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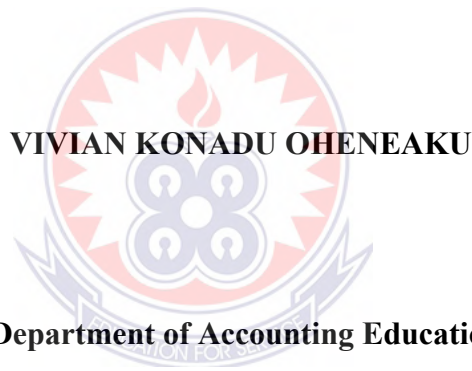
**CREDIT RISK MANAGEMENT IN RURAL BANKS: A CASE OF SOME  
SELECTED RURAL BANKS INSTITUTIONS WITHIN THE ASHANTI  
REGION OF GHANA**



**2017**

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**CREDIT RISK MANAGEMENT IN RURAL BANKS: A CASE OF SOME  
SELECTED RURAL BANKS INSTITUTIONS WITHIN THE ASHANTI REGION  
OF GHANA**



**VIVIAN KONADU OHENEAKU**

**A Dissertation in the Department of Accounting Education, Faculty of Business  
Education, submitted to the School of Graduate Studies, University of Education,  
Winneba in partial fulfilment of the requirements for award of the Master of  
Business Administration (Accounting) Degree.**

**AUGUST, 2017**

## DECLARATION

### STUDENT'S DECLARATION

I, VIVIAN KONADU OHENEAKU, declare that this dissertation with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE: .....

DATE: .....



### SUPERVISOR'S DECLARATION

I hereby declared that the preparation and presentation of this work was supervised by me in accordance with the guidelines for supervision of dissertations as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: CAMILLUS A. WONGNAA (PhD)

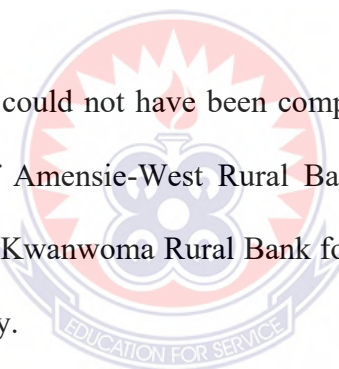
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## **DEDICATION**

This work is dedicated to my husband Stephen Ohenaku and my lovely children Theresa, Michael and Joyce.



## TABLE OF CONTENTS

CONTENT .....	PAGE
DECLARATION .....	iii
ACKNOWLEDGEMENTS .....	iv
DEDICATION .....	v
TABLE OF CONTENTS .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
ABSTRACT .....	xi
CHAPTER ONE: INTRODUCTION .....	1
1.0 Background of the Study .....	1
1.1 Statement of Problem .....	3
1.3. Objectives of the Study .....	5
1.4 Research Questions .....	5
1.5 Significance of the Study .....	5
1.6 Limitation of the Study .....	6
1.6.1 Scope of the Study .....	7
1.7 Organization of the Study .....	7
CHAPTER TWO: LITERATURE REVIEW .....	8
2.1 Introduction .....	8
2.2 Definition of Concepts .....	8
2.3 Theoretical Framework .....	10

2.4 Credit Risk Management Practices .....	12
2.5 Credit Risk Management Policy .....	16
2. 6 Sources of Credit Risk .....	22
2.7 Empirical Review.....	25
CHAPTER THREE: METHODOLOGY .....	30
3.1 Introduction.....	30
3.2 Research Design.....	30
3.3 Study Population.....	31
3.4 Sample and Sampling Techniques .....	31
3.5 Data Collection Procedures.....	33
3.6 Data analysis .....	34
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS .....	36
4.1 Introduction.....	36
4.2 Response Rate.....	36
4.3 Demographic Profile of Sample.....	37
4.4 The Main Sources of Credit Risks Rural banks are exposed to in Ghana .....	39
4.4.1 The Main Types of Credit Risks rural banks in Ghana deal with.....	41
4.4.2 How the understudied Rural Banks minimized its Credit Risk Types .....	43
4.5 Credit Risk Management Practices of Rural Banks in Ghana .....	45
4.5.1 Credit Administration Unit .....	45
4.5.2 Functions of the Credit Administration Unit .....	46

4.5.3 Availability of Procedures and Information Systems for the Monitoring of Credit Conditions across Bank’s Portfolios.....	49
4.5.4 Credit Risk Measurement Methodologies .....	50
4.5.5 Factors the Rural Banks Credit Risk Management Techniques Considered .....	52
4.6 Rural Banks Credit Risk Management Policies as against Bank of Ghana Credit Risk Policies.....	53
4.6.1 Availability of Credit Management Policies at the Understudied Rural Banks .....	54
4.6.2 Provisions in the Institutions Credit Risk Management Policy Manual .....	55
4.6.3 Agency Responsible for the Drafting of Rural Banks Institutions Credit Policy Manual .....	59
4.7 Constraints to Managing Risks by Rural Banks .....	60
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .....	63
5.1 Introduction.....	63
5.2 Summary .....	63
5.2 Conclusion .....	65
5.4. Recommendation to management.....	67
5.5 Recommendations for further research.....	68
REFERENCES .....	69
APPENDIX.....	73



## LIST OF TABLES

TABLE	PAGE
1: Demographic Profile of Survey Respondents.....	37
2: Main Sources of Credit Risks of Rural Banks.....	39
3: Functions of the Credit Administration Unit.....	47
4: Credit Risk Measurement Methodologies.....	50
5: Factors the Rural Banks Credit Risk Management Techniques Looked out for.....	52
6: Provisions in the Banks' Credit Risk Management Policy Manual.....	55
7: Agencies Responsible for the Drafting and Finalizing of the firm's credit policy manual.....	59



## LIST OF FIGURES

FIGURE	PAGE
1: Main Types of Credit Risks.....	41
2: How the Understudied Rural banks dealt with their Credit Risk .....	43
3: Existence of Credit Administration unit .....	45
4: Availability of Procedures and Information Systems for the Monitoring of Credit Conditions .....	49
5: Availability of Credit Risk Management Policy Manuals.....	54



## ABSTRACT

Credit risk has shown to be one of the main forms of risks financial institutions are exposed to due to the very nature of their business operations. The study investigated how rural and community banks managed their credit risk in Ghana. Accordingly, the main objectives of the study were to determine the main sources of credit risks rural and community banks are exposed to in Ghana, to identify the credit risk management practices of rural and community banks in Ghana, to assess the rural and community banks credit risk management policies as against Bank of Ghana credit risk policy and finally to analyze the constraints to managing risks by rural banks. The target population for the study constituted all the rural and community banks in Ghana and specifically the study sample came from rural banks who operated in the Ashanti region; Amensie-West Rural Bank, Atwima Mponua Rural Bank, Sekyere Rural and Atwima Kwanwoma Rural Bank. Since the study was employed cross sectional research design, the study used questionnaires as the data collection instrument. The questionnaire had three parts. The first part of the questionnaires dealt with the demographic characteristics of the study respondents. The second section dealt with the main sources of credit risk that rural banks were exposed to. The third and final section looked at the credit management practices the credit management, credit risk management policy and the constraints to credit risk management. It became evident that the key credit risk sources that most rural were exposed to in their operations were corporate, individual and SMEs commercial loans. Also it was established that most of these banks did not use or have in place independent bodies to review their organization credit decisions and policies. On this score it was recommended that management of these banks should employ the services of external bodies who will have the capacity and competencies to assess their organization's credit decision and policies to ascertain how robust it is in mitigating their organization operations against potential credit risk sources.

## CHAPTER ONE

### INTRODUCTION

#### 1.0 Background of the Study

The strong connection that has been established between banks failure and economic malfunctioning has made the management of credit risk one of the areas of much concern and inquiry among both scholars and practitioners alike (Boahene, Dasah, & Agyei, 2012). Interestingly, Shanmugan and Bourke (1990) equated the relevance of financial institutions roles within an economy to that of the blood analogy within the human system because to them banking institutions provide financial resources for both economic growth and infrastructural development.

According to Afriyie and Akotey (2012), the management of credit risk within traditional banking operations has become more imperative not only due to the global financial meltdown that was experienced in some time past, but because it has continuously been found to be a key determining factor in financial institutions sustenance, growth and bottom-line performance. To Afriyie and Akotey (2012) because banks mobilize deposits from customers and dispense some out as a form of loans and advances to individuals and businesses before they are able to provide the depositors interests, its administration has become very keen since it enables banks to meet its operation expenses as well as its shareholders' interests.

Similar views were shared by Duaka (2015) when he posits that within the financial industry loans and advances are one of the major avenue for revenue creating for most banking institutions. Nonetheless, the author holds that its management

entangles a lot of risks to both the receiver and the giver. For instance, Brown and Moles (2014) posit that in business, anytime a person or an institution borrows and subsequently commit himself to pay the said obligation at the agreed schedule, an asset is generated. However, Brown and Moles (2014) maintain that irrespective of the objective of the agreement, the value of the arrangement will rest largely on the capability and willingness of the said individual or institution to fulfill his promise when the time is due. Hence, the asset claim will be irrelevant until the obligation is fulfilled by the obligee. The succinct illustration given by Brown and Moles (2014) clearly confirms how credit administration can be a tedious work to accomplish. Hence it came as no surprise when Duaka (2015) opine that among all the numerous forms of risks financial institutions are exposed to in their business operations, credit risk is one of risks with much impact and concern to both banking authorities and regulators. Achou (2008) attributed this phenomenon to its ability to fold up strong financial institution irrespective of its years of being in existence.

More so, Fatemi and Fooladi (2006) argued that ever since credit financing moved away from individual loans to firms and state institutions forms credit financing, its management has become more complicated than ever hence requiring a more sophisticated approach to manage it. For example, Brown and Moles (2014) held that in the medieval times credit administration was seen to be relatively straight-forward thus, deciding on whether to grant a person credit request or not, nonetheless in recent times evidence has shown that it requires extensive work in terms of analyzing a client characteristics, firms operations, abilities and even doing a subjective judgment to ascertain whether the creditor can truly repay the facility at the stipulated time or not.

Accordingly, it is against this backdrop that this study seeks to investigate credit risk management within the rural and community banks in Ghana.

### **1.1 Statement of Problem**

According to Afriyie and Akotey (2012), rural and community banks were created to facilitate financial accessibility to rural populace through the mobilization of rural savings for onwards granting of credit to agricultural entities and micro business entities operating in rural setting. Reports from IFAD (2008) as cited in Afriyie & Akotey (2012) indicate that rural and community banks are made up of about 50 percent of the total banking institutions in Ghana and besides are the largest institutions facilitating formal financial services to rural settlers. Admittedly from the findings made in the IFAD (2008) report, it may appear that rural and community banks have to some extent realized some progress in terms of the number of rural banks being created and the development projects some do undertake as part of their corporate social responsibility, nonetheless as to whether their operations have been improved overtime remain unknown. For instance, Afriyie and Akotey (2012) observed that studies assessing banking operations within the context of Ghana have largely concentrated on commercial banks at the expense of other banking tiers.

Apanga, Appiah and Arthur (2016) postulated though it seems credit risk has become more important issues in both academic and business circles, nonetheless there is still few studies conducted mostly within developing economies. For instance, the study of Miranda and Gonzalez-Vega (2011) dealt into optimal management of agricultural

credit, Masood and Fry (2012) also investigated the possible impediments to the running of Basel Accord among Pakistanis banks (Masood & Fry, 2012). Cole et al.(2013) equally measured the challenges to household risk management within Indian banks.

Surprisingly, the existing studies enumerated above all appear to have largely concentrated on commercial banks. Similarly, within the context of Ghana, identical observations have been established in that regards too. For instance, Apanga et al. (2016) measured credit risk management practices of some listed commercial banks in Ghana. Boahene et al. (2012) similarly measured the association between credit risk management and bank performance using commercial banks as their study context and finally Adjirackor et al. (2016) likewise measured credit risk management strategies of Societe General Bank of Ghana.

As argued by Afriyie and Akotey (2012) most of these studies in this area tend to concentrate on Tier 1 banks thus commercial banks with no emphasis on rural and community banks. Accordingly, there is dearth in the literature with regards to credit risk management of rural and community banks. Therefore this study seeks to address this dearth within the literature by investigating credit risk management of some selected rural and community banks withn the Ashanti region of Ghana.

## **1.2 Purpose of the Study**

The aim of the study is to examine the management of credit risk by rural and community banks in the Ashanti Region of Ghana.

### **13. Objectives of the Study**

1. To determine the main sources of credit risks rural and community banks are exposed to in Ghana.
2. To identify the credit risk management practices of rural and community banks in Ghana.
3. To assess the rural and community banks credit risk management policies as against Bank of Ghana credit risk policy.
4. To analyze the constraints to managing risks by rural banks.

