to the appropriate level of management. (Eastern Caribbean Central Bank report, 2010). Also, financial institutions should establish an independent system with an ongoing assessment of its credit risk management processes and the results of the reviews should be communicated directly to the appropriate unit. The credit risk management programme of each institution should include procedures governing the formal review and rating of individual credits. An independent review of credits should be conducted along with regular analysis and rating of credits by account officers. Because of their frequent contact with borrowers, account officers are in a position to detect changes in a borrower's operations or financial condition (Migiri, 2012).

As indicated by Mkandawire (2011), governing body of rural banks ought to have obligation regarding endorsing and intermittently (in any event every year) investigating the credit risk technique and critical credit risk strategies of the bank. Every bank ought to build up a credit risk methodology or arrangement that sets up the goals controlling its credit-giving activities and embrace the important strategies and techniques for directing such activities (Olowa and Olowa, 2017). The board needs to perceive that the system and strategies must cover the numerous activities of the bank in which credit

introduction is a critical risk. Laeven (2014) likewise places that, these methods ought to mirror the bank's resilience for risk and the level of benefit the bank hopes to accomplish for bringing about different credit risks.

Additionally, Duffie and Singleton (2013) upheld that the credit risk arrangements and methods ought to be successfully imparted all through the rural bank. All noteworthy faculty ought to be obviously made to comprehend the bank's way to deal with allowing and overseeing credit and ought to be considered responsible for agreeing to built-up approaches and methodology. The board ought to guarantee that senior management is completely fit for dealing with the credit activities directed by the bank and that those activities are done inside of the risk procedure, approaches and resistances endorsed by the board (Liberman,2016). The board ought to additionally frequently (i.e. in any event yearly), either inside of the credit risk system or inside of an announcement of credit strategy, favor the bank's general credit-allowing criteria (counting general terms and conditions). Furthermore, it ought to affirm the way in which the bank will sort out its credit-giving capacities, including autonomous audit of the credit granting and management capacity and the general portfolio (Nsiah-Agyeman, 2010).

Similarly, Molla (2018) opines that banks have generally centered on the five Cs standards in estimation of borrowers' financial soundness. He proposed the accompanying definitions for the five Cs;

1. Character: This refers to the borrower's personal qualities, for example, trustworthiness, eagerness and responsibility to pay debt. Borrowers who show abnormal state of uprightness and responsibility to reimburse their obligations are viewed as qualified for credit (Molla, 2018).

2. Capacity: This additionally alludes to borrowers' capacity to contain and service debt judging from the achievement or generally of the endeavor into which the credit facility is utilized. Borrowers who display fruitful business execution over a sensible past period are likewise viewed as ideal for credit facility (Molla, 2018).
3. Capital: This alludes to the monetary state of the borrower. Where the borrower has a sensible measure of monetary resources in overabundance of his financial liabilities, such a borrower is viewed as ideal for credit facility (Molla, 2018).
4. Collateral: These are resources, typically portable or undaunted property, swore against the execution of a commitment Examples of collateral are buildings, inventory and account receivables. Borrowers with a great deal more assets to pledge as collateral are considered favorable for credit facility (Molla, 2018).
5. Condition: This refers to the financial circumstance or condition winning at the credit's season application. In times of retreat borrowers discover it entirely hard to acquire credit facility (Molla, 2018).

Furthermore, Van Gestel and Baesens (2010) uncovered that, one of the management rules that banks have utilized in their client data get-together process is screening. This means that screening includes the procedure of recognizing just solid and trustworthy clients from a pool of various candidates for money related help. Banks screen "good" credit risk from "bad" ones in order to make productive loans. Screening is typically done before a credit is conceded. Successful screening obliges banks to gather precise and dependable data from potential borrowers. The point is to assess the default risk of their

clients. The potential borrower is regularly needed to supply the loan officer with data about their experience, salary and total assets. Distinctive credit risk models extending from subjective to quantitative ones may be utilized to encourage the screening procedure to land at an educated choice (Van Gestel and Baesens, 2010).

Equally, Kono and Takahashi (2010) posited that one of the major mechanisms that most effective credit risk management mechanisms, which rural banks employ is by making arrangements with individuals without collateral who get together and form groups with the aim of obtaining loans from a lender. According to Kono and Takahashi (2010), in the typical group lending scheme, each member is jointly liable for each other's loan, so that if any members do not repay, all the members are punished (often in the form of denial of future credit access). Moreover, the prospective borrowers are required to form groups by themselves (Ginen et al, 2010). In addition, rural banks providing individual loans may require guarantor agreeing to guarantee the borrower's loan. However, Godquin (2014) cautions that the essential role of a guarantor is to be a decisive factor for granting the credit and not a secondary repayment source. The presence of a guarantor primarily acts as an ex-ante signal that can reduce adverse selection problem, given that the request for guarantors requires costly efforts for the potential borrower to find one or more guarantors and hence bad borrowers will be discouraged (Ibtissem and Bouri, 2013).

According to Wheehem and Hunger, (2010), the board needs to perceive that the system and strategies must cover the numerous activities of the bank in which credit introduction is a critical risk. Saunders et al., (2010) likewise places

that, these methods ought to mirror the bank's resilience for risk and the level of benefit the bank hopes to accomplish for bringing about different credit risks. The technique ought to incorporate a bank's announcement readiness to allow credit taking into account exposure type (for instance, commercial, consumer, real estate) monetary part, geological area, currency, development and foreseen productivity (Matyszak, 2010). This may additionally incorporate the distinguishing proof of target markets and the general qualities that the bank would need to accomplish in its credit portfolio (including levels of enhancement and resistances). The board should likewise focus the bank's level capital ampleness (Boateng, 2014). Fotoh (2015) upheld that the credit risk arrangements and methods ought to be successfully imparted all through the organization. The board ought to guarantee that senior management is completely fit for dealing with the credit activities directed by the bank and that those activities are done inside of the risk procedure, approaches and resistances endorsed by the board (Basel Council, 2011). The board ought to additionally frequently (i.e. in any event yearly), either inside of the credit risk system or inside of an announcement of credit strategy, favor the bank's general credit-allowing criteria (counting general terms and conditions) (Nsiah-Agyeman, 2010).

Institutional framework

A Seven-Member Board of Directors governs Odotobri Rural Bank. The Board is at the Apex of Bank’s Organogram and is the highest decision-making body of the Bank. The Board exercises its oversight role and responsibilities through the following standing committees:

1. Credit Committee

2. Human Resource & Compensation Committee
3. Local Board Committee
4. Scholarship Committee
5. Asset & Procurement Committee
6. Risk & Compliance Committee
7. Audit and Finance Committee

Management team

The Board is assisted by a Management team with varied and rich working experiences in Banking. The Management headed by the Chief Executive Officer is responsible for the day to day Administration and Operations of the Bank. Inclusive in the Management team are the Deputy General Manager, Central Accounts Manager, ICT Manager, Credit Manager, Audit Manager, and Human Resource/Administrative Manager.

