UGANDA MANAGEMENT INSTITUTE

CREDIT RISK MANAGEMENT AND PROFITABILITY IN COMMERCIAL BANKS

IN UGANDA: A CASE STUDY OF DIAMOND TRUST BANK

BY

AARON OPIDING

14/MBA/12/016

A DISSERTATION SUBMITTED TO THE SCHOOL OF MANAGEMENT SCIENCE IN

PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE

MASTERS DEGREE IN BUSINESS ADMINISTRATION OF

UGANDA MANAGEMENT INSTITUTE

JANUARY, 2018

DECLARATION

I, **Aaron Opiding,** declare that this dissertation is my own original work and that it has not been presented and will not be presented to any other University for similar or any other degree award

Sign…………………………………..

Date……………………………….

APPROVAL

We, the undersigned, certify that we have read and here by recommend for acceptance by Uganda Management Institute a dissertation titled *"Credit risk management and profitability in commercial banks in Uganda: A case study of Diamond Trust Bank"* in partial fulfillment of the requirements for the award of the degree of Masters in Business Administration of Uganda Management Institute.

Dr. Edgar Kateshumbwa Mwesigye, PhD

Sign………………………………………….

Date…………………………………………..

Associate Prof. Gerald Kagambirwe Karyeija, PhD

Sign……………………………………….

Date…………………………………………..

DEDICATION

This research work is dedicated to my wife Mrs Opiding whose company I missed during the course of writing this report.

ACKNOWLEDGEMENT

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ACRONYMS

AAA	Analytical and Advisory Assistance
BDS	Business Development Services
BOD	Board of Directors
BoU	Bank of Uganda
BPS	Budget Policy Statement
CSO	Civil Society Organization
CVI	Content Validity Index
DTB	Diamond Trust Bank
EAC	East African Community
GoU	Government of Uganda
IA	Internal Auditor
ICT	Information and Communication Technology
MDGs	Millennium Development Goals
ME	Monitoring and Evaluation
NGOs	Non-Governmental Organizations
PSR	Public Sector Reform
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Scientists
TTL	Task Team Leader
VAT	Value Added Tax
WBI	World Bank Institute
WBG	World Bank Group

ABSTRACT

The study focused on investigating the relationship between credit risk management and profitability in commercial banks in Uganda with specific focus on Diamond Trust Bank. The study was premised on the following research objectives: to establish the relationship between credit criteria and profitability in Diamond Trust Bank, to investigate the relationship between credit policies and profitability in Diamond Trust Bank and to investigate the relationship between risk mitigation measures and profitability in Diamond Trust Bank. The study adopted a descriptive cross sectional survey design where both quantitative and qualitative approaches were used. In this study, a total number of 101 respondents were expected but 85 respondents returned the survey instruments representing a response rate of 83.6%. The data was collected using questionnaires and interviews and analysis was done using regression analysis and correlation for the quantitative findings. Qualitative analysis was done using content and thematic analysis. The findings revealed that there is a positive relationship between credit criteria, credit policies and risk mitigation and profitability of Diamond Trust Bank. The results on credit criteria and profitability of Diamond Trust Bank were $r = 0.197$, $p = 0.000 < 0.05$, the results for credit policies and profitability of Diamond Trust Bank indicated that $r = 0.353(**)$, $p = 0.001 > 0.05$ and the results for risk mitigation and profitability of Diamond Trust Bank revealed that $r = 0.457(**)$, $p = 0.000 < 0.05$. The findings indicated that credit criteria, credit policies and risk mitigation explained 20.0% of the variation in profitability of Diamond Trust Bank (adjusted $R2 = 0.200$). Findings revealed that credit is extended to borrowers based on capacity, valuation of security is done before credit is extended to the borrower. Diamond Trust Bank has a strong credit policy that has been operation for some time now. It was recommended that instead of focusing on the credit criteria that has gaps, the bank should cast its eyes on a low cost fund source through intensive mobilization for example focus on urgency banking and use of platform fees for services like checking account balances using ATM. DTB should strengthen the implementation of the existing credit policy by ensuring enough resources and manpower is in place to implement the policy. There is need to identify and determine the extent of risk at an early stage take.

CHAPTER ONE

INTRODUCTION

1.1 Introduction.

The study investigated the relationship between credit risk management and profitability in commercial banks in Uganda with specific focus on Diamond Trust Bank. Credit risk management is conceived as the independent variable and profitability is the dependent variable. Although many banks are trying to strategically place themselves in the banking industry so as to favourably compete by making their services efficient and effective; there are growing low profitability levels in some big banks (Kabahuma, 2013). This chapter presents the background to the study, statement of the problem, study purpose, research objectives, research questions, research hypotheses, conceptual framework, significance of the study and operational definitions.

1.2 Background to the study

The background is divided into four perspectives, the historical, theoretical that deals with theories that will underpin the study, conceptual and contextual perspective are presented in detail below.

1.2.1 Historical background

Today, banking is a one of the vibrant industry, focused on technological innovation. Banks play a vital and active role in the economic development of a country (Charabarty, 2014). Banking systems of any country needs to be effective, efficient and disciplined because it brings about a rapid growth in the various sectors of the economy (Charabarty, 2014). Although many banks are trying to strategically place themselves in the banking industry so as to favourably compete by

1

making their services efficient and effective; there are growing low profitability levels in many major commercial banks in Uganda (Kabahuma, 2013).

Banks since independence have been providing a wide range of services to satisfy the banking needs of customers from the smallest account holder to the largest company and in some cases of non-customers (Bategeka, 2011). Many products and services are found in these banking institutions. The range of services offered differs from bank to bank depending mainly on the type and size of the bank.

Uganda's banking sector has evolved over time from a period of "financial repression" during the1970s and 1980s to a period of liberalization that started in the late 1980s. The first commercial bank in Uganda was established in 1906 – the National Bank of India which later became the Grindlays Bank and is now the Stanbic Bank (Abuka and Egesa, 2010). Currently the total number of Banks stands at 22 commercial banks, six credit institutions and three Microfinance Deposit-taking Institutions (MDIs). The evolution of the banking sector has been characterized by bank closures, mergers and acquisitions (Kakuba, 2012). Before the country's independence in 1962, the banking sector was dominated mainly by foreign owned commercial banks (Bategeka, 2009). In addition to the National Bank of India, Standard Bank was opened in 1912 and the Bank of the Netherlands was opened in 1954 and later merged with Grindlays Bank. Uganda Credit and Savings Bank which became Uganda Commercial Bank (UCB) in 1969 was established in 1965 by an Act of Parliament. This was the first local commercial bank established in the country (Kakuba, ibid). Bank of Baroda was established, first in 1953, but regularized as a commercial bank in 1969 with the enactment of the Banking Act of 1969. This was the first legal framework for regulation of the banking sector following the country's

independence (Beck and Hesse, 2006). The Bank of Uganda country's central bank which was established in 1966 under the Bank of Uganda Act (1966), was followed by the establishment of the Uganda Development Bank under the Uganda Development Bank (UDB) Decree (1972).

Between 2000 and 2009, 10 banks were licensed with 70 percent licensed in 2008 and 2009 due to on and off moratorium imposed on bank licensing for an extended period of time from 1996 to 2007 (Kakuba, 2012). There were also non-bank financial institutions established during this period including the International Credit Bank Ltd and a number of other credit institutions and microfinance deposit taking institutions.