### **1.4 Research Questions**

1. What are the main sources of credit risks rural and community banks are exposed to in Ghana?
2. What are the credit risk management practices of rural and community banks in Ghana?
3. How does rural and community banks credit risk management policies fare against the Bank of Ghana credit risk policy?
4. What are the constraints to managing risks by rural banks?

### **1.5 Significance of the Study**

Evidently, it has been established that effective credit risk management is imperative for the sustenance and growth of banking institutions. According to Afriyie and Akotey (2012), in the context of rural and community banks, the concept of credit risk is of greater concern due to the caliber of their market segments as well as their



geographical location. Therefore, findings from this research would be of much importance to the rural banking fraternity since it seeks to focus on credit risk management of some selected rural banks within the Ashanti region. Equally, this research will look at the different credit risk management practices the rural banks employ in their credit risk management hence; participating banks will get to know the different tools and models used by their counterparts in their credit risk administration.

Likewise, both the academic and the business fraternity would gain much insight in ascertaining how rural banks credit risk management practices fare against that of the regulator thus, Bank of Ghana. This research would likewise give regulators relevant information on how the rural banks are managing their institution credit risks and equally identify the shortfalls in their credit risk management practices and provide remedial measures to address these shortfalls. Additionally scholars would rely on this study findings as a term of reference and as a springboard to conduct additional studies in credit risk management across other tiers of the banking sector.

### **1.6 Limitation of the Study**

The study would put in place the necessary precautionary measures in order to make the study results valid and reliable nevertheless, there are other activities or aspects of the study that the researcher will have little or no control over and likely to affect the outcome of the study. For instance, a national survey study would have ensured a more representation for the study sample since this study would be of great relevance to rural banking sector; however, as a result of the time and resource constraints impose on the study, its sample would come from rural banks operating within the Ashanti region of

Ghana. Therefore, the results would not be able to be generalized to other parts of the country hence a more national survey will be needed to address this concern. A final limitation is that participation in this study is voluntary and some banks would choose not to involve themselves in the study therefore limiting its ability to be generalized to all rural banks operating within Ghana hence its study findings usage should be used with care.

### **1.6.1 Scope of the Study**

The study population would come from rural and community banks operating within the Ashanti region of Ghana. Moreover, the study would largely look at how the understudied rural and community banks manage their institutions' credit risk. Hence, the other forms of risks such as market risk, economic risk, political risk would not be the areas of interest in this study.

### **1.7 Organization of the Study**

The study is organized into five chapters. Chapter One constitutes Introduction which pays attention to the study background, Statement of the Problem, and Research Questions. Likewise other areas such as the study purpose, Limitations of the Study, Scope of the Study, and Organization of the Study will all be addressed in Chapter One. Chapter Two will dwell on the accounts of other studies related to the present study whereas Chapter Three views the Methodology adopted for the study. Chapter Four focuses on Results and Discussions while finally, Chapter Five dwells on the Summary of Findings, Conclusions and Recommendations.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter presents the concepts and scope of credit risk, credit risk management practices, credit risk management policy, sources of credit risk and overview of rural banks institutions in Ghana.

#### 2.2 Definition of Concepts

Sullivan et al. (2003) viewed the concept of credit as a trust which permits a party to provide resource to another party where the later party do not have to reimburse the former immediately but rather arranges to return or repay that resource at a later date. The resources provided may be in the form of a financial (i.e. loans) or may consist of goods and services. From this premise one could say that credit encompasses any form of deferred pay which is extended by a creditor (lender) to a debtor (borrower) with an agreement that it will be paid at a later date.

According to Sinkey (2002), credit risk is the likelihood that a debtor will not honor his obligation at the agreed schedule or in the worst case a debtor will fail to make any repayment at all. On the part of Conford(2000) credit risk is the likelihood that the actual return on a loan will not be retrieved as anticipated. Nonetheless, the concept loan default and loan delinquency do not connote the same concept in credit risk. As argued by Padmanabdan (1988) as cited in Afriyie & Akotey (2012) the term loan delinquency means the delay in payment whereas loan default becomes evident when a debtor

continuously defaults in his payment with no evidence of paying back his loan to the lender.

Brown and Moles (2014) on their part described credit risk management as the process of controlling the potential consequences of credit risk. To them the process ought to have a standard risk management framework namely; risk identification, risk evaluation and risk management. That is to say, the cause of the risk has to be known, the extent of the risk has to be equally assessed and finally a decision has to be made as to how the risk will be dealt with. Hence, determining which counterparty is likely to default in his loan repayment is the art of credit risk management. Notwithstanding its straightforwardness Brown and Moles (2014) argued that though one could say credit decision is relatively straightforward in principle (i.e. a lender deciding whether to give credit or refuse credit to a potential client) nevertheless, in practice it involves experience, judgment and a range of analytic and evaluative techniques that are employed to determine the likelihood that the credit will be repaid or not.

Afriyie and Akotey (2012) posited in their study that most credit risks factors within the Ghanaian banking space were relatively caused by either an adverse selection or moral hazards which were all attributed to information asymmetry. Equally it has been reported in the literature that when incidences such as; deficient institutional capacity, inefficient credit guidelines, and ineffective board of directors roles together with low capital adequacy ratios and liquidity as well as compulsory quota-lending due to government interference becomes apparent within the banking space then its associated effect will be that there will be high incidence credit risk (Laker, 2007; Sandstorm, 2009; Kithinji, 2010).

## 2.3 Theoretical Framework

Arguably within the financial literature several theories such as; modern portfolio theory, arbitrage pricing theory, information theory, asset to asset based theory and the 5Cs have all been identified as frameworks for controlling credit risk factors within a credit management system. Nonetheless, this study would employed the 5Cs as its theoretical framework for the study. Once a customer requests a loan, bank officers analyze all available information to determine whether the loan meets the bank's risk-return objectives. Credit analysis is essentially default risk analysis, in which a loan officer attempts to evaluate a borrower's ability and willingness to repay. A bank's credit department often employ the five C's of credit appraisal to focus their analysis on the key dimensions of a credittee's creditworthiness. Lawrence(1997) and Sumon-Das and Shilpi-Das (2007), identified the five C's of credit as; Character, Capacity, Capital, Collateral, and Conditions.

Character: According to Brown and Moles (2014) the character construct looks at the integrity of the business or the person seeking for the credit facility. Honest borrowers of good character are more likely to meet their obligations. Tools employed in assessing the applicant character are; record of meeting past obligations, payment history as well as any pending or resolved legal judgments against the applicant are all employ to assess a credittee's character.

Capacity: It looks at the applicant's ability for the borrower to repay the requested credit (Collins, 2016). Financial statement analysis, with particular emphasis on liquidity and debt ratios, is typically used to assess the applicant's capacity.

Capital: The financial strength of the applicant is reflected by its ownership position within a company. Analysis of the applicant's debt relative to equity and its profitability (Sumon-Das & Shilpi-Das, 2007) ratios are frequently used to assess its capital. Here, emphasis are place on the applicants cash flow to ascertain whether his business or personal income could generate the needed cash or revenue to pay back the credit on time or he himself has a potent sources of income that could be used to service back the loan facility.

Collateral: This refers to the amount of assets the applicant has available for use in securing the credit (Sumon-Das & Shilpi-Das, 2007). It is assume that the larger the amount of available assets, the greater the chance that a firm will recover its funds if the applicant defaults. A review of a creditee balance sheet, asset value appraisals, and any legal claims filed against the applicant's assets can be used to evaluate its collateral value as well. Nonetheless, is has become evident that confiscating clients assets or collateral as a result of loan default has proven to be more difficult to achieve due to the legal processes the creditor has to satisfy before they can eventually have access to these facilities (Brown & Moles, 2014). Hence, due diligence on the part of credit officers has always being the best solution when it comes to protecting a company from possible default.

Conditions: The current economic and business climate as well as any unique circumstances is equally considered by the creditor before credits are eventually approved (Sumon-Das & Shilpi-Das, 2007). For example, if the firm has excess inventory of the items the applicant wishes to purchase on credit, the firm may be willing to sell on more favourable terms or to less creditworthy applicants. Similarly, analysis of

the general economic and business conditions, as well as special circumstances that may equally affect the applicant or firm are also considered to determine its impact on client's repayment rate.

The credit analyst typically gives primary attention to the first two C's thus, character and capacity because they represent the most basic requirements for extending credit to an applicant. Consideration of the last three C's thus, Capital, Collateral, and Conditions is important in structuring the credit management and making the final credit decision, which is affected by the credit analyst's experience and judgment.

#### **2.4 Credit Risk Management Practices**

Authors like Santomero and Babbel(1997), Dowel et al.(2008) and Lindgren(1987)have identified practices such as; clear risk policy and a reporting structure; underwriting authority and loans limit; allocation of responsibility and accountability; prioritization of the lending process and systems; and the timely communication of risk information to top management as main credit risk management practices that are employed in the banking sector.

Equally other practices such as; effective organizational structure; credit risk identification, credit assessment; credit monitoring and credit administration control have been espoused as some of the credit risk management practices (see for example, Basel, 1999; Greuning & Bratanovic, 2003; IAIS – International Association of Insurance Supervisors, 2003).However, a clear look of the practices enlisted by the earlier author as well as the latter scholars seems to be reinforcing each other. For instance, practice such

as; credit administration control and that of underwriting authority and loans boundary all seem to be talking about the same practices. Likewise effective organizational structure and reporting structure tends to talk of the same practices as well. Hence, some of these practices will be discussed and see how they are been implemented across the Ghanaian financial industry.

According to Richard, Chijoriga, Kaijage, Peterson and Bohman (2008), credit risk identification is the process of identifying the potential risk factors associated with a borrower or an investment decision. This credit risk management practice permits financial institutions to identify the possible risks that are linked with its customer's segment that is whether their corporate or individual customers segment. The Basel II Accord reiterates that under this practice the bank ought to identify all the risks inherent in their organization products and services. This presupposes that banks operations and services are not in any way similar hence each individual bank should strive to identify risks peculiar to its markets and products. Also the Banks Basel II Accord likewise expects financial institutions to evaluate and identify all forms of risks that can be associated to new products and activities as well before banks eventually decides to add it to its pull of services.

Another credit risk management practices is credit assessment. Brown and Moles (2014) held that with credit assessment the emphasis is on whether there is a possibility that a borrower may default in full, or in part, on its obligation. According to Richard et al. (2008) the credit risk assessment can be done either by the use of qualitative or quantitative approach. The quantitative assessment tools employs analytic model based on financial information and makes use of accounting information (Brown & Moles,



2014). To the authors' the intent of this method is to provide a picture of the credit quality of an individual or business entity. According to Brown and Moles (2014) statistical model based on multivariate statistical inference techniques are used for performing most of the quantitative analysis. In contrast, the qualitative models are judgmental and deterministic in nature which are mostly based on the creditor past experience (Brown & Moles, 2014). In spite of its less objectivity, Richard et al. (2008) still maintained that credit risk assessed through qualitative models could equally be assigned numbers with the sum of the values compared to a threshold to give effective results. Interestingly, recent evidences suggest that many financial institutions aside from their internal rating models, choose to rely on other external rating system provided by rating organizations viz; Standard & Poor's (S&P), Moody 's Investor Service, Fitch, etc. (Vo, 2015) to assess the credit risk of their clients.

The next credit risk management practice is the establishment of process for approving new credits and extending additional credit facilities. This credit risk management is consistent with the Basel II Accord sixth principle. With the principle 6 it argues that financial institutions should clearly establish procedures for approving new loans as well as the extension of existing loans. With this particular principle, the emphasis is on who is responsible for approving a creditee credits and the limit of credit a bank can give to a borrower being a business entity or an individual client.

Derban et al.(2005) held that monitoring is a credit risk practice which enables organizations to address the moral hazards associated with its credit risk. According to Richard et al. (2008) monitoring under credit risk is to establish frequent contact with creditee and equally establish an environment where the bank could be viewed by the

borrower as a problem solver and a trusted adviser. Likewise the Basel II Accord corroborated the relevance of this credit risk management practice when it opined that credits given out as loans ought to be monitored with due diligence and simultaneously all the necessary procedures ought to be undertaken to remedy the risks connected to lending.

The final credit risk management practice to consider here is managing credit loss. Brown and Moles (2014) underscored that when managing credit risk loss the emphasis should be largely on how to minimize the amount of loss if a default should take place. Methods like covenants, collateral, credit rationing, loan securitization and loan syndication have been employed by most financial institutions both in developed and developing economies in addressing their credit losses (Hugh, 2001, Aduda & Gitonga, 2011, Duaka, 2015). Among all the credit loss controls methods collateral appear to be the one that is largely used by most financial institutions. Brown and Moles (2014) attributed its wide application to the fact that in an event where there is a default, the lender is freed from the expense of the default process and also the possibility of dealing with other creditors of the borrower to assume control over the asset. Equally other control method is the performance bond where a borrower is required to provide a substantial form of deposits to safeguard any future defaults (Brown & Moles, 2014). Another promising controlling method is the credit guarantee. According to Brown and Moles (2014) in situations where a particular credit advances become unacceptable due to its high possibility of non-performance, banks rely on credit guarantee to protect its interest. To the authors it is a third-party insurance which stipulates that in case the borrower defaults in his repayment, the guarantor will offset the principal plus the interest.

