

KWAME NKRUMAH UNIVERSITY OF SCIENCE AND TECHNOLOGY, KUMASI  
GHANA

Credit Risk Management Practices: A Comparative Study between Commercial Banks and  
Microfinance Institutions

By

Stanley Danyo (BSc. Business Administration)

A Thesis submitted to the Department of Accounting and Finance  
College of Humanities and Social Sciences  
in partial fulfilment of the requirements for the degree of

MSC ACCOUNTING AND FINANCE (IDL)

DECEMBER, 2020

## DECLARATION

I hereby declare that this submission is my own work towards the award of the MSc. Accounting and Finance (IDL) and that, to the best of my knowledge, it contains no material previously by another person or any material which has been accepted for the award of any other degree of the University, except where due acknowledgement has been made in the text.

Stanley Danyo

**(PG7230019)**

.....  
Signature

.....  
Date

Certified by:

Dr Joseph Akotey

**(Supervisor's Name)**

.....  
Signature

.....  
Date

Certified by:

Dr Daniel Domehe

**(Head of Department)**

.....  
Signature

.....  
Date

## DEDICATION

This thesis is dedicated to my brothers Gershon Danyo and Francis Danyo for their love, care and support.

# KNUST



## ACKNOWLEDGEMENT

First and foremost, I would like to thank the Almighty God who has seen me throughout the project work to its success.

I am also grateful to my humble supervisor for his support and guidance throughout the work.

My completion of the project could not have been accomplished without the support of my classmates and friends, Juana Mantey and Ebenezer Baddoo.

I am full of commendation for the staff of the various financial institutions who took time of their busy schedule to partake in the study.

Finally, I am grateful to all and sundry whose contributions assisted me in one way or the other to make my dream a success.



## ABSTRACT

**Background:** The financial sector has witnessed astronomical growth in the last two decades both worldwide and locally as well; it is evidenced by the increment in the number of financial institutions in Ghana. This observation could be partly attributed to the enabling environment created through the enactment of laws and the liberalization of the financial sector making it very competitive. Most studies conducted in this field in Ghana have documented credit risk management practices either in a commercial bank or a microfinance institution but none has tried to look at a comparative study of the credit risk practices in the commercial banks and microfinance institutions in Ghana.

**Aim:** The aim of the study was to compare the credit risk practices between commercial banks and microfinance institutions.

**Methods:** Convenience sampling was used for selecting commercial banks and MFIs whereas the selection of participants, workers involved in credit management processes, was done by simple random sampling. The instrument used for data collection was closed-ended questionnaire. STATA version 14 and Microsoft Excel were employed in analysing the data.

**Results:** Generally, the highest educational level of the credit management officials in commercial banks and MFIs was adequate with the lowest being level being HND. The area of risk identification needs a lot of improvement as the results showed low mean practice scores in both commercial bank and MFIs. MFIs reportedly were lacking in the areas of risk monitoring and reporting, risk assessment and analysis, risk management practices, and understanding risk and risk management. Credit culture was the constraint that was reported the most among both commercial bank and MFI officials. On the other hand, inadequate education, training and number of staff for the credit department among commercial bank



respondents whereas inadequate number of staff for the credit department among were the least reported constraints.

Conclusion: Highly qualified and well-trained individuals are needed to properly scrutinize loan applications. Therefore, it is of great importance to employ personnel who have adequate educational qualification and equip them with analytical skills through training. In addition, scheduling a routine assessment carried out by an external team to address the personal biases of credit managers as well as the creation of an early detection system to alert credit managers of non-performing loans for action to be taken will go a long way to improve credit risk management practices. The major constraint identified by both respondents of commercial banks and microfinance institutions. Therefore, further studies could be conducted to find out what credit culture(s) seem to be bothering the staff of the credit departments.



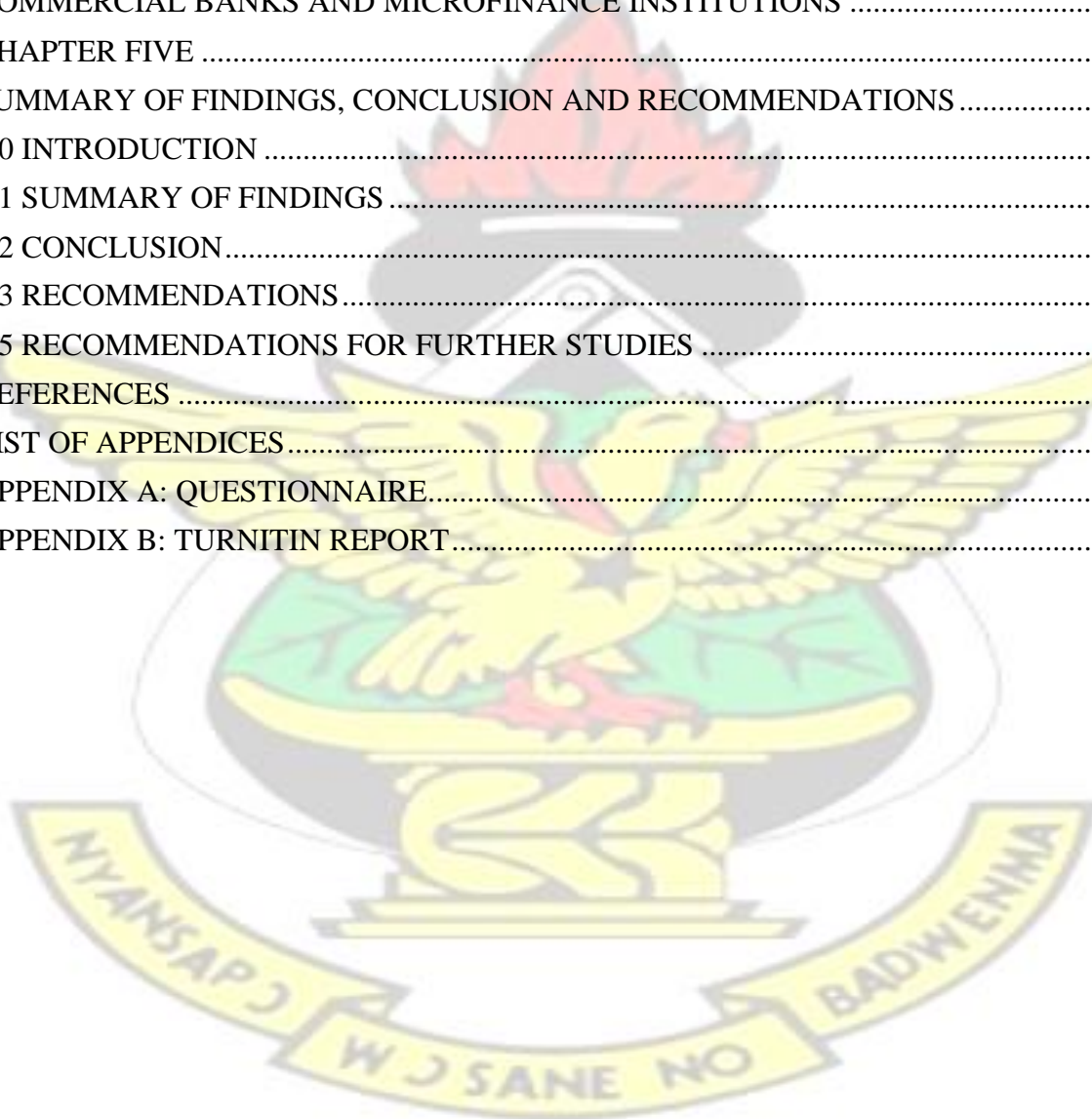
## TABLE OF CONTENTS

DECLARATION .....	i
DEDICATION .....	ii
ACKNOWLEDGEMENT .....	iii
ABSTRACT .....	iv
TABLE OF CONTENTS .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	ix
LIST OF ABBREVIATIONS .....	x
CHAPTER ONE .....	1
INTRODUCTION .....	1
1.0 BACKGROUND TO THE STUDY .....	1
1.1 PROBLEM STATEMENT .....	3
1.2 OBJECTIVES OF THE STUDY .....	4
1.3 RESEARCH QUESTIONS .....	5
1.4 SIGNIFICANCE OF THE STUDY .....	5
1.5 BRIEF METHODOLOGY .....	6
1.6 SCOPE AND LIMITATIONS .....	6
1.6.1 Scope .....	<b>Error! Bookmark not defined.</b>
1.6.2 Limitations .....	7
1.7 ORGANIZATION OF THE STUDY .....	7
CHAPTER TWO .....	9
LITERATURE REVIEW .....	9
2.0 INTRODUCTION .....	9
CONCEPTUAL LITERATURE .....	9
2.1 UNDERSTANDING THE CONCEPT OF RISK .....	9
2.2.1 Definition of Risk .....	9
2.1.2 Credit Risk .....	10
2.2 WHAT IS CREDIT MANAGEMENT .....	12
2.3 THE CREDIT MANAGEMENT PROCESS .....	13
2.3.1 Credit Initiation and Analysis .....	13
2.3.2 Credit Approval .....	15
2.3.3 Documentation and Disbursement .....	16
2.3.4 Credit Monitoring .....	16
2.3.5 Credit Recovery .....	17
2.4 THE BARRIERS TO EFFECTIVE CREDIT MANAGEMENT .....	18

2.4.1 A Financial Institution's Credit Culture .....	20
2.4.2 Inadequate Education and Training .....	21
2.4.3 Individual Biases.....	21
2.5 MEASURES TO REDUCE THE RISK ASSOCIATED WITH CREDIT MANAGEMENT .....	23
2.5.1 Establishing a Relevant Credit Risk Environment.....	23
2.5.2 Operating Under a Safe Credit Delivery Process .....	24
2.5.3 Ensuring Adequate Controls over Credit Risk.....	25
2.6 THEORIES OF CREDIT RISK MANAGEMENT.....	25
2.6.1 Information Asymmetry.....	25
2.6.2 Credit Scoring Approach .....	27
2.6.3 Behavioural Approach .....	28
EMPIRICAL LITERATURE .....	29
CHAPTER THREE .....	33
RESEARCH METHODOLOGY.....	33
3.0 INTRODUCTION .....	33
3.1 RESEARCH DESIGN .....	33
3.2 POPULATION OF THE STUDY .....	33
3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE .....	34
3.3.1 Sample Size.....	34
3.3.2 Sampling Technique .....	34
3.4 DATA COLLECTION .....	35
3.4.1 Data Source.....	35
3.4.2 Data Collection Method.....	35
3.5 DATA ANALYSIS.....	36
3.5.1 Objective One: To assess the qualification and skills sets of credit management employees in the commercial banks and microfinance institutions.....	36
3.5.2 Objective Two: Assess the risk management practices of commercial banks and microfinance institutions.....	36
3.5.3 Identify and rank the constraints in the credit risk management practices in commercial banks and microfinance institutions.....	38
3.6 RELIABILITY AND VALIDITY OF DATA (PRE-TEST).....	39
3.7 ETHICAL CONSIDERATION .....	39
CHAPTER FOUR.....	40
RESULTS AND DISCUSSION .....	40
4.0 INTRODUCTION .....	40
4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS .....	40



4.2 ASSESSMENT OF QUALIFICATION AND SKILLS SETS OF CREDIT MANAGEMENT EMPLOYEES IN THE COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS .....	43
4.3 ASSESSMENT OF THE RISK MANAGEMENT PRACTICES OF COMMERCIAL BANKS AND MFIs.....	45
DISCUSSION OF FINDINGS .....	83
4.5 QUALIFICATION AND SKILLS SETS OF CREDIT MANAGEMENT EMPLOYEES IN THE COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS .....	83
4.6 RISK MANAGEMENT PRACTICES OF COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS.....	83
4.7 CONSTRAINTS IN THE CREDIT RISK MANAGEMENT PRACTICES IN COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS .....	84
CHAPTER FIVE .....	85
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS .....	85
5.0 INTRODUCTION .....	85
5.1 SUMMARY OF FINDINGS .....	85
5.2 CONCLUSION.....	85
5.3 RECOMMENDATIONS.....	86
5.5 RECOMMENDATIONS FOR FURTHER STUDIES .....	86
REFERENCES .....	87
LIST OF APPENDICES.....	92
APPENDIX A: QUESTIONNAIRE.....	92
APPENDIX B: TURNITIN REPORT.....	101



## LIST OF TABLES

Table 4.1: Demographic Characteristics of Respondents .....	40
Table 4.2: Assessment of Qualification and Skills Sets of Credit Management Employees in the Commercial Banks and Microfinance Institutions.....	43
Table 4.3: Assessment of The Risk Management Practices of Commercial Banks and Microfinance Institutions .....	45
Table 4.4: Mean Scores of The Risk Management Practices of Commercial Banks and Microfinance Institutions .....	59
Table 4.5: Overall Risk Management Scores .....	76
Table 4.6: Constraints in the credit risk management practices in Commercial Banks and Microfinance Institutions (N=155) .....	78
Table 4.7: Constraints in the credit risk management practices in Commercial Banks (n=130) .....	79
Table 4.8: Constraints in the credit risk management practices in Microfinance Institutions (n=25).....	80

## LIST OF FIGURES

Figure 4. 1: Mean scores of Risk Management Practices for respondents from Commercial Banks and MFIs (Source: Danyo (2020)) .....	77
Figure 4. 2: Mean Score of Constraints in the credit risk management practices in Commercial Banks and Microfinance Institutions (Source: Danyo (2020)) .....	81

## LIST OF ABBREVIATIONS

<b>Abbreviation</b>	<b>Meaning</b>
<b>ACCA</b>	Association of Chartered Certified Accountants
<b>CAMELS</b>	Capital Adequacy, Asset Quality, Management Quality, Earnings Record, Liquidity Position, and Sensitivity
<b>CAMPARI</b>	Character, Ability, Margin, Purpose, Amount, Repayment, Insurance/Security
<b>CCCPPARTS</b>	Character, Capital, Capability, Purpose, Person, Amount, Repayment, Terms and Security
<b>CFA</b>	Chartered Financial Analyst
<b>CIB</b>	Chartered Institute of Bankers
<b>FRM</b>	Financial Risk Manager
<b>HND</b>	Higher National Diploma
<b>ICA</b>	Institute of Chartered Accountants Ghana
<b>MFI</b>	Microfinance Institution
<b>NPL</b>	Non-Performing Loan
<b>PARSER</b>	Person, Amount, Repayment, Security, Expediency, and Remuneration
<b>RAAC</b>	Risk Asset Acceptance Criteria
<b>TARP</b>	Troubled Asset Relief Program
<b>TGL</b>	Total Gross Loans
<b>US\$</b>	United States Dollars
<b>VaR</b>	Value at Risk

## CHAPTER ONE

### INTRODUCTION

#### 1.1 BACKGROUND TO THE STUDY

The past two decades has seen tremendous growth in the financial sector in Ghana in particular, and globally in general, in terms of the number of financial institutions that have been established. This observation could be partly attributed to the enabling environment created through enactment of laws and the liberalization of the financial sector making it very competitive. A direct outcome of this intense competition has been the many innovative products from the various financial institutions for increased customer service and satisfaction (Asante, 2015). Over the years, the commercial banks as well the numerous microfinance institutions (MFIs) have been a major source of funding to individuals, micro-enterprises, small- and medium-scale enterprises, which in turn serve as a principal income generation source for these institutions through interest accrued from credit facilities.

Kiiru (2004) [cited in Nyawera (2013)] notes that, though the issue of credit in the financial sector dates back in history; it only came into prominence in Europe and Africa after *World War II*. Even in the United States, the concept of credit only became popular after banks had excess liquidity and needed an outlet to dispense with excess funds following the economic boom in 1885 (Ditcher, 2003). Prior to that, borrowers had found the high interest rates charged by banks a deterrent and a disincentive.

The culture of borrowing became prominent in Africa in the 1950s through the opening of credit sections and departments by banks to serve the elite in society. However, over the years, a lot of loan defaulters were recorded especially in the 1990s and this resulted in the formulation and incorporation of stringent assessment of the ability of customers to repay loans in the credit management process (Modurch, 1999). This however did not resolve the issue of loan default.



Default in loan repayment by customers is a challenge for many operators in the financial services industry. Altman (2002) states that, faced with a highly competitive financial sector characterized by unpredictable monetary landscape, rising default rates and expanding levels of consumer and commercial debt, a financial institution's capacity to adequately monitor and manage its credit risk could make the difference between success and failure. Thus, one of the essential practices of prime importance to any financial institution that advances credit to its customers is credit risk management.

Credit risk management is generally seen as the process that ensures that customers pay for the credit advanced to them in addition to the required interest rate charged at the due date of repayment. However, Myers and Brealey (2003) give a more apt description by stating that, credit risk management deals with the methods and strategies adopted by a firm to ensure that they maintain an optimal level of credit and its effective management. Nelson (2002) also argues that credit risk management is the means by which an enterprise manages its credit. Beyond these definitions, credit risk management is noted to be a key component of financial management and involves the key activities of credit analysis, credit rating, credit administration, credit classification and credit reporting.

In the same vein, Chua et al. (2000) notes that credit decision is dependent on the financial data and judgmental assessment of the market outlook, borrower, management and shareholders. The follow-up is carried out through periodic reporting reviews of the financial institution's commitments by the customer (Chua et al. 2000). Credit risk management incorporates decision making process; before the credit decision is made, follow up of credit commitments including all monitoring and reporting process (Fayman, 2011).

The foregoing indicates that, credit risk management is one of the key functions of financial institutions. Those financial institutions, which analyze credit risks more consciously, protect themselves from negative events, thus obtaining comparative advantage over their competitors.



That is why careful credit risk management is important for smooth cash flow and success of overall financial performance of financial institutions.

While deteriorating credit quality is the most frequent cause of poor financial performance in many financial institutions in the country, sound credit risk management practices are advocated for as a precondition for a financial institution's stability and continuing profitability.

## **1.2 PROBLEM STATEMENT**

Financial institutions play a very important role in the development of economies in the world. They do this by playing their intermediary role in channelling excess funds from ultimate lenders to ultimate borrowers in the form of loans (Mishkin, 2004). This important role will be undermined if the banks are not able to retrieve the loans they give out and this may lead to eventual collapse of the financial system of a country. The primary objective of financial institutions is to provide financial services (credit and savings) to people in order to get profit. However, there is a major difference in how the commercial banks and microfinance institutions operate. Commercial banks are usually strict and formal in the appraisal process for loans as compared to the microfinance institutions. Microfinance institutions offer loans mostly to urban and rural peoples who cannot afford collaterals to get loans from the commercial institutions. Financial services in Ghana are largely characterised by high urban concentration. To fill the gap microfinance institutions, provide credit to poor who lack access of formal credit financial institutions. To the extent that commercial banks and microfinance institutions differ in terms of the rules that govern their operations in the country, one would want to find out is this difference a major factor in the loan defaults levels among the two. Also are there any immediate causes or other environmental factors that make default levels differ? A myriad of issues may then come to the fore. Can one attribute this to the over-zealousness

on the part of lending officers, over-reliance on collateral and absence of a sound credit culture all of which culminate in bad debts? Could it be due to defectiveness in the selection process and identification of potential borrowers and/or errors in the selection of business enterprises as to those meriting credits? Or could it be due to long-drawn out appraisal/approval processes, poor appraisal techniques? All these issues are integral to a sound credit risk management practice. Most studies that have been conducted in this field in Ghana have only concentrated on credit risk management practices in only either a commercial bank or a microfinance institution (Ohene,2015; Asante, 2015; Danso, 2015; Ahiable, 2012). No study, has tried to look at a comparative study of the credit risk practices in the commercial banks and microfinance institutions in Ghana. It is therefore imperative to conduct this comparative study to find the root causes of loan defaults, identify possible system lapses and make recommendations towards reversing the upward trend in Ghana's rate of NPL to TGL.

### **1.3 OBJECTIVES OF THE STUDY**

The main objective of the study was to compare the credit risk practices between commercial banks and microfinance institutions.

Specifically, the study seeks to achieve the following objectives:

1. To assess the qualification and skills sets of credit risk management employees in the commercial banks and microfinance institutions
2. To assess the risk management practices of commercial banks and microfinance institutions
3. To identify and rank the constraints that are militating against credit risk management practices in commercial banks and microfinance institutions.

## **1.4 RESEARCH QUESTIONS**

Questions formulated to address the essential issues that the study seek to investigate are:

1. What are the qualifications and skills set of credit risk management employees in commercial banks and microfinance institutions?
2. What are the risk management practices of commercial banks and microfinance institutions?
3. What are the constraints that are militating against effective credit risk management in commercial banks and microfinance institutions?

## **1.5 SIGNIFICANCE OF THE STUDY**

The findings of the research will be of great importance to the Commercial Banks, Microfinance Companies, and the whole financial sector in Ghana, Governmental Agencies, and regulators of the various financing associations, and other researchers. Relevance of this study lies in the fact that most of the previous studies in this field have been done elsewhere and have focused on the relationship between credit risk management and financial performance (Gisemba, 2010; Ikua, 2015; Moti, Masinde, Mugenda and Sindani, 2012). In Ghana, very few studies have been done on credit risk management practices. Amongst these are studies by Ohene (2015) in Rural Banks, Asante (2015) in Savings and Loans Companies, Danso (2015) in Credit Unions, Ahiable (2012) in banks with a case study of ADB branches in the Eastern Region and Afriyie and Akotey (2012 and 2013)

Noting from the studies done so far that not much has been done with regards to comparatively examining the credit risk management practices between the commercial banks and microfinance institutions in Ghana, this study will add to knowledge by providing valuable information to industry practitioners to inform formulation and/or revision of policies and

strategies relevant to credit risk management practices in Ghana and thus contribute to strengthening the economy.

Secondly, this study will help the government agencies and regulatory bodies to have a practical understanding of the credit risk management practices adopted by the commercial banks and Microfinance institutions in Ghana. This understanding will then help in the formulation of appropriate policies and regulations for the sector and for the commercial banks and Microfinance institutions to play their intermediary role well.

Thirdly, in view of the fact that there is a low level of studies done on this subject in Ghana, this study will fill the knowledge gap and add to the existing body of knowledge.

Lastly, this study will serve as a foundation for further research on the subject matter and is thus relevant in this respect.

## **1.6 SCOPE OF THE STUDY**

The scope of the study included demographic characteristics of respondents, the assessment of the risk management practices, the qualification and skill set of credit management employees, risk management practices and the constraints in the credit risk management practices in commercial banks and microfinance institutions.

## **1.7 SUMMARY METHODOLOGY**

Convenience sampling was used for selecting commercial banks and MFIs whereas the selection of participants, workers involved in credit management processes, was done by simple random sampling. The instrument used for data collection was closed-ended questionnaire. STATA version 14 and Microsoft Excel were employed in analysing the data.



## 1.8 LIMITATIONS OF THE STUDY

The lack of access and time constraints on the part of the participants was quite challenging. Moreover, the study was unable to ascertain the level of training of the participants.

## 1.9 ORGANIZATION OF THE STUDY

The research is structured to provide a critical comparative examination of the credit management practices between commercial banks and Microfinance institutions in Ghana. The research is therefore organized in five chapters as outlined below:

- **Chapter one** provides a brief introduction to the background of the research along with the research problem. The chapter also outlines the objectives, purpose and research questions together with the significance and the organization of the research.
- **Chapter two** presents a review of relevant literature on the credit risk management practices in banks and Microfinance institutions. The review of theoretical literature presents theoretical underpinnings relating to key concepts and issues about the study. The review of empirical literature on the other hand provides an overview of research previously conducted on the subject being investigated.
- **Chapter three** deals with the methodology which includes the research design, study population and sampling techniques, data collection instrument and method, data processing and analysis, and ethical considerations.
- **Chapter four** entails data presentation, discussion, and analysis of findings in relation to the literature review. In other words, this chapter analyses the data collected and discuss the results obtained.



- **Chapter five** highlights the key findings of the study. In addition, the research implications for policy has been discussed, recommendations made and suggestions for further research stated. The references and appendices follow this chapter.

# KNUST



## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

This chapter entails the review of literature and is in two parts which are conceptual literature review and the empirical literature review. The review of theoretical literature presents theoretical underpinnings relating to key concepts and issues about the study. The review of empirical literature on the other hand provides an overview of research previously conducted on the subject being investigated.