Currently the banking sector is comprised of 25 commercial banks. According to Beck & Hesse (2006), the banking sector in Uganda was mainly dominated by foreign banks before independence in 1962. According to Brown Bridge (1998) it was observed that the foreign banks were not advancing credit to the local business community and as such in 1965 through an act of parliament, Uganda Credit and saving bank was established and this later was renamed Uganda commercial bank in 1969, purposely to mobilize saving from local Ugandans and to provide credit to the local business. With the establishment of Uganda commercial bank all government transactions were handled by this bank leading to its rapid expansion in a short period. Through the bank of Uganda Act of (1966), Bank of Uganda was established to regulate the banking industry in Uganda and in order to strengthen regulation the government enacted the Banking Act (1969) to provide a frame work for the regulation and supervision of banks in Uganda. This was the first official act for the regulation of Banks in Uganda.

Currently the banking sector in Uganda is guided/Regulated by the following acts, the bank of Uganda act 2000 which replaced the bank of Uganda act 1966 and the bank of Uganda statute 1993. This act empowers Bank of Uganda to formulate and implement monetary policies for the economic and monetary development of Uganda, The financial institutions Act (FIA) 2004. This provide for the regulation, control and the discipline of commercial banks by the bank of Uganda as an arm of government with its decision being final as it cannot be challenged in any court of law or by the Minister.

Ara, Bakaeva and Sun (2009) observed a positive link between credit risk management and profitability of commercial banks in Sweden. This study noted that banks that embrace modern risk management have got lower non-performing assets in relation to those that are performing un like their counter parts that are poor at credit risk management. This was further observed by Kargi (2011), Kolapo, Ayeni & Oke (2012) who observed that credit risk management and profitability are positively related in their study of Nigerian Banks. Fan Li and Yijun Zou (2014) in their study of 47 largest commercial banks in Europe covering a period from 2007 to 2012 observed that credit risk management does have a positive impact on the profitability of commercial banks. However, Kithingi (2010) who assessed several banks in Kenya discovered no relationship between credit risk and profitability. Researchers in Uganda have done a lot on the subject, however this work is going to focus on five commercial banks. Currently records shows that for the period 2008 to 2013, commercial banks have been greatly exposed to impairment losses on loans and advances and the failure to manage credit risks in Uganda over the years has led to the collapse of commercial banks, these include Green land bank, Global trust bank and National bank of commerce and as a result the financial regulator, Bank of Uganda requires commercial banks to provide for the expected loss arising out of the failure of a

4

borrower to honour their monthly installment obligations through what is referred to as provision for bad debts. Over the years this provision for bad debts has become a major cost to banks with in the financial market in Uganda.

An analysis of the financials of Diamond Trust Bank reveals an ever increasing provision for bad and doubtful debt and this is greatly affecting their profitability. This is as a result of the ever increasing loan book over the years by the Ugandan banks which has presented a number of challenges to management with concerns about the quality of mortgage, business and personal loans that are booked by the banks.

1.2.2 Theoretical background

The study was guided by the credit theory that states that informal credit institutions offer loan and savings services to their members by Bien (1965). The institutions are expected to make profits whenever credit is extended. The development of modern commercial institutions came as a consequence of the inability or reluctance of the traditional banks to draw from the financial assets in the rural areas. Businesses usually prefer to obtain funds internally and where they are not available, the business would first consider debt financing before going for equity financing as an external financing source. Commercial institutions should strive to do their business in a manner that does not harm the community in which they operate and failure to do so may force the community to act in a way that harms the activities of the institutions. Commercial bank credit policies should be seen to reflect the interest of the community in which they operate. There should be limitations of advancing credit to customers who are engaged in business that lead to environmental degradation, pollution and those that are socially unacceptable (Prabhu and Neu, 1998)   .

The benefit of this theory has it that if there is any risk identified, there must be continuation of the management process. It should be noted that monitoring takes place at all times to be sure the results are always as intended. This management is being done while following the policies, philosophy, practices, strategies and the credit culture of the bank. The bank is doing all this because its profitability, liquidity and solvency have to be guaranteed. *Criticisms:* despite all these efforts by the banks, there are still failures at times or problems which can be attributed to different factors including information asymmetry (vital information which the customer hides from the bank).

However, in relation to this study, the community is interested in banks managing their credit risk effectively by the use of modern credit risk management tools and skilled officers so that profitability can be enhanced in order to be able to give back to the community in which they operate. Therefore banking institutions should show legitimacy to do business by effectively embedding the community aspirations in their budgets and policies. It is this theory that underpinned the study and was further expanded in the literature review under the theoretical review in chapter two.

1.2.3 Conceptual background

Risk is defined as the probability that a certain event will occur. It is looked at as, in the event of a particular exposure, what is the probability that a particular outcome will occur. According to (Bikker & Metzmakerz, 2005; Buttimer, 2001). Risk on the other hand can be defined as the possibility that something unpleasant or dangerous might happen (Macmillan, 2002). When companies indulge in business, it is obvious that they will be exposed to one type of risk or another which in most cases is an uncertainty although at times it can be certain that it will occur

the researcher notes. Credit risk is defined as the possibility for a loss to a lender arising out of the inability of the borrower to honor his/her contractual obligations of repaying a debt with in the agreed terms. Management in the simplest understood definition can be defined as the act of planning, directing, controlling, monitoring and testing for desired results to be obtained. Or it is simply the act, manner, or practice of managing; handling, supervision, or control.

Credit Risk Management is the way banks lend out money after taking great consideration to avoid losing the money through bad debts. The management process involves risk identification, risk planning and risk mitigation (Jodarn, 2011). For purposes of this study credit risk management referred to credit criteria policies, credit culture and risk mitigation policies in Diamond Trust Bank. Jodarn (2011) defines profitability as return on investment. For purposes of this study profitability was measured in terms of return on assets, return on equity and return on capital employed.

1.2.4 Contextual background

Matovu and Okumu (2013) observed that the credit analysis of banks should be based on the basic principles of lending such as character, collateral, conditions and capacity. Currently records shows that for the period 2008 to 2013 many banks in Uganda like Diamond Trust Bank have been greatly exposed to impairment losses on loans and advances (Diamond Trust Bank Report, 2014). The failure to manage credit risks in Uganda over the years has led to the collapse of commercial banks and as a result the financial regulator. Over the years this provision for bad debts has become a major cost to banks with in the financial market in Uganda thus creating a research gap that the researcher sought to investigate in this study. With the result, the declining profitability levels in the banking sector is demanding more attention for studies for example in

7

2012 Diamond Trust bank registered a decline in profitability by 42 billion (Diamond Trust Bank Managing Director Release, 2013) . Diamond Trust Bank impairment losses on loans and advances which represents credit risk is illustrated below in table 1.1

Table 1.1: Diamond Trust Bank impairment losses on loans and advances which represent credit risk

YEAR	NET PROFIT ('000 Shs)	IMPAIRMENT LOSSES ('000 Shs)	% of impairment to Net profit
2008	6,955,684	1,321,733	19%
2009	5,003,609	284,423	6%
2010	3,141,097	1,350,163	43%
2011	5,535,653	2,476,086	45%
2012	8,147,282	5,872,595	72%
2013	6,453,056	11,478,827	178%
2014	4,256,738	15,776,725	371%

Source: Extracted from Diamond Trust Bank Annual Financial Income Statement(2015)retrieved at www.Diamond trust bank.co.ug.

The above illustration shows a tremendous increase in impairment losses in loans and advances over the years starting with 2010 having 43% and this becoming worse in the year 2013 when 178% was recorded as the total exposure of the bank. Gaps in credit risk management in most commercial banks in Uganda are creating profitability gaps in the banking sector which has put some banks at risk of closure for example commercial banks have been greatly exposed to impairment losses on loans and advances there by leading to a decline in profitability.