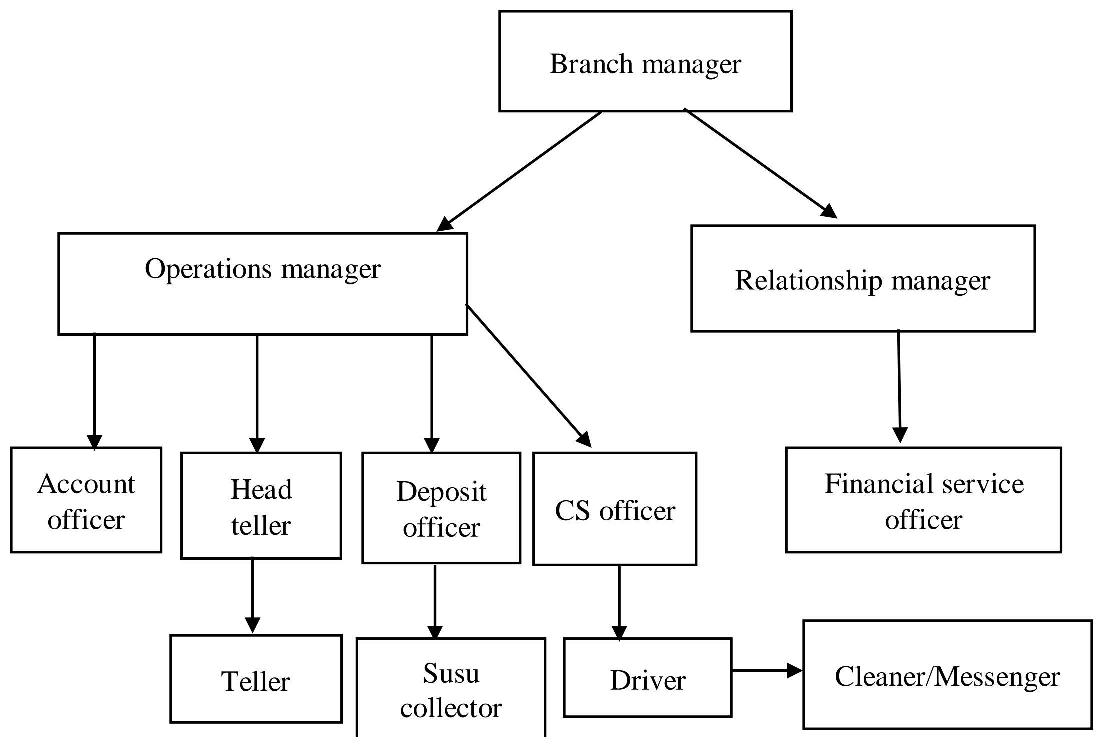

Figure 1: Organizational framework of odotobri rural bank (Branch Level)

Source: Author's construct (2020)

The organogram above represents the branch organizational structure of Odotobri Rural Bank. The hierarchy is such that, the branch manager is regarded as the head of the branch who delegates to the line managers; Operations manager and Relationship manager. The account officer, head teller, deposit officer and customer service officer all report to the operations manager. Only the financial service officer reports to the relationship managers. Both the teller and the Susu coordinator report to the head teller and deposit officer respectively. However, the driver, the cleaner and all the messengers report to the customer service officer.

Conceptual Framework

A conceptual framework is an illustration that shows how constructs of a study are perceived to relate to each other as shown in Figure 2.1. The framework depicts two major sets of variables. These are independent variables which include loan appraisal process, documentation process, disbursement process, and monitoring and evaluation process. The other is the dependent variable which is credit risk management practices. The mentioned independent variables describe the management practices of credit risk process. Each of the afore stated variables is characterized by various indicators.

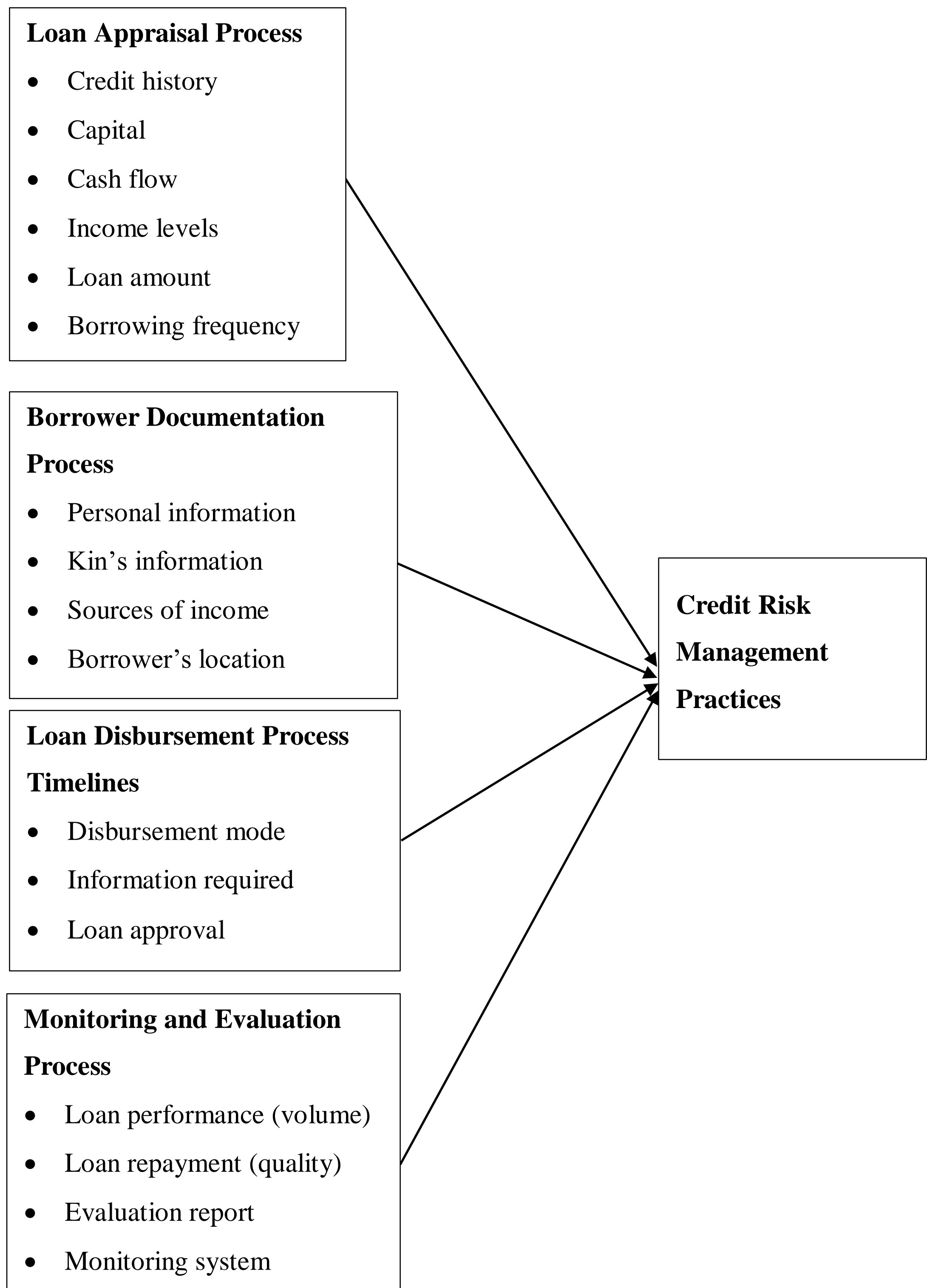

Figure 2: Conceptual framework

Source: Author's construct (2020)

The study reviewed that as a result of rising number of non-performing loans and competition in the rural banking sector, majority of rural banks have strongly focused on credit risk assessment. Rural bankers preferred sophisticated financial techniques in credit appraisal process with the object of assessing both the borrower's business and financial position. It is revealed that both credit terms and client appraisal impacted significantly on the loan performance. It is indicated that loan appraisal is conducted for different reasons including the use of appraisal as a selection tool, to quantify risk, to assist in decision making, and also to ensure that there is good quality business with excellent credit worthiness. The credit appraisal process was found to be also important in addressing non-performing loans. It was further found that the existence of an ineffective and inefficient loan appraisal process is one of the primary causes of NPLs among lending institutions.

The study observed that small banks and community lenders had greater success when they relied on more conservative underwriting including having experienced bankers, review extensive documentation on sales, cash flow and collateral considerations of borrowers. Documentation is found to be crucial during the legal follow-up done by the lending institution. The legal follow-up consists of obtaining proper documentation and keeping relevant documents alive. There are different documents that lending institutions demand in order to facilitate the loan processing. These documents are used as collateral to secure the credit facility being advanced. It has been established that credit restructuring ought to be fully documented and recorded. It has been indicated that loan disbursement should be affected upon signing and delivering of requisite documents to the bank. Prior to loan disbursement, a loan agreement

must be signed by both the bank representatives and the borrower. Once the credit facilities have been disbursed to borrowers, the monitoring process begins. It is indicated that in the microfinance sector, the repayment of loans commences almost immediately upon disbursement. Moreover, it has been observed that one of the factors that result in loan repayment default is delays by banks to process and disburse loans. The nascent stage of risk management procedures and policies necessitates arranging for effective monitoring procedure in order to keep NPLs in check. Monitoring is further underscored by the assertion that poor risk management implies that there exist weak monitoring mechanisms for credit quality of customers which has a likelihood of resulting in huge capital losses. It is asserted that the ability of a bank to monitor risks influences its profitability. Effective monitoring and management of financial risks can prove the difference between success and survival of lending institutions. It is postulated that effective and good loan portfolio managers have focused most of their efforts on appraising loan prudently and also carefully monitoring the performance of advanced loans. Findings of the reviewed studies indicated that in spite of there being arrear monitoring systems among rural banks, these institutions continued to suffer from huge NPLs.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter assesses credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. It again captures research design, study area, population, sampling procedure, data collection instruments, data collection procedures, and data processing and analysis. It included procedures that were followed in executing the study, thereby satisfying the study objectives.