#### **2.1 CONCEPTUAL LITERATURE**

##### **2.1.1 UNDERSTANDING THE CONCEPT OF RISK**

###### **2.1.1.1 Definition of Risk**

In recent year, the concept of risk has been defined and explained variously by several researchers from diverse academic fields (Fayyaz, 2006; Bessis, 2002; Gallati, 2003; Rahman, Abdullah & Ahmad, 2012; Ghosh, 2012; Schroeck, 2002;) however, there is no consensus on the definition. In its simplest form, risk as it relates to the financial sector may be defined as a possibility of loss from a transaction. However, Vasavada *et al.*, (2005) give an elaborate definition of risk in the financial sector by stating that, “a risk can be defined as an unplanned event with financial consequences resulting in loss or reduced earnings”. In addition, an exposure to unpredictability of the outcome that comprises a probability of variation in the desired or expected returns may also be referred to as risk in the financial sector (Gallati, 2003; Fayyaz, 2006; Rahman, Abdullah & Ahmad, 2012). On the other hand, Ghosh (2012) provides the definition of risk as “a potential loss that may occur due to some antagonistic events such as economic downturns, adverse changes in fiscal and trade policy, unfavourable movements

in interest rates or foreign exchange rates, or declining equity prices”. Moreover, an interpretation of risk in banking was given as the “undesirable impacts on returns due to various distinct sources of uncertainties” (Bessis, 2002; and Schroeck, 2002). Furthermore, both authors made note of a limitation that the banking risks depend on the real-world situations which also encompassed a merger of several situations in the external environment.

Risks usually come about as a result of the uncertainty associated with a particular transaction. In other words, an activity which may give profits or result in loss may be called a risky proposition due to uncertainty or unpredictability of the activity of trade in the future (Carey, 2001). Financial institutions undertake a lot of transactions and there are various degrees of risk attached to many of these transactions. These risks include liquidity risk, interest rate risk, market risk, credit or default risk and operational risk.

In conclusion, the term risk in the financial sector can be defined by reflecting on the definitions provided earlier as a probability of any event or threat which has the potential to disturb the core earnings capacity of a financial institution, or to increase the volatility of earnings and cash flows caused by both internal and external exposures.

#### **2.1.1.2 Credit Risk**

When any financial institution advances credit to its clients, it expects that the client will be able to pay back the principal given in addition to the required interest rate charged on the loan. However, there have been instances of clients defaulting and failing to honour their obligations. Failure of a client to honour his/her obligations has dire consequences on the operations of the lending financial institution. According to Marzo (2008), credit risk is more simply defined as the potential of a bank borrower or counterparty to fail to meet its obligations in accordance with the agreed terms.

Colquitt (2007) acknowledged that credit risk is one of the leading and the essential types of banking risk. He defines credit risk as the “likelihood in which a contractual counterparty does not meet its obligations due to decline in repay ability or unwillingness to comply with the contract”. This implies that, when a bank financial institution fails to regain the lending money from a borrower, counterparty, or an obligator, then one can say that is a credit risk. It is in this same vein that Hempel and Simonson (1999) view credit risk as a threat that emerges when the financial institution in question fails in one way or the other to recover the principal or collect the interest on loans and securities as promised.

A Bank or Microfinance company’s principal source of income is the interest it charges when it advances credit to its clients. It is therefore imperative on these companies to be able to properly identify and estimate the risk involved in advancing credit. Calomiris and Mason (2003) assert that, all lenders bear credit risk and which they went further to explain as the risk of non-payment of the interest or principal or both as agreed upon. They then estimated credit risk by being observant of the proportion of assets that are below standard.

Brown (2007), asserts that credit or default risk depends on both internal and external factors. He further listed the components of the internal factors to include excessive dependence on collaterals, deficiency in credit policy and administration of loan portfolio, bank’s failure in post-sanction follow-up, and deficiency in appraising the borrower’s financial position prior to lending. According to Brown (2007), the main external factors included the health or state of the economy, fluctuations in interest rates, fluctuations in foreign exchange rates, and fluctuations in commodity prices.

Dhakan (2006) asserts that the most evident and major cause of credit risk are loans and advances in most banks. The scanning and monitoring of the most dependable loan applications, the degree of collateral of the applicant, the diversification of the loan portfolio,



and the accurate loan pricing depending upon the borrowers repay ability and intentions creates a comprehensive risk analysis practice that can go a long way to help banks eradicate the credit risk. (Karim, 2006; Van Greuning & Brajovic Bratanovic, 2009; Afriyie & Akotey, 2013).

### **2.1.2 WHAT IS CREDIT MANAGEMENT**

Credit management entails the formulation of credit policies within the framework of a business entity's overall objectives, approval or otherwise of credit requests, granting of credits, recording of the transactions, collection of the debts and accounting for those that have become bad and irrevocable (Stanley & Geoffery, 1996).

One of the two traditional roles of a financial institution is the granting of loans and advances to customers. These institutions, especially the commercial ones, have thrived over the years on income earned from this source. According to Barasa (2011), the objective of a financial institutions' credit management is two-fold: to earn interest income and hence make profit like any other profit-oriented organization, and to reduce the risk of defaults thereby remaining liquid. These two objectives are usually at cross-purposes and a balance must be maintained between them for a Banks and Microfinance companies to operate profitably. This assertion agrees with that of Hollensen (2003) who opined that credit administration is primarily concerned with the trade-off between profits from a liberal policy.

Pandey (1981) [cited in Tahir (2000)] also observed that the basic goal of credit management is that of maximizing the value of the company by achieving a trade-off between liquidity and profitability. This view seems to be a generally accepted approach to the understanding of the objectives of a financial institution's credit management, for one could argue that if the administration of bad debts is the sole objective of credit management, the institution will not grant facilities. Consequently, all the mobilized deposits of the institution will be invested in



low return risk free assets. Pandey further states that a firm will engage in credit in such a way that revenues are expanded and default risk involved is kept within acceptable limits.

### **2.1.3 THE CREDIT MANAGEMENT PROCESS**

The credit management process takes several forms and numerous structures are deployed to achieve the stated goals (Basu & Rolfes, 1995). They also note that the success of a financial institution is built on a credit management process that is properly streamlined and is of good quality. This is a key requirement for success by any financial institution. Supporting this, Oesterreichche National Bank (2005) lays emphasis on the importance of the individual stages in the credit management process.

The poor quality of a loan is sometimes due to factors attributable to external shocks that may affect the borrower's ability to repay the loan (Minsky, 1982). However, there are instances where the manner of lending and monitoring credit is responsible for the bad loan portfolio. In some other instances, weak credit risk management systems could also be the source of problem loans (Nishimura *et al.*, 2001). The credit management process basically comprises five steps as outlined in the following sections.

#### **2.1.3.1 Credit Initiation and Analysis**

The first stage of the credit management process is the credit initiation and analysis. Chelagat (2012) states that credit initiation and analysis have three main objectives. These objectives are to ensure that loans are granted in line with the credit policies and procedures approved by the institution, they meet the safety standards and guidelines of the institutions, and that an acceptable level of risk is assumed by the institution.

According to Chodechi (2004), Relationship Managers in the various credit departments of financial institutions scan through the financial market and the various sectors of the economy to identify potential business opportunities for the financial institutions. They also scan through the various industries which have the potential for growth so that their institutions can invest in them (Chodechi, 2004).

The next stage of the credit initiation and analysis stage is the designing of industry-specific criteria to guide the financial institution in terms of its exposure to risk. In order to set a criterion to check risk exposure in the various industries, the Risk Asset Acceptance Criteria (RAAC) is applied to the industries (Jain & Ghazala, 2003). The components of the RAAC applied usually contains both quantitative and qualitative information. This information includes the quality of corporate governance, net sales, net profit and the number of years the business has been operating.

The result of the analysis done by the credit department brings out some prospective clients, both businesses and individuals, who are shortlisted in accordance with the minimum risk criteria. However, Obamuyi (2007) asserts that although the focus of the financial institution is the shortlisted prospective clients, credit initiation can come from both the financial institution and as a request from an existing customer.

Assessing the credit worthiness of the customer usually involves a detailed study of six aspects of a loan application which comprises character, capacity, collateral, conditions, capital and common-sense. These aspects of the loan application analysis are classified as the six (6) Cs. The use of quantitative financial information, both historical and projected, together with qualitative information assists the credit officers in assessing the six Cs. Credit analysts use a checklist to assess the worthiness of a borrower's credit. The items of the checklist have been used to generate mnemonics which have become quite popular among credit analysts. The first

one has components to be Character, Capital, Capability, Purpose, Person, Amount, Repayment, Terms and Security which combines to form CCCPPARTS. the next mnemonic comprises Person, Amount, Repayment, Security, Expediency, and Remuneration which generate PARSER. Last but not the least is CAMPARI which has Character, Ability, Margin, Purpose, Amount, Repayment, Insurance/Security as its components (Rouse, 1989).

With regards to the performance of banks, Ishaq et al. (2016) recommend the CAMELS rating which involves six dimensions combined into one overall numerical rating. The CAMELS rating is drawn from Capital Adequacy, Asset Quality, Management Quality, Earnings Record, Liquidity Position, and Sensitivity to market risk.

#### **2.1.3.2 Credit Approval**

Credit approval is the second stage in the credit management process. According to Rouse (2002), the quality of any credit approval process hinges on two important factors; the comprehensive and transparent presentation of the various risks involved in the transaction and the appropriate assessment of the risks identified.

Therefore, after all the risks are identified and appropriately assessed, a draft of the credit application based on the information collected is prepared in accordance with the credit policy of the financial institution. A copy of the credit application with the appropriate highlight on the credit exposures of the financial institution is submitted to each member of credit committee for their review and subsequent approval or otherwise.

Following the review of the credit application document and subsequent credit approval of the credit request, the client is written to. The facility offer letter to the client details the terms and conditions of the approved credit facility.

### **2.1.3.3 Documentation and Disbursement**

The Legal Department of any financial institution is the appropriate department to deal with all issues of documentation. This is to ensure the institution does not infringe upon any law in the financial sector. The Legal Department prepares agreement documents between the financial institution and the client. According to Van Horne (2007), any agreement document prepared by the Legal Department must ensure maximum protection of the financial institution.

Abreham (2002) advises that the Legal Department must first be consulted before first any compromise to be reached with any client concerning any document. After all documentation issues have been addressed and the approving authorities are satisfied with the information in the document, the credit administration is then instructed for disbursement to be done.

### **2.1.3.4 Credit Monitoring**

According to Kumar (2016), credit monitoring can be defined as “a supervision of a loan account, on an ongoing basis, keeping a continuous vigil watch over the functioning of the borrower’s unit, to confirm that the account conforms to the various assumptions made at the time of sanction or last renewal”. One of the main objectives of every credit department in the various financial institutions is to ensure that non-performing loans in the books of the institutions are at the barest minimum. Credit monitoring thus helps the credit department; to ensure the end use of funds, to evaluate the credit department’s performance vis-à-vis to initiate timely corrective steps to deal with any challenge, and lastly, to ensure the quality of assets on the books of the institution (Chowdhury & Ahmed, 2007)

Salas and Saurina (2002) state that financial institutions with good and sound credit monitoring systems are able to get an early warning sign about customers who are becoming riskier six to nine months before they are faced with any serious challenge. On the other hand, financial



institutions without any good and sound credit monitoring systems only notice when the customer's ratings had deteriorated drastically (Salas & Saurina, 2002). The latter situation gives the financial institution very little opportunity to protect itself from losses.

In view of the foregoing, Ven and Majnini (2003) suggests that a good credit monitoring policy should have provisions that fully addresses certain issues. The issues to be addressed include credit supervision, scrutiny of returns and reports, scrutiny of audit reports, arresting slippages, catching warning signals and remedial actions, and finally restricting of accounts.

#### **2.1.3.5 Credit Recovery**

Dealing with the issue of non-performing loans is a major problem for most financial institutions. According to Agbakoba (2009), for these institutions to function well in this challenging environment, important consideration should be given to the aspect of the operations of the financial institution that looks at debt administration, its control and recovery. To be able to stay in business, the financial institutions have to devise workable and effective ways of checking lapses, leaks and inadequacies in their whole credit management process. It is therefore imperative for these institutions to deal aggressively and effectively with the challenge of non-performing loans to be able to honour their increasing responsibilities.

According to Gisemba (2010), to be able to devise any appropriate and effective strategy to recover a non-performing loan, it is vital to understand the reasons for the default of the loan by the client in question. Gisemba further asserted that this reason is only obtained from the analysis of the behaviour patterns of the customer in relation to the payment of the loan, leading up to the point where the customer became delinquent (Gisemba, 2010). However, the analysis should not be limited to only the behaviour of the account but should extend to the whole customer relationship across all the accounts of the customer.



Agbakoba (2009) proposed three fundamental stages within the credit recovery process. These stages are the pre-delinquent period, the early to mid arrears period and the late arrears period. Each stage in the credit recovery process has a business objective. The objective at the pre-delinquent period is to prevent default occurring, by restructuring debts to give the customer manageable payments. The objective of the early to mid arrears period is to retain 'good' customers by assisting them in resolving their debts within the shortest possible time whilst still providing excellent service. Customers unlikely to recover are accelerated through to the last stage. The objective of the last stage of the process, late arrears, is to collect as much of the outstanding debt with the least cost. Some accounts may be retained in-house while others are assigned to a third-party collection agency. Again, the objective is to recover as much of the debts as quickly as possible.

To be able to recover credit, a credible strategy has to be put in place. A credible and effective strategy should include four main elements namely segmentation, assignment, action and decision (Jay, 2009). In implementing these elements of the strategy, the various accounts are segmented and assigned to resources that are available to the institution based on the various criteria set. After the segmentation and assignment of resources, the actions to be taken are assigned variously to each segment of the accounts identified and then decisions are taken as to how to deal with each account in relation to which stage of the process the account finds itself in the three processes identified.

#### **2.1.4 THE BARRIERS TO EFFECTIVE CREDIT MANAGEMENT**

The concept of proper credit management practices in financial institutions has been in existence for some time now. However, this concept is particularly widely discussed anytime there is a failure of the banking system or a recession such as the global recession of 2008

(Barker, 2009). According to Lang and Jagtiani (2010), many studies conducted to ascertain the reasons for the recession in 2008 underscored credit management failure as one of the principal contributory factors to the recession. Leippold (2006) therefore argued that the problem of credit management failures in banks presupposes that either the approach to credit management or the implementation of credit management practices is lacking in some regards in the various banks.

There have been studies in the past which revealed a positive correlation between good credit management practices and bank performance (Walsh, 2010). However, Harner (2010) argued that many US banks at the time were not willing to embrace good credit risk management practices as observed from the 2008 recession. At the core of the barrier to effective credit management practices were the credit culture and individual biases coupled with lack of proper education (Harner, 2010)

Sherman (2006) states that any credit management technique adopted by any bank is principally focused at providing decision makers accurate information to identify, assess and reduce the default risk in granting credit. Sullivan and Drecnik (2010) therefore argue that any barrier coming from the bank to the realization of this aim is seen as highly counterproductive. Lang and Jagtiani (2010) conclude in their research on the failures of credit management that there is the need for competent internal control systems and a robust autonomous credit management function. As mentioned earlier, financial institutions usually face three potential barriers to credit management; credit culture, inadequate education and training, and individual bias.

#### **2.1.4.1 A Financial Institution's Credit Culture**

According to Basu and Rolfes (1995), credit culture is simply the framework within which viewpoints and principles on activities that are related to the credit management practices are shared within the context of the financial institution. They continue to argue that the credit culture of any financial institution has an effect on their credit management practices. In view of the above argument, Boffey and Robsin (1995) state that the culture and ethics of a financial institution may determine the type of credit or lending it gives out. Middlemiss (2004), in arguing along the same lines, asserts that financial institutions usually have a morally acceptable approach when assessing credit applications.

The credit culture of any financial institution is developed over a long period of time. Therefore, moving away from that culture is usually a difficult undertaking for many institutions. According to Harner (2014), Citigroup, which was one of the financial institutions that was most hit by the 2008 recession had a culture to win-at-all-cost. This culture made them stick to their investment policies even in the face of clear and significant risks of the underwritings the bank was undertaking. This resulted in the group making a loss of approximately US\$10 billion by the start of the fourth quarter of 2007 and necessitating a relief from the US government under the Troubled Asset Relief Program (TARP) to the tune of US\$351 billion dollars, of which US\$45 billion dollars was for capital infusion and US\$306 billion dollars for loans and securities guarantee (Harner, 2014).

A study conducted by Rossi (2009) revealed a link between credit culture and risk management practices in banks. The study concluded that, there was a strong positive relationship between harmonious credit culture and default risk. The study defines harmony in the context of credit management as “cultures that are more accepting of traditional ways of doing business rather than striving for innovation”. Therefore, those banks that are able to adjust their credit culture

to suit a particular season or situation are in a better position to reduce the default risk on the credit they advance.

#### **2.1.4.2 Inadequate Education and Training**

In the field of credit management, adequate educational qualification and training cannot be overemphasized. Hobbs (2003) revealed that, most banks with high non-performing loans on their books got into that situation as a result of their inability to properly assess the loan application to identify the risk involved in the transaction. Similarly, Hogan (2001) asserts that properly scrutinizing the loan application in order to identify the appropriate risk associated with any transaction is very essential to the survival of the financial institution. The proper scrutiny of the loan application can only be done by highly qualified and well-trained individuals.

Every year, persons with varied academic backgrounds enter the financial sector. These individuals come with degrees in economics, accounting, banking and finance, business and related fields. However, most of them lack the relevant practical experience to perform well in the field of credit management. Commenting along the same lines, Lopez and Saldenberg (2008) noted the need for financial institutions to provide their frontline staff with proper and comprehensive training to enable them assess and monitor loans efficiently.

#### **2.1.4.3 Individual Biases**

Managers all over the world on a daily basis are faced with the problem of individual bias in making decisions. However, these biases are not supposed to be to the detriment of the entire organization. Degryse and Ongena (2005) state that a financial institution may have an



elaborate credit management policy and procedure that guides managers as to what information to evaluate when assessing a loan application and the individual participants of such a risk assessment. However, Duke (2010) argues that such an elaborate policy or procedure themselves do not necessarily alter a financial institution's risk as regards advancing credit. He further states that this is due to the fact that decision making is by an individual, hence their individual biases and environments may influence them more than any policy or procedure document.

One type of bias that is common in decision making today is confirmation bias. Asem (2000) defines confirmation bias as the tendency for an individual or a group to place too much weight on evidence that are in support of their views and too little weight on evidence contrary to their views. A study conducted by Nutt (2002) revealed that confirmation bias exists in the banking sector. Individuals vested with the powers to grant loans in many cases place much weight on own judgment more than on considered opinions from colleagues on the credit management team (Nutt 2002). Hribar and Yang (2002) state that studies in the past have identified overconfidence as a trait affecting managers. Powerful positions held by such individuals make them forget that they can also err since they often believe in their uniqueness resulting in them overestimating their own abilities (Hribar & Yang, 2002).

The human problem in the credit management process in a way limits the efficiency of the entire process. The acknowledgement of such a limitation in the credit management process will help practitioners to find a solution to the problem. In this light, Harner (2014) suggests that training and outside assessment may help credit managers avoid some biases in risk assessment and decision making.

## **2.1.5 MEASURES TO REDUCE THE RISK ASSOCIATED WITH CREDIT MANAGEMENT**

The financial sector plays an important role in financing various investment activities in the form of granting loans to individuals and businesses in the Ghanaian economy. However, loan approval is associated with default risk which can cause insolvency issues for the financial institution. When borrowers default on the loans given them, it causes the financial institution to also be indebted to its depositors which can then lead to the eventual collapse of the financial institution. The failure of one financial institution may cause panic in the sector and consequently result in the failure of the domestic financial sector as a whole.

It is therefore important for banks to find ways to identify the risks associated with credit administration and deal with it. In this regard, the Basel Committee on Banking Supervision in September 2000 in its 54th Publication proposed certain measures to tackle the problem. These measures were:

- Establishing a relevant credit risk environment
- Operating under a safe credit delivery process
- Ensuring adequate controls over credit risk

The main points of the measures proposed above by the Basel Committee on Banking Supervision are highlighted below.

### **2.1.5.1 Establishing a Relevant Credit Risk Environment**

The board of directors have overall oversight responsibilities of the operations of a financial institution. Therefore, it is incumbent on the board of directors to intermittently or at least on an annual basis critically assess the credit risk system of the financial institution and propose practical credit management strategies and controls for the financial institution. Such a proposal

from the board of directors should take into consideration the risk threshold of the financial institution and the expected levels of profits under different levels of assumed risk.

It is the responsibility of the top management of the bank to see to the implementation of strategies developed by the board of directors. In implementing the strategies, they ought to develop policies and procedure to identify, measure, monitor and control credit risk. However, these measures should be in line with the credit risk tolerance of the bank.

In addition, the top management is expected to identify credit exposures in all activities and investment they undertake. Any investment or operations of the banks activities that deviate from its core strategy must be fully insured by adequate credit administration conventions and properly endorsed by its board of directors. (Basel Committee on Banking Supervision, 2000).

#### **2.1.5.2 Operating Under a Safe Credit Delivery Process**

In order for financial institution to operate effectively, they ought to have a credit granting criteria which is clear and well-laid out. These criteria should include the type of business transactions they are permitted to engage in with regards to lending. For instance, most financial institutions do not grant mortgage loans and this is a clear criterion that ought to be spelt out clearly by the bank. The document for the credit granting criteria should also contain the type of undertaking by the borrower which is accepted by the bank, the reason and nature of the loan facility and the way in which the facility will be financed or paid. This means that banks are expected to have clearly outlined processes for advancing loans to new clients and also clearly spelt out measures to deal with any changes that may occur during financing of the loan facility (Basel Committee on Banking Supervision, 2000).

### **2.1.5.3 Ensuring Adequate Controls over Credit Risk**

To be able to deal with the risks associated with credit management, financial institutions are expected to have frameworks that are autonomous of the operations of the financial institution and with adequate capacity to evaluate the financial institution's credit management procedures on a regular basis. The result of such evaluations and recommendations should be brought to the attention of the board of directors for onward incorporation into the credit management strategy of the bank.

Aside the external control measures, there ought to be an internal control measure such as constant evaluation of the credit exposure of the bank to ensure that, the financial institution is within the limits that were defined internally and also within the agreed levels of prudential standards. In addition, financial institutions are expected to have early detection systems to identify non-performing loans in order to swiftly deal with the danger. (Basel Committee on Banking Supervision, 2000)

## **2.2 THEORETICAL REVIEW**

### **2.2.1 Information Asymmetry**

The argument (Glanrz, 2002) makes with the theory of asymmetric information is that it may be impossible to distinguish good borrowers from bad borrowers. This phenomenon may result in adverse selection and moral hazards problems which have led to substantial accumulation of non-performing accounts in financial institutions especially the banks. The author goes on to explain that the very existence of banks is often interpreted in terms of its superior ability to overcome three basic problems of information asymmetry', namely ex ante, interim and ex post. According to Hayes (2005) a number of risk-adjusted performance measures have been proposed. The proposed measures, however, focus on risk-return trade-off thus, "measuring



the risk inherent in each activity or product and charge it accordingly for the capital required to support it". Despite the efforts being made to solve the issue of the recovery of the loanable amount, this fails to do that. The deployment of an effective system that can ensure the repayment of loans by borrowers within the stipulated time of repayment is very vital in dealing with asymmetric information problems and in reducing the level of loan losses. If any credit granting financial organizations can ensure these systems, then their long-term success is guaranteed (Glanfz, 2002).

Eppy (2005) states that the problem of perceived information asymmetry in the debt markets poses two basic challenges, adverse selection and moral hazard, for financial institutions in the country.

#### **2.2.1.1 Adverse Selection**

Mishkin (2004) states that adverse selection is an asymmetric information problem that arises before the transaction takes place. In this regard, those individuals and firms who have potential bad credit risks are the ones who will actively apply for loans (Mishkin, 2004). Thus, firms and individuals that are most likely to produce undesirable outcomes from the transactions are the most likely to request for the loans. According to Deakins and Hussain (2007), with this background in mind and not being able to differentiate between good and bad credit risk individuals and firms, most financial institutions are forced to either not grant loans at all or grant loans with premiums. Consequently, there are increases in interest rates over and above going rates as a form of compensation for the inability to differentiate between the good credit risk firm and a bad one (Deakins & Hussain, 2007). This situation of high interest rates arising from the risk premium results in the withdrawal of good credit risk firms from the market leaving only the bad risk firms. As a consequence of the high interest rates, Ogawn, Sterken

and Tokutsu (2000) argue that financial institutions usually end up with loan portfolios comprising almost entirely of bad credit risks.