1.3 Statement of the problem

Although many banks are trying to strategically place themselves in the banking industry so as to favourably compete by making their services efficient and effective; there are growing low profitability levels in most commercial banks (Kibada, 2015). With the result, the declining profitability levels in the banking sector is demanding more attention for studies for example in 2012 Diamond Trust bank registered a decline in profitability by 42 billion (Diamond Trust Bank Managing Director Release, 2013) . Gaps in credit risk management in most commercial banks in Uganda are creating profitability gaps in the banking sector which has put some banks at risk of closure for example commercial banks have been greatly exposed to impairment losses on loans and advances. The banking industry has continued to churn out a great deal of credit but recovery of the same has been a great a problem (Kasozi, 2014). The rate of growth of non-performing Assets (NPA) and foreclosure has steadily increased over the years. The failure to manage credit risk in Uganda over the years has led to the collapse of commercial banks (Teffe Bank, Global trust bank, Cooperative Bank, Greenland bank, National bank of commerce etc). This prompted the financial regulator, Bank of Uganda, to require commercial banks to provide for the expected loss arising out failure of a borrower to honour monthly installment obligations through what is referred to as provision for bad debts. Over the years the provision for bad debts has become a major cost to Diamond Bank (DTB Report, 2015). Most times these uncertainties have happened yet the banks have the ability to curb them. DTB has many nonperforming loans that have come under heavy scrutiny from the regulators, which provides significant incentive to restructure or renegotiate nonperforming loans before they are too far gone to recover any money at all Yet, not much linkage has been done empirically to demystify the proposition surrounding credit risk management in banks and this has created a knowledge gap. It is against such a background that the researcher was prompted to carry out an investigation the relationship

between credit risk management and profitability of commercial banks with specific reference to Diamond Trust Bank.

1.4 Purpose of the study

The purpose of this study was to investigate the relationship between credit risk management and profitability of Diamond Trust Bank in Uganda.

1.5 Objectives of the study

The study sought to achieve the following objectives;

1. To establish the relationship between credit criteria and profitability in Diamond Trust Bank, Uganda.

2. To investigate the relationship between credit policies and profitability in Diamond Trust Bank, Uganda

3. To investigate the relationship between risk mitigation measures and profitability in Diamond Trust Bank, Uganda

1.6 Research questions

The study attempted to answer the following research questions

1. What is the relationship between credit criteria and profitability in Diamond Trust Bank, Uganda?

2. What is the relationship between credit policies and profitability in Diamond Trust Bank, Uganda?

3. What is the relationship between risk mitigation measures and profitability in Diamond Trust Bank, Uganda?

1.7 Research hypotheses

The study tested the following research hypotheses

1. There is a positive significant relationship between credit criteria and profitability in commercial banks in Uganda

2. There is a positive significant relationship between credit policies and profitability in commercial banks in Uganda

3. There is a positive significant relationship between risk mitigation measures and profitability in commercial banks in Uganda

1.8 Conceptual Framework

This sub section outlines the conceptual framework of the study and provides a discussion of the main areas of focus. It seeks to delineate the palpable and crucial link between the issues and as a final point it seeks to summarize the conceptual framework for the study
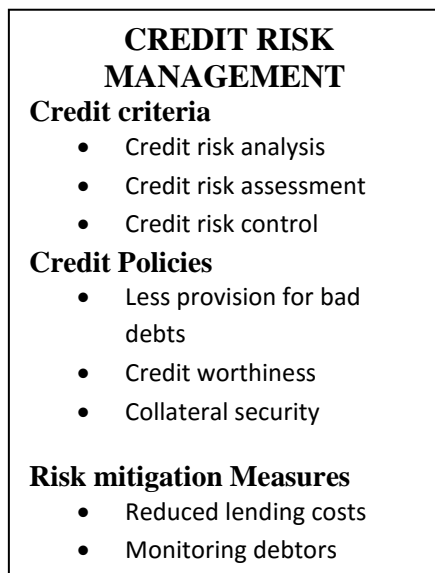
INDEPENDENT VARIABLE　　　　　　　*DEPENDENT VARIABLE*
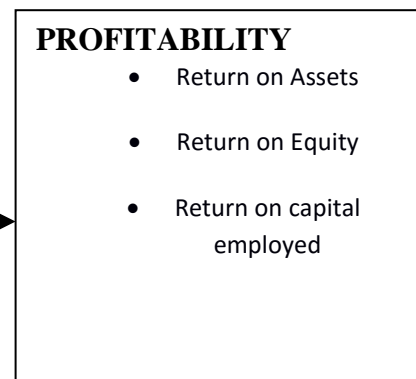
Figure1.1: A conceptual framework illustrating the relationship between credit risk management and profitability of Banks *Source: Adapted from Ddamba (2004) Credit risk management in Uganda: The crisis 1990 to 1999(Modified by the Researcher).*

11

The independent variable is credit risk management and the dependent is profitability. Credit risk management referred to credit criteria, credit policies and risk mitigation measures.

Credit criteria was looked at in terms of credit risk analysis, credit risk assessment and credit risk control. Credit policies referred to less provision for bad debts, collateral security and credit worthiness. Risk mitigation measures were looked at in terms of reduced lending costs and effective monitoring and supervision of debtors. Profitability of banks was measured in terms of return on assets, return on equity and return on capital employed

1.9 Significance of the Study.

It is anticipated that the proposed study will be significant in the following ways: The research findings will greatly contribute to the existing body of Knowledge in the field of credit risk management and profitability and this will be useful in the Ugandan market. Manager and Directors will greatly benefit from this research as it tackles a field which presents one of their biggest challenges in administration and management of commercial banks. Lastly at the end of the research period the researcher will have accumulated a great deal of knowledge which will greatly help him appreciate banking and in particular credit risk management.

1.10 Justification to the Study

Matovu and Okumu (2013) observed that the credit analysis of banks should be based on the basic principles of lending such as character, collateral, conditions and capacity. Currently records shows that for the period 2008 to 2013 many banks in Uganda like Diamond Trust Bank have been greatly exposed to impairment losses on loans and advances (Diamond Trust Bank Report, 2014). The failure to manage credit risks in Uganda over the years has led to the collapse of commercial banks and as a result the financial regulator. Over the years this provision for bad

debts has become a major cost to banks with in the financial market in Uganda thus creating a research gap that the researcher sought to investigate in this study. The failure to manage credit risk in Uganda over the years has led to the collapse of commercial banks like Teffe Bank, Global trust bank, Cooperative Bank, Greenland bank, National bank of commerce. The provision for bad debts has become a major cost to banks operating in Diamond Trust Bank. Most times these uncertainties have happened yet   Diamond Ttrust Bank has the ability to curb them but given the laxity, many have lost billions of money hence the low profitability levels. This scenario warranties an urgent need for a study on credit risk management and profitability in commercial banks.

1.11 Scope of the Study.

1.11.1Geographical Scope: The study was conducted in Kampala at Diamond Trust Bank at the head offices. Kampala is located in Central Uganda and is the capital city of Uganda. The head offices have been chosen because this is where the key documents/records on credit risk management are kept and it is where the key credit decisions are taken.

1.11.2 Content Scope: The study focused on examining the relationship between credit risk management and profitability in commercial banks. Credit risk management is the independent variable and profitability is the dependent variable

1.11.3 Time Scope: The study focused the period 2007 to 2016 as it represents the time when Diamond Trust bank has been greatly exposed to credit risk.