More so, Brown and Moles (2014) observed that ever since the first credit derivative contract was created in 1993, there seems to be a growing demand for derivative as a form of credit risk management approach. With this a bank (i.e. a protection buyer) transfers a potential credit risk from one institution to another (i.e. a protection seller) so that all the credit risk of the particular reference asset is transferred to the protection seller to take charge of it or pay where a default occurs.

## **2.5 Credit Risk Management Policy**

According to Brown and Moles (2014) credit policy is a policy document which entails the procedure and processes that govern an institution credit functioning, including its credit terms, processes required for opening new accounts, processing applications, methods and techniques for credit investigation, the creation and dissemination of credit reports, setting lines of credit, and all other factors that are involved in the credit management process.

As posited by the authors no two organizations will have the same set of credit risk management policies; nevertheless, as this study seeks to measure the credit risk management of some selected rural and community banks in Ghana the study would discuss the credit risk policy of the regulator thus Bank of Ghana to establish how the rural banks policy is comparable to that of the BOG owns. Generally within the context of Ghana, credit administration is guided by the Borrowers and Lenders Act, 2008 Act 773. Under the Act credit is defined as a facility where a lender decides to grant stipulated amount of facility within a specified period or at specified intervals agreed on with the

creditee. Interestingly the Act clearly provides all the tenets within the concept credit; an identified amount/resource where a lender decides to provide to a debtor with an agreement that the given amount will be repaid within a certain agreed time between the creditor and the creditee. The definition provided by the Act is consistent with the earlier definition given by Sullivan et al. (2003).

In all the Borrowers and Lenders Act, 2008 Act 773 has 38 sections, however, a clear look at the entire sections of the Acts reveal that 3 thematic areas of the Act; section 13-18 (Borrowers Right), Section 20 (Repayment/Recovery of debt) and 32-35 (Enforcement of borrower's obligation) dealt extensively with credit management processes. Accordingly, these sections would be discussed in the preceding paragraphs.

Firstly, the borrower's right thus section 13-18 dealt with the entire credit application processes. Under section 13 (1) it explains who can should require for credit; a person who has a legal capacity to enter into a contract may apply to a lender for credit. However, with subsection 2 under section 13 it qualifies its initial claim; a lender thus, in this case a rural bank may decide to enter into a credit arrangement with a prospective creditee on reasonable commercial grounds consistent with the lender's customary risk management and underwriting practices. The emphasis here is that the bank has the ultimate right to either decide to enter into a credit agreement with a creditee or not. Nevertheless, on reasons where the bank decide not to approve a borrower request it should be based on commercial reasons (i.e. the viability of the creditee business if creditee in question is a business entity, the financial statement of the business or if the borrower is a person the decision for the credit denial should be based on the person ability to pay the principal and interest) as well as its own credit risk policies.

Equally section 3 reinforces the subsection 2; it argues that it does not establish a right of a person to require a lender to enter into a credit agreement with that person. Interestingly, though section 13 sought to give much independence to banks on whom they may decide to give credit to nonetheless, section 14 was very explicit, it prohibited banks not base their credit application processes on grounds of race, religion, gender or political affiliation. For instance, Subsection 1 mandates that a lender (rural institution) shall not discriminate against a person on the grounds of race, gender, ethnicity, political affiliation, or religion to (a) assess the ability of the person to meet the obligations of a proposed credit facility; (b) decide whether to refuse an application to enter into a credit agreement, or to offer or enter into a credit agreement; (c) determine an aspect of the cost of a credit agreement to the borrower; (d) propose or agree on the terms and conditions of a credit agreement; (e) assess or require compliance by the person with the terms of a credit arrangement; (f) exercise any right of the lender under a credit agreement, this Act or any legislation relating to credit; or (g) determine whether to continue, enforce, seek judgment as regard a credit agreement or terminate a credit agreement.

Hence, these subsections clearly demonstrate that a bank decision in determining whether a borrower has the capacity to pay a loan facility or not should not be informed by the person demographic characteristics. Although the bank has the ultimate responsibility in assessing a crediter ability to pay for a loan however, it should not be based on these factors but rather on commercial grounds as well as the bank's own risk management policies. Likewise the repayment mode should equally not be informed from these discriminatory factors. Also on instances where a bank decides to enforce or terminate any credit agreement it should not be informed by the enlisted discriminatory factors.

Accordingly, the Act forbids banks from basing their credit decisions on grounds of race, gender, religion or political affiliation.

Section 16 of the Act seeks to protect borrowers from any consequential actions when they seek to exercise their rights under this Act. Thus, Section 16 sub-section 1 stipulates that a lender shall not in response to a borrower's exercise of a right under this Act punish the borrower; alter, or propose to alter the terms or conditions of the credit agreement with the credittee to the detriment of the borrower; or take an action to accelerate, enforce, suspend or terminate a credit agreement with the borrower. This presupposes that in instances where the borrower feels that his/her right has been infringed or trumped upon and would like to seek redress or exercise his right, he cannot be penalize for that.

Moreover, the next section of the Act which equally deals with the credit application process is Section 17 which stipulates that, a lender or a person who acts on behalf of a lender shall not disclose information obtained from a borrower unless the information is required under the Credit Reporting Act, 2007 (Act 726) or under any other law or by a court of competent jurisdiction. This section seeks to protect the confidentiality; personal information and borrowers credit records from sneaking out to third parties. Though, the Act makes room for sharing of credit data, nonetheless it can be only be done through the Credit Reporting Act or through an order from a law court. The last section that completes the credit application processes is Section 18 which mandates that a lender shall not conclude a credit agreement with a prospective borrower unless the lender provides the prospective borrower with a pre-agreement statement and quotation in the form specified in the Schedule. Accordingly to subsection 2 of Section 18, the schedule

should include information on; the principal amount; the proposed disbursement schedule of the principal debt; the interest rate; other credit costs; the total amount involved in the proposed agreement, the proposed repayment schedule; and the basis of any cost that may be assessed if the borrower breaches the contract. Per the Act before a credit application or contract agreement can be said to valid or complete, it should have in it all the enumerated points in the contractual agreement. A look at the sections 13, 14, 16, 17 and 18 clearly show all the processes required within a credit application processes.

Additionally, the subsequent section to be looked at is Section 20 which deal with the repayment and recovery of debt. Subsection 1 of Section 20 mandates a credittee or guarantor to settle the credit amount at any time, subject to notice requirements as the conditions provided for in a credit agreement. Equally Section 2 within the same section stipulates that a credit agreement may provide for the terms and conditions of any prepayment and the order in which advance payments are to be applied. Section 20 of the Act enforces borrowers to pay for their credit facility and likewise shows how the lender ought to go about with his recollection.

Moreover, Section 21 of the Act shows the need for collateral in loan facility agreement. For instance, sub-section 22 makes provision for the creation of collateral registry whose mandate is to register charges and collaterals created by borrowers to secure credit facilities provided by lenders. However, it is the bank responsibility to create or appoint a collateral registry for this office. This section of the Acts deals with the credit controls mechanism within a credit administration process.

The last section to discuss is Section 32 and 33 which deal with enforcement of borrowers' obligations and remedies of a lender on a loan default. With sub-section 1 of Section 32, it stipulates that in instances where a borrower fails to make payment on the due date for a payment, the lender shall give notice of default to the borrower in writing and request the borrower to pay the amount due within a period of thirty days. Subsection 2 provides the medium through which the lender could send the notice of default; either by hand, courier service, registered mail, or other means determined by the lender in consultation with the borrower.

More so, when it becomes evident that the lender is not able to retrieve his payment within 30 days period or no satisfactory provision has been made by the borrower to fulfil his obligations, sub-section 4 of Section 32 gives lenders the right to enforce their the contract as provided in the Act. However, in instances, where the lender is not able to retrieve his amount from the credittee, Section 33 makes curative measures for this condition. For instance, Section 33 stipulates that where a borrower fails to pay an amount secured by a charge under this Act, the lender may either sue the borrower on any covenant to perform under the credit agreement or realize the security in the property charged on notice to the person in possession of the property.

In sum, the above provisions of the Act can be grouped into three thematic areas; credit application processes, credit monitoring and credit loss control. Thus, Sections; 13, 14, 16, 17 and 18 dealt extensively on the credit application processes of banks (organizational structure/operational system). Also Sections 20 and 21 dealt with the credit monitoring processes whereas Sections 22, 32 and 33 deals with credit loss control. As suggested by in the works of (Basel, 1999; Greuning & Bratanovic 2003,



PriceWaterhouse, 1994) an effective credit risk management system ought to have in-built procedure for the identification of risk, measurement, assessment and monitoring and control mechanism. Accordingly, the enlisted sections of Lenders and Borrowers Act thoroughly addressed all these concerns enumerated by Basel (1999), Greuning and Bratanovic (2003) as well as Pricewaterhouse (1994).

## **2. 6 Sources of Credit Risk**

As argued earlier credit risk is when a borrower fails to meet his obligations at the agreed time of which it subsequently leads to a loan default. Various scholars within the literature have identified series of factors that degenerate into risks associated with credit management within financial institutions operations. For instance, authors like Nijskens and Wagner(2011), Breuer et al.(2010) as well as Saunders and Allen(2002) identified factors such as; poor institutional **governance**, poor management control, inappropriate laws, limited institutional capacity, inappropriate credit policies, volatile interest rates, low capital and liquidity levels and government interference and inadequate supervision by the central bank as some of the sources of credit risks. To the authors most of these sources are interrelated thus; the cause of one factor may degenerate into another cause. For instance, lack of management control may lead to laxity in credit assessment as well poor lending practices on the part of personnel at the credit department.

In contrast, Apanga et al. (2016) identified different sources of credit risks in their study. To them factors such as; corporate and small business commercial loans, interbank transactions, trade financing and foreign exchange transactions were the main sources of

credit risk in their study. Interestingly, the sources of risks identified in Apanga et al. (2016) are quite different from the ones provided by the earlier authors. For instance, if you look at the sources espoused in Apanga et al. (2016) work, one could say that they were largely influenced by the banks portfolios thus, the category of businesses the bank dealt with on the daily basis. Nevertheless, whichever way one may decide to identify its sources of credit risk from is valid since all identified factors has the high possibility of creating potential credit risk.

Additionally Fukuda (2012), Giesecke and Kim (2011) as well as Nijskens Wagner and Marsh (2006) identified systematic risk as one of the key sources of credit risk. According to Fakuda (2016) systematic risk is when a borrower fails to meet his obligation repayments hence having consequential effects on other borrowers within an economy. For instance, Giesecke and Kim (2011) and Nijskens and Wagner (2011) established this domino effect in their study when they reported that the mortgage crisis recorded in 2009 made it difficult for mortgage companies to meet their financial obligation hence making it difficult for the banking institution within the US meet their liquidity needs. To the author this in effect spread throughout other sectors of the economy, causing a lockup in liquidity making banks refusing to lend money out for the fear that it may defaulted.

Evidence from the enumerated studies suggests that there are no universal sources of credit risk. For instance, what may be identified as a source of credit risk for a bank may be may not equally be the same source or risk for another bank? For example, per the Bank of Ghana regulations Tier 2 banks (i.e. rural and community banks) are not permitted to trade in foreign exchange transactions. Accordingly, foreign exchange risk

identified in Apanga et al. (2016) cannot be a source of risk for rural and community banks. Likewise, the loan portfolios microfinance institutions deal with are largely small and personal loans hence, its sources of risk will be different from that of commercial banks. These evidences confirm the claim that sources of credit risks are not universal and largely informed by the industry a bank finds itself in.

Equally Walker (2008) in his seminal paper to the World Bank identified three major sources of credit risk; business activities, strategic sources and external sources. Walker (2008) further identified the credit risk factors that constitute business activities as, portfolio and product mix, new products and delivery channels and third party originations and target market. Clearly the factors identified under the business activities are consistent with the sources of credit risks Apanga et al. (2016) identified in their study.

On the strategic factors, Walker (2008) underscored factors such as; target market (i.e. geography), acquisition, concentrations and securitizations. These strategic issues deals the strategic position a bank chose to operate from. According to Brown and Moles (2014) concentration becomes evident when a bank credit portfolio is largely made of clients of the same or related characteristics. Hence, a bank strategic decision to give large share of credit to a certain segment that share or has the same characteristics will lead to a potential source of credit risk if there is downturn within that market segment.