Research Design

A survey design was carried out to seek the opinion of different bank officials on the assessment of credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. This research design helps to gather opinions and other data relating to the occurrence of a phenomenon within a relatively large population. By this method, the researcher collected and analyzed view points from customers of the Bank and staff at the credit department, Operations Department, Customer Advisers and the Manager. The data collection which involved the collection of both primary and secondary data using questionnaire was undertaken. This study adopted a survey design that aimed at assessing the credit risk management practices among rural banks in the Kumasi Metropolis.

Positivism research philosophy was adopted for this study because the research was practical in nature, objective and independent of its social actors as well as based on collection of facts. It was based on objectivist ontological position. Survey questionnaires were administered and formulated on basis of

questions from literature review by the researcher and administered to respondents of credit risk management practices among Odotobri Rural Bank in the Kumasi Metropolis. Also, according to Babbie (2010), deductive approach is normally used when the positivist philosophy of research is adopted for research work. Thus, deductive approach was adopted or used in the study.

Mugenda and Mugenda (2010) noted that questionnaire study involves collecting information from a larger number of cases, perhaps using questionnaires, because of the larger number of cases, survey generally involve some quantitative analysis. According to Dawson et al. (2016), positivism relies on quantifiable observations that results in statistical analysis. Thus, for this current study, quantitative research method was used in addressing the research aim, objectives and problems. Survey studies are usually used to find about the facts by collecting the data directly from population or sample. Kothari (2010) in a time survey study intends to understand and explain the phenomena in a natural setting, organization or compare different demographic groups or see the cause and effect of relationship to make predictions. For this it requires responses directly from respondents of large population in general. While Creswell (2009) say extensive survey carried out when researcher want to make generalization, whereas intensive survey is done for making estimation.

Study Area

Kumasi is the administrative capital of the Ashanti Region and the Kumasi Metropolitan Assembly of Ghana. The metropolis shares boundaries with Kwabre East, and Afigya Kwabre Districts to the north, Atwima Kwanwoma and Atwima Nwabiagya Districts to the West, Asokore Mampong and Ejisu-Juaben Municipality to the east and Bosomtwe District to the south.

The population of the metropolis according to the 2010 Population and Housing Census stands at 1,730,249 with 826,479 males and 903,770 females. About two-thirds of these persons are economically active and about nine in every ten of the these economically active persons are employed. These persons are employed in a wide range of economic activities including wholesale and retail industry, food processing, leather works, craft works, fashion design and furniture works.

The metropolis again consists of accommodation and food service activities like hotels, guest houses, restaurants, and traditional catering services (chop bars) (Ghana Statistical Service, Population and Housing Census, 2010). The study was mainly centered on rural banks of which Odotobri Rural Bank was extensively used as a case study. All eight (8) branches of Odotobri Rural Bank within the Kumasi Metropolis were used as case study during the time of the research. Again, the study focused on management members selected from the Credit Department, Operations Department, Customer Advisers and the Manager of the eight (8) branches of Odotobri Rural Bank within the Metropolis. The study employed census sampling technique to administer structured questionnaires to management members from the eight (8) branches of Odotobri Rural Bank.

Population

For the purposes of this study, the accessible population was all management members drawn from the Credit Department, Operations Department, Customer Advisers and the Manager of the eight (8) branches of Odotobri Rural Bank within the Metropolis. From each branch of Odotobri Rural Bank, ten management staff were selected through census sampling

technique. The decision is also in line with Fellows and Liu, (2008) assertions that particular strata can be focused on if it can facilitate ease of data collection and attainment of meaningful results. Management members or staff drawn from the Credit Department, Operations Department, Customer Advisers and the Manager were used because they were practitioners in charge of the day-to-day running of Odotobri Rural Bank hence had the requisite knowledge to respond to the objectives in the study.

Sampling Procedure

The study adopted the census sampling method to arrive at samples from the Credit Department, Operations Department, Customer Advisers and the Manager. This sampling technique was deemed appropriate due to the relatively small population size for the study. Census sampling method was used because population has been identified and its therefore appropriate to provide information that can be used to draw conclusions about the whole population. The accessible population was all management members drawn from the Credit Department, Operations Department, Customer Advisers and the Manager of the eight branches of Odotobri Rural Bank in the Kumasi Metropolis. Therefore, the study used a sample size of eighty (80) management members which consisted of ten staff from each branch selected from the Credit Department, Operations Department, Customer Advisers and the Manager of the eight branches of Odotobri Rural Bank in the Kumasi Metropolis.

Data Collection Instrument

For this study, the main instrument for information gathering was the use of questionnaires, which mostly contained structured questions. The questions on questionnaires were legitimately organized in light of open and

closed-ended type of questions. The structure of the questionnaire was divided into four sections namely ‘A’, ‘B’, ‘C’, and ‘D’. Section ‘A’ captured the background information of respondents and Section ‘B’ answered the first objective of the study by examining the processes of approval and recovery of loans of rural banks in the Kumasi Metropolis. Section ‘B’ of questionnaire included credit risk management practices of rural banks in the Kumasi Metropolis and the last section of questionnaire captured the solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. By using census sampling technique, questionnaires were self-administered to management members of Odotobri Rural Bank drawn from Credit Department, Operations Department, Customer Advisers and the Manager.

Data Collection Procedures

Data was collected from management members of Odotobri Rural Bank in the Kumasi Metropolis. Letter of introduction requested by the researcher from the Department of Economic and Business Administration at the Catholic University College was served on the management of Odotobri Rural Bank to seek their maximum co-operation and assure them that any information provided would be treated as confidential and solely for academic purpose. The data was collected by the researcher by administering eighty (80) questionnaires to management members drawn from Credit Department, Operations Department, Customer Advisers and the Manager of the eight branches of Odotobri Rural Bank in the Kumasi Metropolis. A visit was made to each of the eight branches of Odotobri Rural Bank to administer questionnaire to the required respondents. A self-introduction was made and the purpose of the

survey was explained to the respondents. The respondents' consent was sought and they were assured of confidentiality of their information. Respondents were given the option to participate willingly or refrain from participating in the study. A questionnaire was left for those who could read and write to fill it. A total of five (5) working days were given to them to fill the questionnaire for collection. The reason for the self-administration of the questionnaire was to ensure data quality control in anticipation of resistance from respondents in providing financial data on the status of their businesses.

Validity and Reliability of Research Instrument

The quality of a research largely depends on the quality of the instruments used and the procedures of collecting the data since the essentials of a good research are validity and reliability. As validity is the extent to which the instrument used measures what it is intended to, the accuracy of a research instrument being reliable lies in whether the data collection process is consistent and stable. This researcher ensured that the questions designed were based on the following guidelines:

1. Questions were formed in such a way as to make it easy for respondents to understand.
2. The questions asked were few in number as was necessary to produce the information required.
3. The questions required answers that were straight forward and precise in nature.
4. The questions were directly related to the information required.
5. The questions were such that they could be answered with honesty and without bias.

Content validity and reliability of questionnaires was thoroughly evaluated to ensure study objectives espoused were achieved largely after the study in two prime ways. Firstly, the researcher designed questionnaires after reviewing extant literature on the credit risk management practices among rural bank and made sure it measured exactly that. Lastly, the content of questionnaires was reviewed by an expert or professional in the subject matter like my supervisor to ensure that questions covered all essential elements in the study.

Ethical Considerations

Ethics has a major effect on the collaboration of respondents during data collection. All respondents participated in the research with no pressurizing at all to ensure that the rules in research were kept up. This infers respondents' reserve each privilege to pull back from the investigation at any stage in the event that they consider fit. Also, verbal assent was obtained from each respondent resulting to giving an explanation about the nature and purpose behind the investigation. This implies researcher gave satisfactory data and assurances about partaking to permit people to comprehend the ramifications of support and to arrive at a completely educated situation as to participate or not. Cognisance was taken of ethical issues laid down in the University of Cape Coast Graduate Students' Handbook and the Guide for the Preparation and Evaluation of Higher Degree Research Thesis. Additionally, the investigation was organized on the need to regard research members and guaranteed them of incredible arrangement of securing their protection, secrecy and privacy. Once more, the utilization of American Psychological Association referencing framework was clung to in recognizing works of different authors in any piece

of the theory. Ultimately, in talking about and investigating information all through the investigation, the most elevated level of objectivity was kept up.