1.12 Definitions to Key Terms and Concepts

A commercial bank is a profit-oriented organization/firm that is engaged in the business of receiving deposits and advancing credit to its clients (Jodarn, 2011).

Risk is defined as the probability that a certain event will occur. It is looked at as, in the event of a particular exposure, what is the probability that a particular outcome will occur. According to (Bikker & Metzmakerz, 2005; Buttimer, 2001).

Risk on the other hand can be defined as the possibility that something unpleasant or dangerous might happen (Macmillan, 2002). When companies indulge in business, it is obvious that they will be exposed to one type of risk or another which in most cases is an uncertainty although at times it can be certain that it will occur the researcher notes.

Credit risk is defined as the possibility for a loss to a lender arising out of the inability of the borrower to honor his/her contractual obligations of repaying a debt with in the agreed terms.

Management in the simplest understood definition can be defined as the act of planning, directing, controlling, monitoring and testing for desired results to be obtained. Or it is simply the act, manner, or practice of managing; handling, supervision, or control (answers.com, 2010).

Credit Risk Management the way banks lend out money after taking great consideration to avoid losing the money through bad debts. The management process involves risk identification, risk planning and risk mitigation. For purposes of this study credit risk management refers to credit criteria policies, credit culture and risk mitigation policies in Diamond Trust Bank. Jodarn (2011) defines **profitability** as return on investment. For purposes of this study profitability was measured in terms of return on assets, return on equity and return on capital employed.

In conclusion, this chapter reviews the relationship between credit management and profitability. The aim, problem statement, objectives, research questions, significance and operational definitions are the key areas discussed in this chapter. The parameters of the study scope and limitations will be highlighted in this chapter. The next chapter provides an overview on the literature reviewed on credit management and profitability

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of the related literature in line with the objectives of the study. Each variable within the conceptual frame work is to be reviewed. The literature review identifies the knowledge gap, which formed the basis for the researcher's study and helped in developing a methodology for the study. The literature reviewed was from journals, textbooks, working papers, dissertations and internet websites.

2.2 Theoretical framework

This sub section presents the theories that underpinned the study, how the theories have been used by other researchers and how they guided the study. The theory was used in the discussion of findings in chapter five.

2.2.1 The Credit Theory

The study was guided by the credit theory propounded by Bien (1965) who noted that states that informal credit institutions offer loan and savings services to their members. The institutions are expected to make profits whenever credit is extended. The development of modern commercial institutions came as a consequence of the inability or reluctance of the traditional banks to draw from the financial assets in the rural areas. Businesses usually prefer to obtain funds internally and where they are not available, the business would first consider debt financing before going for equity financing as an external financing source. Commercial institutions should strive to do their business in a manner that does not harm the community in which they operate and failure to do so may force the community to act in a way that harms the activities of the institutions.

Commercial bank credit policies should be seen to reflect the interest of the community in which they operate. There should be limitations of advancing credit to customers who are engaged in business that lead to environmental degradation, pollution and those that are socially unacceptable (Prabhu and Neu, 1998)   .

However, in relation to this study, the community is interested in banks managing their credit risk effectively by the use of modern credit risk management tools and skilled officers so that profitability can be enhanced in order to be able to give back to the community in which they operate. Therefore banking institutions should show legitimacy to do business by effectively embedding the community aspirations in their budgets and policies. It is this theory that underpinned the study and was further expanded in the literature review under the theoretical review in chapter two.

2.3 Review of Related Literature

The literature under is reviewed according to the study objectives which are credit criteria policies, credit culture, risk mitigation policies and profitability.

A commercial bank is a profit-oriented organization/firm that is engaged in the business of receiving deposits and advancing credit to its clients (Jodarn, 2011). Risk is defined as the probability that a certain event will occur. It is looked at as, in the event of a particular exposure, what is the probability that a particular outcome will occur. All Identified risk is not absolute in terms of the impact it may have on profitability of commercial banks thus risk is relative, complex risk requires complex and specialized structures in place to manage it. The process of risk management involves the fundamental step of risk identification, risk analysis and assessment, risk audit monitoring and risk treatment or control. Thus credit risk is defined as the

possibility for a loss to a lender arising out of the inability of the borrower to honor his/her contractual obligations of repaying a debt with in the agreed terms. In creating a nexus this research looked at as credit risk management that requires a structured approach for managing uncertainties that arise due to exposures to credit risk.

Management in the simplest understood definition can be defined as the act of planning, directing, controlling, monitoring and testing for desired results to be obtained. Or it is simply the act, manner, or practice of managing; handling, supervision, or control (answers.com, 2010). Risk on the other hand can be defined as the possibility that something unpleasant or dangerous might happen (Macmillan, 2002). When companies indulge in business, it is obvious that they will be exposed to one type of risk or another which in most cases is an uncertainty although at times it can be certain that it will occur the researcher noted.

Ruthrock (2011) noted that banks are one of such businesses whose risk is very sure because they don't function in isolation given the dynamic environment in which they operate. Given the riskiness of her activities, a bank does not wait to introduce risk management at a certain stage of its activities but does so right from the start. This is so because her activities are so correlated in such a way that if not well handled, the effect / consequences can be connected and can even lead to bankruptcy (Ruthrock, 2012). For this goal to be attained, decision makers need to first of all identify the risk involved, measure its intensity, assess it, monitor it and then look for measures on how to control it.

2.3.1 Credit Criteria and Profitability

Credit risk in simple terms is the monetary loss incurred by a financial institution as a result of the borrower failing to honour his/her loan obligations as per the contract repayment period.

Campel (2013) further explains the default rate as the probability that a borrower will default on both the principal and interest. Banks like any other firm or corporation have formal laid down policies and principles that have been put in places by the board of directors on how to manage credits and this have to be carefully implemented by management (Campel, 2013). The researcher noted that despite the rules, it does not mean that the credit policies are stereotyped. "A good lending policy is not overly restrictive, but allows for the presentation of loans to the board that officers believe are worthy of consideration but which do not fall within the parameters of written guidelines".

Profitability is the excess of revenues over costs. Guru (1999) opines that profitability of commercial banks is determined by both internal and external factors. The internal factors are controllable whereas the external factors are out of control for business organizations. Guru (1999) advises that focus by bank management should be on the internal factors such as credit risk, effective credit policies, skilled officers and others. Therefore credit risk management is the organization and coordination credit processing and approval activities with a set objectives of ensuring that a commercial bank does not incur a monetary loss as a result of the borrowers failing to honor their financial obligations.

 Several research work has been carried out to explain credit risk challenges faced by commercial banks. Traditionally banks are involved in the business of advancing loans to their clients and loans normally make up the bulk of their assets. When the economic environments become un stable like the economic instability experienced by the Uganda financial market for the period starting 2011 to 2012 interest rates charged by banks are fast overtaken by inflation and borrowers find it difficult to repay loans as real incomes fall, insider loans increase and over concentration in certain portfolios increases giving a rise to credit risk. Chijoriga (1997), Gil

Diaz (1994), Brown, bridge and Harvey (1998) a number of reasons, which include the following but not limited to, loose credit standards for borrowers and counter parties, weak portfolio risk management or limited attention to swings in economic or other circumstances that normally result into deterioration in the credit standing of a bank's counter parties.

Shubhasis (2005) states that banks are risk machines, the very reason why risk management is very important to them. Bank failures in Mexico Wessel (1984) were attributed to improper lending practices, lack of experience, organizational and informational systems to adequately assess credit risk in the falling economy (Gil Diaz, 1994). Hull (2012) confirms the great requirement for regulation of commercial banks. Ara, Bakeva and Sun (2009) observed that there is a link between the minimum capital requirement and the underlying risk exposure of the bank. This means that banks that are highly exposed to risk would require higher capital requirement to mitigate the risk therein.