#### **2.2.1.2 Moral Hazard**

Mishkin (2004) notes that moral hazard is an asymmetric information problem that arises after the transaction has taken place. This asymmetric information problem occurs as a result of the potential for a borrower to breach a loan agreement by engaging in activities that are considered immoral in the eyes of the lender as they may not only involve high risk but also have high possibility of success (Boot & Thakor, 1994). In this regard, the financial institution fears that the borrower may use the money for a purpose other than the intended and for which the loan was granted. The problem of moral hazard therefore comes with high monitoring costs for the financial institutions in making sure the loans are used for their stated purposes (Deakins & Hussain, 2007). To address moral hazard, most lenders have an exclusion list which bars establishment and maintenance of business relationships with clients engaged in any of the following activities; unethical and unsatisfactory labour conditions including concerns for the health and safety of workers, activities that impact negatively on the environment, the community, and climate change, and involvement in weapons of mass destruction.

#### **2.2.1.3 Credit Scoring Approach**

This is based on quantitative approach to credit risk management. It is a statistical procedure to first convert information about a credit applicant or an existing account holder into numbers that are then summed to get a score. This score is then seen as a measure of the credit risk of the individual concerned, that is, the probability of repayment. The credit scoring is important because it allows banks to avoid the riskiest customers and helps them to assess whether certain

kinds of businesses are likely to be profitable by comparing the profit margin that remain once operating and default expenses are subtracted from gross revenues. It uses data as input such as personal details, residence, employment status, referees, postal and physical addresses. It is also important for reasons of cost and consistency. Prior to the wide use of credit scoring, a credit officer had to review a credit application and use a combination of experience, industry knowledge and personal know-how to arrive at a decision based on the abundance of information in a typical application (Alexander, 2007).

#### **2.2.1.4 Behavioural Approach**

This theory is based on qualitative or subjective method to credit risk management. It is the use of subjective judgmental approach of credit risk decision. It uses the six Cs and CAMPARI approaches. The 6 Cs approach considers the 6 factors in assessing the creditworthiness of an individual or an entity. These qualitative factors include character which is the client credit history and reputation; capacity which is client's ability to pay and handle the proposed level of debt; capital which is the net value of a client's assets that forms back up liquidity to meet his repayment; condition on how client's employment or business withstand the vagaries of the economy, social, political and international environments, government regulation, completion and changes in bank's policies.; collateral is considered as a cushion for the financier to rely on when the primary source i.e. income does not come in; lastly common-sense which the use of individual general experiences and intuition. However, the CAMPARI approach consider seven factors which include; character , the willingness to pay; ability to repay which is adequacy of cash to meet repayment; margin of finance, client contribution of a certain margin as commitment; purpose which must be defined clearly; amount which the amount the financier is willing to contribute to the client; repayment terms that is the structure and terms of



repayment; lastly insurance for which in the event the borrower dies the loan can be settled from insurance proceeds (Alexander,2007).

### **2.3 EMPIRICAL LITERATURE**

The issuance of credit is the main activity undertaken by most financial institutions. Before the issuance of credit, there are processes that institutions follow to advance credit and this has led to the concept of credit management practice. Credit management practices have been studied by many researchers for improved understanding of the fine details of the concept.

A study conducted by Wanjiru (2016) to understand the management practices of unsecured loans in Commercial Banks in Kenya was quite revealing. The study noted that commercial banks with clearly developed credit policies with provision for clients without collateral by providing a high-level overview of the request and loan size limits for new borrowers are able to mitigate the bank's exposure to risk by following what is stipulated in the policy. Another finding of the study was that, most of the non-performing loans of the commercial banks are attributable to moral hazard and this was as a result of lapses in the loan monitoring process. With the issue of credit recovery, the study observed that the commercial banks mostly used the legal means to retrieve their money from chronic defaulters.

Ohene (2015), in examining the credit management practices of rural banks in Ghana found that, the default on bank loans were mostly as a result of non-supervision on the part of credit officers as well as the diversion of funds by borrowers. The study also revealed that the screening and risk analysis are done in relation to the business plan and awareness of the risk associated with a particular business. In addition, the character of the borrower and availability of collateral or security are two critical considerations in the award of credit. Also, the study showed that training before and after loan disbursement on the part of borrowers is very low in



the banks and the recovery programme was also not effective. Some of the credit officers were found not to be up to the task on loan appraisal, disbursement and recovery. And this situation adversely impacted the operations of the credit department of most of the banks.

Asante (2015), in assessing credit management practices in Savings and Loans Companies revealed that, client appraisal was a viable strategy for credit. And in appraising clients for the possibility of advancement of credit, it was important to have competent personnel do the appraisal. The study supported the findings of Ohene (2015) and also revealed that the appraisal should have a critical focus on the character of the client seeking the loan and the collateral or security. The study further revealed that the availability of credit policy assisted the institutions in the reduction of bad loans and also allowed credit managers to follow an effective process in appraising loans due to its comprehensive nature. The reason for this assertion was due to the fact that, the credit policy facilitated the reduction of errors and major risks associated with appraisal and disbursement.

In a study conducted by Hassan (2009) on the topic “Risk Management Practices of Islamic Banks of Brunei Darussalam” in order to assess the degree to which the Islamic banks in Brunei Darussalam implemented risk management practices and carried them out thoroughly by using different techniques to deal with various kinds of risks. It was revealed in the study results that Islamic banking system was no different from any other system of banking as it had several risks which were attributed to the special range of products offered together with the conventional products as well. The results also showed that the staff of the Islamic Banks in the city of Brunei Darussalam had a high level of understanding of risk and risk management which is a sign of their successful risk management capabilities. With regards to the risks these banks faced, foreign exchange risk, credit risk and operating risk were ranked highest. After the use of a regression model to elaborate the results, Hassan (2209) found that two variables (Risk Identification and Risk Assessment and Analysis) were the most influencing and that

understanding of the true application of Basel-II Accord would not only improve their risk management practices but also go a long way to improve the efficiency of Islamic Bank's risk management systems.

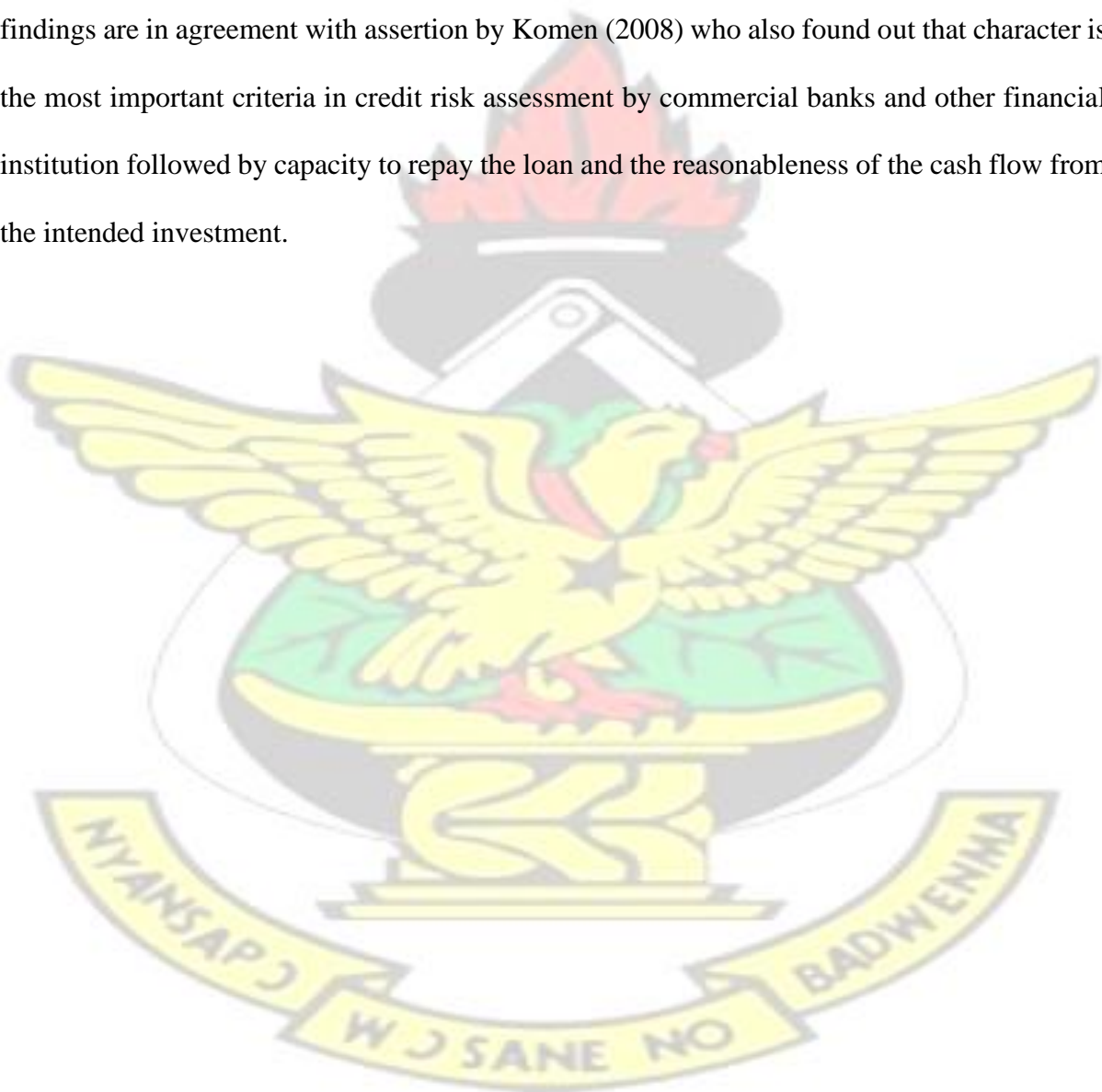
Mathara (2007) conducted a study to assess the response to the challenge of non-performing loans in the National Bank of Kenya Ltd (NBK). The results of his study revealed that the reasons for the non-performance was the lack of adequate credit policy guidelines, poor credit risk management practices, use of quantitative methods of loan assessment and poor monitoring and evaluation system. The lack of a current credit policy that is updated regularly and the inadequate monitoring of loans led to an increasing number of nonperforming loan portfolios and defaulter rates going unnoticed by the bank. The study concluded suggesting that the use of quantitative techniques that stressed on the borrower's projected cash flows and analysis of audited financial books of account would have improved the performance of the loan portfolio rather than the use of quantitative credit analysis methods that factored the character of the borrowers' reputation and the historical financial capability of the borrower.

In a comparative study of Bank's Risk Management of Malaysian National and Foreign Banks by Al-Tamimi (2007), they found out that foreign exchange risk, credit risk and then operating risk were the three most important types of risks facing the Malaysian commercial banks. The results of the study also revealed that the banks were somewhat efficient in managing risk while more influential factors of risk management processes were risk identification, assessment and analysis. The authors concluded that there was a significant difference between the Malaysian National and Foreign banks with regards to risk assessment practices.

Mwirigi (2006) examined the credit risk management techniques adopted by microfinance institution in Kenya concludes that 92% of the participants used credit management polices as a basis of objective credit risk appraisal, 67.5% had distinct departments where credit activities

are organized, 67.5% involved their institution in the development of credit risk management policies and 87.5% used present credit risk level as a 21 mean of managing credit risk. He also identified credit risk as the most component risk with 80% of the respondents ranking it as the most important among risks faced by their institutions.

Study on the use of 6 Cs credit risk appraisal model by Mutwiri (2003) finds that the most critical factors of the model are character, capacity and common-sense in that order. These findings are in agreement with assertion by Komen (2008) who also found out that character is the most important criteria in credit risk assessment by commercial banks and other financial institution followed by capacity to repay the loan and the reasonableness of the cash flow from the intended investment.



## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter presents a description of the methodology of the study. First, the research design that was used in the study is described. This is followed by the data collection procedure which involves Sample population, Sample Technique and Sample Size, Sources of Data and the Data Collection Instrument. Then the methods that were employed in data analysis is presented. Finally, the ethical issues of the study are presented.

#### **3.1 RESEARCH DESIGN**

A cross-sectional research design was used for the study. This is because data was collected from a cross section of staff who are in charge of the credit risk management process of the commercial banks as well as that of the Microfinance institutions at a particular time interval.

#### **3.2 POPULATION OF THE STUDY**

The target population of the study was made up of employees of the Commercial Banks and Microfinance institutions who are involved in the credit management process of their companies within the Greater Accra Region of Ghana. According to the Bank of Ghana, there are twenty-three (23) commercial banks and one hundred and thirty-seven (137) Microfinance institutions in Ghana. This brings the number of targeted institutions to one hundred and sixty (160) (Banking Supervision, 2020); Other Financial Institution, 2020).



### 3.3 SAMPLE SIZE AND SAMPLING TECHNIQUE

#### 3.3.1 Sample Size

It carrying out a study, it is usually not possible to include the whole population in the study. Therefore, there was the need to draw a sample from the population. In estimating the sample size for the study, the formula for proportions by Yamane was used (Yamane, 1967). The mathematical equation for calculating the sample size is:

$$n = \frac{N}{1+N(e)^2}$$

Where;

n = sample size,

N = population size and

e = level of precision (0.05)

When this formula was applied with a population of one-hundred and sixty (160), the representative sample size was one hundred and fourteen (114).

#### 3.3.2 Sampling Technique

First of all, convenience sampling of banks and MFIs was employed as a few of these financial institutions denied access to interviewers. Then simple random sampling technique was employed in choosing participants in cases where the financial institutions granted access to the interviewers. This technique was selected because each individual is chosen entirely by chance and each member of the population had an equal chance, or probability, of being selected.

### **3.4 DATA COLLECTION**

#### **3.4.1 Data Source**

The data for this study was obtained from both primary data source. The primary data was gathered using questionnaires which were administered to the individual employees of the Banks and Microfinance institutions who were involved in the credit management process.

#### **3.4.2 Data Collection Method**

There are a number of methods social science researchers use to collect data. In this study however, data was collected using questionnaires. In designing the questionnaire literature available to the researcher was considered. The ideas from the review of that literature and the research objectives helped formulate the basic information addressed by the questionnaire. A closed-ended questionnaire was completed by each of the selected respondent through a face-to-face interview. The questionnaire was distributed among credit management or credit department workers found in the commercial banks and microfinance institutions. These group of workers were chosen based on the fact that their work involved risk management practices. Crotty (2008) states that when a researcher wants to provide control over the participant's range of responses by the use of specific response alternatives, the best type of questions to fall on is close-ended questions. This allows for a simple way of summarizing and analysing the responses. The reason why the questionnaire method was selected as a means of data collection is based on the fact that it provides broader distribution of the sample and also helps in the collection of large data (Flick, 2006). Additionally, the collection of data from a potentially large number of respondents allowing for statistical analysis of the study results that used a questionnaire was more economical than any other method (Bryman and Cramer, 1997; Miller, 1983). Studies conducted on risk management practices in emerging markets by (Hassan, 2009;

Shafiq and Nasr, 2010; Al-Tamimi and Al-Mazrooei, 2007) also employed this research methodology.

### **3.5 DATA ANALYSIS**

The data collected was processed with two software packages, first STATA Version 14, which was used for data entry and analysis of relative frequency, central tendency and cross tabulation of variables. Microsoft Excel spreadsheet was used to develop all graphs and pie-charts.

#### **3.5.1 Objective One: To assess the qualification and skills sets of credit management employees in the commercial banks and microfinance institutions.**

In order to assess the qualifications and skills sets of the credit management employees of commercial banks and microfinance institutions, questions relating to the educational qualifications, number of years worked as a credit management administrator, professional qualifications attained among other were asked. These responses were analysed using descriptive statistics and gauged against the standard skills sets and qualifications that a credit management administrator should have.

#### **3.5.2 Objective Two: Assess the risk management practices of commercial banks and microfinance institutions**

A great number of studies published by renowned international bodies in the financial sector reported the main contributing factor to the 2007–2008 financial crisis to be weak risk governance (see, Financial Stability Board, 2013; Ika & Abdullah, 2011; Mongiardino & Plath, 2010). This finding was further supported by (Aebi, Sabato, & Schmid, 2012; Battaglia &

Gallo, 2015; Hashagen, Harman, Conover & Sharma, 2009; Watson & Holland, 2010; Sabato, 2010). The consensus among the scholars was that poor governance which later resulted in the lack of confidence of stakeholders in bank's ability to manage its asset and liabilities triggered the liquidity crisis of 2007. The crisis then served as a means in creating systematic risk which led to the spread of the crisis across borders (Hashagen, Harman, Conover and Sharma, 2009). A study by Derwall and Verwijmeren (2007) has also provided empirical evidence supporting the notion that good governance contributes directly to minor systematic risk.

Liquidity risk is considered as another significant factor which directly contributed to the financial crisis. Jenkinson (2008), for instance, stated that the crisis has highlighted clear weaknesses in the banks' liquidity risk management. This has undermined the financial stability of the banking industry and the economy as whole.

Besides liquidity and governance risk, other researchers (see, Al-Tamimi, & Al-Mazrooei, 2007; Hassan, 2009; Hussain & Al-Ajmi, 2012; Khalid & Amjad, 2012; Rosman, 2009; Shafiq and Nasr, 2010) made the effort to include risk assessment and analysis, risk monitoring and reporting, risk identification, understanding risk and risk management, and credit risk analysis as the main determinants of risk management practice. Also included are liquidity risk analysis, risk governance and type of institution.

There are eight subsections found in this section and they include Risk Management Practices, Risk Assessment and Analysis, Understanding Risk and Risk Management, Risk Monitoring and Reporting, Liquidity Risk Analysis, Credit Risk Analysis, Risk Identification, and Risk Governance. Each subsection has a number of statements, these statements correspond to a variable in the dataset. The value of a statement in the questionnaire was then entered into the corresponding statement variable. A mean score was then populated for each statement variable with the highest score being ranked the "best practiced" in credit risk management among the



participants whereas the lowest score inferred “poorly practiced” in credit risk management among respondents. The mean scores of each subsection were also generated to determine the one that performed best.

### **3.5.3 Identify and rank the constraints in the credit risk management practices in commercial banks and microfinance institutions**

The participants were allowed to indicate their level of agreements with identified constraints to the successful implementation of a sound credit risk management practices using a five-point Likert scale (1=strongly disagree, 2=disagree, 3=neither agree nor disagree, 4=agree and 5=strongly agree). Each constraint was generated as a variable so the values were entered per respondent, a mean score was then generated for each constraint variable. Here, the constraint with the highest score was ranked or deemed as the most pressing constraint while the one with the lowest score was deemed the least pressing constraint. The constraints presented to the credit managers included the following;

1. A financial institution’s credit culture
2. Inadequate education and training
3. Individual biases of the credit management administrator
4. Improper assessment of clients’ documents
5. Inadequate number of staff for the credit department

### **3.6 RELIABILITY AND VALIDITY OF DATA (PRE-TEST)**

The questionnaires were pretested in the Ho municipality (Volta Region, a location different from where the study was conducted) among 10 respondents. The pretesting allowed for further modification, of the framing and sequence of questions and as well determined the time for each questionnaire to be completed. A Cronbach's alpha of 0.94 was obtained for questions related to risk management practices. The Cronbach's alpha showed that the combination of the questions for assessing risk management practices had acceptable reliability based on Taber's interpretation that alpha values higher than 0.70 are widely recommended for satisfying reliability (Taber, 2018).

### **3.7 ETHICAL CONSIDERATION**

An introductory letter was sent to the management of the various Banks and Microfinance institutions, stating the purpose of the study and to seek for permission to use their various companies in study. The researcher ensured the confidentiality and anonymity of the respondents. In this regard, the respondents were first assured that, the information that they will provide was going to be used for academic purposes only. In addition, the respondents were given the chance to voluntarily participate in the research by asking for their consent before the administration of the questionnaires and that, they were free to withdraw their consent at any time in the course of the administration of the questionnaire.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.0 INTRODUCTION

This chapter presents the results and discussion of the study. The results section first looks at the demographic characteristics of respondents and then goes ahead to the assessment of the risk management practices, the qualification and skill set of credit management employees, risk management practices and the constraints in the credit risk management practices in commercial banks and microfinance institutions. The discussion of findings then follows for each of the research objectives.

#### 4.1 DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

*Table 4.1: Demographic Characteristics of Respondents*

<b>Sex of Respondent</b>	<b>Frequency (N=155)</b>	<b>Percentage (%)</b>
Female	52	33.6
Male	103	66.5
<b>Age Group of Respondents [Mean=34.0 SD=5.0]</b>		
Below 30	36	23.2
30 to 34	35	22.6
35 to 39	59	38.1
40 and above	25	16.1
<b>Highest level of Education</b>		
Bachelor's degree	60	38.7
HND	24	15.5
Master's degree	71	45.8
<b>Type of Financial Institution</b>		
Commercial Bank	130	83.9
Microfinance Institution	25	16.1
<b>Town or City</b>		
Accra	12	7.7
Adenta	9	5.8
Airport	7	4.5
Amasaman	5	3.2
Ashaiman	12	7.7
East Legon	20	12.9
Kokomlemle	8	5.2
Lapaz	5	3.2

Legon	12	7.7
Madina	7	4.5
Makola	6	3.9
Osu	4	2.6
Oyarifa	5	3.2
Ridge	8	5.2
Sakaman	5	3.2
Sarpeiman	3	1.9
Tema	15	9.7
Teshie	12	7.7
<b>Position in the Organization</b>		
Accountant	4	2.58
Admin officer	8	5.16
Assistant Relationship Manager	12	7.74
Audit	5	3.23
Branch Manager	1	0.65
Credit Officer	27	17.42
Data Entry Clerk	15	9.68
Field Sales Supervisor	10	6.45
Finance Officer	10	6.45
Forex	4	2.58
Head of Risk	9	5.81
Loan Recovery Officer	4	2.58
Money Markets	1	0.65
Office Clerk	8	5.16
Officer level	7	4.52
Personal Assistant	5	3.23
Relationship officer	4	2.58
Research Officer	4	2.58
Risk officer	7	4.52
Sales	7	4.52
Treasury back officer	4	2.58
<b>Number of years working as a credit management official</b>		
0 to 3 years	68	43.9
4 to 7 years	54	34.8
7 to 9 years	10	6.5
10 to 12 years	23	14.8
<b>Do you have any Professional Qualification</b>		
No	128	82.6
Yes	27	17.4
<b>State the Professional Qualification You Have (n=27)</b>		
ACCA	12	44.4
ACI dealing certificate	1	3.7
CIB	1	3.7
ICA Ghana	13	48.2

Source: Danyo (2020)



A total of 155 officers from both commercial banks and microfinance institutions participated in this study. About two-thirds (66.5%) of the respondents were male (103) while 52 participants representing 33.6% were female. The 30 to 39 years age group had the highest number of respondents 59 (38.1%) whereas the 40 years and above age group had the least number of respondents 25(16.1%). The mean age of the respondents was 34.0. Few of the respondents 24(15.5%) had HND as the highest level of education whereas most of them 71(45.8%) had a Master's degree and 60(38.7%) of them had a bachelor's degree. A large number of the respondents 130(83.9%) were working in a Commercial bank while very few of them 25(16.1%) worked in microfinance institutions. East Legon had the highest number of respondents, 20 representing 12.9% while the township with the least number of respondents was Sarpeiman with 3(1.9%). Credit officer was the position or job title with the most number respondents 27(17.4%) followed by Risk officer 16(10.3%) while the Branch manager position had the least with only 1(0.7%) respondent.

The years working as a credit management official with the most respondents are 0 to 3 years with 68 (43.9%) followed by 4 to 7 years with 54 (34.8%), and then 23 (14.8%) respondents for 10 to 12 years. The group 7 to 9 years of work as a credit management official had the least respondents with 10(6.5%).

A large number of respondents 128(82.6%) reportedly have no professional qualification while a few of them 27(17.4%) had a professional qualification. Out of the 27 respondents who had a professional qualification, 13(48.2%) had ICA Ghana, 12(44.4%) had ACCA, 1(3.7%) had ACI dealing certificate and 1(3.7%) had CIB qualifications.