The last classification by Walker (2008) under the sources of credit risk was external sources. With the external source factors such as; economic conditions (i.e. GDP, inflation, interest rate, exchange rate), industry, competitive and market conditions, legislative and regulatory changes and finally technological advancement were identified

as factors that triggered external sources of credit risk. Similarly, Boahen et al. (2012) identified factors such as; inflation, the level of interest rates and the GDP rate as the main sources of credit risk under the economic conditions where most credits officers spend most of their time in analyzing it rippling effect on their loan performance.

Walker (2008) classification although seem to be more encompassing than the sources provided by Apanga et al. (2016), Nijskens and Wagner, (2011), Breuer et al. (2010) and that of Saunders and Allen (2002) nevertheless, it failed to appreciate the internal factors as one of the potential sources of credit risk within the banking sector.

## **2.7 Empirical Review**

This section seeks to discuss some works within the literature that sought to investigate credit risk management within the financial sector and likewise identify the gap that this study seeks to fill.

Firstly, Afriyie and Akotey (2012) sought to investigate the effect credit risk management has on banks profitability using rural and community banks within the Brong Ahafo Region of Ghana. The study employed secondary data source where the financial statements of ten rural banks between the periods of 2006 to 2010 were used for the study analysis. Also the study used panel regression model for the study variables estimation measurement. The study results showed that there exist a positive significant relationship between non-performing (i.e. credit risk management) and the understudied rural banks profitability (i.e. ROE and ROA). The study further observed that the understudied rural banks institutions did not have sound and effective credit risk management practices at their disposal. Their study sought to emphasis mostly on the relationship between credit

risk management and banks profitability measurement which is not the exact focus of this present study. However, the present study seeks to examine how rural banks manage their credit risk in their banking operations hence findings from this study will add more breadth to the literature with regards to how rural banks manage their credit risk.

Additionally, the study which provided some inspiration for the researcher to conduct this present study was the works of Apanga et al. (2016). They sought to examine credit risk management practices within financial institutions in Ghana. The study sample came from some banks listed on the Ghana Stock Exchange. Findings from the study showed that the credit risk management practices being employed by the understudied listed banks were in tandem to sound credit risks management practices. Although their study made some fascinating findings with regards to how the understudied banks credit risk management practices were comparable to the principles in the Basel II Accord.

Equally Boahene et al. (2012) also investigated the relationship that existed between credit risk and banks profitability in Ghana. The study employed panel data from six selected commercial banks between the periods of 2005-2009 thus, a five year period to analyze the study relationship. Results from the study showed that credit risk (i.e. non-performing loan rate, net charge-off rate, and the pre-provision profit as a percentage of net total loans and advances) had a significant impact on the understudied banks profitability. Moreover, conclusions from their results showed that the banks had higher profitability rate despite the high incidence of credit risk at their banks operations. They attributed this inconsistent in their study findings to issues such as; prohibitive lending/interest rates, fees and commission (non- interest income) the banks were charging at the time. Admittedly, Boahene et al. (2012) study was in the context of Ghana

however where their study sample came from were commercial banks hence the present study which seeks to investigate its study outcome from microfinance institutions will provide different findings to that of Boahene and colleagues.

Likewise Adjirackor et al.(2016) also sought to follow the same trajectory by investigating credit risk management strategies of Societe General Ghana which operate as commercial banks. The employed case study as its research design and at the same time used interview schedule as the study research instrument. The study relied on interview to collate the views from senior credit officer at SGSSB Ghana Ltd on the institution credit risk management strategies. Again questionnaire items were relied on to solicit information about the banks non-performing loans within the financial year. The results from the study showed that SG-SSB had a clear, written guideline on credit risk management with the board of directors having an oversight responsibility for implementation.

Although their study was more specific since it adopted one institution as its case study and for that matter demands some recommendation. Nevertheless as mentioned earlier since the strategic choices that banks make as a result of the market segment they deal with or operate from are always different across banks, it suggests that the sources of SGSSB credit risks and credit risk management may not be the same to that of rural and community banks since on the face value both operate in two different frontiers. On this score findings from this study will not be the same as findings obtained in Adjirackor et al. (2016) study.

Interestingly, within the African Sub region works of Duaka (2015) which sought to investigate credit risk management in Nigeria as well as Richard(2006) which also

investigated credit risk management in Tanzania all seems to be interested in measuring their impact from commercial banks within their respective countries. Similarly, other related works conducted within some developing countries all followed the same suit by investigating credit risk management practices of commercial banks (see for example, Kavun & Vorotintcev (2016) conducted in Ukraine, Bayyoud & Sayyad (2015) conducted in Palestinian). Tafri, Hamid, Meera and Omar (2010) on their part examined the connection between credit risk and profitability of the conventional and Islamic banks in Malaysia between the periods from 1996 to 2005. Tafri et al. (2010) work postulated a significant relationship between banks credit risk and profitability.

Although Tafri et al. (2010) work sought to ascertain the nature of relationship that exist between the two variables which is worth recommending nonetheless, their focus was one to examine the credit risk management of the understudied and besides their work context was outside the scope of Ghana. On this note what the researcher seeks to achieve in his study is different from what Tafri et al. (2010) work achieved.

Finally, the works of Li and Zou(2014) assessed the connection between credit risk management and profitability of commercial banks in Europe. The research collected data from the largest 47 commercial banks in Europe from 2007 to 2012. The findings established that credit risk management do have positive effects on the profitability of commercial banks. Equally the context with which Li and Zou (2014) work was undertaken make it different from the context with which this study seeks to measure its objective from. Besides their objective was not to thoroughly understand the credit risk management of the understudied European banks. On this premise the study of the

researcher and that of the Li and Zou (2014) cannot be seen to achieve or understudy the same study dimension or objectives.

In sum, the enumerated studies though show that over time credit risk management practices studies within the context of Ghana and other developing having been catching up with developed economies. Nonetheless, the above enumerated studies showed that much emphasis have been placed on commercial banks at the expense of other sub sectors financial institutions. Accordingly, this study seeks to address this gap by investigating credit risk management practices of rural and community banks in Ghana.





## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

This chapter gives a brief description of the research method employed, the population considered and it equally discusses the sample and sampling procedures. It also discusses the sources of data, the data collection procedures and the type of research instrument used. It also features prominently, the type of data analysis adopted for the study.

#### **3.2 Research Design**

The study employed a case study as the research design for the study. According to Bryman (2012) case study entails the detailed and intensive analysis of a single case or multiple cases. Likewise Kumar (2011) shared Bryman view when he postulated that a case study design could take the form of an individual, a group, a community, an instance, an episode, an event, a subgroup of a population, a town or a city. The author again added that with a case study design, the phenomenon the researcher chooses become the basis of a thorough, holistic and in-depth exploration of the aspect(s) that you want to find out about. Though this research design are not without limitation but provide the best means for the study to achieve its study objectives. For instance, Kumar (2011) argued that it is a very relevant design when investigating an area where little is known or where you want to have a holistic comprehension of a phenomenon or place. Similarly, case study is of great importance when the focus of a study is on intensively examining and understanding rather than confirming and quantifying. For these

assumptions case study design is the best approach since earlier evidence from the literature suggested that credit risk management within the rural banks' are less investigated or explored.

### **3.3 Study Population**

As this study seeks to investigate credit risk management of rural and community banks in Ghana, the study population would emanate from licensed rural and community banks who operate within Ghana. Accordingly, the population for this study constituted all the 140 licensed rural and community banks within Ghana (i.e. total population derived from the BOG ("List of rural and community banks", Bank of Ghana, April 2016). Therefore employees of some selected rural and community banks in Kumasi formed the study target population. Accordingly, a projected number of 100 employees in the selected rural and community banks institutions were targeted for this study.

### **3.4 Sample and Sampling Techniques**

Bryman (2012) argues that if a researcher seeks to ensure that its sample become an exact representation of the study population so that at the end its findings can be generalized to the entire study population, then random sampling or probability sampling method is appropriate. Interestingly, non-probability sampling does not guarantee this effect in its application. As this study seeks to ensure that its sample becomes exact representation of the study population, it employed simple random sampling. However, before the study employed the simple random sampling, multi-stage cluster sampling was used to divide

the entire rural and community banks in the region into smaller clusters in order to make the primary data collection more manageable. Hence, rural banks with branches within the main business center of Kumasi were grouped into one cluster whereas rural banks with no presence in the main business center of the metropolis were also grouped into one cluster, with bank with branches in both in rural setting and urban setting into one separate cluster and finally rural banks with their head office within the peri-urban centers were equally grouped into one cluster. Afterwards simple random sampling was used to select a specific rural bank to represent each cluster.

On this score Atwima Kwanwoma Rural Bank was selected as the sample representative for the banks with their head offices' within the peri-urban center, Amansie-west Rural Bank was selected as the representative sample for the banks with no presence within the main business center of Kumasi, Sekeyere Rural Bank was selected as the representative for banks' with branches at both an urban and rural setting and Atwima Mponua Rural Bank was the selected sample for the banks with their branches at the main business center of Kumasi. They have all been duly licensed by the Bank of Ghana and have been operating for close to eight years now. Hence, these rural banks formed the study sample. Subsequently the study used the Krejcie and Morgan (1970) sampling table to determine the sample size for the 100 participants for the understudied institutions. Based on the table, the sample size for this study stood at 80. The Krejcie and Morgan (1970) sampling table take into accounts the product of the chi-square for the specified confidence level in this case 95% confidence level by the population size (i.e. 100), the population proportion (0.50) and the desired margin of error (i.e. 5%) as well as the square of the margin of

error square and the sum product of chi-square and population proportion. Moreover, the breakdown of the bank's number of branches have presented in Table 3.1

**Table 3.1: Branches of the Rural Banks**

<b>Name of Branches</b>	<b>Number of branches</b>
Amansie-West Rural Bank Limited	8
Sekyere Rural Bank Limited	9
AtwimaMponua Rural Bank Limited	8
AtwimaKwanwoma Rural Bank Limited	6

**Source: Amansie-West Rural Bank website, Sekyere Rural Bank website, AtwimaMponua Rural Bank website, AtwimaKwanwoma Rural Bank.**

### **3.5 Data Collection Procedures**

The study used self-administering as its main source of data collection instrument. The questionnaires were sent out to all the employees of the credit departments of the four rural and community banks to enable the researcher have adequate insight into the problem under enquiry. The questionnaire was the main instrument used in the study since it was less expensive way to gather data from a large number of respondents and also required less skill for its administration. The administration of the questionnaire was done by the researcher together with two field assistants through personal visits to the various rural and community banks on five consecutive occasions. Prior to their commencement of the administration the researcher trained them adequately on how they were supposed to administer the questionnaires to the respective samples. This technique of training them prior to their commencement help in reducing any possible defects their

involvement was likely to have on the results outcome. Questionnaires were given to respondents four days prior to the collection so that they could get ample time to go through and respond.

### **3.6 Data analysis**

Since this study is largely dealing with primary data, the study relied on IBM Statistical Package for Social Sciences (SPSS) version 20.0 to analyze its field data. Equally the data was analyzed on the basis of descriptive statistics (i.e. Frequency, Mean, Standard deviation and Percentages). Specifically the first objective sought to determine the main sources of credit risks rural and community banks are exposed to in Ghana. Accordingly, data collected on this item would be computed on the basis of frequencies and percentages to determine the key sources of credit risks the understudied rural banks were susceptible to. Also with regards to the next objective it sought to identify the credit risk management practices of rural and community banks in Ghana. Equally for the study to be able to identify the common credit risk management practices of the understudied banks, it used frequencies and percentages to identify the credit management practices that were largely implemented by the understudied rural banks. More so, with regards to the third objective which sought to establish how the rural and community banks credit risk management policies fared against the Bank of Ghana credit risk policy, content analysis would be used to establish the similarity and the dissimilarity between studied banks credit risk management and that of the Bank of Ghana policy. Finally the last objective sought to identify the constraints to risk management of the understudied rural banks organizations. With this objective frequencies and percentages would be employed

to establish the kinds of challenges that were seen by the respondents as the kinds of constraints that in their view inhibited their organization ability to deal adequately with their credit management.

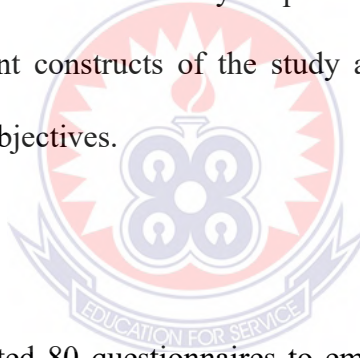


## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

#### 4.1 Introduction

This chapter focuses on the descriptive analysis of the final data collected from the survey and summaries of the basic statistics related to the respondents' demographic profile and the other measuring scales of the study. The Statistical Package for Social Sciences (SPSS) version 17.0 was used for the descriptive analysis of the research data. The chapter is structured into two sections. The first section presents the response rate and the demographic profile of the survey respondents. The second and final section looked at the measurement constructs of the study and discussions of the findings in reference to the research objectives.