Data Processing and Analysis

After questionnaire administration, the raw data was analyzed using descriptive and inferential statistical methods of SPSS version 25 to bring useful results to the topic under study which were expressed in tables, charts and graphs. Quantitative instruments of data analyses were used to examine the volume of evidence that was gathered from the field. Relative importance index method (RII) or mean score rankings were used as its inferential statistical tool. Data from the study were quantified by the relative importance index (RII) method prior to ranking to analyze the processes of approval and recovery of loans of rural banks in the Kumasi Metropolis, determine credit risk management practices of rural banks in the Kumasi Metropolis, and suggest solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. RII supports to find the input a certain variable makes to the forecast of a criterion variable both by itself and in combination with other predictor variables. RII has been used by several scientists in their analysis in variant factions. Therefore, adopting the use of RII for this study proves worthy because it has been used and adopted in identifying the relative significance of variables in works as shown in the citations above. One more reason for adopting RII in this study is best for group of variables, and the questionnaires of this study.

Chapter Summary

This chapter has presented the research methodology that was used in analyzing the research questions. The data was collected by the researcher by

administering eighty (80) questionnaires to management members drawn from Credit Department, Operations Department, Customer Advisers and the Manager of the eight branches of Odotobri Rural Bank in the Kumasi Metropolis. The study relied entirely on primary data which was collected from the respondents (management members) by the researcher using a structured questionnaire. Relative Importance Index (Mean score rankings) as an inferential statistical method was used to analyze the results of the study and presented them in tables. The results and findings of this study were presented in chapter four.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter gives a detailed analysis of data collected and presents, findings and interpretation of the results on credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. This chapter of the study captures the background characteristics of respondents, processes of approval and recovery of loans of rural banks in the Kumasi Metropolis, credit risk management practices of rural banks in the Kumasi Metropolis, and solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. Again, this chapter sets to outline and analyze the findings of the research by the use of Statistical Package for Social Sciences (SPSS) and presented in form of frequency tables, charts and graphs.

Background Characteristics of Respondents

This section of the study made use of primary data collected from relevant respondents amongst management of Odotobri Rural Bank on credit risk management practices among rural banks in the Kumasi Metropolis. Also, data on individual characteristics which capture age, sex, and educational level, among others were used and analyzed in the study.

Table 1: Background Characteristics of Respondents

Variables	Alternatives	Frequency (N=80)	Percentage (%)
Sex	Male	48	60
	Female	32	40
Age	36 – 40	31	39
	31- 35	23	29
	Above 40	14	17
	26 – 30	12	15
Highest Educational Level	University/Polytechnic /Diploma	54	68
	Senior High School	26	
Work experience	5-12 Years	39	49
	13-19 Years	24	29
	Below 5 Years	17	22
Rank/Department	Credit Department	36	45
	Customer Relations		
	Operations Department	15	19
	Manager	8	10

Source: Field data (2020)

From the table below, 60% of the respondents were males whereas 40% represented females. In all, majority of the male respondents (management) participated in the study. Similarly, 39% of the respondents were 36-40 years, 29% were from 31-35 years, 17% of the respondents were above 40 years whiles 15% from 26-30 years. Also, table 2 shows that 68% had university level education while the remaining 32% had Senior High level of education. This

means that majority of respondents (management) who participated in the study were literate hence were capable to contributing to the objectives of the study. When respondents were asked the number of years, they have worked with Odotobri Rural Bank, 49% of the respondents indicated that they had a work experience of 5-12 years, 29% of the respondents said they have worked with Odotobri Rural Bank for 13-19 years, 22% indicated that they had work experience less than 5 years. This means that all participated respondents had work experience with Odotobri Rural Bank for some appreciable number of years hence were capable to respond to the credit risk management practices among rural banks in the Kumasi Metropolis. Finally, 45% of respondents belonged to the credit department of Odotobri Rural Bank, 26% were staff of the customer relations department, 19% belonged to the operations department whiles the remaining 10% were managers of Odotobri Rural Bank.

Processes of Approval and Recovery of Loans of Rural Banks

Table 2: Processes of Loan Appraisal

Processes of loan Appraisal	Agree (%)	Disagree (%)	Total (%)
Our bank verifies the credit history of prospective borrowers before lending money	96	4	100
The capital of borrower is verified by the bank	91	9	100
Cash flows of borrowers are examined by the bank.	89	11	100
Income levels of borrowers are verified by the bank.	95	5	100
The borrowing frequency of borrowers is factored in before advancing credit facility.	90	10	100

n= 80

Source: Field data (2020)

The study establishes the processes of approval and recovery of loans of Odotobri Rural Bank in the perspective of management. Table 4 reveals 96% of the respondents agreed that Odotobri Rural Bank verified credit history of prospective borrowers before lending money whilst 4% disagreed. The results also reveal majority 91% of respondents agreed that the capital of borrower is verified by the bank whereas 9% disagreed. Similarly, 89% of respondents agreed that the cash flows of borrowers are examined by the bank. On the other hand, 11% of the respondents disagreed. On whether or not the income levels of borrowers were verified by the bank, 95% of the respondents agreed while 5% disagreed. Lastly, 90% of respondents (management) agreed that borrowing frequency of borrowers was factored in before advancing credit facility whilst 10% disagreed.

Table 3: Processes of Documentation of Borrowers

Processes of documentation	Agreed (%)	Neutral (%)	Disagreed (%)	Total (%)
Our bank demands for borrower's personal information before lending money	82	11	7	100
Our bank demands for information of borrower's family members before lending money	89	6	5	100
Our bank seeks to know the source(s) of income of borrowers	94	4	2	100
The bank seeks information regarding borrowers' workplace or business premises	96	3	1	100

n= 80

Source: Field data (2020)

The analyzed results in Table 6 indicated that 82% of respondents (management) agreed that the bank demanded for borrower's personal information before lending money in the documentation process, 11% of respondents were neutral that the bank demanded for borrower's personal information before lending money and the remaining 7% disagreed. Again, 89% majority of respondents agreed that the rural bank demanded information of borrower's family members before lending money whilst 6% of respondents remained neutral that the rural bank demanded information of borrower's family members before lending money in the disbursement loan process. 5% of respondents disagreed that the rural bank demanded information of borrower's family members before lending money in the loan process of disbursement. Similarly, 94% majority of respondents agreed that the rural bank sought to know the source(s) of income of borrowers whilst 4% of respondents were neutral that rural bank sought to know the source(s) of income of borrowers. 2% of respondents disagreed that rural bank sought to know the source(s) of income of borrowers in the loan process of disbursement. Finally, Table 3 shows 96% of respondents agreed that the bank sought information regarding borrowers' workplace or business premises, 3% were neutral that the bank sought information regarding borrowers' workplace or business premises, and 1% of respondents disagreed that the bank sought information regarding borrowers' workplace or business premises.

Table 4: Processes of Loan Disbursement

Loan Disbursement Process	Agree (%)	Disagree (%)	Total (%)
Disbursement of credit to borrowers takes short time once approved	83	17	100
Loans are credited to borrower's bank account	96	4	100
Loans are credited to borrower's phone number	12	88	100
The bank demands for customer's residential address before disbursing loans to qualified applicants	92	8	100

n= 80

Source: Field data (2020).

Table 4 reveals that 83% of the respondents (management) agreed that disbursement of credit to borrowers took a short time once approved whiles 17% disagreed. The results also reveal majority 96% of respondents (management) agreed that loans were credited to borrower's bank account whereas 4% disagreed. Similarly, 88% of respondents (management) disagreed that loans were credited to borrower's phone account. On the other hand, 12% of the respondents (management) agreed. Again, 92% of the respondents (management) agreed that the bank demanded for customer's residential address before disbursing loans to qualified applicants whilst 8% disagreed.

Credit Risk Management Practices of Rural Banks

Table 5: Strategies for Credit Monitoring

Credit monitoring strategies	Mean	Std. Err.	Std. Dev.	RII	Rank
Collaterals	3.72	0.077	0.951	0.68	1ST
Credit rationing	3.70	0.095	1.173	0.66	2ND
Agreements	3.69	0.090	1.120	0.65	3RD
Evaluating contracts	3.65	0.093	1.159	0.63	4TH
Use of mortgage-backed security of loans	3.60	0.092	1.147	0.60	5TH
Guaranteeing the repayment of loans	3.57	0.082	1.023	0.58	6TH

n = 80

Source: Field data (2020).