Greuning and Bratanovic (2013) analysed what an effective credit risk management system should entail and observed the establishment of a suitable credit risk environment which operates under a sound credit granting process with an appropriate credit administration that emphasizes assessment, scoring, monitoring, evaluation and control over credit risk. Further Greuning & Bratanovic (2003) also identified the importance of credit policies to banks. They state that credit policies provide direction and guidance to credit officers involved in the assessment, scoring and approval of credit. This is largely motivated by the desire to score out bad loans that probably may increase the risk of default hence affecting profitability. However the credit policy should always be approved by the board of directors. They concluded that banks that adopt advanced

credit risk management techniques can achieve 50% of their target loan level. This explains the low levels of credit risk exposure to banks that have adopted modern risk management in the process of approving their loans.

2.3.2 Credit Policies and Profitability

A bank's credit culture is the policies, practices, philosophy and management style that are being put in place to act as a guide for the lending manager or personnel to carry out their credit management function. This spells out the lending environment and points out the lending behavior that is acceptable to the bank. In a study made by Mckinley (1990, cited in Boffey & Robson, 1995), credit culture is defined as "a combination of factors that establish a lending environment that encourages certain lending behavior. It should include such things as management's communication of values and priorities, the indoctrination of lenders during training, and the bank's lending philosophy and policy (Kibada, 2014)." Credit culture is thus good because it acts as a guideline for a good bank credit management, performance and maybe failure. Even if there is a wrong move in the credit risk management resulting to losses, the manager personally cannot be blamed if the decisions were taken based on its credit culture. The blame will go to the entire management or decision makers and adjustments can then be made.

Amongst the many factors that can lead to bank problems, poor credit risk management has always been pointed out by different writers as being poor credit culture. This is basically because since banks make their profits from interest gotten after lending money to customer, a poor credit risk management during the lending process will also have negative results on the bank at the end and vice versa. The effects of different risks types on banks are negative but, credit risk has been pinpointed or identified as the key risk in terms of its influences on bank

performance (Kyazze, 2015). This is because if granted loans are defaulted, it goes along to affect the liquidity, solvency and profitability of the bank. A failure to reconcile these three, leads to bank failure and even bankruptcy. This failure can also have a chain effect to influence payment systems and thus affect the whole economy in the long run. Despite the consequences of credit culture, it cannot be avoided because it is associated with the core activities of the bank. Banks like any other business entity makes their profits through loan granting so, a collapse is assured with the least mistake in the course of the process. The root cause of this problem has always been poor and unreliable information that lenders get from borrowers even though other factors including poor risk management can be associated.

Despite the situation, the bank cannot avoid the risk since doing so puts the bank off business. How then do the different banks fight or manage credit risk? If they do manage this risk and think that their risk management is effective, why do they still face problems associated with credit risk?

2.3.3 Risk Mitigation measures and Profitability

Okumu (2013) who carried out a study on e -banking in Uganda on profitability factors in commercial banks notes that credit culture involves understanding on line transactions and bank services that are provided by financial institutions allowing its customers to conduct banking transactions. They use special technology to modernize the customer by providing bank and account related information online (Okumu, 2013). Much as the study has a similar trend on online banking, in bridging the gap, the researcher used a descriptive cross sectional survey compared to the earlier study that used a case study method. Descriptive cross sectional surveys are simple and easy to apply in quantitative surveys.

According Danford (2011), in his study on commercial banking and the performance of SMEs notes that credit culture is one of the structural changes in service quality in the banking sector today. A good credit culture has enabled the banks to advance loans that have not turned into bad debts. However, the above study adopted a qualitative approach and in creating a missing link, mixed methodological approaches was applied in the current study. Mixed methodological approaches combine both qualitative and quantitative methodological approaches.

In another article by Fletcher (2015), she looks at the different criteria taken by different Scottish bank managers before making lending decisions and their inappropriateness. After her work, she found out that under the Small Firms Loan Guarantee Scheme in Scotland, inadequacies of banks" appraisal processes in applications for loans were highlighted as problem because a large

number of applicant firms were not required to supply even the basic information about them. Fletcher (2015) looking at the negative consequences which may befall the bank if they do not carry out a good credit risk management, it is thus the most important responsibility of the bank to do so. To accomplish this, they also need a good education of credit risk management. Credit risk management is not an activity that has to be introduced at a certain stage of the lending decision but should be at the start point in any lending decision process. However the researcher noted that in this research there was limited technical expertise amongst the bank managers to analyze propositions. There was lack of strategic analysis of the applicant firm in relation to market conditions and competitors" behavior, and thus, a call for an improvement in the bank

appraisal methods.

Fletcher (2015) as cited in Kyazze (2015) notes that a good risk assessment procedure will help to dispense and make the banking business safer, successful and more profitable. he said

information asymmetry can be overcome by good sectoral analysis information, supplemented by training. Kyazze (2013) further notes there are always challenges with credit risk management. To address this problem, he proposed that improved risk assessment and greater uniformity of the bank managers" decision making can help to reduce adverse selection problems

and resultant liquidity constraints which are faced by entrepreneur and new small businesses. What he meant is that the bank managers must always carefully examine the diverse factors that can bring about credit risk and also make sure that enough precautions are implemented in order to prevent harm coming or problems arising. The final suggestion she made was the importance of bankers /accountants" relationship being an important criterion in the lending decision in some

cases. This is to say, if the bankers could work hand in hand with the accountants of the companies in question, it will help the banks to have the best information needed or required for making their lending decisions.

2.4 Summary of the Literature reviewed

The literature review above confirms that different scholars have conducted several studies on credit risk management and profitability. However, a number of gaps have been identified as per the literature reviewed which this research bridged. For example the studies above used smaller samples, most of them employed secondary data and in contrast the study used a big sample size and adopts both secondary and primary data. Most of the studies on the subject above are based on developed countries with a well-developed private and public sector yet the current study focused on Uganda. Most studies were qualitative and do not guide us on the relationship between the study variables. The scholars did not specifically focus on the variables as laid down

in this study. Considering the above, the current study focused on credit risk management and profitability.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This Chapter presents and describes the approaches and techniques the researcher used to collect data and investigate the research problem. They included the research design, study population, sample size and selection, sampling techniques and procedure, data collection methods, data collection instruments, data quality control (validity and reliability), procedure of data collection, data analysis and measurement of variables.

3.2 Research Design

A descriptive cross sectional survey design was adopted for the current study as it is intended to permit in-depth study of fundamental themes. Kothari(2004:103) states that cross sectional survey entails collecting data from a cross section of respondents at a single point in time. The descriptive cross sectional survey designs validate emerging constructs and proposition in the data set; guiding the study of various units within the identified case by underlining the mechanism by which an incident is brought to being (Kothari, 2004:101). A cross sectional survey contributes significantly to a researcher's own learning process by shaping the skills needed to do a good research. The above design is usually the simplest and least costly alternative. Though proof may be hard to come by owing to absence of hard theory, learning is certainly possible (Kothari, 2004). The study also applied both quantitative and qualitative approaches. Creswell (2009) noted that quantitative methods are more objective and help to

investigate the relationships between the identified variables. This study applied qualitative approaches which involved in depths probe and application of subjectively interpreted data. As pointed out by Kothari (2004) qualitative researchers aim to gather an in-depth understanding of human behavior and the reasons that govern such behavior.