#### 4.2 Response Rate

The study distributed 80 questionnaires to employees working within the credit departments of Atwima Kwanwoma Rural Bank, Sekyere Rural Bank, Amansie-West Rural Bank and Atwima Mponua Rural Bank all operating within the Ashanti region. From the questionnaires distributed, a total of 67 completed questionnaires were returned to the researcher. Nonetheless out of these received questionnaires, 60 were usable for analysis, giving an effective response rate of 82.19%. This response rate is considered to be very adequate satisfactory since per the estimation given by Baruch and Holtom (2008), the average response rate for surveys in management and behavioural science research ought to be around 52.7%.

### 4.3 Demographic Profile of Sample

The demographic profile of the survey respondents are presented in Table 1; institutions the respondents worked with, educational qualification, respondents position within the understudied institutions and finally the number of years the respondents have worked with the various rural banks.

**Table 1: Demographic Profile of Survey Respondents**

Demographic variable	Category	Frequency	Percentage
<b>Rural banks respondents represented</b>	AtwimaKwanwoma Rural Bank	15	25.0%
	Sekyere Rural Bank	15	25.0%
	Amansie-West Rural Bank	15	25.0%
	AtwimaMponua Rural Bank	15	25.0%
<b>Education</b>	Diploma/HND	19	32.26%
	Bachelor's degree	29	48.38%
	Master's degree	12	19.35%
<b>Position</b>	Loan officer	21	35.48%
	Credit manager	29	48.38%
	Branch manager	10	16.13%
<b>Years worked with the bank</b>	1-5 years	39	64.52%
	6-10 years	15	25.8%
	11-15 years	6	9.67%

**Source: Author's fieldwork, 2017.**

The demographic profile of the survey respondents in Table 1 show that with regards to the composition of the rural banks the respondents represented, 25% of the respondents



worked with the respective understudied banks. Moreover, with the banks specific demographic characteristics, Atwima Kwanwoma Rural Bank, it has seven branches presently with six of its branches situated within the Kumasi metropolis. Sekyere Rural Bank has nine branches with its headquarters located in Jamasi within the Ashanti region. Amansie-west on the other hand has eight branches with three of its branches situated within the Kumasi metropolis with its headquarters located at Manso-Nkwanta within the Ashanti region.

Finally Atwima Mponua rural bank has eight branches with its headquarters located at Toase within the Ashanti region of Ghana. This suggests that generally the understudied rural banks have seen some improvements with regards to its operations and even to the extent that founding feat within the Kumasi which originally by virtue of their operations are not supposed to core of its target markets. As for the educational levels of the respondents, results from Table 1 shows that nearly half of the study participants had bachelor's degree as their academic qualification whereas 32.26% and 19.35% of the respondents had diploma and master's degree respectively. More so, with regards to the positions the respondents occupied in their respective organizations, it became evident that a little over 48% of the respondents were credit managers for their respective financial institutions while 35.48% were the loan officer for the organizations with 16.13% being the branch managers at the understudied rural banks organizations. Finally with regards to the numbers of years the respondents have worked with their organizations, it was established that more than half of the study participants thus, 64.52% have been employees at their organization for a period of 1-5 years now whereas

48.38% have equally worked with their organization for 6-10 years now and lastly 9.67% have worked at their organization for 11-15 years now. Findings from the study suggests generally a large segment of the respondents worked at their respective banks credit departments and likewise occupied key roles making them well informed to respond to the questions this study seeks to answer.

#### **4.4 The Main Sources of Credit Risks Rural banks are exposed to in Ghana**

As established in the literature that there are no universal source of credit risks for all banking institutions. Accordingly, this objective sought to establish from the study respondents the main sources of credit risks their rural banks were susceptible to due to their nature of operations. Hence, respondents' ratings on the key sources of their organization credit risks have been presented in Table 2.

**Table 2: Main Sources of Credit Risks of Rural Banks**

<b>Sources</b>	<b>Frequency</b>	<b>Percentage</b>
Corporate and small businesses commercial loans	52	86.67%
Trade financing	8	13.33%
<b>Total</b>	<b>60</b>	<b>100.0%</b>

**Source: Author's fieldwork, 2017.**

Results from Table 2 show that the main source of credit risk the understudied rural banks were vulnerable to was corporate and small businesses commercial loans. On this source 86.67% of the respondents identified this as their organization main source of credit risk. On the contrary, a small segment of the respondents thus, 13.33% on their part

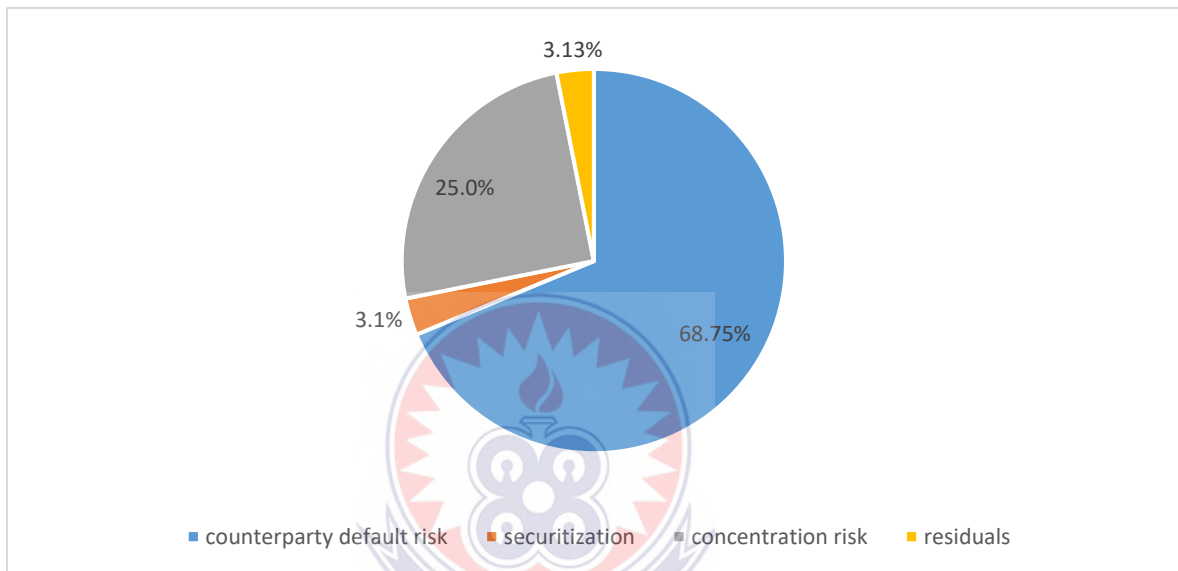
identified trade financing as their organization main source of credit risk. Findings from the study suggest that other forms of risks such as interbank transactions, trade financing, foreign exchange transaction and derivatives were not identified by the respondents as part of their organization main source of credit risks.

Equally findings from the study revealed that risks factors identified by Apanga et al. (2016) thus corporate and small business commercial loans and trade financing as some of the main sources of credit risks commercial banks in Ghana were exposed to were likewise identified in this study as well. On this note findings from this study confirm the works of Apanga et al. (2016) in this regard. Nonetheless, the other form of risks such as interbank transactions, foreign exchange transactions and derivatives identified in their study could not be confirmed in this study as some of the sources of credit risks rural banks understudied in this study faced.

Evidently, the inability of this study to identify some of the earlier sources posited in Apanga et al. (2016) studies is largely attributed to the regulation governing rural banks operations. For instance, per the Bank of Ghana regulations Tier 2 banks (i.e. rural banks) are not allowed to trade in foreign exchange transactions hence, risk forms such as foreign exchange and derivatives may not necessary be part of rural banks credit risk sources. Additionally, due to the low level of capital most rural banks in Ghana have they may not be able to lend monies to their sister rural banks hence, with this they are likely not be entangled in interbank transaction risks. Hence, the understudied banks not identifying interbank transaction as one of their core sources of credit risk could be somehow be attributed to this reason.

#### 4.4.1 The Main Types of Credit Risks rural banks in Ghana deal with

After identifying the main sources of credit risks the understudied rural banks face in their operations the study proceeded to establish the main types of credit risk they were equally facing in their dealings. Consequently, the respondents' responses on the types of credit risks their institutions were exposed to have been presented in Figure 1.



**Fig. 1: Main Types of Credit Risks**

**Source: Author's fieldwork, 2017.**

Evidently, results from Figure 1 show that in all the understudied rural banks were exposed to four main types of credit risks namely; counterparty default risk, securitization, concentration risk and residuals. However, among all these credit risk types, counterparty default was the risk type that was identified by majority of the respondents as the kind of credit risk their organization was mostly susceptible to. On this credit risk type 68.75% of the respondents identified it as their organization main type of credit risk. Likewise, the next credit risk type that recorded the second highest enumeration by the study respondents was concentration risk. On this risk category it was

identified by 25.0% of the participants as their institution main type of credit risk. Importantly, Brown and Moles (2014) argued that concentration credit risk becomes mostly evident when a bank credit portfolio is largely made of clients of the same or related characteristics. Interestingly, most rural banks clients segments consist of SMEs and individuals working within the informal sector.

Moreover, since these are the market segments their products and services seek to attract they most often find themselves concentrating a large part of their services to this segment. This suggests that when any economic misfortune happen within that segment they are likely to be exposed to the concentration risk the respondents identified as one of the credit risk types their organization faces. Hence, its identification by most of the respondents was not all that surprising.

However, among these four credit risk types, securitization and residuals were the forms of risk that were least identified by the respondents as the types of credit risk their business were normally exposed. On these credit risk types 3.13% respectively identified these credit risk types as the forms of risk they organization deal with in their operations.

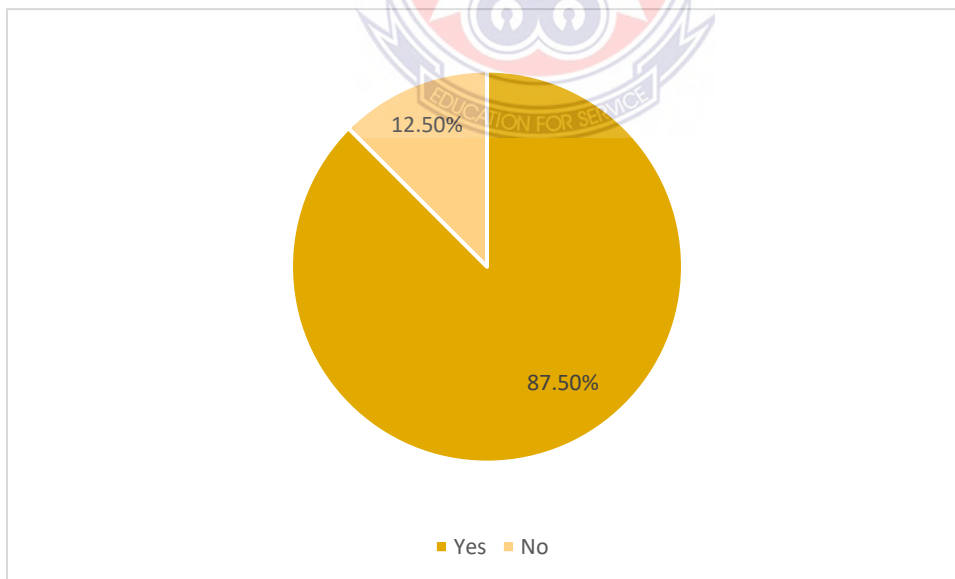
Findings from this study corroborate the works of Walker (2008) which equally posited factors such as; counterparty default risk, concentrations and securitizations as some of the key types of credit risk banks financial institutions face due to the nature of their transactions. Similarly, findings from this study affirm the works of Apanga et al. (2016) which identified counterparty default and concentration risk as the main types of credit risk commercial banks in Ghana were susceptible to in their daily dealings.

Nonetheless, risk factors such as equity risk and to some extent mortgage risk identified by Giesecke and Kim (2011) and Nijskens and Wagner (2011) as some of the

main types of risk banks operating within the advanced economies face could not be confirmed as the kinds of credit risks rural banks within the scope of Ghana did faced. Evidently, this go to suggest that a bank's country of origin could inform the type of credit risk the said bank is likely to be exposed. For instance, in Ghana mortgage financing it's in the infancy stage so most banks are not exposed to this form of credit risk but in matured markets like the US mortgage financing is at the matured stage hence its impact on banks may be severe or evident than that of Ghana.

#### 4.4.2 How the understudied Rural Banks minimized its Credit Risk Types

Respondents' ratings as to how their organizations reduced its credit risk types (i.e. counterparty default, securitization, concentration and residual risks) have been shown in Figure 2.