This section of the study identified and ranked most practiced credit monitoring strategy among Odotobri Rural Bank in the Kumasi Metropolis after a comprehensive review of extant literature. Management were asked to fall on their matchless experience in ranking most practiced credit monitoring strategy among Odotobri Rural Bank in the Kumasi Metropolis. The Mean Score Rank and the Relative Importance Index (RII) were used to analyse the responses from the field survey. As part of the Mean Score Rank, the standard deviation was determined to ascertain the level of agreement of the responses given. Regarding descriptive statistics this study is described by the measures of central tendency and degrees of dispersion (standard deviation) as proposed by Ali and Bhaskar (2016). The mean score is a measure of central tendency which is calculated by summing all the values and dividing this by the number of cases

to produce a mean average. The standard deviation is a measure of variability (Altman and Bland, 2005). The standard deviation (SD) measures how widely spread the values of a dataset are. If SD values are small or close to zero, then the values are close to the mean (Altman and Bland, 2005). The Standard error (SE) estimates how sample means vary or deviates from the SD of the sampling distribution and used to calculate the confidence interval. Rooshdi et al. (2018) added that the RII allows the identification of the most important criteria based on the responses of the participants of the survey and it is also an appropriate tool to prioritise the indicators rated on the Likert scale adopted for the study. In agreement with Owusu-Manu et al. (2019) where two or more variables have the same RII, the variable with the highest mean is ranked higher. Ahadzie (2007) also opined that where two or more variables have the same mean, the one with the lowest standard deviation is given the precedence in terms of ranking. This is because standard deviation measures the consistency of agreement between the respondents' interpretation, and hence, the lower the standard deviation number the better (Owusu-Manu et al., 2019). Yi (2011) asserts that a standard deviation less than 2.000 is considered as the best, because it shows a small degree of variation, but a high level of agreement between how the respondents interprets the variables. In using the hypothesised mean of 3.5 as adopted by Field (2005) and Owusu-Manu et al. (2018). It was obvious from Table 6, all the factors had means greater than the hypothesised mean of 3.5 and their standard error means were also close to zero indicating a great consistency among the agreement between the respondents.

Table 6 contains the results of statistical analyses. As observed from the table, respondents (management) ranked the use of collaterals with a mean score

of 3.72, an RII of 0.68 and a standard deviation of 0.951 as most practiced credit monitoring strategy. Credit rationing was ranked second with a mean score of 3.70, an RII of 0.66 and a standard deviation of 1.173, the use of agreements was ranked third with a mean score of 3.69, an RII of 0.65 and a standard deviation of 1.120 and contract evaluation with a mean score of 3.65, an RII of 0.63 and a standard deviation of 1.159 as subsequent credit monitoring strategies at Odotobri Rural Bank. Likewise, use of mortgage-backed security of loans [RII-0.60, Mean – 3.60 and SD – 1.147] and guaranteeing the repayment of loans [RII-0.58, Mean – 3.57 and SD – 1.023] were other ranked least practiced credit monitoring strategies at Odotobri Rural Bank.

Table 6: Strategies of Loan Recovery

Loan recovery strategies	Mean	Std. Err.	Std. Dev.	RII	Rank
Legal actions	4.12	0.095	0.992	0.82	1ST
First and second remainder notice	4.06	0.090	0.865	0.79	2ND
Polite recovery phone calls	4.00	0.093	0.936	0.75	3RD
Monthly statements	3.94	0.092	0.941	0.71	4TH

n= 80

Source: Field data (2020)

This section of the study aimed at management' ranking strategies of loan recovery used at Odotobri Rural Bank. Based on the rich experience of the respondents with strategies of loan recovery, they were asked to determine the level of practice of these variables. The Mean Score Rank and the Relative Importance Index (RII) were used to analyse the responses from the field

survey. As part of the Mean Score Rank, the standard deviation and standard error were determined to ascertain the level of agreement of the responses given. The descriptive statistics of this study is described by the measures of central tendency and degrees of dispersion (standard deviation). The mean score is a measure of central tendency which is calculated by summing all the values and dividing this by the number of cases to produce a mean average. The standard deviation is a measure of variability (Altman and Bland, 2005). The standard deviation (SD) measures how widely spread the values of a dataset are. If SD values are small or close to zero, then the values are close to the mean (Ali and Bhaskar, 2016). Rooshdi et al. (2018) added that the RII allows the identification of the most important criteria based on the responses of the participants of the survey and it is also an appropriate tool to prioritise the indicators rated on the Likert scale adopted for the study. In agreement with Owusu-Manu et al. (2019) where two or more variables have the same RII, the variable with the highest mean is ranked higher. Ahadzie (2007) also opined that where two or more variables have the same mean, the one with the lowest standard deviation is given the precedence in terms of ranking. This is because standard deviation measures the consistency of agreement between the respondents' interpretation, and hence, the lower the standard deviation number the better (Owusu-Manu et al., 2019). Yi (2011) asserts that a standard deviation less than 2.000 is considered as the best, because it shows a small degree of variation, but a high level of agreement between how the respondents interprets the variables.

Respondents (management) ranked the use of legal actions as the first strategy of loan recovery, with a mean score of 4.12, an RII of 0.82 and a

standard deviation of 0.992. This was followed by sending first and second remainder notice to customers with a mean score of 4.06, an RII of 0.79 and a standard deviation of 0.865, making polite recovery phone calls was ranked third with [RII- 0.75, Mean – 4.00 and SD – 0.936] and issuing monthly statements with [RII- 0.71, Mean – 3.94 and SD – 0.941] ewere other strategies for recovering loans according to management at Odotobri rural bank.

Solutions to Challenges of Credit Risk Management Practices of Rural Banks

Table 7: Solutions to Challenges of Credit Risk Management Practices

Solutions/Measures	Mean	Std. Err.	Std. Dev.	RII	Rank
Court actions	4.90	0.082	1.427	2.05	1ST
Monitoring the borrower's business progress	4.88	0.096	0.848	1.93	2ND
Use of third-party debt collectors	4.84	0.077	0.925	1.84	3RD
Bank recovery team	4.78	0.092	1.275	1.80	4TH
Rescheduling of payments	4.52	0.091	1.117	1.74	5TH
Regular review of borrower's report	4.33	0.075	0.853	1.71	6TH
Write off long outstanding debts	4.03	0.068	0.741	1.63	7TH

n= 80

Source: Field data (2020)

This section of the study was for management to suggest solutions to Challenges of Credit Risk Management Practices of Odotobri Rural Banks.

Respondents (management) were asked indicate by ranking identified solutions to challenges of credit risk management practices of Odotobri Rural Banks. The Mean Score Rank and the Relative Importance Index (RII) were used to analyse the responses from the field survey. As part of the Mean Score Rank, the standard deviation and standard error were determined to ascertain the level of agreement of the responses given.

The descriptive statistics of this study is described by the measures of central tendency and degrees of dispersion (standard deviation). The mean score is a measure of central tendency which is calculated by summing all the values and dividing this by the number of cases to produce a mean average. The standard deviation is a measure of variability (Altman and Bland, 2005). The standard deviation (SD) measures how widely spread the values of a dataset are. If SD values are small or close to zero, then the values are close to the mean (Ali and Bhaskar, 2016). Rooshdi et al. (2018) added that the RII allows the identification of the most important criteria based on the responses of the participants of the survey and it is also an appropriate tool to prioritise the indicators rated on the Likert scale adopted for the study. In agreement with Owusu-Manu et al. (2019) where two or more variables have the same RII, the variable with the highest mean is ranked higher. Ahadzie (2007) also opined that where two or more variables have the same mean, the one with the lowest standard deviation is given the precedence in terms of ranking. This is because standard deviation measures the consistency of agreement between the respondents' interpretation, and hence, the lower the standard deviation number the better (Owusu-Manu et al., 2019). Yi (2011) asserts that a standard deviation less than 2.000 is considered as the best, because it shows a small degree of

variation, but a high level of agreement between how the respondents interprets the variables.