## 4.2 ASSESSMENT OF QUALIFICATION AND SKILLS SETS OF CREDIT MANAGEMENT EMPLOYEES IN THE COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS

*Table 4.2: Assessment of Qualification and Skills Sets of Credit Management Employees in the Commercial Banks and Microfinance Institutions*

	Frequency (N=155)	Percentage (%)
<b>Educational Qualifications considered when hiring</b>		
BA and BSc Qualifications	4	2.6
BSc. Business Administration	3	1.9
Bachelor's degree with a Finance background	14	9.0
Chartered credit analysts	3	1.9
Economics & Business Admin	15	9.7
FRM/CFA/Masters in finance	2	1.3
Finance or Accounting	21	13.6
First degree	55	35.5
HND	12	7.7
Marketing	10	6.5
Risk management	16	10.3
<b>What Skills do you consider important for employing someone to the credit department?</b>		
Accounting/Finance	10	6.5
Analytical skills	49	31.6
Attention to details	6	3.9
Basic understanding of financial statements	5	3.2
Computer skills	5	3.2
Credit analysis	16	10.3
Credit appraisal and risk assessment	15	9.7
Degree	13	8.4
Finance background	12	7.7
Goal getter	1	0.7
Inter personal relations	10	6.5
Risk management	13	8.4
<b>Do Employees in the credit department receive any training?</b>		
Yes	155	100.0
No	0	0.0
<b>What kind of training is given to employees of the credit department?</b>		
External training	47	30.3
In house training	108	69.7
<b>What kind of training is given to employees of the credit department?</b>		
Advance Excel, Credit Regulation in Ghana	1	0.7
Credit Management Training	89	57.4
Financial and non-financial assessment training	16	10.3
In-depth credit training	12	7.7

Negotiation Skills	10	6.5
Relationship management training	4	2.6
Risk management and controls	23	14.8
<b>How many times is the training offered in a year</b>		
Once	48	31.0
Twice	66	42.6
Thrice	27	17.4
Four times	7	4.5
As and when necessary	7	4.5

Source: Danyo (2020)

The educational qualifications considered when hiring with the highest number of participants is First degree, 55(35.5%), with the second highest being Finance or Accounting, 21(13.5) and the FRM/CFA/Masters in Finance was the educational qualification with the least number of respondents.

A large number of the respondents 49(31.6%) identified analytical skills as a skill to consider when hiring someone to the credit union whereas he one considered the least important was goal getter, 1(0.7%).

All the respondents agreed that the employees in the credit department receive training. Out of the 155 respondents, 47 (30.3%) of them reportedly receive external training and 108(69.7%) receive in house training. The form of training given the employees range from Credit management training (which has the highest number of respondents, 60(38.7%)) to Advance Excel, credit regulation in Ghana, having the least number of respondents, 1(0.7%). Nearly half of the respondents 66(42.6%) reported that training was offered twice in a year followed by once a year, 48 (31.0%) and then the least with 7(4.5%) respondents being four times and as and when necessary.



### 4.3 ASSESSMENT OF THE RISK MANAGEMENT PRACTICES OF COMMERCIAL BANKS AND MFIs

*Table 4.3: Assessment of The Risk Management Practices of Commercial Banks and Microfinance Institutions*

	<b>Strongly Disagree [n (%)]</b>	<b>Disagree [n (%)]</b>	<b>Neither Agree nor Disagree [n (%)]</b>	<b>Agree [n (%)]</b>	<b>Strongly Agree [n (%)]</b>	<b>Mean Score</b>	<b>Standard Deviation</b>
<b>13. Risk Management Practices (N=155)</b>							
The institution's risk management policy clearly defines the roles and responsibilities carried out across its various functions	0 (0.0)	5 (3.2)	3 (1.9)	78 (50.3)	69 (44.5)	4.4	0.7
One of the objectives of the institution is having an effective risk management policy	0 (0.0)	7 (4.5)	5 (3.2)	54 (34.8)	89 (57.4)	4.5	0.8
The institution is highly effective in continuously reviewing its risk management strategies and performance	0 (0.0)	18 (11.6)	0 (0.0)	82 (52.9)	55 (35.5)	4.1	0.9
The executive management of the institution regularly reviews the institution's performance in managing its business risk	0 (0.0)	18 (11.6)	36 (23.2)	52 (33.6)	49 (31.6)	3.9	1.0
The institution risk management procedures and processes are documented and provide clear guidance to staff about managing risks	0 (0.0)	13 (8.4)	8 (5.2)	36 (23.2)	98 (63.2)	4.4	0.9
The institution policy encourages training programs in the risk management-related areas	0 (0.0)	20 (12.9)	16 (10.3)	71 (45.8)	48 (31.0)	3.9	1.0
The institution emphasizes on the recruitment of highly qualified people in risk management	0 (0.0)	11 (7.1)	41 (26.5)	57 (36.8)	46 (29.7)	3.9	0.9
The institution risk management policy is effectively communicated across the institution	0 (0.0)	18 (11.6)	24 (15.5)	82 (52.9)	31 (20.0)	3.8	0.9
The institution has a comprehensive risk management process which entails identifying,	1 (0.7)	7 (4.5)	20 (12.9)	66 (42.6)	61 (39.4)	4.2	0.9



evaluating, measuring, monitoring, reporting and controlling all its risks on a timely manner							
The institution risk management strategy is flexible enough to deal swiftly and adequately with all risks	0 (0.0)	0 (0.0)	22 (14.2)	107 (69.0)	26 (16.8)	4.0	0.6
The institution assesses the adequacy of its capital and liquidity on the basis of its risk profile, market and macro-economic conditions	0 (0.0)	20 (12.9)	10 (6.5)	77 (49.7)	48 (31.0)	4.0	0.9
The level of risk management practices of the institution is considered to be excellent	0 (0.0)	24 (15.5)	18 (11.6)	62 (40.0)	51 (32.9)	3.9	1.0
<b>14. Understanding Risk and Risk Management</b>							
There is a common understanding of risk management across the institution	0 (0.0)	18 (11.6)	12 (7.7)	112 (72.3)	13 (8.4)	3.8	0.8
Risk management responsibility is clearly set out and understood throughout the institution	0 (0.0)	10 (6.5)	8 (5.2)	133 (85.8%)	4 (2.6)	3.8	0.6
Risk management policy is communicated down the line and well understood by all institution - concerned parties	0 (0.0)	8 (5.2)	0 (0.0)	111 (71.6)	36 (23.2)	4.1	0.7
Accountability for risk management is clearly set out and understood throughout the institution	0 (0.0)	30 (19.3)	0 (0.0)	99 (63.9)	26 (16.8)	3.8	0.9
Risk management is important for the success and performance of the institution	0 (0.0)	8 (5.2)	0 (0.0)	64 (41.3)	83 (53.5)	4.4	0.7
Application of the most sophisticated techniques in risk management is pivotal in the institution	0 (0.0)	8 (5.2)	12 (7.7)	92 (59.3)	43 (27.7)	4.1	0.7
The objective of your institution is to expand the applications of the use of advanced risk management technique	0 (0.0)	18 (11.6)	4 (2.6)	115 (74.2)	18 (11.6)	3.9	0.8
It is significant for your institution to emphasize on continuous review and evaluation of the techniques used in risk management	0 (0.0)	8 (5.2)	0 (0.0)	88 (56.8)	59 (38.0)	4.3	0.7
The institution applies risk management techniques with the aim to reduce its costs or expected losses	0 (0.0)	8 (5.2)	10 (6.4)	60 (38.7)	77 (49.68)	4.3	0.8

<b>15. Risk Identification</b>							
The institution conducts a comprehensive and systematic identification of its risks in line with the institution's overall aims and objectives	0 (0.0)	8 (5.2)	4 (2.6)	70 (45.2)	73 (47.1)	4.3	0.8
Risk identification is a continuous process in the institution at transactional and portfolio levels	0 (0.0)	18 (11.6)	0 (0.0)	61 (39.3)	76 (49.0)	4.3	0.9
The institution finds it difficult to identify and priorities its main risks	28 (18.1)	43 (27.7)	30 (19.3)	23 (14.8)	31 (20.0)	2.9	1.4
Changes in risk are recognized and identified with the institution's rules and responsibilities	0 (0.0)	18 (11.6)	20 (12.9)	75 (48.4)	42 (27.1)	3.9	0.9
Your institution is aware of the strengths and weaknesses of the risk management systems of the other institution s	0 (0.0)	8 (5.2)	26 (16.8)	100 (64.5)	21 (13.5)	3.9	0.7
Your institution has developed and applied procedures for the systematic identification of investment opportunities	0 (0.0)	18 (11.6)	20 (12.9)	80 (51.6)	37 (23.9)	3.9	0.9
<b>16. Risk Assessment and Analysis</b>							
Your institution bank assesses the likelihood of risk occurrence	0 (0.0)	8 (5.2)	16 (10.3)	98 (63.2)	33 (21.3)	4.0	0.7
Your institution assesses risks by using qualitative analysis methods (e.g., high, moderate, and low)	0 (0.0)	8 (5.2)	28 (18.0)	73 (47.1)	46 (29.7)	4.0	0.8
Your institution assesses risk by using quantitative analysis method	0 (0.0)	8 (5.2)	50 (32.3)	50 (32.3)	47 (30.2)	3.9	0.9
Your institution analyses and evaluates the opportunities that it has to achieve objectives	0 (0.0)	8 (5.2)	3 (1.9)	105 (67.7)	39 (25.2)	4.1	0.7
Your institution's response to analyse risk includes an assessment of the costs and benefits of each relevant risk	0 (0.0)	18 (11.6)	3 (1.9)	92 (59.4)	42 (27.1)	4.0	0.9
Your institution's response to analyse risk includes prioritizing of risk and selecting those that need an application of active management	0 (0.0)	18 (11.6)	3 (1.9)	92 (59.4)	42 (27.1)	4.0	0.9

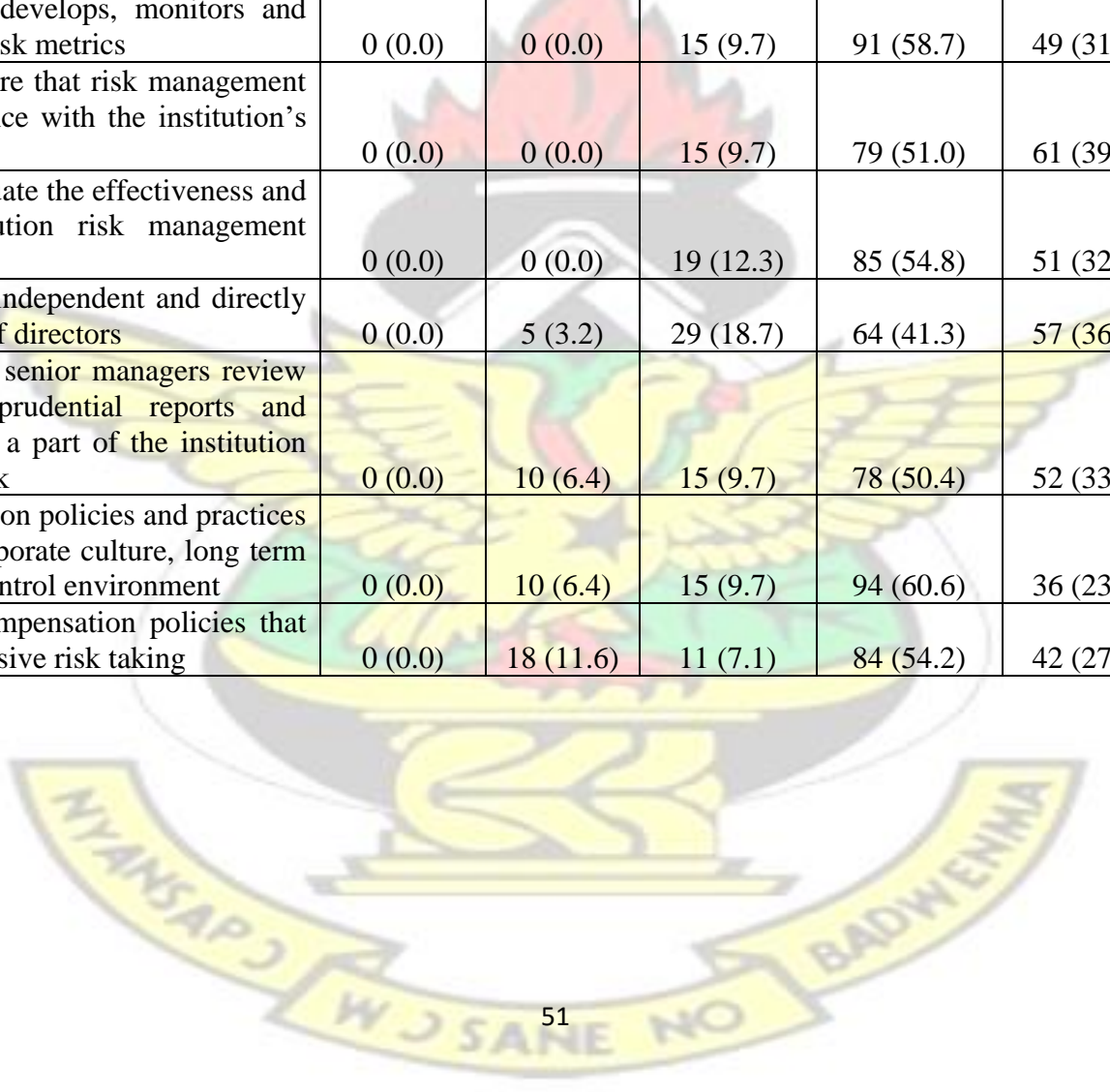
Your institution's response to analyse risk includes prioritizing risk treatments where there are resource constraints on risk treatment implementation	0 (0.0)	18 (11.6)	15 (9.7)	76 (49.0)	46 (29.7)	4.0	0.9
<b>17. Risk Monitoring and Reporting</b>							
Monitoring the effectiveness of risk management is an integral part of routine management reporting in the institution	8 (5.2)	13 (8.4)	5 (3.2)	64 (41.3)	65 (41.9)	4.1	1.1
Level of control by the institution is appropriate for the risks that it faces	18 (11.6)	3 (1.9)	5 (3.2)	70 (45.2)	59 (38.1)	4.0	1.2
Reporting and communication processes within the institution support the effective management of risks	0 (0.0)	11 (7.1)	10 (6.4)	84 (54.2)	50 (32.6)	4.1	0.8
The institution continuously evaluates the effectiveness of its existing controls and risk management responses	0 (0.0)	18 (11.6)	3 (1.9)	69 (44.5)	65 (41.9)	4.2	0.9
The institution response to risk includes action plans in implementing decisions about identified risk	0 (0.0)	18 (11.6)	3 (1.9)	78 (50.3)	56 (36.1)	4.1	0.9
The institution's managers continuously monitor the implementation of risk management policies and make necessary adjustments	0 (0.0)	18 (11.6)	3 (1.9)	111 (71.6)	23 (14.8)	3.9	0.8
The institution's managers regularly monitor the effectiveness of the risk management policies and procedures	0 (0.0)	21 (13.5)	0 (0.0)	81 (52.3)	53 (34.2)	4.1	0.9
The institution organizational structure enables monitoring and control over the business risk taken	0 (0.0)	13 (8.4)	13 (8.4)	80 (51.6)	49 (31.6)	4.1	0.9
<b>18. Credit Risk Analysis</b>							
The institution undertakes credit worthiness analysis before granting loans	0 (0.0)	8 (5.2)	0 (0.0)	61 (39.3)	86 (55.5)	4.5	0.7
The institution conducts thorough analysis of the client's characters, capacity, collateral, capital and conditions before granting loans	0 (0.0)	0 (0.0)	8 (5.2)	55 (35.5)	92 (59.3)	4.5	0.6



The institution classifies borrowers according to their riskiness	0 (0.0)	8 (5.2)	12(7.7)	57 (36.8)	78 (50.3)	4.3	0.8
The institution's credit policy commensurate with its overall risk management policy	0 (0.0)	12 (7.7)	18 (11.6)	63 (40.7)	62 (40.0)	4.1	1.1
The institution obtains information about the borrowers from credit information bureau	0 (0.0)	8 (5.2)	4 (2.6)	37 (23.8)	106 (68.4)	4.6	0.8
The institution sets credit limits by type of borrowers, economic sectors and geographical locations to avoid concentration of credit	0 (0.0)	8 (5.2)	0 (0.0)	92 (59.3)	55 (35.5)	4.3	0.7
Credit risk is monitored on a regular basis and reported to institution senior management.	0 (0.0)	12 (7.7)	18 (11.6)	49 (31.6)	76 (49.0)	4.1	1.1
The institution has a credit risk management committee to oversee its different credit risk exposures	12 (7.7)	10 (6.4)	8 (5.2)	42 (27.1)	83 (53.5)	4.1	1.2
The credit administration of the institution ensures proper approval, completeness of documents, receipt of collateral and approval of exceptions before credit disbursement	0 (0.0)	0 (0.0)	8 (5.2)	54 (34.8)	93 (60.0)	4.5	0.6
The institution board periodically reviews the credit risk strategy and credit policy	0 (0.0)	0 (0.0)	20 (12.9)	62 (40.0)	73 (47.1)	4.3	0.7
<b>19. Liquidity Risk Analysis</b>							
Liquidity is a key determinant of the institution financial soundness	0 (0.0)	0 (0.0)	8 (5.2)	19 (12.3)	128 (82.6)	4.8	0.5
The institution's "Management Board" defines liquidity risk strategy, and its tolerance for liquidity risk	0 (0.0)	0 (0.0)	8 (5.2)	60 (38.7)	87 (56.1)	4.5	0.6
Institution managers give due consideration to external and internal factors posing liquidity risk while formulating the liquidity policy	0 (0.0)	0 (0.0)	8 (5.2)	88 (56.8)	59 (38.0)	4.3	0.6
The current institution's policy clearly defines the institution liquidity strategy (short and long term)	0 (0.0)	0 (0.0)	20 (12.9)	61 (39.4)	74 (47.7)	4.3	0.7



The institution liquidity policy is flexible enough to deal with the unusual liquidity pressures	0 (0.0)	22 (14.2)	24 (15.5)	44 (28.4)	65 (41.9)	4.0	1.1
Board of Directors and Senior Managers regularly review the liquidity policy of the institution	0 (0.0)	12 (7.7)	17 (11.0)	59 (38.1)	67 (43.2)	4.1	1.1
The institution has always identified the tools to meet its liquidity requirements	0 (0.0)	12 (7.7)	12 (7.7)	58 (37.4)	73 (47.1)	4.2	1.1
Stress Testing and Scenario Analysis plays a central role in the liquidity risk management framework of the institution	0 (0.0)	12 (7.7)	22 (14.2)	78 (50.3)	43 (27.7)	3.9	1.1
The institution's Stress Testing is based on sophisticated risk management techniques including Value at Risk (VaR) and option-based models	0 (0.0)	12 (7.7)	34 (21.9)	59 (38.1)	50 (32.3)	3.9	1.1
<b>20. Risk Governance</b>							
The board of directors approves and oversees the institution risk management framework, policies and processes	0 (0.0)	0 (0.0)	13 (8.4)	77 (49.7)	65 (41.9)	4.3	0.6
The institution board of directors has relevant knowledge of the banking industry and risk management	0 (0.0)	0 (0.0)	25 (16.1)	51 (32.9)	79 (51.0)	4.3	0.7
The board of directors formulate and defines the mandate and responsibilities of board-level committees (Risk Committee; Audit committee) which deal with risk governance	0 (0.0)	8 (5.2)	3 (1.9)	88 (56.8)	56 (36.1)	4.2	0.7
Risk management committee members of the institution are independent and qualified	0 (0.0)	12 (7.7)	11 (7.1)	103 (66.4)	29 (18.7)	3.9	1.0
The institution risk management committee provides sufficient policies and guidelines on how to manage different risks	0 (0.0)	0 (0.0)	45 (29.0)	76 (49.0)	34 (21.9)	3.9	0.7
The Risk Committee reviews and recommends risk strategy to board of directors and oversees the implementation of risk management framework	0 (0.0)	8 (5.2)	25 (16.1)	101 (65.2)	21 (13.5)	3.9	0.7



The Chief Executive Officer develops and recommends the overall business strategy, risk strategy, risk appetite statement and risk tolerance	0 (0.0)	4 (2.6)	19 (12.3)	91 (58.7)	41 (26.4)	4.1	0.7
The Chief Risk Officer oversees the risk management functions of the institution	0 (0.0)	4 (2.6)	15 (9.7)	87 (56.1)	49 (31.6)	4.2	0.7
The Chief Risk Officer develops, monitors and reports on the institution risk metrics	0 (0.0)	0 (0.0)	15 (9.7)	91 (58.7)	49 (31.6)	4.2	0.6
The internal auditors ensure that risk management processes are in compliance with the institution's policies	0 (0.0)	0 (0.0)	15 (9.7)	79 (51.0)	61 (39.3)	4.3	0.6
The internal auditors evaluate the effectiveness and efficiency of the institution risk management processes	0 (0.0)	0 (0.0)	19 (12.3)	85 (54.8)	51 (32.9)	4.2	0.6
The internal auditors are independent and directly accountable to the board of directors	0 (0.0)	5 (3.2)	29 (18.7)	64 (41.3)	57 (36.8)	4.1	0.8
The institution board and senior managers review internal audit reports, prudential reports and external experts report as a part of the institution risk governance framework	0 (0.0)	10 (6.4)	15 (9.7)	78 (50.4)	52 (33.5)	4.1	0.8
The institution compensation policies and practices are consistent with its corporate culture, long term objectives, strategy and control environment	0 (0.0)	10 (6.4)	15 (9.7)	94 (60.6)	36 (23.2)	4.0	0.8
The institution avoids compensation policies that create incentives for excessive risk taking	0 (0.0)	18 (11.6)	11 (7.1)	84 (54.2)	42 (27.1)	4.0	0.9

Source: Danyo (2020)

Table 4.3 shows the level of agreement of respondents when asked about risk management practices for commercial banks and microfinance institutions. With regards to the risk management practices majority of the respondents agreed that institution's risk management policy clearly defines the roles and responsibilities carried out across its various functions with a recorded (mean= 4.4, SD= 0.7); majority of the respondents agreed that one of the objectives of the institution is having an effective risk management policy with a recorded (mean= 4.5, SD= 0.8); majority of the respondents agreed that the institution is highly effective in continuously reviewing its risk management strategies and performance with a recorded (mean= 4.1, SD= 0.9); majority of the respondents agreed that the executive management of the institution regularly reviews the institution's performance in managing its business risk with a recorded (mean= 3.9, SD= 1.0); majority of the respondents agreed that the institution risk management procedures and processes are documented and provide clear guidance to staff about managing risks with a recorded (mean= 4.4, SD= 0.9); majority of the respondents agreed that the institution policy encourages training programs in the risk management-related areas with a recorded (mean= 3.9, SD= 1.0); majority of the respondents agreed that the institution emphasizes on the recruitment of highly qualified people in risk management with a recorded (mean= 3.9, SD= 0.9); majority of the respondents agreed that the institution risk management policy is effectively communicated across the institution with a recorded (mean= 3.8, SD= 0.9); majority of the respondents agreed that the institution has a comprehensive risk management process which entails identifying, evaluating, measuring, monitoring, reporting and controlling all its risks on a timely manner with a recorded (mean= 4.2, SD= 0.9); majority of the respondents agreed that the institution risk management strategy is flexible enough to deal swiftly and adequately with all risks with a recorded (mean= 4.0, SD= 0.6); majority of the respondents agreed that the institution assesses the adequacy of its capital and liquidity on the basis of its risk profile, market and macro-economic conditions with a recorded (mean= 4.4,



SD= 0.7); majority of the respondents agreed that the level of risk management practices of the institution is considered to be excellent with a recorded (mean= 4.14, SD= 0.86).

The next section in table 4.3 shows the level of agreement of both sets of respondents regarding their Understanding of Risk and Risk Management. Majority of the respondents were in agreement that there is a common understanding of risk management across the institution with a recorded (mean= 3.8, SD= 0.8); majority of the respondents agreed that risk management responsibility is clearly set out and understood throughout the institution with a recorded (mean= 3.8, SD= 0.6); majority of the respondents agreed that risk management policy is communicated down the line and well understood by all institution -concerned parties with a recorded (mean= 4.1, SD= 0.7); majority of the respondents agreed that accountability for risk management is clearly set out and understood throughout the institution with a recorded (mean= 3.8, SD= 0.9); majority of the respondents agreed that risk management is important for the success and performance of the institution with a recorded (mean= 4.4, SD= 0.7); majority of the respondents agreed that application of the most sophisticated techniques in risk management is pivotal in the institution with a recorded (mean= 4.1, SD= 0.7); majority of the respondents agreed that the objective of your institution is to expand the applications of the use of advanced risk management technique with a recorded (mean= 3.9, SD= 0.8); majority of the respondents agreed that it is significant for your institution to emphasise on continuous review and evaluation of the techniques used in risk management with a recorded (mean= 4.3, SD= 0.7); majority of the respondents agreed that the institution applies risk management techniques with the aim to reduce its costs or expected losses with a recorded (mean= 4.3, SD= 0.8).