**Fig. 2: How the Understudied Rural banks dealt with their Credit Risk**

**Source: Author's fieldwork, 2017.**

Results from Figure 2 show that generally the four investigated rural banks relied on two approaches to minimize their organizations credit risk exposures that is; collateralized debt obligation and guarantees. This suggests that in the banks attempt to reduce its exposure against counterparty default they required from the creditee a collateralized assets to mitigate against likely possible default from him or her. Evidently with the collateralized debt obligation more than half of the respondents thus, 62.5% identified it as the approach they rely on to minimize their credit risk. On the other hand 37.5% of the survey participants identified guarantees as the next approach their institution uses to mitigate against the potential credit risk factor their institutions become exposed to when granting a credit facility to a customer. Surprisingly, this study could not confirm the claims made by Brown and Moles (2014) when they posited that in recent times derivatives have been found to be one of the best approach used to mitigate against credit risk within the financial sector. Hence, in this study context it became evident that these financial institutions did not rely on this mitigating approach.

However, findings from this study is consistent with the claims made by authors like Hugh (2001), Brown and Moles (2014) and Duaka (2015) when they identified collateral as one of the widely used credit risk control measure. Likewise findings from this study confirm the works of Aduda and Gitonga(2011) where they identified collateral as one of the widely used approaches banks' in Kenya used to insulate their organization againsts credit risk. Interestingly, Brown and Mole (2014) attributed its wide usage to its easiness when deciding to sell it off when an obligee defaults. Also findings from this study affirm Brown and Moles (2014) observation when they equally identified guarantee

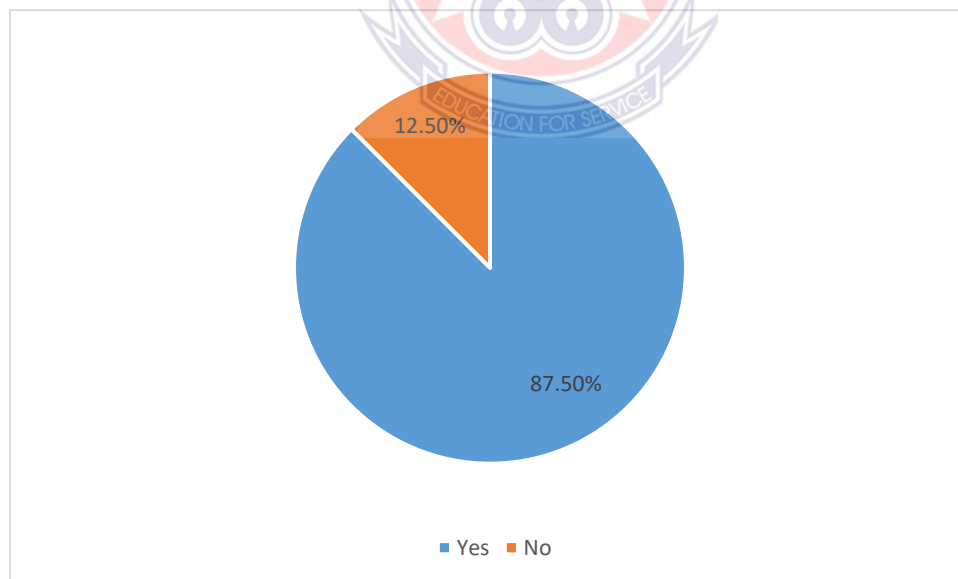
as one of the possible means used to minimize credit default when credit advances become unacceptable due to its high possibility of non-performance.

#### 4.5 Credit Risk Management Practices of Rural Banks in Ghana

The purpose of this objective was to establish from the understudied rural banks the credit risk management practices they employed in their credit administration processes. Accordingly, this section provides results on the credit risk management practices of the understudied rural banks institutions.

##### 4.5.1 Credit Administration Unit

Respondents rating as to whether their organization has a separate department or unit responsible for their organization's credit administration has been presented in Figure 3.



**Fig. 3: Existence of Credit Administration unit**

**Source: Author's fieldwork, 2017.**



In the quest to establish the credit risk management practices of the four understudied rural banks, the study before then sought to establish whether the institution under investigation had a separate unit or department tasked with the responsibility of handling its institution's credit administration processes. Accordingly, results from Figure 3 show that to a large extent almost all the understudied banks (87.5% of them) had credit departments. Notwithstanding this cross section of the respondents not agreeing to the presence of such a department within their organization, the high level of agreement achieved on this item is equally encouraging and needs to be replicated across all the rural banks operating within the country since evidence suggests that credit risk is one of the key forms of risks financial institutions are exposed to since loans form huge part of their operations (Boahene et al., 2012; Duaka, 2015).

Moreover, the high level of existence of credit administration unit within the understudied banks suggest that their credit risk management practice was in tandem with the recommendation made by Basel (1999) and IAIS(2003) that financial institutions should have effective organizational structure (i.e. credit department) that will be responsible for the organization's credit administration processes.

#### **4.5.2 Functions of the Credit Administration Unit**

Having established that most of the understudied rural banks had in place a credit administration unit the study then sought to establish the roles the credit department played in their organization's credit administration to establish whether their unit's practices were in line with best credit risk management practices. Accordingly, survey

participants' responses on the various function their organization credit administration unit performed have been presented in Table 3.

**Table 3: Functions of the Credit Administration Unit**

<b>Functions</b>	<b>Frequency</b>	<b>Percent</b>
Keep credit file up to date	14	23.33%
Obtain current financial information	19	31.67%
Send renewal notices	9	15%
Prepare various documents such as loans agreements	18	30%
<b>Total</b>	<b>60</b>	<b>100.0</b>

**Source: Author's fieldwork, 2017.**

Evidently, results from Table 2 show that the credit administration function that were largely performed by most of the understudied rural banks credit administration unit were obtaining current financial information about their clients as well as preparing of various documents such as loans agreements. On these functions 31.67% as well as 30% respectively agreed that at their organization the credit departments did performed these functions. Equally it became evident that the credit administration unit of the understudied firms did also ensured that the credit file of their clients or department were up to date. On this function 23.33% agreed on this as one the functions performed by their credit administration unit.

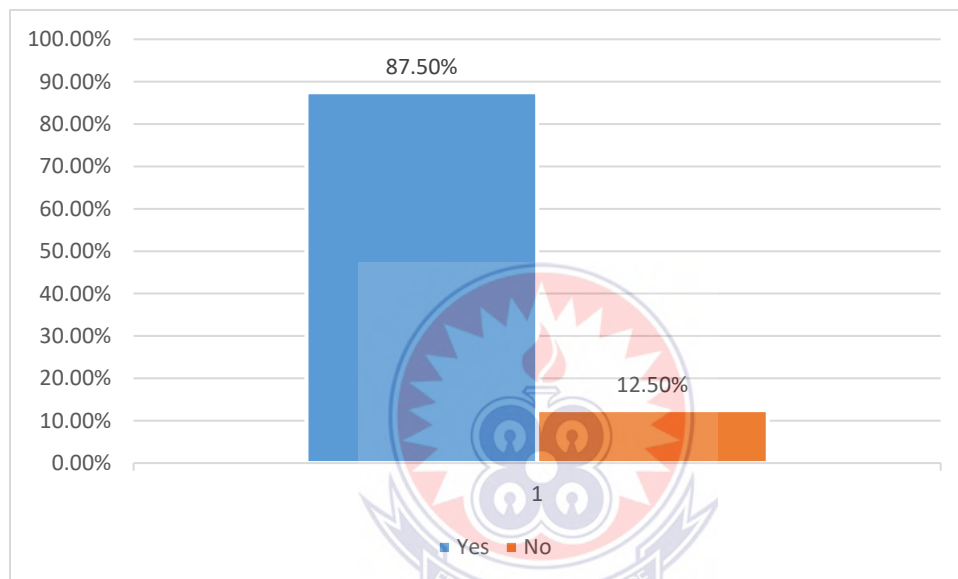
The final function identified by the respondents as one of the key functions performed by their credit administration unit was the act of sending renewal notices to clients to fulfill their obligations when due or overdue. Interestingly, this function had the least rating among all the three credit administration unit function investigated. On this item only 15% agreed that this was one of the function performed by their credit administration unit.

Findings from the study suggest that the credit unit of the understudied rural banks performed some key credit management practices aimed at enhancing their institution credit management. Importantly, the practice of ensuring that credit file were always up to date together with obtaining current financial information about their clients are consistent to the role of monitoring identified by Derban et al. (2005). For instance, Richard et al. (2008) held that monitoring under credit risk management practice is to establish frequent contact with borrowers in order to garner current information about the borrower' present conditions. This suggests that the understudied rural banks had sound monitoring practices in place.

Likewise preparing of various documents such as loans agreement is somehow similar to the sixth principle of the Basel II Accord. This principle mandates financial institutions to create processes for the writing loan agreement and approving loans agreement. Similarly, within the context of this study it became evident that the sixth principle of the Basel II Accord was to some extent practiced by the credit administration unit of the understudied rural banks organizations.

### 4.5.3 Availability of Procedures and Information Systems for the Monitoring of Credit Conditions across Bank's Portfolios

Respondents' ratings as to whether their organizations have in place procedures and information systems to effectively monitor the conditions of individual credits across the institutions portfolios have been presented in Figure 4.



**Fig. 4: Availability of Procedures and Information Systems for the Monitoring of Credit Conditions**

**Source: Author's fieldwork, 2017.**

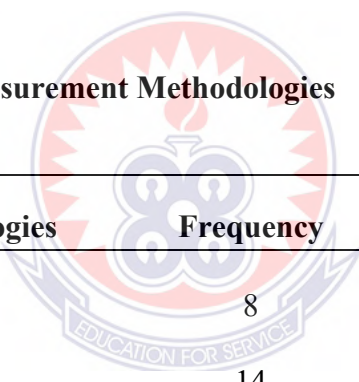
Results from Figure 4 show that almost all the understudied rural banks had in place procedures and information systems to effectively monitor the conditions of individual credits across the institution's portfolios. In terms of its availability 87.5% agreed to its presence in their organization. In contrast, only a small segment of the respondents disagreed to the availability of this procedure at their organization. Thus, 12.5% of the respondents said this. Findings from this work is consistent with the works

of Brown and Moles (2014) which identified that financial institutions rely largely on their institutions' procedures and information system to monitor the credit conditions of their clients.

#### 4.5.4 Credit Risk Measurement Methodologies

With this credit risk management practice it sought to establish the various measurement methodologies the investigated rural banks employ to quantify their organization' risk exposures. Consequently, respondents rating on the various measurement tools their organization uses to quantify their risk exposures have been presented in Table 4.

**Table 4: Credit Risk Measurement Methodologies**



Measurement methodologies	Frequency	Percent
Experts	8	13.33
Subjective analyses	14	23.33
Accounting based method	38	63.33
<b>Total</b>	<b>60</b>	<b>100.0</b>

**Source: Author's fieldwork, 2017.**

It became evident that the rural banks understudied in this study had a series of credit risk measurement methodologies in place. Notably among them were accounting based method and subjective analyses measurement methods. For instance, with the accounting based method it was revealed that more than half of the respondents identified it as one of the measurement tools their organization used when quantifying their

organization risk exposures. Hence, on this tools 63.33% of the respondents agreed to its application within their organization. However, among all the measurement, experts' method was the credit risk measurement method that received the lowest enumeration among the study respondents. On this approach only 13.33% of the respondents agreed to its usage within their organization. Findings from this study suggest that the investigated rural banks used both quantitative and qualitative assessment methods to quantify their credit risk exposures. Richard et al. (2008) likened quantitative method to accounting based method whereas subjective analyses to qualitative assessment method. On this premise findings from the study affirm the views espoused by Richard et al. (2008) that both quantitative and qualitative assessment methods are used by financial institutions to quantify their organization risk exposure. Likewise findings from this study affirm the views espoused by Brown and Moles (2014) when they reported in recent times most financial institutions use accounting based method together with subjective analyses to quantify their institutions' credit risk exposures.

Interestingly, findings from the study seems to confirm recent trends identified by Vo (2015) that with time most financial institution seems to be relying on expert ratings to quantify their organization risk exposures. Though, in Ghana there is no established credit rating agency but the respondents' identification of expert judgment as one of the methods used in quantifying their organization credit risk exposures could suggest that the understudied rural banks relied on individual experts for this services but not established organizations.

#### 4.5.5 Factors the Rural Banks Credit Risk Management Techniques Considered

The aim of this construct was to ascertain the exact factors their credit risk management techniques considered during their credit administration process. Hence, respondents' ratings on the factors their organization credit risk management techniques look out for have been presented in Table 5.