The quantitative and qualitative approaches were adopted in sampling, collection of data, data quality control and in data analysis. Triangulation was adopted for purposes of getting quality data. Triangulation means using more than one method to collect data on the same topic (Somekh & Lewin, 2005). This is a way of assuring the validity of research through the use of a variety of methods to collect data on the same topic, which involves different types of samples as well as methods of data collection (Groves, Fowler, Couper, Lepkowski, Singer, Tourangeau & 2009). However, the purpose of triangulation is not necessarily to cross validate data but rather to capture different dimensions of the same phenomenon (Kothari, 2004).

3.3 Study Population

A population is the aggregate or totality of objects or individuals having one or more characteristics in common that are of interest to the researcher and where inferences are to be made (Amin, 2005). The population under study was 101 who included top level, middle level and lower level staff of all departments in Diamond Trust Bank (Investment, procurement, finance, risk legal, internal audit, benefits, contribution, customer service and data management unit) were used. The researcher believed that this category of people is knowledgeable enough about her area of study. The researcher has also chosen the population above because it was possible for him to get the necessary data for this research from such a population. The population was made up of respondents of both sexes (male and female).

3.4 Sample Size and Selection

The study was based on a sample size of 95 that was drawn from a population of 101. The sample size of 95 was sufficient and this is supported by Krejcie and Morgan (1970). After obtaining the total sample, the break down for the different categories of respondents was obtained using the formula below.

Table 3.1: Population, Sample Size and Sampling Techniques

Category	Total population	Sample size	Sampling Techniques
Managing Director	1	1	Purposive
Credit Department	11	11	Purposive
Procurement Department	5	5	Purposive
Accounts Department	15	14	Purposive
Risk Department	4	4	Purposive
Internal audit Department	7	7	Purposive
Legal Department	4	4	Purposive
Compliance Department	5	5	Purposive
Customer service Department	50	44	Simple random
TOTAL	**101**	**95**	

Source: Diamond Trust Bank Manual (2014)

3.4.1 Sampling Techniques and Procedure

3.4.1.1 Probability Sampling

Probability sampling, or random sampling, is a sampling technique in which the probability of getting any particular sample may be calculated (Katebire, 2007). The advantage of probability sampling is its lower cost compared to probability sampling. Simple random sampling was adopted in sampling staff in the customer care department. According to Creswell (2009), simple random sampling ensures that every member has an equal chance of being recruited into the sample. A sample frame was constructed and then the members were randomly sampled.

3.4.1.2 Non Probability Sampling

This is a type of sampling that adopts non random sampling techniques like quota, purposive, convenient and snow ball. Selection of respondents to have representative samples was based on the non-probability sampling methods (purposive sampling technique). Purposive sampling was adopted to sample the respondents in respondents from the Managing Director's office, respondents from the Credit Department, respondents from the Procurement Department, respondents from the Finance Department, respondents from the Risk Department, respondents from the Internal audit Department, respondents from the Legal Department and Compliance Department. According to Creswell (2009) purposive sampling enables a researcher to select respondents based on his or her own judgment.

3.5 Data Collection Methods

Both primary and secondary data was obtained. In the current study, data was collected using two key methods: the questionnaire survey method and the interview method

3.5.1 Questionnaire Survey

A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. Although they are often designed for statistical analysis of the responses, this is not always the case. The researcher used the questionnaire survey because it is practical, large amounts of information can be collected, questionnaires data can easily be quantified, it is also a cheap way of collecting data, a large group of respondents is covered within a short time, it also allows in-depth research, to gain firsthand information and more experience over a short period of time (Kothari, 2004). Survey methodology is both a scientific field and a profession, meaning that some professionals in the

field focus on survey errors empirically and others design surveys to reduce them (Earl-Babbie, 2013). The researcher used the questionnaire to explore issues on the study variables. The questionnaire was administered to managing director's office, respondents from the credit department, respondents from the procurement department, respondents from the finance department, risk department, respondents from the internal audit department, respondents from the legal department, respondents from the compliance department, respondents from the customer service department in a period of a week and after the questionnaire was subjected to data processing and analysis.

3.5.2 Interviews

According to Kothari (2004), interviews describe the life events and experiences of the respondents with respect to analysis of the significance of the portrayed phenomena. As Groves et.al (2009) argues, interviews are basically the correct technique to use when exploring sensitive topics, to create conducive environment for respondent to take part. This method constituted the fundamental part of the data collection for this study where three types of interviews were used. Both structured interview and semi structured interviews followed the why and how questions. Interviews were used because they have the advantage of ensuring probing for more information, clarification and capturing facial expression of the interviewees (Somekh and Lewin, 2005). In addition they also gave an opportunity to the researcher to revisit some of the issues that have been an over-sight in other instruments and yet they are considered vital for the study. The researcher conducted interviews with 01 managing director's office, 02 respondents from the credit department, 01 respondent from the procurement department, 01 respondent from the finance department, risk department, 01 respondent from the internal audit department, 01 respondent from the legal department, 01 respondent from the compliance department, 02

respondents from the customer service department in a period of a week and after the interviews were subjected to analysis.

3.5.3 Documentary Review

In the secondary analysis of qualitative data, good documentation cannot be underestimated as it provides necessary background and much needed context both of which make re-use a more worthwhile and systematic endeavor (Kothari, 2004). Secondary data is obtained through the use of published and unpublished documents (Junker and Pennink, 2010). Various publications, magazines, newspapers, credit risk reports, Credit risk hand books, historical documents and the Financial institutions Act and other sources of published information was reviewed by the researcher. According to Ragin (2011), secondary data can be helpful in the research design of subsequent primary research and can provide a baseline with which the collected primary data results can be compared to other methods. According to Somekh and Lewin (2005), documents can be helpful in the research design of subsequent primary research and can provide a baseline with which the collected primary data results can be compared to other methods. The issues that were explored were indicated in the study objectives or as laid down in the independent and dependent variables of the study.

3.6 Data Collection Instruments.

The key data collection instruments to be used were the questionnaires, interview guide and documentary review checklist.

3.6.1 Questionnaire

A questionnaire is a reformulated written set of questions to which respondents record their answers, usually within rather closely defined alternatives (Kothari, 2004). The questionnaire

was used on the basis that the variables under study cannot be observed, for instance, respondents' views, opinions, perceptions and feelings. The questionnaire was equally used because the information had to be collected from a large sample in a short period of time yet the respondents could read and write (Bill, 2011). In this research, a self-administered questionnaire was used to draw information regarding the study. The researcher chose the questionnaire as an instrument because the study is virtually descriptive and the tool is an easy method of data collection. A copy of the questionnaire is appended in the list of appendices labeled appendix (i).

3.6.2 Interview Guide

The researcher also conducted interviews. An interview is a dialogue between an interviewer and interviewee. It is an organized conversation aimed at gathering data about a particular topic (Junker and Pennink, 2010). The interview guides were unstructured capturing questions on each of the four variables of the study. The interview guides were used because it has the advantage of ensuring probing for more information, clarification and capturing facial expression of the interviewees (Ragin, 2007). A copy of the interview guide is appended in the list of appendices labeled appendix (ii).

3.6.3 Documentary Review Check list

The documentary review list was used for purposes of reviewing documentary data. Documentary data was obtained through the use of published and unpublished documents. According to Groves et.al (2009), documents can be helpful in the research design of subsequent primary research and can provide a baseline with which the collected primary data results can be compared to other methods. Amin (2005) noted a documentary review checklist lists the documents that the researcher reviewed. Documentary data supplements primary data.

3.7 Quality Control of Data Collection/Pretesting (Validity and Reliability)

Data quality control techniques ensured that data collected is valid and reliable; the instruments were first tested to ensure validity and reliability.