With regards to the risk assessment and analysis dimension, majority of the respondents agreed that the institution conducts a comprehensive and systematic identification of its risks in line with the institution's overall aims and objectives with a recorded (mean= 4.3, SD= 0.8); majority of the respondents agreed that risk identification is a continuous process in the



institution at transactional and portfolio levels with a recorded (mean= 4.3, SD= 0.9); majority of the respondents neither agreed nor disagreed that the institution finds it difficult to identify and priorities its main risks with a recorded (mean= 2.9, SD= 1.4); majority of the respondents agreed that changes in risk are recognized and identified with the institution's rules and responsibilities with a recorded (mean= 3.9, SD= 0.9); majority of the respondents agreed that your institution is aware of the strengths and weaknesses of the risk management systems of the other institutions with a recorded (mean= 3.9, SD= 0.7); majority of the respondents agreed that with a recorded (mean= 4.1, SD= 0.7); majority of the respondents agreed that your institution has developed and applied procedures for the systematic identification of investment opportunities with a recorded (mean= 3.9, SD= 0.9).

With regards to the dimension of risk assessment and analysis, majority of the respondents agreed that their institution bank assesses the likelihood of risk occurrence with a recorded (mean= 4.0, SD= 0.7); majority of the respondents agreed that their institution assesses risks by using qualitative analysis methods (e.g., high, moderate, and low) with a recorded (mean= 4.0, SD= 0.8); majority of the respondents agreed that Your institution assesses risk by using quantitative analysis method with a recorded (mean=3.9 , SD= 0.9); majority of the respondents agreed that their institution analyses and evaluates the opportunities that it has to achieve objectives with a recorded (mean= 4.1, SD= 0.7); majority of the respondents agreed that their institution's response to analyse risk includes an assessment of the costs and benefits of each relevant risk with a recorded (mean= 4.0, SD= 0.9); majority of the respondents agreed that their institution's response to analyse risk includes prioritizing of risk and selecting those that need an application of active management with a recorded (mean= 4.0, SD= 0.9); majority of the respondents agreed that their institution's response to analyse risk includes prioritizing risk treatments where there are resource constraints on risk treatment implementation with a recorded (mean= 4.0, SD= 0.9).

When considering the dimension of risk monitoring and reporting, majority of the respondents agreed that monitoring the effectiveness of risk management is an integral part of routine management reporting in the institution with a recorded (mean= 4.1, SD= 1.1); majority of the respondents agreed that the level of control by the institution is appropriate for the risks that it faces with a recorded (mean= 4.0, SD= 1.2); majority of the respondents agreed that reporting and communication processes within the institution support the effective management of risks with a recorded (mean= 4.1, SD= 0.8); majority of the respondents agreed that the institution continuously evaluates the effectiveness of its existing controls and risk management responses with a recorded (mean= 4.2, SD= 0.9); majority of the respondents agreed that the institution response to risk includes action plans in implementing decisions about identified risk with a recorded (mean= 4.1, SD= 0.9); majority of the respondents agreed that the institution's managers continuously monitor the implementation of risk management policies and make necessary adjustments with a recorded (mean= 3.9, SD= 0.8); majority of the respondents agreed that the institution's managers regularly monitor the effectiveness of the risk management policies and procedures with a recorded (mean= 4.1, SD= 0.9); majority of the respondents agreed that the institution organizational structure enables monitoring and control over the business risk taken with a recorded (mean= 4.1, SD= 0.9).

with a recorded (mean= , SD= 0.); majority of the respondents agreed that

With regards to the credit risk analysis, majority of the respondents agreed that the institution undertakes credit worthiness analysis before granting loans with a recorded (mean= 4.5, SD= 0.7); majority of the respondents agreed that the institution conducts thorough analysis of the client's characters, capacity, collateral, capital and conditions before granting loans with a recorded (mean= 4.5, SD= 0.6); majority of the respondents agreed that the institution classifies borrowers according to their riskiness with a recorded (mean= 4.3, SD= 0.8); majority of the respondents agreed that the institution's credit policy commensurate with its overall risk

management policy with a recorded (mean= 4.1, SD= 1.1); majority of the respondents agreed that the institution obtains information about the borrowers from credit information bureau with a recorded (mean= 4.6, SD= 0.8); majority of the respondents agreed that the institution sets credit limits by type of borrowers, economic sectors and geographical locations to avoid concentration of credit with a recorded (mean= 4.3, SD= 0.7); majority of the respondents agreed that credit risk is monitored on a regular basis and reported to institution senior management with a recorded (mean= 4.1, SD=1.1); majority of the respondents agreed that the institution has a credit risk management committee to oversee its different credit risk exposures with a recorded (mean= 4.1, SD= 1.2); majority of the respondents agreed that the credit administration of the institution ensures proper approval, completeness of documents, receipt of collateral and approval of exceptions before credit disbursement with a recorded (mean= 4.5, SD= 0.6); majority of the respondents agreed that the institution board periodically reviews the credit risk strategy and credit policy with a recorded (mean= 4.3, SD= 0.7).

Taking the liquidity risk analysis dimension into consideration, majority of the respondents agreed that liquidity is a key determinant of the institution financial soundness with a recorded (mean= 4.8, SD= 0.5); majority of the respondents agreed that the institution's "Management Board" defines liquidity risk strategy, and its tolerance for liquidity risk with a recorded (mean= 4.5, SD= 0.6); majority of the respondents agreed that institution managers give due consideration to external and internal factors posing liquidity risk while formulating the liquidity policy with a recorded (mean= 4.3, SD= 0.6); majority of the respondents agreed that the current institution's policy clearly defines the institution liquidity strategy (short and long term) with a recorded (mean= 4.3, SD= 0.7); majority of the respondents agreed that the institution liquidity policy is flexible enough to deal with the unusual liquidity pressures with a recorded (mean= 4.0, SD= 1.1); majority of the respondents agreed that board of directors and senior managers regularly review the liquidity policy of the institution with a recorded



(mean= 4.1, SD= 1.1); majority of the respondents agreed that the institution has always identified the tools to meet its liquidity requirements with a recorded (mean= 4.2, SD= 1.1); majority of the respondents agreed that stress testing and scenario analysis plays a central role in the liquidity risk management framework of the institution with a recorded (mean= 3.9, SD= 1.1); majority of the respondents agreed that the institution's Stress Testing is based on sophisticated risk management techniques including Value at Risk (VaR) and option-based models with a recorded (mean= 3.9, SD= 1.1).

With regards to the risk governance dimension, majority of the respondents agreed that the board of directors approves and oversees the institution risk management framework, policies and processes with a recorded (mean= 4.3, SD= 0.6); majority of the respondents agreed that the institution board of directors has relevant knowledge of the banking industry and risk management with a recorded (mean= 4.3, SD= 0.7); majority of the respondents agreed that with a recorded (mean= 4.2, SD= 0.7); majority of the respondents agreed that the board of directors formulate and defines the mandate and responsibilities of board-level committees (Risk Committee; Audit committee) which deal with risk governance with a recorded (mean= 4.2, SD= 0.7); majority of the respondents agreed that risk management committee members of the institution are independent and qualified with a recorded (mean= 3.9, SD= 1.0); majority of the respondents agreed that the institution risk management committee provides sufficient policies and guidelines on how to manage different risks with a recorded (mean= 3.9, SD= 0.7); majority of the respondents agreed that the Risk Committee reviews and recommends risk strategy to board of directors and oversees the implementation of risk management framework with a recorded (mean= 3.9, SD= 0.7); majority of the respondents agreed that the Chief Executive Officer develops and recommends the overall business strategy, risk strategy, risk appetite statement and risk tolerance with a recorded (mean= 4.1, SD= 0.7); majority of the respondents agreed that the Chief Risk Officer oversees the risk management functions of the



institution with a recorded (mean= 4.2, SD= 0.7); majority of the respondents agreed that the Chief Risk Officer develops, monitors and reports on the institution risk metrics with a recorded (mean= 4.2, SD= 0.6); majority of the respondents agreed that the internal auditors ensure that risk management processes are in compliance with the institution's policies with a recorded (mean= 4.3, SD= 0.6); majority of the respondents agreed that the internal auditors evaluate the effectiveness and efficiency of the institution risk management processes with a recorded (mean= 4.2, SD= 0.6); majority of the respondents agreed that the internal auditors are independent and directly accountable to the board of directors with a recorded (mean= 4.1, SD= 0.8); majority of the respondents agreed that the institution board and senior managers review internal audit reports, prudential reports and external experts report as a part of the institution risk governance framework with a recorded (mean= 4.1, SD= 0.8); majority of the respondents agreed that the institution compensation policies and practices are consistent with its corporate culture, long term objectives, strategy and control environment with a recorded (mean= 4.0, SD= 0.8); majority of the respondents agreed that the institution avoids compensation policies that create incentives for excessive risk taking with a recorded (mean= 4.0, SD= 0.9).

**Table 4.4: Mean Scores of The Risk Management Practices of Commercial Banks and Microfinance Institutions**

<b>13. Risk Management Practices</b>	<b>Commercial Bank (n=130)</b>				<b>MFI (n=25)</b>			
	<b>Mini</b>	<b>Maxi</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Mini</b>	<b>Maxi</b>	<b>Mean</b>	<b>Std. Dev.</b>
The institution's risk management policy clearly defines the roles and responsibilities carried out across its various functions	2	5	4.4	0.7	4	5	4.1	0.3
One of the objectives of the institution is having an effective risk management policy	2	5	4.5	0.8	4	5	4.4	0.5
The institution is highly effective in continuously reviewing its risk management strategies and performance	2	5	4.2	0.9	2	5	3.7	0.9
The executive management of the institution regularly reviews the institution's performance in managing its business risk	2	5	4.0	1.0	2	4	3.0	0.7
The institution risk management procedures and processes are documented and provide clear guidance to staff about managing risks	2	5	4.4	0.9	2	5	4.2	0.9
The institution policy encourages training programmes in the risk management-related areas	2	5	4.0	0.9	2	5	3.7	1.1
The institution emphasises on the recruitment of highly qualified people in risk management	2	5	4.0	0.9	2	5	3.4	0.8
The institution risk management policy is effectively communicated across the institution	2	5	3.9	0.9	2	5	3.4	1.0
The institution has a comprehensive risk management process which entails identifying, evaluating, measuring, monitoring, reporting and controlling all its risks on a timely manner	1	5	4.2	0.9	3	5	4.0	0.7
The institution risk management strategy is flexible enough to deal swiftly and adequately with all risks	3	5	4.0	0.6	3	5	3.9	0.6
The institution assesses the adequacy of its capital and liquidity on the basis of its risk profile, market and macro-economic conditions	2	5	4.1	0.9	2	5	3.5	1.0
The level of risk management practices of the institution is considered to be excellent	2	5	4.1	0.9	2	5	3.0	1.1

<b>14. Understanding Risk and Risk Management</b>								
There is a common understanding of risk management across the institution	2	5	3.8	0.7	2	4	3.4	0.8
Risk management responsibility is clearly set out and understood throughout the institution	2	5	3.9	0.5	2	4	3.6	0.8
Risk management policy is communicated down the line and well understood by all institution -concerned parties	2	5	4.1	0.7	4	5	4.2	0.4
Accountability for risk management is clearly set out and understood throughout the institution	2	5	3.9	0.9	2	4	3.2	1.0
Risk management is important for the success and performance of the institution	2	5	4.4	0.8	4	5	4.5	0.5
Application of the most sophisticated techniques in risk management is pivotal in the institution	2	5	4.1	0.8	3	5	3.9	0.6
The objective of your institution is to expand the applications of the use of advanced risk management technique	2	5	3.9	0.8	2	4	3.6	0.8
It is significant for your institution to emphasise on continuous review and evaluation of the techniques used in risk management	2	5	4.3	0.8	4	5	4.2	0.4
The institution applies risk management techniques with the aim to reduce its costs or expected losses	2	5	4.4	0.8	3	5	4.2	0.7
<b>15. Risk Identification</b>								
The institution conducts a comprehensive and systematic identification of its risks in line with the institution's overall aims and objectives	2	5	4.3	0.8	4	5	4.5	0.5
Risk identification is a continuous process in the institution at transactional and portfolio levels	2	5	4.3	0.9	2	5	4.1	1.2
The institution finds it difficult to identify and priorities its main risks	1	5	3.0	1.4	1	4	2.2	1.1
Changes in risk are recognized and identified with the institution's rules and responsibilities	2	5	4.0	0.9	2	5	3.5	1.0

Your institution is aware of the strengths and weaknesses of the risk management systems of the other institutions	2	5	3.8	0.8	4	4	4.0	0.0
Your institution has developed and applied procedures for the systematic identification of investment opportunities	2	5	4.0	0.9	2	5	3.5	1.0
<b>16. Risk Assessment and Analysis</b>								
Your institution bank assesses the likelihood of risk occurrence	2	5	4.0	0.7	3	5	3.9	0.6
Your institution assesses risks by using qualitative analysis methods (e.g., high, moderate, and low)	2	5	4.0	0.9	3	5	3.9	0.6
Your institution assesses risk by using quantitative analysis method	2	5	4.0	0.9	3	5	3.5	0.7
Your institution analyses and evaluates the opportunities that it has to achieve objectives	2	5	4.1	0.7	4	5	4.1	0.3
Your institution's response to analyse risk includes an assessment of the costs and benefits of each relevant risk	2	5	4.1	0.9	2	5	3.7	0.9
Your institution's response to analyse risk includes prioritizing of risk and selecting those that need an application of active management	2	5	4.1	0.9	2	5	3.7	0.9
Your institution's response to analyse risk includes prioritizing risk treatments where there are resource constraints on risk treatment implementation	2	5	4.1	0.9	2	5	3.5	1.0
<b>17. Risk Monitoring and Reporting</b>								
Monitoring the effectiveness of risk management is an integral part of routine management reporting in the institution	1	5	4.1	1.1	2	5	3.7	0.9
Level of control by the institution is appropriate for the risks that it faces	1	5	4.0	1.2	1	5	3.5	1.3
Reporting and communication processes within the institution support the effective management of risks	2	5	4.2	0.9	3	4	3.8	0.4
The institution continuously evaluates the effectiveness of its existing controls and risk management responses	2	5	4.2	0.9	2	5	4.0	1.1



The institution response to risk includes action plans in implementing decisions about identified risk	2	5	4.1	0.9	2	5	4.0	1.1
The institution's managers continuously monitor the implementation of risk management policies and make necessary adjustments	2	5	4.0	0.8	2	4	3.6	0.8
The institution's managers regularly monitor the effectiveness of the risk management policies and procedures	2	5	4.1	0.9	2	5	3.8	1.0
The institution organizational structure enables monitoring and control over the business risk taken	2	5	4.1	0.8	2	5	3.7	0.9
<b>18. Credit Risk Analysis</b>								
The institution undertakes credit worthiness analysis before granting loans	2	5	4.5	0.8	4	5	4.4	0.5
The institution conducts thorough analysis of the client's characters, capacity, collateral, capital and conditions before granting loans	3	5	4.5	0.6	4	5	4.6	0.5
The institution classifies borrowers according to their riskiness	2	5	4.3	0.9	3	5	4.2	0.7
The institution's credit policy commensurate with its overall risk management policy	1	5	4.1	1.1	1	5	3.8	1.3
The institution obtains information about the borrowers from credit information bureau	2	5	4.5	0.8	4	5	4.9	0.3
The institution sets credit limits by type of borrowers, economic sectors and geographical locations to avoid concentration of credit	2	5	4.3	0.8	4	5	4.1	0.3
Credit risk is monitored on a regular basis and reported to institution senior management.	1	5	4.2	1.1	1	5	3.8	1.3
The institution has a credit risk management committee to oversee its different credit risk exposures	1	5	4.2	1.2	1	5	3.8	1.6
The credit administration of the institution ensures proper approval, completeness of documents, receipt of collateral and approval of exceptions before credit disbursement	3	5	4.6	0.6	4	5	4.5	0.5

The institution board periodically reviews the credit risk strategy and credit policy	3	5	4.4	0.7	3	5	4.2	0.7
<b>19. Liquidity Risk Analysis</b>								
Liquidity is a key determinant of the institution financial soundness	3	5	4.7	0.6	5	5	5.0	0.0
The institution's "Management Board" defines liquidity risk strategy, and its tolerance for liquidity risk	3	5	4.5	0.6	4	5	4.6	0.5
Institution managers give due consideration to external and internal factors posing liquidity risk while formulating the liquidity policy	3	5	4.3	0.6	4	5	4.2	0.4
The current institution's policy clearly defines the institution liquidity strategy (short and long term)	3	5	4.4	0.7	3	5	4.3	0.8
The institution liquidity policy is flexible enough to deal with the unusual liquidity pressures	2	5	4.0	1.0	2	5	3.6	1.4
Board of Directors and Senior Managers regularly review the liquidity policy of the institution	1	5	4.1	1.1	1	5	4.1	1.3
The institution has always identified the tools to meet its liquidity requirements	1	5	4.2	1.1	1	5	4.1	1.3
Stress Testing and Scenario Analysis plays a central role in the liquidity risk management framework of the institution	1	5	4.0	1.0	1	5	3.6	1.1
The institution's Stress Testing is based on sophisticated risk management techniques including Value at Risk (VaR) and option-based models	1	5	3.9	1.1	1	5	3.5	1.2
<b>20. Risk Governance</b>								
The board of directors approves and oversees the institution risk management framework, policies and processes	3	5	4.3	0.6	4	5	4.7	0.5
The institution board of directors has relevant knowledge of the banking industry and risk management	3	5	4.3	0.7	3	5	4.4	0.8

The board of directors formulate and defines the mandate and responsibilities of board-level committees (Risk Committee; Audit committee) which deal with risk governance	2	5	4.2	0.8	4	5	4.4	0.5
Risk management committee members of the institution are independent and qualified	1	5	3.9	1.0	1	4	3.6	1.0
The institution risk management committee provides sufficient policies and guidelines on how to manage different risks	3	5	4.0	0.7	3	5	3.5	0.7
The Risk Committee reviews and recommends risk strategy to board of directors and oversees the implementation of risk management framework	2	5	3.9	0.7	3	4	3.6	0.5
The Chief Executive Officer develops and recommends the overall business strategy, risk strategy, risk appetite statement and risk tolerance	2	5	4.1	0.7	4	5	4.2	0.4
The Chief Risk Officer oversees the risk management functions of the institution	2	5	4.2	0.7	4	5	4.2	0.4
The Chief Risk Officer develops, monitors and reports on the institution risk metrics	3	5	4.2	0.6	4	5	4.2	0.4
The internal auditors ensure that risk management processes are in compliance with the institution's policies	3	5	4.3	0.7	4	5	4.5	0.5
The internal auditors evaluate the effectiveness and efficiency of the institution risk management processes	3	5	4.2	0.7	4	5	4.2	0.4
The internal auditors are independent and directly accountable to the board of directors	2	5	4.0	0.9	4	5	4.5	0.5
The institution board and senior managers review internal audit reports, prudential reports and external experts report as a part of the institution risk governance framework	2	5	4.1	0.8	2	5	4.1	1.2

The institution compensation policies and practices are consistent with its corporate culture, long term objectives, strategy and control environment	2	5	4.0	0.7	2	5	4.0	1.1
The institution avoids compensation policies that create incentives for excessive risk taking	2	5	4.0	0.9	2	5	4.0	1.1

Source: Danyo (2020)

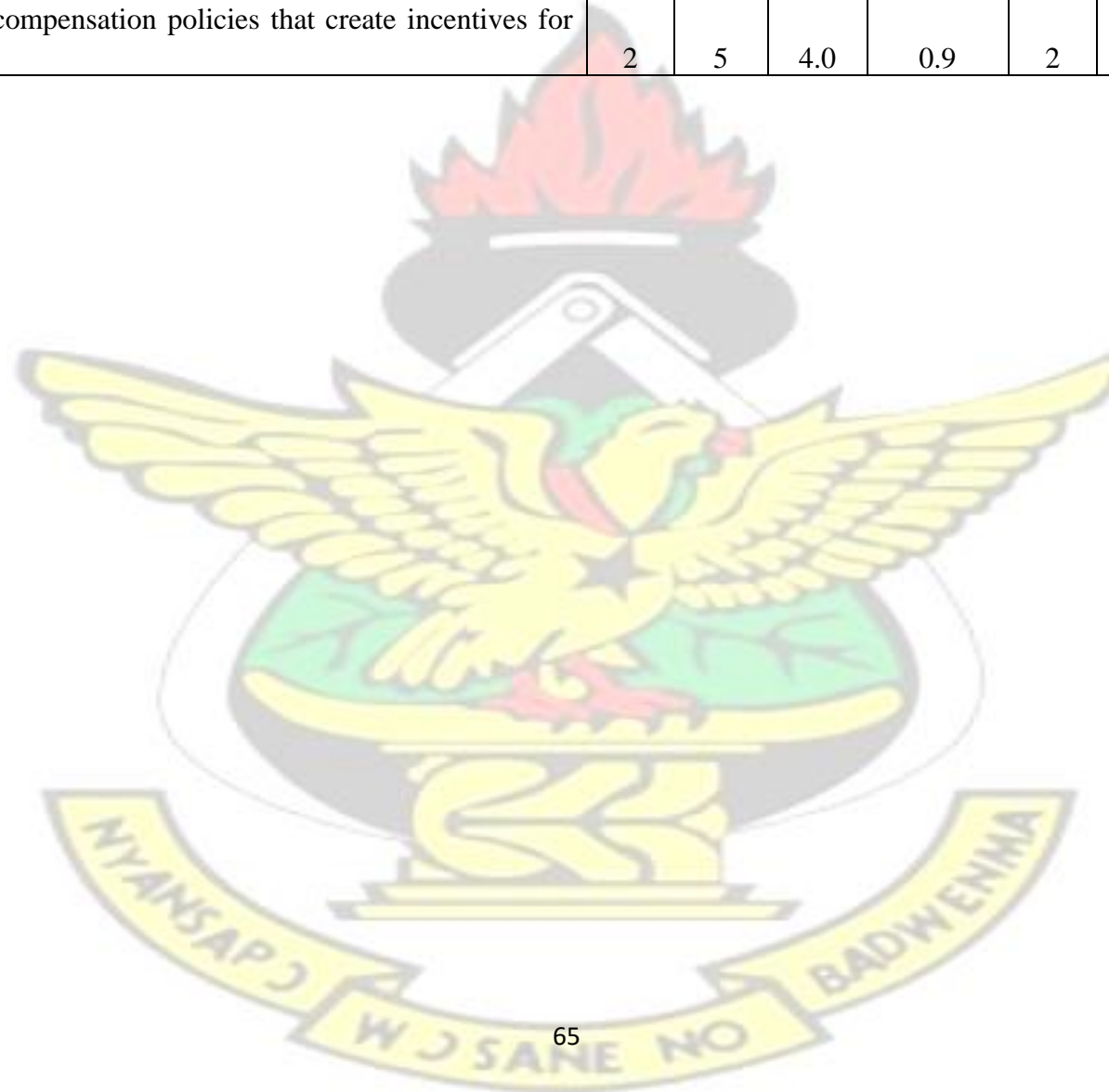




Table 4.4 shows the level of agreement of respondents when asked about risk management practices for respondents from commercial banks and microfinance institutions. With regards to the risk management practices majority of the respondents agreed that institution's risk management policy clearly defines the roles and responsibilities carried out across its various functions with a recorded (mean= 4.4, SD= 0.7) among commercial bank respondents and (mean= 4.1, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that one of the objectives of the institution is having an effective risk management policy with a recorded with a recorded (mean= 4.5, SD= 0.8) among commercial bank respondents and (mean= 4.4, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution is highly effective in continuously reviewing its risk management strategies and performance with a recorded (mean= 4.2, SD= 0.9) among commercial bank respondents and (mean= 3.7, SD= 0.9) among microfinance institution respondents; majority of the respondents agreed that the executive management of the institution regularly reviews the institution's performance in managing its business risk with a recorded (mean= 4.0, SD=1.0) among commercial bank respondents whereas level of neither agreement nor disagreement was observed (mean= 3.0, SD= 0.7) among microfinance institution respondents; majority of the respondents agreed that the institution risk management procedures and processes are documented and provide clear guidance to staff about managing risks with a recorded (mean= 4.4, SD= 0.9) among commercial bank respondents and (mean= 4.2, SD= 0.9) among microfinance institution respondents; majority of the respondents agreed that the institution policy encourages training programs in the risk management-related areas with a recorded (mean= 4.0, SD=0.9) among commercial bank respondents and (mean= 3.7, SD= 1.1) among microfinance institution respondents; majority of the respondents agreed that the institution emphasizes on the recruitment of highly qualified people in risk management with a recorded (mean= 4.0, SD= 0.9) among commercial bank respondents whereas a level of

neither agreement nor disagreement was observed (mean= 3.4, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that the institution risk management policy is effectively communicated across the institution with a recorded (mean= 3.9, SD= 0.9) among commercial bank respondents and (mean= 3.4, SD= 1.4) among microfinance institution respondents; majority of the respondents agreed that the institution has a comprehensive risk management process which entails identifying, evaluating, measuring, monitoring, reporting and controlling all its risks on a timely manner with a recorded (mean= 4.2, SD= 0.9) among commercial bank respondents and (mean= 4.0, SD= 0.7) among microfinance institution respondents; majority of the respondents agreed that the institution risk management strategy is flexible enough to deal swiftly and adequately with all risks with a recorded (mean= 4.0, SD= 0.6) among commercial bank respondents and (mean= 3.9, SD= 0.6) among microfinance institution respondents; majority of the respondents agreed that the institution assesses the adequacy of its capital and liquidity on the basis of its risk profile, market and macro-economic conditions with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 3.5, SD= 1.0) among microfinance institution respondents; majority of the respondents agreed that the level of risk management practices of the institution is considered to be excellent with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and a level of neither agreement nor disagreement was observed (mean= 3.0, SD= 1.1) among microfinance institution respondents.