**Table 5: Factors the Rural Banks Credit Risk Management Techniques Looked out for**

<b>Factors</b>	<b>Frequency</b>	<b>Percent</b>
Loan purpose	25	41.67
Loan maturity	10	16.67
Financial conditions	17	28.33
Economic situation	6	10
Firm's business plan	2	3.33
<b>Total</b>	<b>60</b>	<b>100.0</b>

**Source: Author's fieldwork, 2017.**

It became evident that the loan purpose thus, what exactly a borrower was to use the loan facility for was the factor that their credit risk management techniques generally considered most thus, 41.67% said this. In contrast the business plan of the borrower was the factor that the banks credit management techniques least considered when deciding to approve a borrower's loan request or not.

Findings from the study suggests that the rural banks credit risk management techniques assessed factors likely to cause loan defaults nonetheless, it can be argued that

their credit risk management techniques merely considered few factors which in this sense make their assessment not exhaustive to identify all the possible factors likely to cause a borrower defaults such as economy conditions and firms business plan. For instance, Sumon-Das and Shilpi-Das (2007) argued that economic conditions and business plan ought to be adequately considered by a creditor before they agree to lend capital to a borrower since these factors are potential sources of loan default. However, the financial conditions identified by the respondents as one of the key factors their organization credit risk management techniques consider is consistent with the works of Sumon-Das and Shilpi-Das (2007) when they postulated assessment of a borrower financial situation enables creditor to establish as to whether the client has adequate cash flow or revenue to offset his obligation when given. Findings from this study is consistent with the works of Brown and Moles (2014) which established that most financial institutions consider the reason why a borrower wants a credit facility before the approving a person loan request. However, findings from this study could confirm the views of Brown and Moles (2014) which reported that the key issues banks' credit management techniques look out for are ability, amount and repayment.

#### **4.6 Rural Banks Credit Risk Management Policies as against Bank of Ghana Credit Risk Policies**

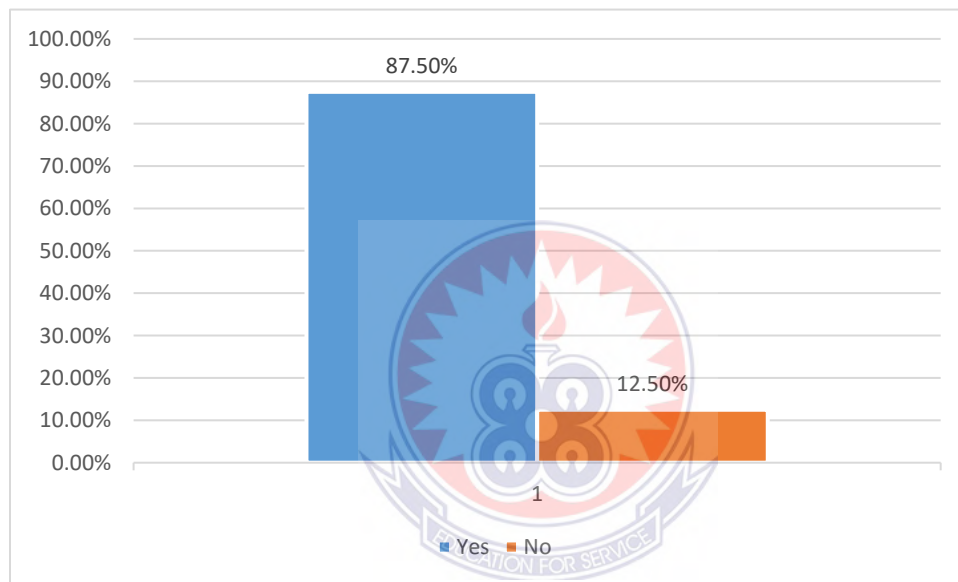
This study objective sought to compare and contrast the credit risk management policies of the understudied rural banks as against that of the Bank of Ghana credit risk policy to ascertain how it fare against the regulator's position. Accordingly, this section



provides the responses from the respondents with regards to their organization credit risk management policies.

#### 4.6.1 Availability of Credit Management Policies at the Understudied Rural Banks

Respondents rating as to whether their organization has in place credit risk management policy manual has been presented in Figure 5.



**Fig. 5: Availability of Credit Risk Management Policy Manuals**

**Source: Author's fieldwork, 2017.**

Results from Figure 3 show that to a large extent the understudied rural banks had credit risk management in place that guided their credit administration processes. For instance, 87.5% of the respondents agreed to the availability of credit risk management policy manual at their organization. On the other hand, a small segment of the respondents held a varied view to them their organization did not have in place credit risk management policy manual. Subsequently the study proceeded to identify the measures that were contained in the rural banks credit risk policy manual.

#### 4.6.2 Provisions in the Institutions Credit Risk Management Policy Manual

Respondents' ratings with regards to provisions their manual entailed have been presented in Table 6.

**Table 6: Provisions in the Banks' Credit Risk Management Policy Manual**

Provisions	Frequency	Percent
Guidelines for risk identification, reporting and control	15	25%
Provisions on loan repayment, enforcement and litigation	17	28.33%
Provisions on credit range, acceptable levels of risk-reward tradeoff for the granting of credit	12	20%
Guidelines for writing credit contract agreement	9	15%
Provision for borrower's record taking, storage and sharing	7	11.67%
Total	60	100.0%

**Source: Author's fieldwork, 2017.**

Results from Table 6 reveal that the understudied organization had an array of provisions in their credit risk management policy manual which were used as a guide for their respective organizations credit management. Evidently, results from Table 5 show that most of the credit policy manual of these firms had in it measures that covered issues such as; loan repayment, ways of enforcing credit arrangements and ways to employ in the course of any contractual litigation issues. On this provision, 28.33% of the respondents agreed to the existence of this provision in their credit policy manual.

Equally 25% of the respondents likewise agreed that their organization credit policy manual had provision on how their organization credit department had to identify their organization's risk, as well as how to report these identified risks factors and equally ways to control the identified risk factors.

Similarly, it was established that the credit policy manual of these rural banks had in it the stipulated credit range and acceptable levels of risk-reward tradeoff they should entertain. On this provision, 20% of the respondents agreed to the existence of this provision in their policy manual. Interestingly, provision on how to take borrower's record, keep it and share was the provision that received the least enumeration among the study respondents. Thus, 11.67% of the respondents agreed to its existence in their organization credit policy manual.

According to Brown and Moles (2014) credit policy is a policy document which entails the procedure and processes that govern an institution credit functioning, including its credit terms, processes required for opening new accounts, processing applications, methods and techniques for credit investigation, the creation and dissemination of credit reports, setting lines of credit, and all other factors that are involved in the credit management process. Accordingly, this section seeks to assess how comparable the provisions identified in the credit policy manual of the rural banks fare to that of the BOG credit risk policy.

Results from the study indicate that the provision thus, measures on their loan repayment, enforcement and litigation which received the highest rating with regards to its presence in the understudied rural banks credit policy manual is consistent with the

policy manual of BOG thus, section 20 of the Borrowers and Lenders Act, 2008 Act 773 which dealt extensively with the repayment and recovery of debt. The banks policy manual is likewise consistent with provisions in subsection 1 of Section 20 which makes provision on how loan are to be repaid by the borrower.

Equally section 2 within the same section stipulates that a credit agreement may provide for the terms and conditions of any prepayment and the order in which advance payments are to be applied. Section 20 of the Act enforces borrowers to pay for their credit facility and likewise shows how the lender ought to go about with his recollection. Section 32 and 33 dealt with enforcement of borrowers' obligations and remedies of a lender on a loan default. Hence, their policy manual equally have in it enforcement and litigation measures. This suggests that their policy manual with regards to enforcement and litigation measures are consistent with the provision in the section of 32 and 33.

Also the rural banks policy manuals which have in it guidelines for risk identification, reporting and control affirm section 13 of the BOG manual. Under section 13(1) it explains who can require for credit. However, with subsection 2 under section 13 it qualifies its initial claim; a lender thus, in this case a rural bank may refuse to enter into a credit agreement with a prospective borrower on reasonable commercial grounds consistent with the lender's customary risk management and underwriting practices. With this provision it places maximum responsibility on the rural bank to have in place measures that will help its organization to decide whether to grant a borrower loan request informed by the organization own risk indicators and control system.

Equally the rural banks credit risk policy manuals have provisions on how to record borrower data, store and share is consistent with Section 17 of the BOG policy which stipulates that, a lender or a person who acts on behalf of a lender shall not disclose information obtained from a borrower unless the information is required under the Credit Reporting Act, 2007 (Act 726) or under any other law or by a court. This section seeks to protect the confidentiality; personal information and borrowers credit records from sneaking out to third parties. Also the policy manual of the understudied rural banks which had provision on how to write credit contract agreement is in tandem with subsection 2 of Section 18 which stipulates financial institutions on how to write their loan or credit agreement.

Additionally, aside the institution credit range, acceptable levels of risk-reward trade off which appear not be in the BOG policy manual all the other provisions found in the rural banks credit policy manuals are consistent with provisions made in the BOG credit policy. Findings, from the study suggest that in a large extent the credit policy manual of the understudied rural banks were in tandem to most of the provisions in BOG credit policy document.

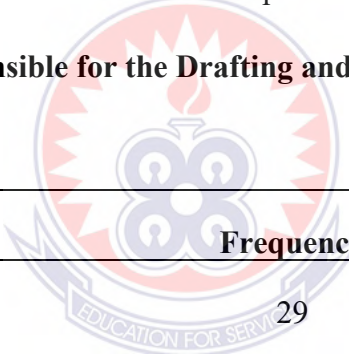
Findings from this study show that the understudied rural banks had credit risk management policies that took into account how the organizations ought to identify their risks, report, control, credit range and acceptable level of risks a bank may be willing to contain. Evidently, findings from this study to some extent showed that rural banks investigated in this context had in place an effective credit risk management policy hence consistent with the views shared by Basel(1999), Greuning & Bratanovic (2003), Pricewaterhouse (1994) when they posit that effective credit risk management policy

ought to take into consideration how it will identify its risk, measure, assess, monitor and mechanism to employ to control the risks an organization will be susceptible to.

#### **4.6.3 Agency Responsible for the Drafting of Rural Banks Institutions Credit Policy Manual**

This construct sought to establish the various agencies being it the people responsible for the drafting and finalizing of the understudied rural banks credit policy document. Accordingly, respondents' responses on the persons responsible for the drafting of their organization credit policy document have been presented in Table 7.

**Table 7: Agencies Responsible for the Drafting and Finalizing of the firm's credit policy manual**



<b>Persons</b>	<b>Frequency</b>	<b>Percent</b>
Senior management	29	48.33
Board of directors	25	41.67
Shareholders	4	6.67
Outside experts	2	3.33
<b>Total</b>	<b>60</b>	<b>100</b>

**Source: Author's fieldwork, 2017.**

Evidence from Table 7 reveals that most of the understudied rural banks credit policy manual were drafted by their senior management. On this item nearly half of the respondents thus 48.33% said at their organization senior management performed this function. Interestingly, nearly half of the respondents thus, 41.67% revealed that at their

organization board of directors were the people responsible for the drafting of their institution credit policy manual. However, as to whether the understudied institutions relied on either outside experts or their shareholders to undertake this role, it became evident that these persons were the least used by the understudied institutions when drafting and finalizing their credit policy documents.

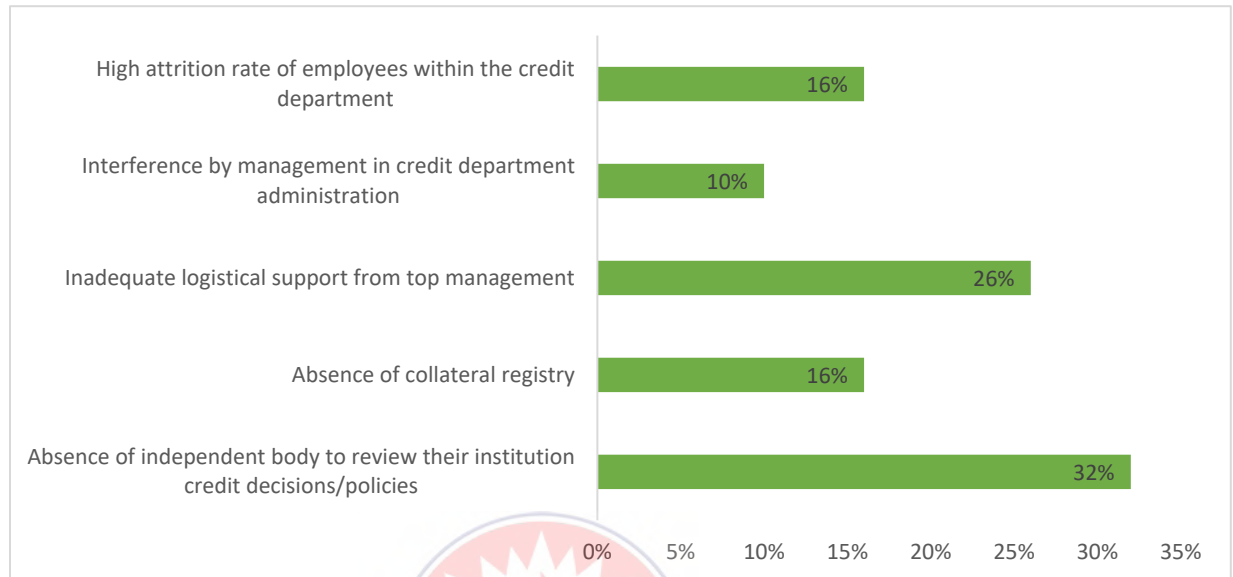
Findings from the study suggest that most of the understudied institutions relied on their senior management to draft their organization credit policy document. Evidently this practice is not in line with international credit management practices where it is expected that a bank board of directors ought to perform this function (Basel II, Kannan, 2004). However, what ought to be made known is that within the Ghanaian context a firm's board of directors may not have all the requisite skills and knowledge to perform such a function hence most of these specialized responsibilities are relegated to senior management.