From Table 7, filing court actions against defaulters was highly ranked by the respondents (management) as the foremost solution to Challenges of Credit Risk Management Practices (Management) recording an RII of 2.05, a high mean score of 4.90 and SD of 1.427. Closely ranked was monitoring borrower's business progress with an RII of 1.93, a mean score of 4.88 and an SD of 0.848. The use of third-party debt collectors with [RII = 1.84; Mean = 4.84 and SD = 0.925], the use of bank recovery team with [RII = 1.80; Mean =4.78 and SD = 1.275], Rescheduling of payments with [RII = 1.74; Mean = 4.52 and SD = 1.117], and Regular review of borrower's report [RII = 1.71; Mean = 4.33 and SD = 0.853] were ranked third, fourth, fifth, and sixth respectively. The least ranked solution to Challenges of Credit Risk Management Practices (Management) was the writing off long outstanding debts with RII =1.63; Mean = 4.03 and SD = 0.741. Although these factors recorded lower RII and Mean Scores, the factors are seen by management to contribute to solving the challenges of credit risk management practices of Odotobri Rural Banks.

Discussions

Processes of Approval and Recovery of Loans of Rural Banks

The study established what processes of approval and recovery of loans of Odotobri rural banks from perspectives of management staff. The study revealed that management agreed that Odotobri Rural Bank verified credit history of prospective borrowers before lending money. Also, management agreed the capital of borrower was verified by the bank. Again, management in

the study agreed the cash flows of borrowers were examined by the bank. Moreover, management of Odototbri Rural Bank agreed the income levels of borrowers were verified by the bank. Aside the forgoing, management agreed the borrowing frequency of borrowers was factored in before advancing credit facility. Generally, the findings of this study indicate the thoroughness with which rural banks appraised prospective borrowers for loans. This was contrary to the results of a previous study carried out by Sanusi (2012) in Nigeria. The latter study had established that there existed poor credit appraisal system, which was one of the factors that had rendered several rural banks to be in financial distress. Yet the present study's findings reinforced the observations made in a past local study conducted by Mureithi (2010) where the importance of credit appraisal process among lending entities was underlined. Also, Findings from the study are consistent with Olalere and Wan (2016) who observed that the abandonment of the credit appraisal process often resulted into several banks using credit card to process and therefore addressed the importance of credit analysis. The length of time taken to process loan applications, credit experience, proportion of collateral security to the loan approved and the purpose of the loan are the variables identified by (Olalere and Wan, 2016). It was concluded that informed credit decisions made by loan officers are affected by the long waiting time which reflects a shortage of credible credit information.

Credit Risk Management Practices of Rural Banks

This study uncovered management of Odotobri Rural Bank agreed that the bank demanded for borrower's personal information before lending money as part of documentation process. Management staff of Odotobri Rural Bank

agreed that the rural bank demanded information of borrower's family members before lending money and also sought to know the source(s) of income of borrowers. The study again unraveled that both management agreed the bank sought information regarding borrowers' residence as part of loan disbursement process. Moreover, the rural bank sought information regarding borrowers' workplace or business premises according to management. These findings are consistent with the results of a study conducted in the United States by Mills and McCarthy (2014) which indicated that banks conducted extensive documentation of borrowers' sales, cash flow and collateral considerations. In the same vein, the present study's findings agree to the emphasis granted to documentation process in a study conducted by Wondimagegnehu (2012) in Ethiopia. The latter study has underscored the importance of documentation and keeping relevant documents alive particularly in relation to legal follow-ups. Another study that support the current results was conducted by Ibtissem and Bouri (2013) in Tunisia. The foregoing study had found that documentation was conducted prior to advancing credit to borrowers. The documents sought were employed as collateral to secure the credit facility being advanced by the lending institution. Findings from this study are congruent with Essendi (2013) positing that documentation is found to be crucial during the legal follow -up done by the lending institution. The follow-up consists of obtaining proper documentation and keeping relevant documents alive. Moreover, it was noted that a sound credit risk management system facilitates identification of potential risks related to loan restructuring, underwriting and documentation. In addition, it was established that credit restructuring ought to be fully documented and recorded (Essendi, 2013). Additionally, findings agree with Wondimagegnehu

(2012) who examined the determinants of non-performing loans of commercial banks in Ethiopia and indicated that credit documentation follows a number of considerations. This is premised on the assertion that advancing credit should carefully balance limiting of risks and maximizing profits while at the same time maintaining a competitive edge over rival entities. Credit documentation and approval entails determination of whether or not credit should be advanced to a given borrower. This process involves gathering relevant information and also determining the credit worthiness of the prospective borrower. Documentation process is postulated to be important.

From the study, management of Odotobri Rural Bank agreed that disbursement of credit to borrowers took a short time once approved and also agreed that loans were credited to borrower's bank account. Again, management staff of Odotobri Rural Bank disagreed loans were credited to borrower's phone account. The results of this study were in contrast to the findings of study commissioned by the CBI (2010) in Iraq. While the present study indicated that loan disbursement processed was finalized without physical presentation of documentation to the lending bank, the past study observed that loan disbursement was affected on after the borrower signed and delivered the requisite documents to the lending institution. A study conducted locally by Bichanga and Aseyo (2013) admitted that there are delays in disbursement of loans to borrowers. This is a departure from the present study findings where it is revealed that disbursement of loans to borrowers took relatively short time upon approval. Additionally, findings are in agreement with CBI (2010), which mentioned the credit disbursement process begins with an extensive analysis of the creditworthiness of the borrower or the capacity and willingness of the

borrower to repay the credit facility which was usually credited to borrower's bank account.

The research study revealed that management of Odotobri Rural Bank ranked the use of collaterals as most practiced credit monitoring strategy. Findings are consistent with Armendariz and Morduch (2010) who highlighted several important mechanisms that allow banks to generate high repayment rates of unsecured loans without using group lending contracts. These mechanisms include the use of non-refinancing threats, regular repayment schedules, collateral substitutes, and the provision of nonfinancial services. One of the major mechanisms that most effective credit risk management mechanisms, which banks employ is by making arrangements with individuals without collateral who get together and form groups with the aim of obtaining loans from a lender (Armendariz and Morduch, 2010). Again, findings are consistent with Cebenoyan and Strahan (2012) posited that some banks use a guarantee to reduce the risk attached to the loan, but MFIs often do not require their clients to provide any physical collateral that traditional commercial banks do. However, in order to maintain high repayment rate, rural banks can use important mechanism that is collateral substitutes. A common collateral substitute used by many rural banks especially during their initial years of operation is to require borrowers to pay a percentage of every unit borrowed (beyond a given scale) in order to collect an emergency fund, which serves as insurance against loan default, death or disability. Also, in Russia and rural areas of Albania, household items may be considered as collateral if they have sufficient personal value for borrowers (Armendariz and Morduch, 2010).

Findings indicated that management agreed that they sent monthly statements as part of the loan recovery strategies whiles customers confirmed. Again, larger percentage of management staff of Odotobri Rural Bank agreed that they placed polite recovery phone calls to customers. Furthermore, management agreed that they sent first and second remainder notice as a strategy for loan recovery. Management agreed that Odotobri Rural Bank filed legal actions against defaulted customers as loan recovery strategy. Findings of the study are generally consistent with Weber et al., (2010) who indicated that regular review of the borrower's loan information, as well as frequent on-site visit, updating borrower's credit files, monthly statements to customers, polite recovery phone calls, remainder notices to customers and sometimes, legal actions enhance the extent at which the loan is remitted. The purpose in the work-out phase is to trim down losses and if feasible get the borrower back on track. If a borrower's expected loss increases, the reason(s) accounted for this should be investigated and corrective measures taken to avert the situation. Bad credits (indicating credits that can partly be paid back or not at all by the borrower) are managed in the work-out division of the bank (Weber et al. 2010). Also, findings are consistent with Ogboi and Unuafe (2015) who conducted a study on the strategies of recovering loans revealed that monthly statements to customers, polite recovery phone calls to customers, first and second remainder notices to customers, and legal actions meted to customers are critically essential to impacting significantly on loan performance. This implies that aforementioned loan recovery strategies are major aspects that management of lending institutions ought to factor in order to enhance the performance of loans.