The next section in table 4.3 shows the level of agreement of both sets of respondents regarding their Understanding of Risk and Risk Management. Majority of the respondents were in agreement that there is a common understanding of risk management across the institution with a recorded (mean= 3.8, SD= 0.5) among commercial bank respondents and (mean= 3.4, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that risk management responsibility is clearly set out and understood throughout the institution with a

recorded (mean= 3.9, SD= 0.6) among commercial bank respondents and (mean= 3.6, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that risk management policy is communicated down the line and well understood by all institution - concerned parties with a recorded (mean= 4.1, SD= 0.7) among commercial bank respondents and (mean= 4.2, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that accountability for risk management is clearly set out and understood throughout the institution with a recorded (mean= 3.9, SD= 0.9) among commercial bank respondents and (mean= 3.2, SD= 1.0) among microfinance institution respondents; majority of the respondents agreed that risk management is important for the success and performance of the institution with a recorded (mean= 4.4, SD= 0.8) among commercial bank respondents and (mean= 4.5, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that application of the most sophisticated techniques in risk management is pivotal in the institution with a recorded (mean= 4.1, SD= 0.8) among commercial bank respondents and (mean= 3.9, SD= 0.6) among microfinance institution respondents; majority of the respondents agreed that the objective of your institution is to expand the applications of the use of advanced risk management technique with a recorded (mean= 3.9, SD= 0.8) among commercial bank respondents and (mean= 3.6, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that it is significant for your institution to emphasise on continuous review and evaluation of the techniques used in risk management with a recorded (mean= 4.3, SD= 0.8) among commercial bank respondents and (mean= 4.2, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that the institution applies risk management techniques with the aim to reduce its costs or expected losses with a recorded (mean= 4.4, SD= 0.8) among commercial bank respondents and (mean= 4.2, SD= 0.7) among microfinance institution respondents.



With regards to the risk assessment and analysis dimension, majority of the respondents agreed that the institution conducts a comprehensive and systematic identification of its risks in line with the institution's overall aims and objectives with a recorded (mean= 4.3, SD= 0.8) among commercial bank respondents and (mean= 4.5, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that risk identification is a continuous process in the institution at transactional and portfolio levels with a recorded (mean= 4.3, SD= 0.9) among commercial bank respondents and (mean= 4.1, SD= 1.2) among microfinance institution respondents; majority of the respondents neither agreed nor disagreed that the institution finds it difficult to identify and priorities its main risks with a recorded (mean= 3.0, SD= 1.4) among commercial bank respondents and (mean= 2.2, SD= 1.1) among microfinance institution respondents; majority of the respondents agreed that changes in risk are recognized and identified with the institution's rules and responsibilities with a recorded (mean= 4.0, SD= 0.9) among commercial bank respondents and (mean= 3.5, SD= 1.0) among microfinance institution respondents; majority of the respondents agreed that your institution is aware of the strengths and weaknesses of the risk management systems of the other institutions with a recorded (mean= 3.8, SD= 0.8) among commercial bank respondents and (mean= 4.0, SD= 0.0) among microfinance institution respondents; majority of the respondents agreed that your institution has developed and applied procedures for the systematic identification of investment opportunities with a recorded (mean= 4.0, SD= 0.9) among commercial bank respondents and (mean= 3.5, SD= 1.0) among microfinance institution respondents.

With regards to the dimension of risk assessment and analysis, majority of the respondents agreed that their institution bank assesses the likelihood of risk occurrence with a recorded (mean= 4.0, SD= 0.7) among commercial bank respondents and (mean= 3.9, SD= 0.6) among microfinance institution respondents; majority of the respondents agreed that their institution assesses risks by using qualitative analysis methods (e.g., high, moderate, and low) with a



recorded (mean= 4.0, SD= 0.9) among commercial bank respondents and (mean= 3.9, SD= 0.6) among microfinance institution respondents; majority of the respondents agreed that Your institution assesses risk by using quantitative analysis method with a recorded (mean=4.0 , SD= 0.9) among commercial bank respondents and (mean= 3.5, SD= 0.7) among microfinance institution respondents; majority of the respondents agreed that their institution analyses and evaluates the opportunities that it has to achieve objectives with a recorded (mean= 4.1, SD= 0.7) among commercial bank respondents and (mean= 4.1, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that their institution's response to analyse risk includes an assessment of the costs and benefits of each relevant risk with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 3.7, SD= 0.9) among microfinance institution respondents; majority of the respondents agreed that their institution's response to analyse risk includes prioritizing of risk and selecting those that need an application of active management with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 3.7, SD= 0.9) among microfinance institution respondents; majority of the respondents agreed that their institution's response to analyse risk includes prioritizing risk treatments where there are resource constraints on risk treatment implementation with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 3.5, SD= 1.0) among microfinance institution respondents.

When considering the dimension of risk monitoring and reporting, majority of the respondents agreed that monitoring the effectiveness of risk management is an integral part of routine management reporting in the institution with a recorded (mean= 4.1, SD= 1.1) among commercial bank respondents and (mean= 3.7, SD= 0.9) among microfinance institution respondents; majority of the respondents agreed that the level of control by the institution is appropriate for the risks that it faces with a recorded (mean= 4.0, SD= 1.2) among commercial bank respondents and (mean= 3.5, SD= 1.3) among microfinance institution respondents;

majority of the respondents agreed that reporting and communication processes within the institution support the effective management of risks with a recorded (mean= 4.2, SD= 0.9) among commercial bank respondents and (mean= 3.8, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that the institution continuously evaluates the effectiveness of its existing controls and risk management responses with a recorded (mean= 4.2, SD= 0.9); majority of the respondents agreed that the institution response to risk includes action plans in implementing decisions about identified risk with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 4.0, SD= 1.1) among microfinance institution respondents; majority of the respondents agreed that the institution's managers continuously monitor the implementation of risk management policies and make necessary adjustments with a recorded (mean= 4.0, SD= 0.8) among commercial bank respondents and (mean= 3.6, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that the institution's managers regularly monitor the effectiveness of the risk management policies and procedures with a recorded (mean= 4.1, SD= 0.9) among commercial bank respondents and (mean= 3.8, SD= 1.0) among microfinance institution respondents; majority of the respondents agreed that the institution organizational structure enables monitoring and control over the business risk taken with a recorded (mean= 4.1, SD= 0.8) among commercial bank respondents and (mean= 3.7, SD= 0.9) among microfinance institution respondents.

With regards to the credit risk analysis, majority of the respondents agreed that the institution undertakes credit worthiness analysis before granting loans with a recorded (mean= 4.5, SD= 0.8) among commercial bank respondents and (mean= 4.4, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution conducts thorough analysis of the client's characters, capacity, collateral, capital and conditions before granting loans with a recorded (mean= 4.5, SD= 0.6) among commercial bank respondents and

(mean= 4.6, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution classifies borrowers according to their riskiness with a recorded (mean= 4.3, SD= 0.9) among commercial bank respondents and (mean= 4.2, SD= 0.7) among microfinance institution respondents; majority of the respondents agreed that the institution's credit policy commensurate with its overall risk management policy with a recorded (mean= 4.1, SD= 1.1) among commercial bank respondents and (mean= 3.8, SD= 1.3) among microfinance institution respondents; majority of the respondents agreed that the institution obtains information about the borrowers from credit information bureau with a recorded (mean= 4.5, SD= 0.8) among commercial bank respondents and (mean= 4.9, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that the institution sets credit limits by type of borrowers, economic sectors and geographical locations to avoid concentration of credit with a recorded (mean= 4.3, SD= 0.8) among commercial bank respondents and (mean= 4.1, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that credit risk is monitored on a regular basis and reported to institution senior management with a recorded (mean= 3.8, SD=1.3) among commercial bank respondents and (mean= 4.1, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that the institution has a credit risk management committee to oversee its different credit risk exposures with a recorded (mean= 4.2, SD= 1.2) among commercial bank respondents and (mean= 3.8, SD= 1.6) among microfinance institution respondents; majority of the respondents agreed that the credit administration of the institution ensures proper approval, completeness of documents, receipt of collateral and approval of exceptions before credit disbursement with a recorded (mean= 4.6, SD= 0.6) among commercial bank respondents and (mean= 4.5, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution board periodically reviews the credit risk strategy and credit policy with a recorded (mean= 4.4, SD= 0.7) among



commercial bank respondents and (mean= 4.2, SD= 0.7) among microfinance institution respondents.

Taking the liquidity risk analysis dimension into consideration, majority of the respondents agreed that liquidity is a key determinant of the institution financial soundness with a recorded (mean= 4.7, SD= 0.6) among commercial bank respondents and (mean= 5.0, SD= 0.0) among microfinance institution respondents; majority of the respondents agreed that the institution's "Management Board" defines liquidity risk strategy, and its tolerance for liquidity risk with a recorded (mean= 4.5, SD= 0.6) among commercial bank respondents and (mean= 4.6, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that institution managers give due consideration to external and internal factors posing liquidity risk while formulating the liquidity policy with a recorded (mean= 4.3, SD= 0.6) among commercial bank respondents and (mean= 4.2, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that the current institution's policy clearly defines the institution liquidity strategy (short and long term) with a recorded (mean= 4.4, SD= 0.7) among commercial bank respondents and (mean= 4.3, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that the institution liquidity policy is flexible enough to deal with the unusual liquidity pressures with a recorded (mean= 4.0, SD= 1.0) among commercial bank respondents and (mean= 3.6, SD= 1.4) among microfinance institution respondents; majority of the respondents agreed that board of directors and senior managers regularly review the liquidity policy of the institution with a recorded (mean= 4.1, SD= 1.1) among commercial bank respondents and (mean= 4.1, SD= 1.3) among microfinance institution respondents; majority of the respondents agreed that the institution has always identified the tools to meet its liquidity requirements with a recorded (mean= 4.1, SD= 1.3); majority of the respondents agreed that stress testing and scenario analysis plays a central role in the liquidity risk management framework of the institution with a recorded (mean= 3.6, SD=



1.1); majority of the respondents agreed that the institution's Stress Testing is based on sophisticated risk management techniques including Value at Risk (VaR) and option-based models with a recorded (mean= 3.9, SD= 1.1) among commercial bank respondents and (mean= 3.5, SD= 1.2) among microfinance institution respondents.

With regards to the risk governance dimension, majority of the respondents agreed that the board of directors approves and oversees the institution risk management framework, policies and processes with a recorded (mean= 4.3, SD= 0.6) among commercial bank respondents and (mean= 4.7, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution board of directors has relevant knowledge of the banking industry and risk management with a recorded (mean= 4.3, SD= 0.7) among commercial bank respondents and (mean= 4.4, SD= 0.8) among microfinance institution respondents; majority of the respondents agreed that the board of directors formulate and defines the mandate and responsibilities of board-level committees (Risk Committee; Audit committee) which deal with risk governance with a recorded (mean= 4.2, SD= 0.8) among commercial bank respondents and (mean= 4.4, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that risk management committee members of the institution are independent and qualified with a recorded (mean= 3.9, SD= 1.0) among commercial bank respondents and (mean= 3.6, SD= 1.0) among microfinance institution respondents; majority of the respondents agreed that the institution risk management committee provides sufficient policies and guidelines on how to manage different risks with a recorded (mean= 4.0, SD= 0.7) among commercial bank respondents and (mean= 3.5, SD= 0.7) among microfinance institution respondents; majority of the respondents agreed that the Risk Committee reviews and recommends risk strategy to board of directors and oversees the implementation of risk management framework with a recorded (mean= 3.9, SD= 0.7) among commercial bank respondents and (mean= 3.6, SD= 0.5) among microfinance institution respondents; majority

of the respondents agreed that the Chief Executive Officer develops and recommends the overall business strategy, risk strategy, risk appetite statement and risk tolerance with a recorded (mean= 4.1, SD= 0.7) among commercial bank respondents and (mean= 4.2, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that the Chief Risk Officer oversees the risk management functions of the institution with a recorded (mean= 4.2, SD= 0.7) among commercial bank respondents and (mean= 4.2, SD= 0.4) among microfinance institution respondents; majority of the respondents agreed that the Chief Risk Officer develops, monitors and reports on the institution risk metrics with a recorded (mean= 4.2, SD= 0.4) among commercial bank respondents and (mean= 4.1, SD= 0.3) among microfinance institution respondents; majority of the respondents agreed that the internal auditors ensure that risk management processes are in compliance with the institution's policies with a recorded (mean= 4.3, SD= 0.7) among commercial bank respondents and (mean= 4.5, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the internal auditors evaluate the effectiveness and efficiency of the institution risk management processes with a recorded (mean= 4.2, SD= 0.6); majority of the respondents agreed that the internal auditors are independent and directly accountable to the board of directors with a recorded (mean= 4.0, SD= 0.9) among commercial bank respondents and (mean= 4.5, SD= 0.5) among microfinance institution respondents; majority of the respondents agreed that the institution board and senior managers review internal audit reports, prudential reports and external experts report as a part of the institution risk governance framework with a recorded (mean= 4.1, SD= 0.8) among commercial bank respondents and (mean= 4.1, SD= 1.2) among microfinance institution respondents; majority of the respondents agreed that the institution compensation policies and practices are consistent with its corporate culture, long term objectives, strategy and control environment with a recorded (mean= 4.0, SD= 0.7) among commercial bank respondents and (mean= 4.0, SD= 1.1) among microfinance institution

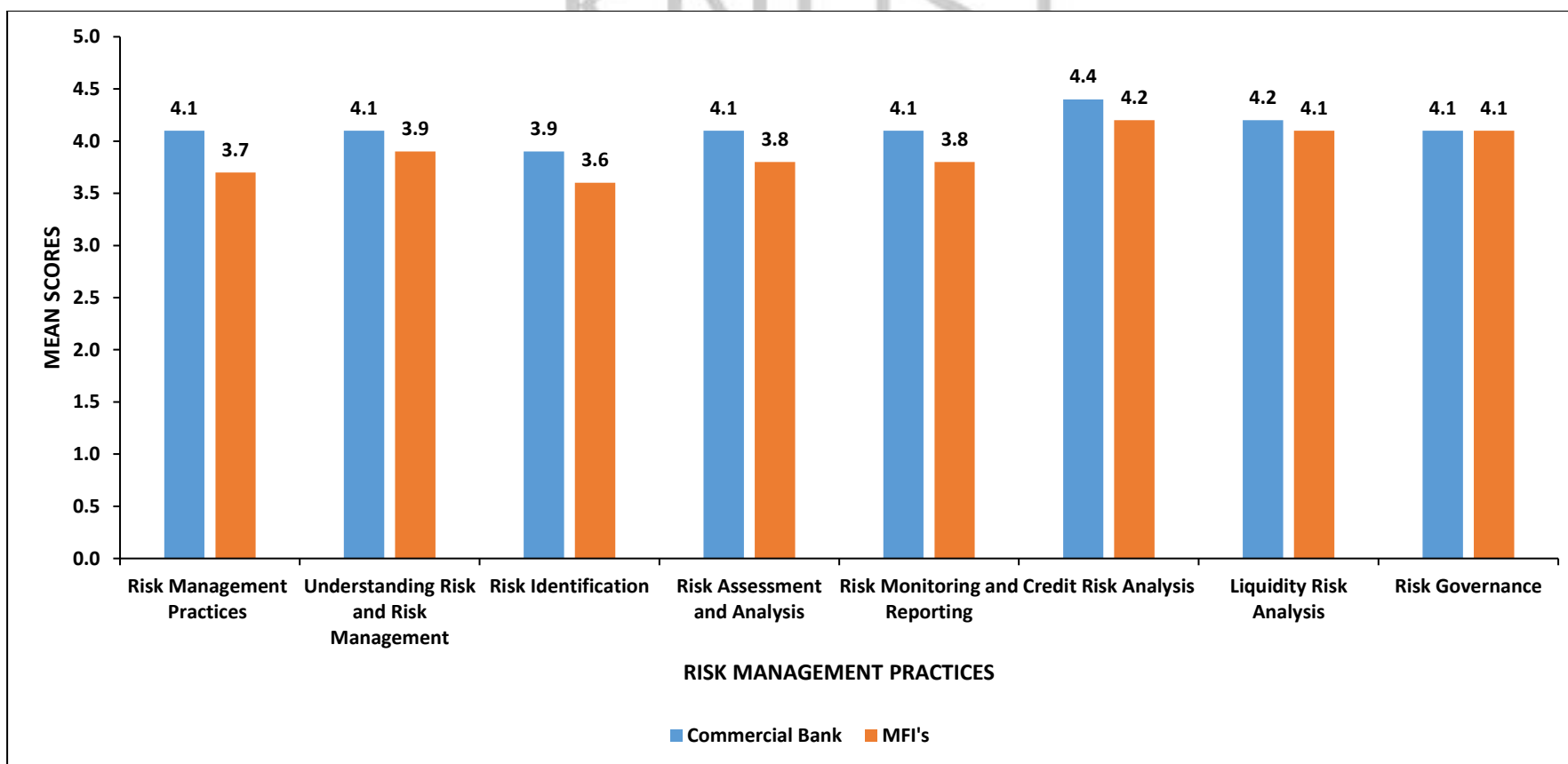
respondents; majority of the respondents agreed that the institution avoids compensation policies that create incentives for excessive risk taking with a recorded (mean= 4.0, SD= 0.9) among commercial bank respondents and (mean= 4.0, SD= 1.1) among microfinance institution respondents.

**Table 4.5: Overall Risk Management Scores**

	<b>Commercial Bank (Mean Score) (N=130)</b>				<b>MFI (Mean Score) (N=25)</b>			
	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev</b>	<b>Min</b>	<b>Max</b>	<b>Mean</b>	<b>Std. Dev</b>
Risk Management Practices	2.2	5	4.1	0.7	3.1	4.7	3.7	0.5
Understanding Risk and Risk Management	2.1	5	4.1	0.6	3.0	4.3	3.9	0.5
Risk Identification	2.0	5	3.9	0.7	2.8	4.2	3.6	0.5
Risk Assessment and Analysis	2.0	5	4.1	0.8	3.0	5.0	3.8	0.6
Risk Monitoring and Reporting	1.9	5	4.1	0.9	2.0	4.6	3.8	0.9
Credit Risk Analysis	2.6	5	4.4	0.7	3.2	5.0	4.2	0.6
Liquidity Risk Analysis	2.7	5	4.2	0.7	2.7	5.0	4.1	0.8
Risk Governance	2.8	4.9	4.1	0.5	3.4	4.7	4.1	0.4

Source: Danyo (2020)

Table 4.5 shows the overall risk management scores for the respondents in commercial banks and microfinance institutions. The table shows that the risk management practice with the highest mean score was Credit risk analysis among both commercial bank respondents (4.4) and MFIs respondents (4.2). Both commercial banks and MFIs recorded the lowest mean scores (3.9 and 3.6 respectively) for Risk Identification. The same mean score of 4.1 was reported among both commercial bank and MFI respondents.



*Figure 4. 1: Mean scores of Risk Management Practices for respondents from Commercial Banks and MFIs (Source: Danyo (2020))*



Figure 1 is a bar graph showing the mean scores of risk management practices for respondents from commercial banks and MFIs. The graph shows that the risk management practice with the highest mean score was Credit risk analysis among both commercial bank respondents (4.4) and MFIs respondents (4.2). Both commercial banks and MFIs recorded the lowest mean scores (3.9 and 3.6 respectively) for Risk Identification. The same mean score of 4.1 was reported among both commercial bank and MFI respondents.

#### 4.4 CONSTRAINTS IN THE CREDIT RISK MANAGEMENT PRACTICES IN COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS

*Table 4.6: Constraints in the credit risk management practices in Commercial Banks and Microfinance Institutions (N=155)*

	<b>Strongly Disagree [n (%)]</b>	<b>Disagree [n (%)]</b>	<b>Neither Agree nor Disagree [n (%)]</b>	<b>Agree [n (%)]</b>	<b>Strongly Agree [n (%)]</b>	<b>Mean Score</b>
A financial institution's credit culture can affect the institutions' credit management practice	0 (0.0)	0 (0.0)	11 (7.1)	43 (27.7)	101 (65.1)	4.6 (SD=0.6)
Inadequate education and training	9 (5.8)	12 (7.7)	20 (12.9)	43 (27.7)	71 (45.8)	4.0 (SD=1.2)
Individual biases of the credit management administrator	0 (0.0)	12 (7.7)	29 (18.7)	54 (34.8)	60 (38.7)	4.0 (SD=0.9)
Improper assessment of client's documents	6 (3.9)	11 (7.1)	7 (4.5)	66 (42.6)	65 (41.9)	4.1 (SD=1.0)
Inadequate number of staff for the credit department	7 (4.5)	4 (2.6)	36 (23.2)	61 (39.3)	47 (30.3)	3.9 (SD=1.0)

Source: Danyo (2020)

Table 4.6 shows the constraints in the credit risk management practices in both commercial banks and microfinance institutions. The table shows mean scores for the various constraints as follows: a financial institution's credit culture can affect the institutions' credit management practice (mean =4.6, SD=0.6); inadequate education and training (mean=4.0, SD=1.2); individual biases of the credit management administrator (Mean= 4.0, SD=0.9); Improper assessment of client's documents (mean = 4.1, SD=1.0); and inadequate number of staff for the credit department (mean=3.9, SD=1.0).

**Table 4.7: Constraints in the credit risk management practices in Commercial Banks (n=130)**

	<b>Strongly Disagree</b> [n (%)]	<b>Disagree</b> [n (%)]	<b>Neither Agree nor Disagree</b> [n (%)]	<b>Agree</b> [n (%)]	<b>Strongly Agree</b> [n (%)]	<b>Mean Score</b>
A financial institution's credit culture can affect the institutions' credit management practice	0 (0.0)	0 (0.0)	11 (8.4)	40 (30.8)	79 (60.8)	4.5 (SD=0.6)
Inadequate education and training	9 (6.9)	12 (9.2)	14 (1.78)	38 (29.2)	57 (43.8)	3.9 (SD=1.2)
Individual biases of the credit management administrator	0 (0.0)	12 (9.2)	23 (17.7)	46 (35.4)	49 (37.7)	4.0 (SD=1.0)
Improper assessment of clients' documents	6 (4.6)	11 (8.4)	7 (5.3)	52 (40.0)	54 (41.5)	4.1 (SD=1.1)
Inadequate number of staff for the credit department	7 (5.4)	2 (1.5)	3 (23.1)	53 (40.8)	38 (29.2)	3.9 (SD=1.0)

Source: Danyo (2020)

Table 4.7 shows the constraints in the credit risk management practices in both commercial banks. The table shows mean scores for the various constraints as follows: a financial

institution's credit culture can affect the institutions' credit management practice (mean =4.5, SD= 0.6); inadequate education and training (mean=3.9, SD=1.2); individual biases of the credit management administrator (mean=4.0, SD=1.0); improper assessment of client's documents (mean = 4.1, SD=1.1); and inadequate number of staff for the credit department (mean=3.9, SD=1.0).