3.7.1 Validity

Validity refers to the truthfulness of findings or the extent to which the instrument is relevant in measuring what it is supposed to measure (Earl-Babbie, 2013). The validity of the instrument quantitatively was established using the Content Validity Index (CVI). This involved the expert scoring of the relevance of the questions in the instrument in relation to the study variables. The instruments that yielded a CVI above 0.7 were within the accepted ranges. Index (CVI) was computed using the formula below:

$$CVI = \frac{\text{Number of relevant items}}{\text{Total number of items}} \times 100$$

To establish validity qualitatively , the instruments was given to the experts (supervisor) to evaluate the relevance of each item in the instrument to the objectives and rate each item on the scale of very relevant (4), quite relevant (3), somewhat relevant (2), and not relevant (1).

Content Validity results for the Instruments

Table 3.2: Content validity Index Results

Content validity Index Results for Questionnaires		
Variables	*Content Validity Index*	*Number of items*
Credit Criteria	0.708	11
Credit Policy	0.766	19
Risk Mitigation	0.754	8
Profitability	0.705	9

Source: Primary data (2017)

All the results for the variables under study scored above 0.7 indicating that the items in the questionnaire were valid

3.7.2 Reliability

Qualitatively, the reliability of the instruments was established through a pilot test of the questionnaire to ensure consistency and dependability and its ability to tap data that would answer the objectives of the study. The results were subjected to a reliability analysis (Creswell, 2003). Quantitatively, reliability was established using the Cronbach's Alpha Reliability Coefficient test. Upon performing the test, if the values 0.7 and above, the items in the instrument were regarded reliable. Based on Cronbach's Alpha Coefficient, the scales for the variables were reliable. In the case of psychometric tests, must fall within the range of 0.7 above for the test to be reliable (Bill, 2011).

Cronbach Reliability Coefficient test results for the Instruments

Table 3. 3: Cronbach Reliability Coefficient test

Cronbach Reliability Coefficient Results test for Questionnaire		
Variables	*Cronbach test results*	*Number of items*
Credit Criteria	0.807	5
Credit Policy	0.733	5
Risk Mitigation	0.754	6
Profitability	0.704	8

Source: Primary data (2016)

33

All the results for the variables under study scored above 0.7 indicating that the items in the questionnaire were reliable

3.8 Data Collection Procedure

The researcher through proper channels asked for an introductory letter from Uganda Management Institute which he use for purposes of introduction before the participants when collecting data from the field. The researcher ensured confidentiality of the survey sheet since the identities are not important. Participants were given time to respond and after the researcher collected the surveys the next day. The researcher did not offer them any incentives for participating in the research.

3.9 Data Analysis Techniques

The researcher used both qualitative and quantitative methods of data analysis. Data Analysis follows an inductive content analysis that permits identification of themes and patterns of explicit word used in raw data and literature reviews (Ragin, 2007:99).

3.9.1 Quantitative Data Analysis

Data was sorted using the Statistical Package for Social Sciences (SPSS) method. Both Excel and SPSS have a similar feel, with pull-down menus, a host of built-in statistical functions and a spreadsheet format for easy data entry. SPSS has faster and easier basic function access, it has a wider variety of graphs and charts and it is easier to find statistical tests (Junker and Pennink, 2010). The analysis relied on both descriptive and inferential statistics. Quantitative data got from the questionnaires was computed into frequency counts and percentage. The descriptive statistics included use of frequency tables, mean, and standard deviation. The key data analysis techniques used was Pearson Correlation Coefficient and Regression analysis.

Correlation Coefficients help to assess/test the degree of relationship between the selected variables of the study. In addition to frequency distribution, tables, mean, standard deviation and other measures of central tendency will be used in data analysis.

3.9.2 Qualitative data analysis

To grasp the meaning of all qualitative data produced by the interviews and document analysis, explanation building through content analysis as an interpretive technique was adopted. The case content analysis is informed by deducing the inference of content textual data holding on to naturalistic patterns. These are; direct content analysis, conventional and summative content analysis (Earl-Babbie, 2013). The current study took on a summative content analysis whose basis was to understand why certain issues are held. Summative content analysis described studied keywords to construct meaning to the themes being studied in a broader context. All primary data was thus structured through formation of categories and examining the theories fully to understand the variables of the study (Creswell, 2009). It is through this lense that meaningful concepts and themes informed by the research questions were extracted to generate credibility to raw data to meaningful processed data and draw conclusion.

3.10 Measurement of Variables

The independent variable and the dependent variable were measured on a five point Likert type scale (1- Strongly Disagree, 2-Disagree, 3-Not sure, 4- Agree and 5-Strongly agree). The choice of this measurement is that each point on the scale carries a numerical score which is used to measure the respondents' attitude and it is the most frequently used summated scale in the study of social attitude. According to Bill (2011), the Likert scale is able to measure perception, attitudes, values and behaviours of individuals towards a given phenomenon.

3.11 Ethical Considerations

Honesty: There are several reasons why it is important to adhere to ethical norms in research. First, norms promote the aims of research, such as knowledge, truth, and avoidance of error. For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error. Second, since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work, such as trust, accountability, mutual respect, and fairness (Amin, 2005).

Informed Consent: The ethics framework is essential as it entails the voluntary informed consent of the participants. This requires giving the participants adequate information about what the study will involve and an assurance that their consent to participate would be free and voluntary rather than coerced. According to Sekaran(2003) participants informed consent may be obtained either through a letter or form that clearly specifies what the research involves, includes clearly laid down procedures the participants can expect to follow and explain the ways in which their confidentiality will be assured. It may also be imperative to describe possible risks and benefits of the research (Sekaran, 2003). The signing of the voluntary informed consent by each individual participant was confirmation that they were not being coerced to participate in the study but were doing so willingly. The researcher explained to the participants that an audio tape would be used to record interviews for purposes of informed. The researcher made the respondents aware of their right to opt out of the study if they so wished and that recording would only be done with their approval. In all the interviews, the participants consented to the use of audio tape. Some respondents required further verbal assurance that the tapes would under no circumstances be handed over to their supervisors.

Only after the research had given them this assurance did they agree to sign the consent form and freely participate in a taped interview.

Anonymity: Respondent's names were withheld to ensure anonymity and confidentiality in terms of any future prospects. In order to avoid bias, the researcher interviewed the respondents one after the other and ensured that he informed them about the nature and extent of his study and on the other hand he gave them reasons as to why was interviewing them.

Confidentiality: The researcher protected confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

Justice and beneficence: The researcher explained to respondent's use of certain gadgets that they did not understand or had little knowledge about e.g camera and tape recorders. Some respondents required further verbal assurance that the tapes would under no circumstances be handed over to their supervisors

Objectivity: The researcher avoided bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research where objectivity was expected or required. He avoided or minimized bias or self-deception. He disclosed personal or financial interests that affected the research.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF RESULTS

4.1 Introduction

This Chapter presents the description of the background variables, data analysis, presentation and interpretation of the findings. This chapter presents the study findings on the basis of the study objectives. The findings are presented basing on the research objectives which are: to establish the relationship between credit criteria and profitability in Diamond Trust Bank, to investigate the relationship between credit policies and profitability in Diamond Trust Bank and to investigate the relationship between risk mitigation measures and profitability in Diamond Trust Bank.

4.2 Response Rate

The response rate is computed based on the number of questionnaires distributed and returned and the number of interviews expected to be conducted out and the interviews actually conducted.