Solutions to Challenges of Credit Risk Management Practices of Rural Banks

The research study indicated that management of Odotobri Rural Bank ranked filing 'court actions' against defaulters as the top most solution to challenges of credit risk management practices and the 'writing off long outstanding debts' as least ranked solution to challenges of credit risk management practices of Odotobri Rural Bank. Other solution according to management staff in order of ranking included 'use of third-party debt collectors', 'bank recovery team', 'monitoring the borrower's business progresses, 'regular review of borrower's report', 'rescheduling of payments', and 'court actions' as solutions to challenges of credit risk management practices of Odotobri Rural Bank. Findings from the study are consistent with Olowa and Olowa (2017) suggesting that the bank is expected to identify and get rid of bad customers who possess non-value activities, behaviors and actions that increase credit risk. Nonetheless, the financial stability of the customer remains so important, albeit with reducing credit risk. The customer whose financial position is not strong or stable is likely to default in repayment of the money borrowed. In an event of default, banks require collateral or a property or other asset offered by the borrower and some cases, taken through court actions as a way for a bank to protect the loan. Again, by charging every borrower a premium based on the expected loss, the average loss in loan through lending can be compensated for. Therefore, the bank will not suffer much in an event of loss. Monitoring is very important when loans are given out to customers. Monitoring involves frequent contact with clients, creating a conducive environment that the bank can be seen as a problem solver and a

trusted adviser. Loan administrators are supposed to keep an eye on repayment rates and processes. Regular review of the borrower's loan information, as well as frequent on-site visit, updating borrower's credit files, enhance the extent at which the loan is remitted (Olowa and Olowa, 2017).

Summary of Key Findings

1. The study found that management agreed that Odotobri Rural Bank verified credit history of prospective borrowers before lending money. Moreover, management of Odototbri Rural Bank agreed the income levels of borrowers were verified by the bank. Aside the forgoing, management agreed the borrowing frequency of borrowers was factored in before advancing credit facility.
2. This study found that management of Odotobri Rural Bank agreed that the bank demanded for borrower's personal information before lending money as part of documentation process. Management staff of Odotobri Rural Bank agreed that the rural bank demanded information of borrower's family members before lending money. The study again unraveled that management agreed the bank sought information regarding borrowers' residence as part of loan disbursement process.
3. From the study, management of Odotobri Rural Bank agreed that disbursement of credit to borrowers took a short time once approved and also agreed that loans were credited to borrower's account number.
4. The study indicated that management agreed that they sent monthly statements as part of the loan recovery strategies. Again, management staff of Odotobri Rural Bank agreed that they placed polite recovery

phone calls to customers and sent first and second remainder notice as a strategy for loan recovery.

5. Management agreed that Odotobri Rural Bank filed legal actions against defaulted customers as loan recovery strategy.
6. The solutions to challenges associated with credit risk management practices proffered by management of Odotobri Rural Bank ranked filing ‘court actions’ against defaulters as the top most solution to challenges of credit risk management practices and the ‘writing off long outstanding debts’ as least ranked solution to challenges of credit risk management practices of Odotobri Rural Bank.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Overview

This chapter presents the summary of the research undertaken on the assessment of credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. Again, the purpose was to identify processes of approval and recovery of loans of rural banks in the Kumasi Metropolis, assess credit risk management practices of rural banks in the Kumasi Metropolis and identify solutions to challenges of credit risk management practices of rural banks in the Kumasi Metropolis. It also outlines the conclusions derived from the empirical results and make recommendations based on the conclusions.

Summary of Findings

Based on an objective analysis of data and discussion of results and findings, the following are the summary of major findings of the study:

Processes of approval and recovery of loans of rural banks

The study established that management agreed that Odotobri Rural Bank verified credit history of prospective borrowers before lending money. Also, management in the study agreed that cash flows of borrowers were examined by the bank. Moreover, management of Odototbri Rural Bank agreed the income levels of borrowers were verified by the bank. Aside the forgoing, management agreed that the borrowing frequency of borrowers was factored in before advancing credit facility.

Credit risk management practices of rural banks

This study found that management of Odotobri Rural Bank agreed that the bank demanded for borrower's personal information before lending money as part of documentation process. Management staff of Odotobri Rural Bank agreed that the rural bank demanded information of borrower's family members before lending money and also sought to know the source(s) of income of borrowers. The study again found that management agreed the bank sought information regarding borrowers' residence as part of loan disbursement process. Moreover, the rural bank sought information regarding borrowers' workplace or business premises according to management.

From the study, it was found that management of Odotobri Rural Bank agreed that disbursement of credit to borrowers took a short time once approved and also agreed that loans were credited to borrower's account number. Again, management staff of Odotobri Rural Bank disagreed loans were credited to borrower's phone number. The study found out that management of Odotobri Rural Bank ranked the use of collaterals as most practiced credit monitoring strategy. The study indicated that management agreed that they sent monthly statements as part of the loan recovery strategies. Again, management staff of Odotobri Rural Bank agreed that they placed polite recovery phone calls to customers. Furthermore, management agreed that they sent first and second remainder notice as a strategy for loan recovery. Management agreed that Odotobri Rural Bank filed legal actions against defaulted customers as loan recovery strategy.

Solutions to challenges of credit risk management practices of rural banks

The research study indicated that management of Odotobri Rural Bank ranked filing 'court actions' against defaulters as the top most solution to challenges of credit risk management practices and the 'writing off long outstanding debts' as least ranked solution to challenges of credit risk management practices of Odotobri Rural Bank. Other solution according to management staff in order of ranking included use of third-party debt collectors, bank recovery team, monitoring the borrower's business progress, regular review of borrower's report, rescheduling of payments, and court actions as solutions to challenges of credit risk management practices of Odotobri Rural Bank.

Conclusions

The following are conclusions drawn from the study:

1. The study concluded that management agreed that Odotobri Rural Bank verified credit history of prospective borrowers before lending money. Also, management concluded the capital of borrower was verified by the bank. Again, management in the study concluded the cash flows of borrowers were examined by the bank. Aside the forgoing, management concluded the borrowing frequency of borrowers was factored in before advancing credit facility.
2. This study concluded management of Odotobri Rural Bank that the bank demanded for borrower's personal information before lending money as part of documentation process. The study again concluded that management agreed the bank sought information regarding borrowers' residence as part of loan disbursement process. Moreover, the rural bank

sought information regarding borrowers' workplace or business premises according to management.

3. From the study, it was concluded that management of Odotobri Rural Bank agreed that disbursement of credit to borrowers took a short time once approved and also agreed that loans were credited to borrower's account number. Again, management staff of Odotobri Rural Bank disagreed loans were credited to borrower's phone account.
4. The research study concluded that management of Odotobri Rural Bank use collaterals as most practiced credit monitoring strategy. The study also concluded that management sent monthly statements as part of the loan recovery strategies. Again, management staff of Odotobri Rural Bank concluded that they placed polite recovery phone calls to customers. Furthermore, management concluded they sent first and second remainder notice as a strategy for loan recovery.
5. The study concluded that management of Odotobri Rural Bank filed legal actions against defaulted customers as loan recovery strategy.
6. The study concluded management of Odotobri Rural Bank suggested filing court actions against defaulters as the top most solution to challenges of credit risk management practices and the writing off long outstanding debt as least suggested solution to challenges of credit risk management practices of Odotobri Rural Bank.

Recommendations

The study having produced some relevant findings, presents the following recommendations:

1. Management of Odotobri Rural Bank disburses credit to borrowers takes a short time once approved. It is therefore recommended that the board and management of Odotobri Rural Bank should encourage the enactment of strategies and policies to trace defaulters who are nowhere to be found. The addresses provided by customers should be thoroughly checked in order to be able to trace customers when the need arise. Also, alternate addresses should be requested by the customer or applicants to assist credit collectors recover debts easily. This finding is consistent with Central Bank of Iraq (CBI, 2006), who posited that the credit process begins with an extensive analysis of the creditworthiness of the borrower or the capacity and willingness of the borrower to repay the credit facility. The study further indicated that loan disbursement should be effected upon signing and delivering of requisite documents to the bank. These documents serve as the primary protection for banks once the loan has been disbursed. Prior to loan disbursement, a loan agreement, which is a legal document binding both parties, must be signed by both the bank representatives and the borrower. Once the credit facilities have been disbursed to borrowers, the monitoring process begins in order to ensure that the banking institution does not suffer from non-performing loans
2. The research study found out that management of Odotobri Rural Bank use collaterals as most practiced credit monitoring strategy. It is recommended that the board and management of Odotobri Rural Bank should not make collateral securities be the only method used to recover debts. Therefore, in extreme cases, management of Odotobri Rural Bank

should file court actions against defaulters to recover debts. This finding agrees with Hull (2011) who mentioned that the common collateral substitute used by many MFIs especially during their initial years of operation is to require borrowers to pay a percentage of every unit borrowed (beyond a given scale) in order to collect an emergency fund, which serves as insurance against loan default, death or disability