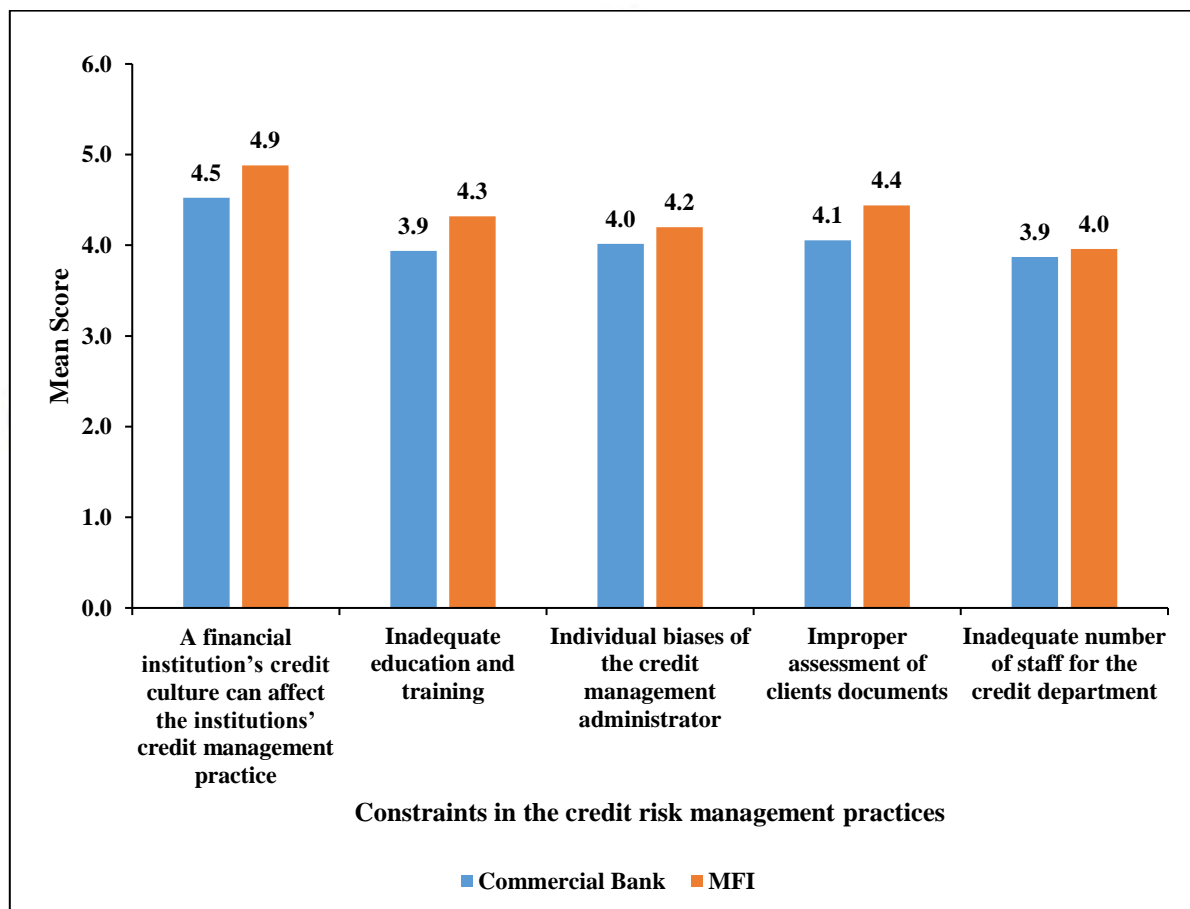
**Table 4.8: Constraints in the credit risk management practices in Microfinance Institutions (n=25)**

	<b>Strongly Disagree</b> [n (%)]	<b>Disagree</b> [n (%)]	<b>Neither Agree nor Disagree</b> [n (%)]	<b>Agree</b> [n (%)]	<b>Strongly Agree</b> [n (%)]	<b>Mean Score</b>
A financial institution's credit culture can affect the institutions' credit management practice	0 (0.0)	0 (0.0)	0 (0.0)	3 (12.0)	22 (88.0)	4.9 (SD=0.3)
Inadequate education and training	0 (0.0)	0 (0.0)	6 (24.0)	5 (20.0)	14 (56.0)	4.3 (SD=0.9)
Individual biases of the credit management administrator	0 (0.0)	0 (0.0)	6 (24.0)	8 (32.0)	11 (44.0)	4.2 (SD=0.8)
Improper assessment of clients' documents	0 (0.0)	0 (0.0)	0 (0.0)	14 (56.0)	11 (44.0)	4.4 (SD=0.5)
Inadequate number of staff for the credit department	0 (0.0)	2 (8.0)	6 (24.0)	8 (32.0)	9 (36.0)	4.0 (SD=1.0)

Source: Danyo (2020)

Table 4.8 shows the constraints in the credit risk management practices in both commercial banks. The table shows mean scores for the various constraints as follows: a financial

institution's credit culture can affect the institutions' credit management practice (mean =4.9, SD= 0.3); inadequate education and training (mean=4.3, SD=0.9); individual biases of the credit management administrator (mean=4.2, SD=0.8); improper assessment of client's documents (mean = 4.4, SD=0.5); and inadequate number of staff for the credit department (mean=4.0, SD=1.0).

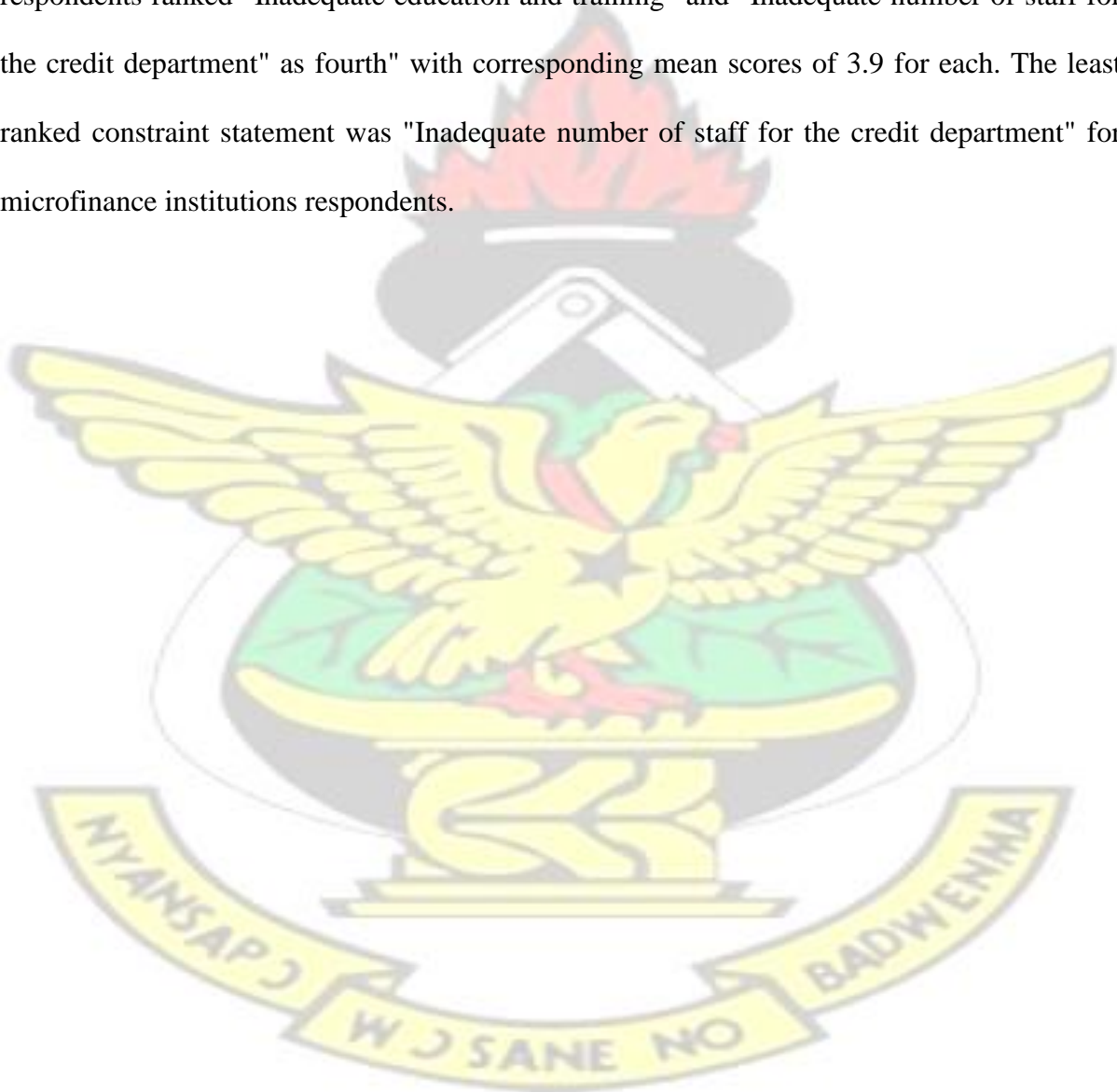


**Figure 4. 2: Mean Score of Constraints in the credit risk management practices in Commercial Banks and Microfinance Institutions (Source: Danyo (2020))**

Figure 2 is a bar graph showing the mean scores of constraints in the credit risk management practices in commercial banks and Microfinance Institutions. The figure above shows the constraint statement "A financial institution's credit culture can affect the institutions' credit management practice" had the highest mean score of 4.5 and 4.9 for commercial banks and microfinance institutions respectively. The second highest constraint statement was "Improper



assessment of clients' documents" with a mean score of 4.1 for commercial bank and 4.4 for microfinance institutions. Commercial bank respondents identified "Individual biases of the credit management administrator" as the third highest constraint statement with a mean score of 4.0 whereas microfinance institutions respondents ranked "Inadequate education and training" as third with a mean score of 4.3. Respondents from microfinance institutions ranked "Individual biases of the credit management administrator" as fourth while commercial bank respondents ranked "Inadequate education and training" and "Inadequate number of staff for the credit department" as fourth" with corresponding mean scores of 3.9 for each. The least ranked constraint statement was "Inadequate number of staff for the credit department" for microfinance institutions respondents.



## **DISCUSSION OF FINDINGS**

### **4.5 QUALIFICATION AND SKILLS SETS OF CREDIT MANAGEMENT EMPLOYEES IN THE COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS**

With regards to the qualification of respondents, nearly half of them (45.8%) have a master's degree, 38.7% have a bachelor's degree, 15.5% have an HND and 17.4% of the respondents have a professional qualification like ACCA, ACI dealing certificate, CIB and ICA Ghana. All of the 155 respondents agreed to have received some sort of training in the credit department ranging from credit management training (57.4%), risk management and controls (14.8%), to financial and non-financial assessment training.

### **4.6 RISK MANAGEMENT PRACTICES OF COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS**

The mean score of risk management practices were generally high for respondents from commercial banks and relatively lower among respondents of microfinance institutions. The mean scores among commercial bank respondents ranged from 3.9 to 4.4 while that of microfinance institutions ranged from 3.6 to 4.2. There were low mean scores for Risk Identification among both sets of respondents however, that of microfinance institutions (3.6) was much lower than that of commercial banks and this points to a problem microfinance institutions face. These low mean scores infer that risk identification was poorly practised among respondents. There is already enough uncertainty associated with each transaction even when the risk is low, and adding the inability to properly identify risk which is an important part in credit management simply spells doom. The results of this study are in agreement with Hobbs (2003) who revealed that, most banks with high non-performing loans on their books got into that situation as a result of their inability to properly assess the loan application to

identify the risk involved in the transaction. The respondents' feedback on the lack in the ability to identify risk also confirms the inference of Leippold (2006), that the problem of credit management failures in various banks is lacking when it comes to the implementation of credit management practices.

#### **4.7 CONSTRAINTS IN THE CREDIT RISK MANAGEMENT PRACTICES IN COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS**

The mean score based on the level of agreement for each statement about constraints was reportedly high for both commercial bank and Microfinance institutions. This implies that the average respondent from both institutions strongly agree that all five statements are constraints in the credit risk management. The statement with the highest level of agreement was "A financial institution's credit culture can affect the institutions' credit management practice" with mean scores of 4.5 and 4.9 for commercial bank and microfinance institutions respectively". This result from the study agrees with the results of Boffey and Robsin (1995) which led them to infer that the culture and ethics of a financial institution may determine the type of credit or lending it gives out. The first and vital step to make changes in any culture and for that matter, credit culture in the financial institution is the acknowledgement of the problem or the need for change. This acknowledgement has been done by the respondents the moment the results showed a large number of them ranked the statement "A financial institution's credit culture can affect the institutions' credit management practice" as the foremost constraint. However, it takes time to instil new credit culture in a financial institution just like bringing cultural change in any other aspect of life.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.0 INTRODUCTION**

This chapter provides the summary of findings, conclusion and recommendations of the study.

#### **5.1 SUMMARY OF FINDINGS**

Generally, the highest educational level of the credit management employees in commercial banks and microfinance institutions was adequate with the lowest being level being HND.

The area of risk identification needs a lot of improvement as it reported low mean scores in both commercial bank and microfinance institutions. Risk monitoring and reporting, risk assessment and analysis, risk management practices, and understanding risk and risk management are areas of credit risk management that microfinance institutions should look to improve upon.

Credit culture was the constraint that was reported the most by both respondents from commercial banks and microfinance institutions. On the other hand, the least reported constraints were inadequate education, training and number of staff for the credit department among commercial bank respondents whereas that for respondents from microfinance institutions was inadequate number of staff for the credit department among.

#### **5.2 CONCLUSION**

Generally, both commercial banks and microfinance institutions had staff with adequate educational level. Respondents from commercial banks performed better across all areas of credit risk management practices as compared to their counterparts in the microfinance institutions. Credit culture was the major constraint for both commercial banks and MFIs.



### **5.3 RECOMMENDATIONS**

1. Hogan (2001) asserts that properly scrutinizing the loan application in order to identify the appropriate risk associated with any transaction is very essential to the survival of the financial institution. The proper scrutiny of the loan application can only be done by highly qualified and well-trained individuals. Therefore, taking this into consideration, it is imperative to bring on personnel who have adequate educational qualification. It does not end there as these credit management officers need to be trained so they can develop analytical skills to better identify risks. The training should involve practical situations so that they are able to adjust their credit culture to suit a particular season or situation which will put them in a better position to reduce the default risk on the credit they advance.

2. Moreover, bringing in an external assessment team annually will also help credit managers address some personal biases faced and proffer ways to minimize them or avoid them entirely in risk assessment and decision making.

3. In addition, the creation of an early detection systems to flag or alert credit management officials of non-performing loans in order to swiftly deal with the danger will go a long way to help prevent financial institutions from failing.

### **5.5 RECOMMENDATIONS FOR FURTHER STUDIES**

The major constraint identified by both respondents of commercial banks and microfinance institutions. Therefore, further studies could be conducted to find out what credit culture(s) seem to be bothering the staff of the credit departments.

## REFERENCES

- Aebi, V., Sabato, G. and Schmid, G. (2012). Risk management, corporate governance, and bank performance in the financial crisis. *Journal of Banking & Finance*, 36(12): 3213–3226.
- Ahiabile, E.Y., (2012). An assessment of *Credit Management practices at Agricultural Development Bank (ADB) branches in the Eastern Region*. Unpublished MBA Dissertation, Kwame Nkrumah University of Science and Technology. Ghana
- Al-Tamimi, H. A. H., & Al-Mazrooei, F. M. (2007). Banks' risk management: a comparison study of UAE national and foreign banks. *The Journal of Risk Finance Incorporating Balance Sheet*, 8(4), 394-409.
- Altman, E. I. (2002). *Managing Credit Risk: A Challenge for The New Millennium*. Economic Notes, 31, 201-214.
- Asante, Y.A., (2015). Assessing *Credit Management practices in savings and loans companies: A Case Study First Allied Savings and Loans Company Limited, Kumasi*. Unpublished MBA Dissertation, Kwame Nkrumah University of Science and Technology. Ghana
- Banking Supervision (2020). *Bank of Ghana Website*. Available <https://www.bog.gov.gh/supervision-regulation/ofisd/list-of-ofis/> (23/05/2020)
- Barasa, W. M. (2011). *Credit Bank Policy and Profitability of a Commercial Bank; A case study of Housing Finance Bank (HFB)* (Unpublished MBA Dissertation). Makerere University, Uganda.
- Basu, S. & Rolfes, H. (1995). *Strategic credit management*, John Wiley and Sons Inc
- Battaglia, F., and A. Gallo. 2015. Risk governance and Asian bank performance: An empirical investigation over the financial crisis. *Emerging Markets Review*, 25, 53–68.
- Bessis, J. (2011). *Risk management in banking*. John Wiley & Sons.
- Boffey, R. & Robson, G. (1995). Bank credit risk management, *Managerial Finance*, Vol. 21, No.1, pp.66-79.
- Brown, C. (2008). *Inequality, consumer credit and the saving puzzle*. Edward Elgar Publishing.
- Bryman, A., & Cramer, D. (1994). *Quantitative data analysis for social scientists*. London: Routledge
- Calomiris, C. W., & Mason, J. R. (2003). Consequences of bank distress during the Great Depression. *American Economic Review*, 93(3), 937-947.
- Carey, A. (2001). Effective risk management in financial institutions: the Turnbull approach. *Balance Sheet*.

- Chelagat, K. N. (2012). *Determinants of Loan Defaults by Small and Medium Enterprises among Commercial Banks in Kenya* (Unpublished MBA Dissertation). University of Nairobi, Kenya.
- Chowdhury, T. F. & Ahmed, K. (2007). *Performance Evaluation of selected private commercial banks in Bangladesh*, New Delhi: Vikas Publishing House.
- Colquitt, J. (2007). *Credit risk management: How to avoid lending disasters and maximize earnings*. New York: McGraw Hill Professional.
- Crotty, M (2008), *The Foundations of Social Research: Meaning and Perspective in The Research Process*, Sage London.
- Danso, M. J. (2015). *An assessment of Credit Management processes of Credit Unions: A Case Study Societies in Obuasi Municipality*. Unpublished MBA Dissertation, Kwame Nkrumah University of Science and Technology. Ghana
- Derwall, J., & Verwijmeren, P. (2007). Corporate governance and the cost of equity capital: Evidence from gmi's governance rating. *European Centre for Corporate Engagement Research Note*, 6(1), 1-11.
- Ditcher, B. (2003). *Corporate Finance and Investment: Decisions and Strategies*. England: Prentice Hall.
- Fayyaz, A., 2006. Managing risk in financial sector. In M.S. Umer Eds. 2006. Managing risk in financial sector. Karachi: *The Institute of Bankers Pakistan*, 87-97
- Financial Stability Board. 2013. Thematic report on risk governance: Peer review report. [http://www.financialstabilityboard.org/publications/r\\_130212](http://www.financialstabilityboard.org/publications/r_130212). Accessed 10 April 2020.
- Flick U., (2006). *An Introduction to Qualitative Research (3rd Ed)*. London: Thousand Oaks, Sage
- Gallati, R. (2003). *Risk management and capital adequacy*. New York, USA: McGraw Hill Professional.
- Ghosh, A. (2012). *Managing risks in commercial and retail banking*. USA: John Wiley & Sons.
- Gisemba, P. N. (2010). *The Relationship between Credit Risk Management Practices and Financial Performance of Saccos In Kenya*. Unpublished MBA Dissertation, University of Nairobi.
- Gisemba, P. N. (2010). *The Relationship between Credit Risk Management Practices and Financial Performance of Saccos in Kenya* (Unpublished MBA Dissertation). University of Nairobi, Kenya.
- Hashagen, J., Harman, N., Conover, M., & Sharma, J. (2009). Risk management in banking: Beyond the credit crisis. *The Journal of Structured Finance*, 15(1), 92-103.



- Hassan, A. 2009. Risk management practices of Islamic banks of Brunei Darussalam. *The Journal of Risk Finance* 10(1): 23–37.
- Hempel, G. H., & Simonson, D. G. (1999). *Bank management: Text and cases*. Wiley.
- Hollensen S, (2003). *Marketing Management: A Relationship Approach* Financial Times Prentice Hall
- Hussain, H. A., & Al-Ajmi, J. (2012). Risk management practices of conventional and Islamic banks in Bahrain. *The Journal of Risk Finance*, 13(3), 215-239.
- Ika, S. R., & Abdullah, N. (2011). A comparative study of financial performance of Islamic banks and conventional banks in Indonesia. *International Journal of Business and Social sciences* 2(15): 199–207.
- Ikua, K. S. (2015). *Effect of Credit Management Practices on Financial Performance Of Savings And Credit Cooperative Societies In The Hospitality Industry In Nairobi*. (Unpublished MBA Dissertation). University of Nairobi, Kenya.
- Ishaq, A. B., Karim, A., Ahmed, S., & Zaheer, A. (2016). Evaluating performance of commercial banks in Pakistan: “An application of Camel model”. *Journal of Business & Financial Affairs*, 5(1), 1–30.
- Jain, S. & Ghazala, M. (2003). A Little at a Time: The Use of Regularly Scheduled Repayments in Microfinance Programs. *Journal of Development Economics*, 72(1), 253–279.
- Jenkinson, N. (2008). Strengthening regimes for controlling liquidity risk: some lessons from the recent turmoil. *Bank of England Quarterly Bulletin, Quarterly*, 48(2), 223-228.
- Khalid, S., & Amjad, S. (2012). Risk management practices in Islamic banks of Pakistan. *The Journal of Risk Finance*, 13(2), 148-159.
- Lang, W. & Jagtiani, J. (2010). The mortgage and financial crises: The role of credit risk management and corporate governance. *Atlantic Economic Journal*, Vol. 38, No 2, pp. 123-144.
- Leippold, M. (2006). Optimal credit limit management under different information regimes. *Journal of Banking and Finance*, Vol. 30, No. 2, pp. 463-487
- Middlemiss, M., (2008), *Affordability and over-indebtedness*, Available from: Bailey, M., (2008a), *Consumer Credit Quality: Underwriting, scoring, fraud prevention and collections*, White Box Publishing.
- Miller, W. L. (1983). *The Survey Method in the Social and Political Sciences: Achievements, Failures, and Prospects*. London: Francis Pinter
- Minsky, H. P. (1982). *Can "It" Happen Again? Essays on Instability and Finance*. Armonk/New York: M.E. Sharpe.
- Mishkin F. S. (2004). *The Economics of Money, Banking and Financial Markets*. (7th Ed). New York: Pearson Addison-Wesley.



- Mongiardino, A., and C. Plath. 2010. Risk governance at large banks: Have any lessons been learned? *Journal of Risk Management in Financial Institutions* 3:116–123
- Morduch, J. (1999). *The Microfinance Promise*. Journal of Economic Literature, Princeton University.
- Myers, C.S. and Brealey, R.A. (2003). *Principles of Corporate Finance*. New York: McGraw Hill.
- Nelson, L. (2002). *Solving Credit Problem*. [On-line]. Available <http://www.cfo.com> (03/02/2020)
- Nishimura, K., Kazuhito, I., & Yukiko, O (2001). *The Disposal of Non-Performing Loans and Its Potential Influence*. <http://www5.cao.go.jp/keizai3/2001/0628furyousaiken-e.pdf>
- Obamuyi, T. M. (2007). An Exploratory Study of Loan Delinquency among Small and Medium Enterprises (SMEs) In Ondo State of Nigeria, *Labour and Management in Development*, 8: 2-8.
- Oesterreichische National Bank. (2005). *Credit approval process and credit risk management*, Vienna: Oesterreichische National Bank
- Ohene, J., (2015). An examination of *Credit Management practices of Rural Bankss: A Case Study Asokore Rural Bank*. Unpublished MBA Dissertation, Kwame Nkrumah University of Science and Technology. Ghana
- Other Financial Institution (2020). *Bank of Ghana Website*. Available <https://www.bog.gov.gh/supervision-regulation/ofisd/list-of-ofis/microfinanceinstitutions/>
- Pandey, I. M. (1981), *Capital Structure and the cost of capital*. Vikas Publishing House (P) Limited
- Rahman, N. A. A., Abdullah, N. A. H., & Ahmad, N. H. (2012). *Banking risk: ownership structure, moral hazard and capital regulation*. Saarbrücken, Germany: Lap Lambert Academic Publishing
- Rosman, R. (2009). Risk management practices and risk management processes of Islamic banks: a proposed framework. *International Review of Business Research Papers*, 5(1), 242-254.
- Rossi, S. (2009). How loan portfolio diversification affects risk, efficiency and capitalisation: A managerial behaviour model for Austrian banks, *Journal of Banking and Finance*, Vol. 33, No. , pp. 2218-2226
- Rouse, G. (2002). *Bankers Lending Techniques*. London: Global Professional & Publishing
- Sabato, G. (2010). Financial crisis: where did risk management fail?. *International Review of Applied Financial Issues and Economics*, (2), 315-327.
- Salas, V. & Saurina, J. (2002). Credit risk in two institutional regimes, Spanish commercial and savings banks. *Journal of Financial Services Research*, vol. 22.