Findings from this study corroborate the works of Apanga et al. (2016) where it became evident that most commercial banks in Ghana credit policy manuals were drafted by their senior management. Hence, Apanga et al. (2016) affirms the researcher view.

#### **4.7 Constraints to Managing Risks by Rural Banks**

This final objective of the study sought to establish from the respondents the specific challenges that inhibit their organization to adequately mitigate the main sources and type of credit risks that were established to confronting the understudied rural banks credit risk

management. Accordingly, respondents' ratings as to the main constraints that affected their institutions credit risk management have been presented in Figure 6.



**Fig. 6: Constraints to Managing Risks by Rural Banks**  
**Source: Author's fieldwork, 2017.**

Results from Figure 6 show in all five (5) factors were enumerated by the study respondents as the main constraints that inhibited their organization ability to adequately mitigate against their business operations credit risks sources. However, among all the five factors it became evident that absence of independent body to review the banks credit management as well as its credit risk policies was the factor that was enumerated by majority of the respondents as one of the main challenges affecting their organization credit risk management efforts.

Findings from the study suggests that the absence of collateral registry by the understudied rural banks contravenes the BOG credit policy manual which mandates financial institutions to have in place collateral registry whose purpose will be to register charges against collaterals created by borrowers to secure credit facilities provided by



lenders as and when the borrower defaults in his payment agreement. Evidently absence of independent bodies to review the understudied banks credit policies suggests that these banks largely relied on their internal workforce for this purpose. Although BOG gives banks the freedom to come up with their own credit policy as to how it ought to identify its credit levels and appetite nonetheless, solely relying on its internal workforce for such a vital purpose can make its credit policies or decision ineffective since evidence suggests that organization workforce may not have all the require skills or knowledge on how to effectively control its institution risk. Hence, having most of the respondents identifying the absence of independent bodies to review their organization credit decisions or policies go to conform that the respondents admit that just relying on their workforce for such a delicate function may not prove to be a good policy decision to be undertaken by their respective banks.

Findings from this study corroborate the works of Duaka (2015) where it became evident that the main challenges affecting credit risk management in financial institutions are absence of independent body to review banks credit risk policy and inadequate logistical support from organizations' top management.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter presents the summary of the study as guided by the study's objectives and conclusions reached based on the findings as well as recommendations for enhancing credit risk management within rural banks and further future research studies.

#### 5.2 Summary

The main problem of the study was to investigate the credit risk management of rural banks in Ghana. The study used the 5Cs namely; character, capacity, capital, collateral and conditions as its theoretical framework. Equally the literature review of the study was built around these themes; definition of concepts, theoretical framework, sources of credit risk, credit risk management practices, credit risk management policies, overview of rural bank operation in Ghana and finally empirical review. The study population came from all the 140 licensed rural and community banks within Ghana. Specifically, the study sample came from rural banks operating within the Kumasi metropolis.

With the first research question, it was revealed that most of the investigated rural banks had in place credit administration units charged with the responsibilities of preparing credit documents most especially loans agreement. Equally it became evident that their credit unit responsibilities also included obtaining current financial information about their borrower's and likewise ensuring that their credit document were up to date. Again

it was established that most of the rural banks assessed in this study had in place procedures and information system to monitor the various segment of borrowers that formed their bank's portfolio. Also it was established that the rural banks employed mostly accounting based method and to some extent subjective analyses to quantify their organization risk exposures.

Moreover, with the second research question it became evident that most of the rural banks investigated in this study had credit policy manual which guided their credit administration processes. Equally under the same research question it was established that most of the understudied rural banks credit policy manual was analogous to that of the Bank of Ghana credit policy manual.

Subsequently with the third research question the study found out that corporate, individuals and SMEs loans were the main source of credit risks the understudied rural banks were largely exposed to due to the very nature of their business operation. However, with reference to the main types of credit risks rural banks were mostly vulnerable to, it was revealed that counterparty default and concentration risks were the main type of credit risks the investigated rural banks were susceptible to. However, in an effort to reduce these risks exposures, it became evident that the understudied banks to a great extent used collateral and guarantees to minimize the risks associated with their borrowers and market segments.

Finally the last research question established that constraints such as absence of independent body to review their organization credit decisions and policies together with inadequate logistical support from top management were suggested by large part of the

study respondents as the key challenges that made their organization credit risk management ineffective.

## **5.2 Conclusion**

The first specific objective the study sought to measure was to identify the credit risk management practices of rural banks in Ghana. On this objective it became evident that most of banks studied in this study had in place credit administration unit/department at their respective banks. Also it was revealed that the activities that formed the investigated rural banks credit risk management practices were; preparing of loans agreements, obtaining current financial information on their borrowers and likewise keeping of up to date credit records to aid management in their credit decisions. More so, it became evident that the rural banks credit risk management practices had in it measurement tools such as accounting based and subjective analyses methods used in quantifying their organization risk exposures prior to the approval of credit request by a borrower. Finally it was established that the rural banks credit risk management techniques thus, accounting based and subjective analyses methods did considered factors such as loan purpose, financial conditions and loan maturity before a final decision was made as to whether to agree to a credit request or not.

The next study objective was to assess how the rural banks credit risk management policies fared against that of the Bank of Ghana credit risk policy. Evidently, with the exception of collateral registry with which most of the understudied rural banks did not have in place most of their credit risk policies manual were consistent with that of the Bank of Ghana credit policy. Mores so, it became evident that the rural banks senior

management were responsible for the drafting and finalizing of their firm's credit policy manual. This revelation was attributable to the limited skills their board of directors had with respect to risk management within the financial sector.

The subsequent study objective sought to identify the main sources of credit risks rural banks were exposed to in Ghana. With this objective it became evident that the key credit risk sources that most rural banks were susceptible to were; corporate, individual and SMEs commercial loans. This suggests that other credit risks sources such as derivatives and foreign exchange transactions were not part of the credit risks rural banks operating within Ghana faced in their operations. Equally it became evident that when rural banks were exposed to credit risks types namely; counterparty default and concentration credit risks they used collateral and guarantees as the main tools to mitigate against these risk exposures.

The fourth and the final objective sought to analyze the constraints to managing risks by rural banks. With this research objective, it became evident that challenges such as; absence of independent body to review the bank's credit decisions/policies, absence of collateral registry, high attrition rate of employees within their credit departments, interference by management in their credit department decisions and inadequate logistical support from top management were identified by the respondents as the main constraints that inhibited their organizations ability to properly manage their credit risk sources and types. However, among all the five factors it became evident that absence of independent body to review their credit decisions/policies together with inadequate logistical support from top management were enlisted by majority of the study participants as the key challenges that affected their institutions credit risk management.

#### 5.4. Recommendation to management

- It became evident that most of these banks relied mostly on accounting based method and subjective analyses to quantify their organization risk exposures, on this note it is recommended that management of these rural banks should make it a point to build the capacities of their credit administration department on a regular basis since any mishap in their duties may lead to series of loan default.
- Equally it was established that most of these banks did not used or have in place independent bodies to review their organization credit department decisions and policies. On this score it is recommended that management of these banks should likewise employ the services of external bodies who will have the capacity and competence to assess their organization's credit decision and policies to ascertain how robust it is in mitigating their organization against potential credit risk sources.
- Additionally, it was established that most of these banks did not provide its credit departments with the needed logistics to facilitate the department credit management. On this note it is recommended that management of these banks should channel adequate resources to their credit departments since evidence suggests that their organizations sustainability to a larger extent will depend on the decisions made by their credit departments.
- Finally it became evident that the drafting and finalizing of the understudied banks credit policy manual were done by their senior management. On this score it is recommended that the rural banks should either recruit mostly employees

who are conversant with the Ghanaian banking landscape into senior management role or have in place training programs aimed at building the capacities of its senior management with regards to how they can guide their respective institutions to adequately manage their institutional risks factors.

- It was established that most of these rural banks used credit risk management practices of their counterparts in the larger sphere of the banking tier (i.e. commercial banks). Although it can be said to be a good practice nonetheless, merely trying to replicate what exist in the commercial banks setting might not be adequate since their market segment may not necessarily be the same as the universal banks. On this score it will be important for rural banks to carefully assess their operations and client type to identify the practices that will enable them to adequately address the risks its market segments possess.

### **5.5 Recommendations for further research**

Firstly, this study confined itself to rural banks operating with the Ashanti region of Ghana. Hence, a comparative study should be carried out to compare whether the findings also apply to operating outside the scope of the Ashanti region. Also, the main purpose of this study was to investigate the credit risk management of rural banks hence, additional study will be required to measure how their credit risk management practices have impacted on their non-performing loans to ascertain their effectiveness.

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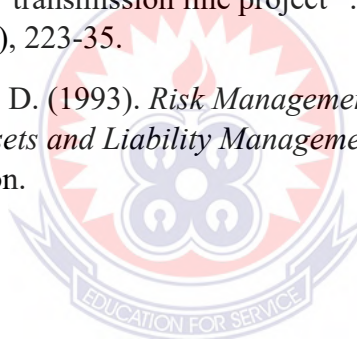
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## APPENDIX

## UNIVERSITY OF EDUCATION WINNEBA-KUMASI CAMPUS

**Topic: Credit Risk Management in Microfinance Institutions**

This study is being undertaken for academic purposes and any information provided will be greatly appreciated and guided with the ultimate confidentiality.

**SECTION A: INSTITUTIONS PROFILE**

1. Please indicate the institution you worked with? .....
2. What is your highest educational qualification? .....
3. What is your present position at this institution? .....
4. How many years have you worked with organization? .....

**SECTION B: SOURCES OF CREDIT RISK**

5. What are the main sources of your firm's credit risk exposures? Please tick[√]where applicable to your firm

Corporate and small business commercial loans	Interbank transactions	Trade financing	Foreign exchange transactions	Derivatives

6. What are the main types of credit risk your firm encounter in their day to day operations? Please tick[√] where applicable to your firm

Counterparty Default Risk	Equity Risk	Securitization Risk	Concentration Risk	Residual Risk

7. How do you reduces these risks and their exposures in your organization's operations?

Collateralized Debt Obligation	Guarantees	Derivatives

**SECTION C: CREDIT RISK MANAGEMENT PRACTICES**

8. Do you have a separate unit in charge of credit administration?  
[ ] Yes [ ] No

9. What are the functions of the credit administration unit?

Keep credit file up to date	Obtain current financial information	Send renewal notices	Prepare various documents such as loan agreements


10. Do you have procedures and information systems in place to effectively monitor the conditions of individual credits across the banks' various portfolios?

Yes                       No

11. What credit risk measurement methodologies do you use to quantify risk exposures?

Experts	Subjective Analyses	Accounting-based method	None

12. What factors are considered by the credit risk management techniques?

Loan purpose	Loan maturity	Financial conditions	Economic situation	Firm's business plan

13. Do you have in place credit control systems to manage their credit exposures?

Yes                       No

14. Are there systems in place that allow for an independent review of their credit granting activities to ensure that the procedures used can effectively manage credit risk exposures.

Yes                       No

**SECTION D: CREDIT RISK POLICIES**

15. Do you have credit risk management policies manuals in place?

Yes                       No

16. What are some of the provisions in the above manual?

- Guidelines for risk identification, reporting and control
- Provisions on loan repayment, enforcement and litigation
- Provisions on credit range, acceptable levels of risk-reward tradeoff for the granting of credit
- Guidelines for writing credit contract agreement
- Provision for borrower's record taking, storage and sharing

17. Who are responsible for the drafting and finalizing of the firm's credit policy manual?

Senior Management	Board of Directors	Shareholders	Outside experts

18 Do you have a collateral registry at your institution?

Yes     No

**SECTION D: CONSTRAINTS TO CREDIT RISK MANAGEMENT**

18. What are some of challenges that make it difficult for your organization to effectively deal with its credit risks sources?

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