3. It is recommended that the board and management of Odotobri Rural Bank should organize regular training to help manage credit risk effectively and credit officials to become very competent when analysing and assessing credit. This will consequently make trained staff to intensify credit risk monitoring to be supervised by management to ensure credit officers perform periodic follow-ups on borrowers to ensure that loans are used for the intended purpose. The board and management should provide the needed logistics like motorbike/bicycle to ease mobility and increase frequency of working visits. This finding is congruent with Gaitho (2013) positing that effective credit risk management involves establishing a suitable environment; operating under a sound credit granting process; maintaining an appropriate credit administration that involves monitoring process as well as satisfactory controls over credit risk. Top management is mandated to ensure appropriate and clear credit risk management guidelines. The study plainly outlined the scope and allocation of the bank credit facilities and the mode in which a credit portfolio is managed, that is how loans are initiated, evaluated, supervised and collected. In view of this, the guidelines should be well communicated throughout the organization;

and that all and sundry involved in credit risk management is obliged to understand them. This will enhance better application of those guidelines in the interest of the banking organization.

4. It is recommended that loan officers of Odotobri Rural Bank are transferred frequently to reduce granting loans to friends, family members and hence loan default. This finding is consistent with Maphartia (2010) who indicated that each bank should establish uniform policies, procedures and criteria for rescheduling and other types of workouts for each program area. Its policies and procedures should provide for the recognition of gains and losses on rescheduled accounts in accordance with the provisions of credit management standards and as well the implementation of mandatory transfers to reduce familiarization of management members with clients, friends and family members.
5. It is thus recommended that board and management of Odotobri Rural Bank should put in place proper debt collection mechanisms including use of third-party debt collectors, bank recovery team, regular review of borrower's report, and 'rescheduling of payments as court action becomes the last resort. This finding agrees with Kono & Takahashi (2010) who mentioned that financial institutions should create internal controls that will ensure that credit initiation, approval, review, administration, payments and work-out functions are kept as separate as possible.

Suggestion for Further Research

Based on the findings, the study suggests the following:

1. Similar study may be conducted in other financial institutions especially savings and loans institutions.
2. Causes of loan failures and the assessment of the behavioural and environmental aspects from both the lenders' and borrowers' perspective.

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APPENDIX A

CATHOLIC UNIVERSITY OF COLLEGE, SUNYANI

Department of Business Administration

(Master of Business Administration, Finance)

SURVEY QUESTIONNAIRE FOR MANAGEMENT

CREDIT RISK MANAGEMENT PRACTICES AMONG RURAL BANKS IN THE KUMASI METROPOLIS: A CASE STUDY OF ODOTOBRI RURAL BANK.

Dear Sir/Madam

This questionnaire aims to solicit information on credit risk management practices among rural banks in the Kumasi Metropolis using Odotobri Rural Bank as a case study. The study is being conducted in partial fulfillment of the requirement for Master of Business Administration (Finance). I therefore seek your maximum co-operation and assure you that any information provided will be treated as confidential. Thank you for your co-operation. If you have any queries, please feel free to contact:

(NAME: KWARTENG DIANA DUROWAAH)

Department of Business Administration

Catholic University College.

Tel: +233(0) 242104136

Section A: Background Information

1. Sex:
   a. Male [ ]
   b. Female [ ]

2. Age:
    a. Below 25 years [ ]
    b. 25-35 years [ ] (
    c. 35-45 years [ ]
    d. 45-55 years [ ]
    e. Above 55 [ ]
3. Marital status:
    a. Married [ ]
    b. Single [ ]
    c. Divorced [ ]
    d. Widowed [ ]
4. Indicate the highest educational level attained
    a. No formal education [ ]
    b. Primary School [ ]
    c. Junior High/Middle School [.]
    d. Senior High/Technical School[..]
    e. University/Polytechnic/Diploma [ ]
    f. Others (specify)……………………………………
5. Rank/Department you work with
    a. Credit Department [ ]
    b. Operations Department [ ]
    c. Customer Adviser [ ]
    d. Manager [ ]
6. Please indicate how long you have been working (work experience)?
    a. Less than 5 years [ ]

b. 5 - 10 years [ ]

c. 10 - 15years [ ]

d. 15 - 20 years [ ]

e. Above 20 years [ ]

Section B: Considering Main Objectives

Processes of Approval and Recovery of Loans of Rural Banks

7. Please tick (√) appropriate box for each of the following questions, *1= Strongly Disagree   2= Disagree 3= Neutral 4= Agree 5= Strongly Agree*

Loan Appraisal Process	**1**	**2**	**3**	**4**	**5**
Our bank verifies the credit history of prospective borrowers before lending money					
The capital of borrower is verified by the bank.					
Cash flows of borrowers are examined by the bank.					
Income levels of borrowers are verified by the bank.					
The bank determines the loan amount to advance to borrowers.					
The borrowing frequency of borrowers is factored in before advancing credit facility.					

Borrower's Documentation Process	1	2	3	4	5
Our bank demands for borrower's personal information before lending money					
Our bank demands for information of borrower's family members before lending money					
Our bank seeks to know the source(s) of income of borrowers					
The bank seeks information regarding borrowers' residence					
The bank seeks information regarding borrowers' workplace or business premises					

Loan Disbursement Process	1	2	3	4	5
Disbursement of credit to borrowers takes short time once approved					
Loans are credited to borrower’s bank account					
Loans are credited to borrower’s phone account					
The bank demands for additional information before disbursing loans to qualified applicants					

Section C: Credit Risk Management Practices of Rural Banks

8. Does the bank monitor loan to ensure proper payment?
    a. Yes [ ]
    b. No [ ]
9. Are there daily, weekly or monthly credit reports generated to monitor loans?
    a. Yes [..]
    b. No [..]
10. The following collaterals are often asked for to secure the loan.
    a. Mortgage [..]
    b. Hypothecation [...]
    c. Personal Guarantee [..]
    d. Other (Specify) …………………………
11. Is the borrowed funds injected in the business for which it was borrowed?
    (a) Yes { } (b) No { }
12. Do you use collaterals in your institution?
    a. YES [ ]
    b. NO [ ]

13. If yes please give guidelines in the use of collaterals in your institution

14. Is due process used in assessing collaterals

    a. Yes [ ]

    b. No [ ]

15. What is your basic requirement regarding the use of collateral?

    a. Evidence of registration [ ]

    b. Size of collateral [ ]

    c. Nature of collateral [ ]

    d. Location of collateral [ ]

    e. Currency [ ]

16. How do you assess whether the collateral offered is enough?

    a. Use of third party [ ]

    b. Use of trained staff [ ]

    c. Use of discretion [ ]

17. Please indicate by ranking the Credit Risk Management Practices of Odotobri Rural Banks starting with the scale ***1** as **Most Practiced*** and follow in that order.

Credit approval and monitoring strategies	Rank
Agreements	
Collaterals	
Credit rationing	
Loan securitization	
Evaluating contracts	
Credit protection	

18. How do you evaluate credit applications?

……………………………………………………………………………………..

……………………………………………………………………………………..

……………………………………………………………………………………..

19. What strategies do you have in place for your debt recovery?

……………………………………………………………………………………..

……………………………………………………………………………………..

……………………………………………………………………………………..

20. On recovery strategies of loans, please tick (√) appropriate box for each of the following questions *1= Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree*

Recovery strategies	**1**	**2**	**3**	**4**	**5**
Monthly statements					
Polite recovery phone calls					
First and second remainder notice					
Legal actions					

Section D: Solutions to Challenges of Credit Risk Management Practices of Rural Banks

21. Please indicate by ranking the challenges of credit risk management practices of rural banks starting with the scale ***1=most appropriate, 2=sometimes appropriate, 3=moderately appropriate 4=Not appropriate*** and follow in that order.

Solutions	**Rank**
Court actions	
Use of third-party debt collectors	

Rescheduling of payments	
Write off long outstanding debts	
Bank recovery team	
Creation of good atmosphere	
Monitoring the borrower’s business progress	
Regular review of borrower’s report	
Updating borrowers credit files	
Supporting borrowers	

Any other comment:

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