- Schroeck, G. (2002). *Risk management and value creation in financial institutions* (Vol. 155). USA: John Wiley & Sons.
- Shafiq, A., & Nasr, M. (2010). Risk management practices followed by the commercial banks in Pakistan. *International Review of Business Research Papers* 6(2): 308–325
- Sherman, P. D. (2006). Credit risk and credit access in Asia: Risk management practices in Asia and their interfaces with insolvency systems, OECD
- Stanley, B. & Geoffrey, A. (1996). *Foundations of Financial Management*, (8th Ed) US, The Irwin Series in Finance.
- Sullivan, A., & Drecnik, W. (2010). Bankruptcy in a bank credit card portfolio. *Journal of Retail Banking* Vol. 13 No. 4, pp. 33-41.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.
- Tahir, B. H. (2000). *Credit Management in Commercial Banks: A Case Study Of Habib (Nig) Bank Ltd* (Unpublished MBA Dissertation). University of Ahmadu Bello University, Nigeria
- Van Greuning, H., & Brajovic Bratanovic, S. (2009). *Analyzing Banking Risk A Framework for Assessing Corporate Governance and Financial Risk*. The World Bank.
- Van Horne, J. C. (2007). *Financial Management and Policy*. New Jersey: Prentice Hall Inc
- Walsh, L. (2010). *An assessment of the credit management process of credit unions*. (Unpublished MBA Dissertation). Waterford Institute of Technology, Waterford.
- Watson, R., & Holland, J. (2010). Banks, knowledge and crisis: a case of knowledge and learning failure. *Journal of Financial Regulation and Compliance*. 18(2), 87-105
- Yamane, T. (1967). *Statistics, An Introductory Analysis* (2nd Ed). New York: Harper and Row.

## **LIST OF APPENDICES**

### **APPENDIX A: QUESTIONNAIRE**

#### **INTRODUCTION**

This is neither a government survey nor a profit-oriented project. Information will be aggregated with those from similar interviews with other institutions and will be used for academic purposes in Mr. Stanley Danyo's master's thesis at the Kwame Nkrumah University of Science and Technology. This questionnaire is intended to gather information that will facilitate the evaluation of credit risk management practices in commercial banks and MICROFINANCE INSTITUTIONS. This is in partial fulfilment of the award of MSc. Accounting and Finance. The specific objectives of the study are to:

1. To assess the qualification and skills sets of credit risk management employees in the commercial banks and microfinance institutions
2. To assess the risk management practices of commercial banks and microfinance institutions
3. To identify and rank the constraints that are militating against credit risk management practices in commercial banks and microfinance institutions

All the information collected during this interview is confidential and no direct references will be made to individual respondents. You are free at any point during the interview to withdraw your consent. Your support and contribution would be very much appreciated.

2. Microfinance institution

Position

2. HND [ ] 3. First [ ]

5. PHD [ ]

years worked as



**B) Assessment of Qualification And Skills Sets Of Credit Management Employees In  
The Commercial Banks And Microfinance Institutions**

8) What educational qualifications do you consider in hiring employees to the credit department?

.....

.....

.....

9)What skill sets do you consider important for employing someone to the credit department?

.....

.....

.....

.....

10)Is there any training given to employees of the credit department?

1. Yes [      ]                      2. No [      ]

11) If Yes to Q.10, what kind of training is given to employees of the credit department?

.....

.....

.....

11) If Yes to Q.10, Is the training in house training or external.

1. In house training [      ]                      2. External training [      ]

12) How many times is the training offered in a year?

1. Once [      ]                      2. Twice [      ]                      3. Thrice [      ]

4. Others (specify).....

### **C) Assessment of The Risk Management Practices of Commercial Banks And Microfinance Institutions**

Please indicate your level of agreement with the following statement in question 13 to 20 using a 5-point Likert scale where: 1= Strongly Disagree; 2= Disagree; 3=Neither Agree nor Disagree; 4=Agree; and 5= Strongly Agree.

#### **13) Risk Management Practices**

<b>Statement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
The institution's risk management policy clearly defines the roles and responsibilities carried out across its various functions					
One of the objectives of the institution is having an effective risk management policy					
The institution is highly effective in continuously reviewing its risk management strategies and performance					
The executive management of the institution regularly reviews the institution's performance in managing its business risk					
The institution risk management procedures and processes are documented and provide clear guidance to staff about managing risks					
The institution policy encourages training programmes in the risk management-related areas					
The institution emphasises on the recruitment of highly qualified people in risk management					
The institution risk management policy is effectively communicated across the institution					
The institution has a comprehensive risk management process which entails identifying, evaluating, measuring, monitoring, reporting and controlling all its risks on a timely manner					
The institution risk management strategy is flexible enough to deal swiftly and adequately with all risks					
The institution assesses the adequacy of its capital and liquidity on the basis of its risk profile, market and macro-economic conditions					
The level of risk management practices of the institution is considered to be excellent					

#### **14) Understanding Risk and Risk Management**

Statement	1	2	3	4	5
There is a common understanding of risk management across the institution					
Risk management responsibility is clearly set out and understood throughout the institution					
Risk management policy is communicated down the line and well understood by all institution -concerned parties					
Accountability for risk management is clearly set out and understood throughout the institution					
Risk management is important for the success and performance of the institution					
Application of the most sophisticated techniques in risk management is pivotal in the institution					
The objective of your institution is to expand the applications of the use of advanced risk management technique					
It is significant for your institution to emphasise on continuous review and evaluation of the techniques used in risk management					
The institution applies risk management techniques with the aim to reduce its costs or expected losses					

#### 15) Risk Identification

Statement	1	2	3	4	5
The institution conducts a comprehensive and systematic identification of its risks in line with the institution's overall aims and objectives					
Risk identification is a continuous process in the institution at transactional and portfolio levels					
The institution finds it difficult to identify and prioritise its main risks					
Changes in risk are recognised and identified with the institution's rules and responsibilities					
Your institution is aware of the strengths and weaknesses of the risk management systems of the other institution s					
Your institution has developed and applied procedures for the systematic identification of investment opportunities					

#### 16) Risk Assessment and Analysis

Statement	1	2	3	4	5
Your institution bank assesses the likelihood of risk occurrence					

Your institution assesses risks by using qualitative analysis methods (e.g. high, moderate, and low)					
Your institution assesses risk by using quantitative analysis method					
Your institution analyses and evaluates the opportunities that it has to achieve objectives					
Your institution's response to analyse risk includes an assessment of the costs and benefits of each relevant risk					
Your institution's response to analyse risk includes prioritising of risk and selecting those that need an application of active management					
Your institution's response to analyse risk includes prioritising risk treatments where there are resource constraints on risk treatment implementation					

### 17) Risk Monitoring and Reporting

Statement	1	2	3	4	5
Monitoring the effectiveness of risk management is an integral part of routine management reporting in the institution					
Level of control by the institution is appropriate for the risks that it faces					
Reporting and communication processes within the institution support the effective management of risks					
The institution continuously evaluates the effectiveness of its existing controls and risk management responses					
The institution response to risk includes action plans in implementing decisions about identified risk					
The institution's managers continuously monitor the implementation of risk management policies and make necessary adjustments					
The institution's managers regularly monitor the effectiveness of the risk management policies and procedures					
The institution organisational structure enables monitoring and control over the business risk taken					

### 18) Credit Risk Analysis

Statement	1	2	3	4	5
The institution undertakes credit worthiness analysis before granting loans					



The institution conducts thorough analysis of the client's characters, capacity, collateral, capital and conditions before granting loans					
The institution classifies borrowers according to their riskiness					
The institution's credit policy commensurate with its overall risk management policy					
The institution obtains information about the borrowers from credit information bureau					
The institution sets credit limits by type of borrowers, economic sectors and geographical locations to avoid concentration of credit					
Credit risk is monitored on a regular basis and reported to institution senior management.					
The institution has a credit risk management committee to oversee its different credit risk exposures					
The credit administration of the institution ensures proper approval, completeness of documents, receipt of collateral and approval of exceptions before credit disbursement					
The institution board periodically reviews the credit risk strategy and credit policy					

#### 19) Liquidity Risk Analysis

Statement	1	2	3	4	5
Liquidity is a key determinant of the institution financial soundness					
The institution's "Management Board" defines liquidity risk strategy, and its tolerance for liquidity risk					
Institution managers give due consideration to external and internal factors posing liquidity risk while formulating the liquidity policy					
The current institution's policy clearly defines the institution liquidity strategy (short and long term)					
The institution liquidity policy is flexible enough to deal with the unusual liquidity pressures					
Board of Directors and Senior Managers regularly review the liquidity policy of the institution					
The institution has always identified the tools to meet its liquidity requirements					
Stress Testing and Scenario Analysis plays a central role in the liquidity risk management framework of the institution					
The institution's Stress Testing is based on sophisticated risk management techniques including Value at Risk (VaR) and option-based models					

## 20) Risk Governance

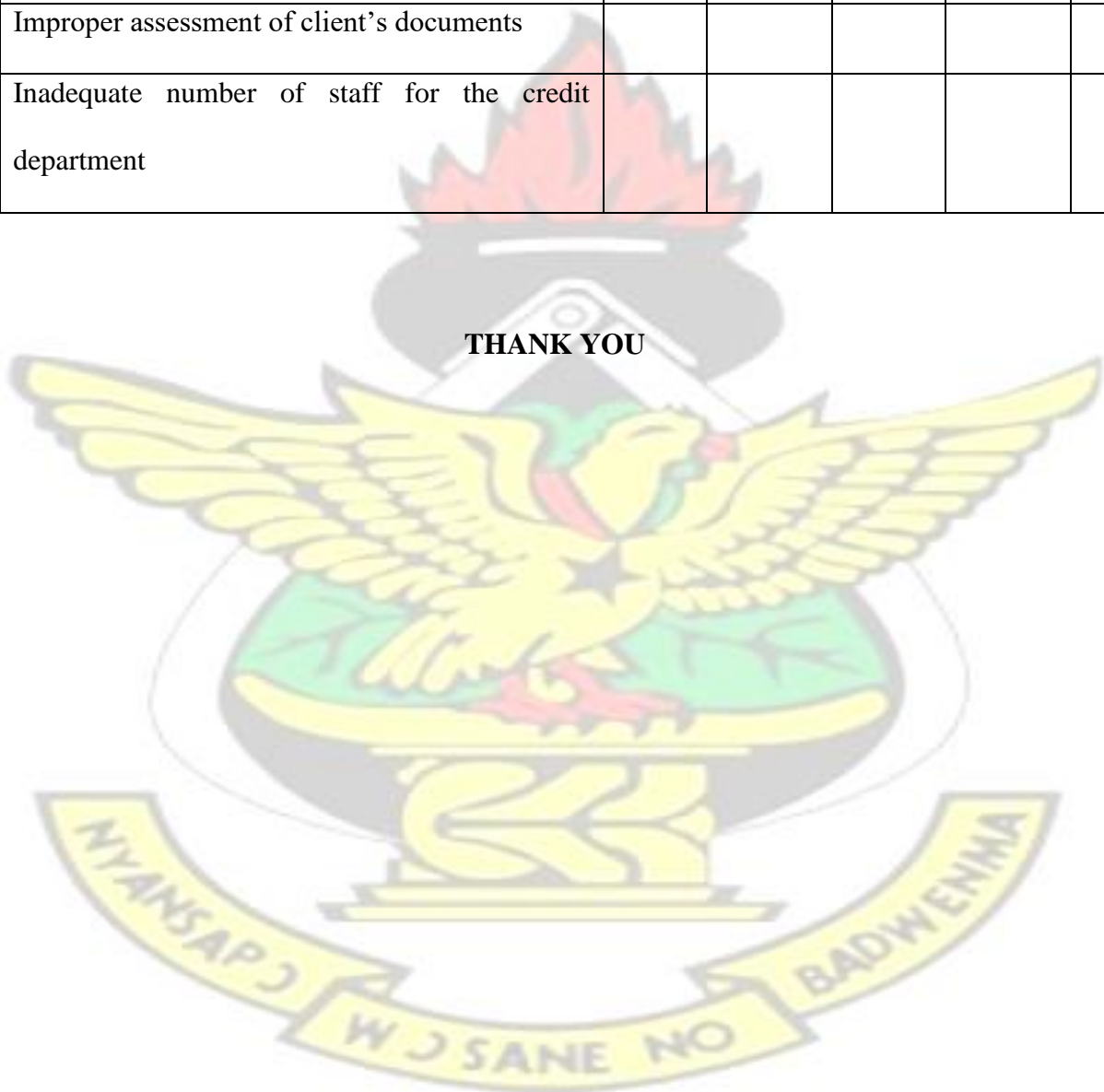
Statement	1	2	3	4	5
The board of directors approves and oversees the institution risk management framework, policies and processes					
The institution board of directors has relevant knowledge of the banking industry and risk management					
The board of directors formulate and defines the mandate and responsibilities of board-level committees (Risk Committee; Audit committee) which deal with risk governance					
Risk management committee members of the institution are independent and qualified					
The institution risk management committee provides sufficient policies and guidelines on how to manage different risks					
The Risk Committee reviews and recommends risk strategy to board of directors and oversees the implementation of risk management framework					
The Chief Executive Officer develops and recommends the overall business strategy, risk strategy, risk appetite statement and risk tolerance					
The Chief Risk Officer oversees the risk management functions of the institution					
The Chief Risk Officer develops, monitors and reports on the institution risk metrics					
The internal auditors ensure that risk management processes are in compliance with the institution's policies					
The internal auditors evaluate the effectiveness and efficiency of the institution risk management processes					
The internal auditors are independent and directly accountable to the board of directors					
The institution board and senior managers review internal audit reports, prudential reports and external experts report as a part of the institution risk governance framework					
The institution compensation policies and practices are consistent with its corporate culture, long term objectives, strategy and control environment					
The institution avoids compensation policies that create incentives for excessive risk taking					

## D) CONSTRAINTS IN THE CREDIT RISK MANAGEMENT PRACTICES IN COMMERCIAL BANKS AND MICROFINANCE INSTITUTIONS

Please indicate your level of agreement with the following constraint in the effective implementation of credit management practices. Where 1=Strong agree, 2=Agree, 3= Neither Agree nor Disagree, 4= Disagree and 5=Strongly disagree

Statement	1	2	3	4	5
A financial institution's credit culture can affect the institutions' credit management practice					
Inadequate education and training					
Individual biases of the credit management administrator					
Improper assessment of client's documents					
Inadequate number of staff for the credit department					

**THANK YOU**



## APPENDIX B: TURNITIN REPORT

### CREDIT RISK MANAGEMENT PRACTICES: A COMPARATIVE STUDY BETWEEN COMMERCIAL BANKS AND MFI's

#### ORIGINALITY REPORT

<b>18%</b>	<b>14%</b>	<b>5%</b>	<b>12%</b>
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

#### PRIMARY SOURCES

<b>1</b>	<b>core.ac.uk</b> Internet Source	<b>2%</b>
<b>2</b>	<b>Submitted to University of Ghana</b> Student Paper	<b>1%</b>
<b>3</b>	<b>westminsterresearch.westminster.ac.uk</b> Internet Source	<b>1%</b>
<b>4</b>	<b>erepository.uonbi.ac.ke</b> Internet Source	<b>1%</b>
<b>5</b>	<b>gradeup.co</b> Internet Source	<b>1%</b>
<b>6</b>	<b>www.bizresearchpapers.com</b> Internet Source	<b>1%</b>
<b>7</b>	<b>Submitted to Midlands State University</b> Student Paper	<b>1%</b>
<b>8</b>	<b>Submitted to Anglia Ruskin University</b> Student Paper	<b>1%</b>
<b>9</b>	<b>Submitted to Kenyatta University</b>	



	Student Paper	1%
10	<b>LexisNexis</b> Publication	<1%
11	<b>Submitted to University of Cape Coast</b> Student Paper	<1%
12	<b>everant.org</b> Internet Source	<1%
13	<b>www.hrpub.org</b> Internet Source	<1%
14	<b>Submitted to Sikkim Manipal University, Ghana</b> Student Paper	<1%
15	<b>studentsrepo.um.edu.my</b> Internet Source	<1%
16	<b>Submitted to Open Learning Centre</b> Student Paper	<1%
17	<b>Submitted to University of Northumbria at Newcastle</b> Student Paper	<1%
18	<b>Submitted to Wawasan Open University</b> Student Paper	<1%
19	<b>www.uniassignment.com</b> Internet Source	<1%
<b>Submitted to Kampala International University</b>		

20	Student Paper	<1%
21	<a href="http://www.coursehero.com">www.coursehero.com</a> Internet Source	<1%
22	Submitted to Ghana Technology University College Student Paper	<1%
23	<a href="http://www.ibbm.org.my">www.ibbm.org.my</a> Internet Source	<1%
24	Submitted to Asian Institute of Technology Student Paper	<1%
25	Songporn Hansanti, Sardar M. N. Islam, Peter Sheehan. "Chapter 2 Recent Issues in International Finance: A Literature Review", Springer Science and Business Media LLC, 2008 Publication	<1%
26	Submitted to Sheffield Hallam University Student Paper	<1%
27	<a href="http://ir.knust.edu.gh">ir.knust.edu.gh</a> Internet Source	<1%
28	<a href="http://chss.uonbi.ac.ke">chss.uonbi.ac.ke</a> Internet Source	<1%
29	<a href="http://pdfs.semanticscholar.org">pdfs.semanticscholar.org</a> Internet Source	<1%

30	Asma Abdul Rehman, Abdelhafid Benamraoui, Aasim Munir Dad. "A comparative study of Islamic and conventional banks' risk management practices: empirical evidence from Pakistan", Journal of Banking Regulation, 2017 Publication	<1%
31	environmentalsystemsresearch.springeropen.com Internet Source	<1%
32	www.mubs.ac.ug Internet Source	<1%
33	docplayer.net Internet Source	<1%
34	repository.seku.ac.ke Internet Source	<1%
35	erepo.usiu.ac.ke Internet Source	<1%
36	ubir.bolton.ac.uk Internet Source	<1%
37	Submitted to University of Wales Institute, Cardiff Student Paper	<1%
38	www.iosrjournals.org Internet Source	<1%
39	Submitted to Chifley Business School Student Paper	<1%

40	Submitted to October University for Modern Sciences and Arts (MSA) Student Paper	<1 %
41	<a href="http://www.researchsquare.com">www.researchsquare.com</a> Internet Source	<1 %
42	Submitted to University of Kabianga Student Paper	<1 %
43	Submitted to KDU College Sdn Bhd Student Paper	<1 %
44	<a href="http://ugspace.ug.edu.gh">ugspace.ug.edu.gh</a> Internet Source	<1 %
45	<a href="http://www.tandfonline.com">www.tandfonline.com</a> Internet Source	<1 %
46	Submitted to Victoria University Student Paper	<1 %
47	Submitted to University of Stellenbosch, South Africa Student Paper	<1 %
48	<a href="http://mafiadoc.com">mafiadoc.com</a> Internet Source	<1 %
49	Submitted to Higher Education Commission Pakistan Student Paper	<1 %

[article.sciencepublishinggroup.com](http://article.sciencepublishinggroup.com)



50	Internet Source	<1 %
51	<a href="http://www.scribd.com">www.scribd.com</a> Internet Source	<1 %
52	<a href="http://pt.scribd.com">pt.scribd.com</a> Internet Source	<1 %
53	Bashir Muhammad, Sher Khan, Yunhong Xu. "Understanding risk management practices in commercial banks: The case of the emerging market", Risk Governance and Control: Financial Markets and Institutions, 2018 Publication	<1 %
54	Justice Ray Achoanya Ayam, Gabriel S. Ahinful. "Risk Management in Rural and Community Banks: The Ghanaian Experience", Case Studies in Business and Management, 2015 Publication	<1 %
55	<a href="http://suaire.suanet.ac.tz:8080">suaire.suanet.ac.tz:8080</a> Internet Source	<1 %
56	<a href="http://islamicnoteforbanking.blogspot.com">islamicnoteforbanking.blogspot.com</a> Internet Source	<1 %
57	Submitted to Multimedia University Student Paper	<1 %
58	<a href="http://www.mdpi.com">www.mdpi.com</a> Internet Source	<1 %

59	<a href="http://www.ijecm.co.uk">www.ijecm.co.uk</a> Internet Source	<1 %
60	Submitted to University of Derby Student Paper	<1 %
61	Submitted to msm-nl Student Paper	<1 %
62	Mandeep Kaur, Samriti Kapoor. "Adoption of Basel norms: a review of empirical evidences", Journal of Financial Regulation and Compliance, 2015 Publication	<1 %
63	<a href="http://www.eajournals.org">www.eajournals.org</a> Internet Source	<1 %
64	Submitted to Yeungnam University Student Paper	<1 %
65	<a href="http://repository.up.ac.za">repository.up.ac.za</a> Internet Source	<1 %
66	Sania Khalid, Shehla Amjad. "Risk management practices in Islamic banks of Pakistan", The Journal of Risk Finance, 2012 Publication	<1 %
67	Submitted to University Der Es Salaam Student Paper	<1 %
68	<a href="http://www.wbiconpro.com">www.wbiconpro.com</a> Internet Source	<1 %

69	Submitted to ideamalta Student Paper	<1%
70	Submitted to CVC Nigeria Consortium Student Paper	<1%
71	Submitted to Kwame Nkrumah University of Science and Technology Student Paper	<1%
72	<a href="http://www.globets.org">www.globets.org</a> Internet Source	<1%
73	Submitted to The University of Manchester Student Paper	<1%
74	<a href="http://www.nrsp.org.uk">www.nrsp.org.uk</a> Internet Source	<1%
75	<a href="http://journal.frontiersin.org">journal.frontiersin.org</a> Internet Source	<1%
76	<a href="http://repository.mua.ac.ke">repository.mua.ac.ke</a> Internet Source	<1%
77	<a href="http://eprints.glos.ac.uk">eprints.glos.ac.uk</a> Internet Source	<1%
78	<a href="http://link.springer.com">link.springer.com</a> Internet Source	<1%
79	<a href="http://www.escola-danca.com">www.escola-danca.com</a> Internet Source	<1%

80	<a href="#">epdf.pub</a> Internet Source	<1 %
81	Abul Hassan. "Risk management practices of Islamic banks of Brunei Darussalam", The Journal of Risk Finance, 2009 Publication	<1 %
82	Submitted to Majan College Student Paper	<1 %
83	<a href="#">mbr.cikd.ca</a> Internet Source	<1 %
84	<a href="#">journals.sagepub.com</a> Internet Source	<1 %
85	<a href="#">upet.ro</a> Internet Source	<1 %
86	Submitted to Kisii University Student Paper	<1 %
87	<a href="#">www.ciitlahore.edu.pk</a> Internet Source	<1 %
88	<a href="#">www.aafm.com.br</a> Internet Source	<1 %
89	Submitted to University of Greenwich Student Paper	<1 %
90	<a href="#">gbata.org</a> Internet Source	<1 %



91	<a href="http://vdocuments.site">vdocuments.site</a> Internet Source	<1%
92	<a href="http://www.ksvali.com">www.ksvali.com</a> Internet Source	<1%
93	<a href="http://iajournals.org">iajournals.org</a> Internet Source	<1%
94	<a href="http://scholarworks.waldenu.edu">scholarworks.waldenu.edu</a> Internet Source	<1%
95	Hassan M. Hafez. "RISK MANAGEMENT PRACTICES IN EGYPT: A COMPARISON STUDY BETWEEN ISLAMIC AND CONVENTIONAL BANKS", Risk Governance and Control: Financial Markets & Institutions, 2015 Publication	<1%
96	Hussein A. Hassan Al-Tamimi, Faris Mohammed Al-Mazrooei. "Banks' risk management: a comparison study of UAE national and foreign banks", The Journal of Risk Finance, 2007 Publication	<1%
97	<a href="http://www.iiste.org">www.iiste.org</a> Internet Source	<1%
98	<a href="http://www.assignmentpoint.com">www.assignmentpoint.com</a> Internet Source	<1%

99 "Globalization of Financial Institutions", Springer Science and Business Media LLC, 2014 <1%

---

Exclude quotes Off  
Exclude bibliography Off

Exclude matches Off