Table 4.1: Response Rate

Respondents	Distributed/ Conducted	Response Rate	Percentage
Questionnaire	101	85	83.6
Interviews	20	16	80

Source: Primary data 2017   N=85

Face to face interviews were carried out with the respondents; in total 20 respondents were expected to be interviewed and 16 were actually interviewed making a total percentage of 80. The researcher also used survey to collect data, out of the 101 questionnaires that were distributed, 85 were returned making a response rate of 83.6%. Fowler (2002) states that there is

no agreed-upon standard for acceptable response rates; however, he indicates that some survey procedures used result in a response rate of over 75%. Bailey (1987) puts a minimum acceptable response rate at 75%. While Schutt indicates that response rate below 60% is unacceptable, however, Babbie (1987) observes that a 50% response rate is adequate.

4.3 Demographic characteristics of the respondents

Purdie, Dunne, Boyle, Cook, and Najman (2002:34) explained that, profiling research respondents is achieved by establishing their demographic characteristics, which may include; gender, age, generation, race, ethnicity, education and marital status among other things. On his part, Kasekende (2014) pointed out that, thorough presentation and interpretation of the demographic profile of the study sample is very important because it enables the researcher to obtain the overall mental and physical picture of the sample. This is crucial in getting a clear understanding of their perceptions while connecting the concepts under study. It is one way of entering into the respondent's natural set up so as to understand the study concepts the way he/she does. This is, especially so, while carrying out qualitative studies where quantification and numbers are limited.

Kirtiraj (2012) observed that, in social sciences research, personal characteristics of respondents have a very significant role to play in expressing and giving the responses about the problem. Keeping this in mind, the demographic characteristics (age, gender, education, occupation, duration at work, marital status, etc) for the 85 study respondents were examined, presented, and used later in the report to draw conclusions.

Table 4.2: Age of the Respondents

The table below presents the summary statistics on the age of the respondents

		Frequency	Percent
Valid	10-19	1	1.2
	20-29	35	41.4
	30-39	27	32.0
	40-49	16	18.9
	Over 50	4	4.7
	Total	83	98.2
Missing	System	2	1.8
Total		85	100.0

Source: Primary Data (2017)   N = 85

From the above table 4.2, all the respondents that took part in the study were above the age of 10 years. The category aged between 20-29 years were 41.4%, age category 30-39 years were 32%, age category 40-49 years were 18.9% and above 50 years were 4.7%. This indicated that all categories of respondents in reference to different age groups were represented in this study.

Table 4.3: Gender of the Respondents

		Frequency	Percent
Valid	Male	66	77.5
	Female	16	19.5
	Total	82	97.0
Missing	System	3	3.0
Total		85	100.0

Source: Primary Data (2017)   N = 85

Table 4.3 shows that the majority of the respondents were males at (77.5%) and females were at (19.5%). These results show that gender representation indicated much variation between the males and females with a difference of 35%. Although the findings on gender indicated a

discrepancy in favour of males, the study was representative since both males and female were included in the study sample. Ali, Saghir and Hassan (2006:3) observed that, gender is basically a statistical distribution of how many male or females there are in a population. Gender is an important variable in any given situation and is variably affected by social and economic phenomenon.

Table 4. 4: Marital Status of the Respondents

The table below presents the summary statistics on the Marital Status of the respondents

		Frequency	Percent
	Married	43	56.8
	Single	30	36.1
	Divorced	3	1.8
Valid	Separated	1	1.2
	Widowed	1	1.2
	Others	1	1.2
	Total	82	97.6
Missing	System	4	2.4
Total		85	100.0

Source: Primary Data (2017)   *N=85*

The majority of the respondents were married (56.8%) and 36.1% were single. This indicated that all categories of respondents in reference to marital status were represented in this study.

The table below presents the summary statistics on the education level of the respondents

Table 4.5: Highest level of education of the Respondents

The table below presents the summary statistics on highest level of education of the Respondents

		Frequency	Percent
	Degree	61	89.3
	Post Graduate	18	10.7
Total		85	100.0

Source: Primary Data (2017)   *n=85*

41

The majority of the respondents were Bachelor's degree holders (89.3%) compared to 10.7% with post graduate qualifications. This showed that a good number (99) had the required qualification since the minimum requirement for a position in a public entity these days is a certificate. These results indicate that the respondents had reasonably good education qualifications and the desired skills and knowledge to deliver. On the positive note, on the basis of their education levels, the respondents were able to read, understand the questionnaire and give appropriate responses.

4.4 Empirical Results

This sub section gives an insight on the three objectives of the study as laid down in chapter one. The study tools (appendix 1&2) were made up of four sections respectively. These responses ranged from Strongly Agree (SA), Agree (A), Neutral (N), Disagree (DA), to Strongly Disagree (SDA) and the respondents were required to indicate the extent to which they agree or disagree with the statements. The questions were assigned weight on a 5-point scale rated 1 to 5 as follows: Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1). The findings were presented on the basis of the study objectives

4.5 Dependent Variable (Profitability)

Findings to address the dependent variable were obtained using a variety of methods including survey instrument, document analysis, etc. The self-administered questionnaire measured profitability 05 items on a scale of Likert scale. The 05 items measuring profitability are presented in Table 4.6. The items were scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 =Neutral , 4 = Agree and 5 = Strongly Agree. For each of the

above items, descriptive statistics that include frequencies, percentages and means are presented in Table 4.6 below:

Table 4.6: Descriptive Statistics on Profitability

Question	Code	Percentage	Mean
The decline of key sectors like the real estate sector has affected Diamond Trust Bank profitability	SD	6.7%	3.67
	D	11.7%	
	N	11%	
	A	48.5%	
	SA	22.1%	
The fluctuating nature of the economy has affected Diamond Trust Bank profitability	SD	4.9%	3.31
	D	20.7%	
	N	23.2%	
	A	40.2%	
	SA	11%	
Interest free deposits are negatively impacting on Diamond Trust Bank profitability levels	SD	9.9%	3.35
	D	13.6%	
	N	20.4%	
	A	43.2%	
	SA	12.4%	
Investing in government securities has helped Diamond Trust Bank increase its profitability levels	SD	8.9%	3.68
	D	15.2%	
	N	8.2%	
	A	34.2%	
	SA	33.5%	
The bank investments generate sustainable income	SD	6.2%	3.82
	D	17.4%	
	N	7.5%	
	A	25.5%	
	SA	43.5%	

Source: Primary Data (2017)   *N =85*

As to whether the decline of key sectors like the real estate sector has affected Diamond Trust Bank profitability, the respondent's responses indicated that cumulatively, the larger percentage (70.6%) of the respondents agreed, 18.4% disagreed while 11% were undecided. The mean = 3.67 was near four, which on the five-point Likert scale used to measure the items implies agree.

43

A respondent noted *"Most of our customers are from the real estate business but following its collapse, the bank has moved into investing in government securities"*

This implied that Banks these days no longer focus on extending credit to borrowers as the major source of revenue. Okumu(2013) noted that the real estate business has affected the economy greatly following its collapse.

Responses to the question as to whether the fluctuating nature of the economy has affected Diamond Trust Bank profitability (51.2%) disagreed while 25.6% agreed. The mean = 3.31 near four indicated that the majority agreed with the item implying that the fluctuating nature of the economy has affected Diamond Trust Bank profitability.

A Relationship Manager noted "*When the economy is not don't well, we tend to get variations in profitability in the bank at the end of the year. The financial statements released will always portray this*".

Lubya(2013) noted that the prevailing economic conditions influence the Bank's profitability in Uganda

As to whether interest free deposits are negatively impacting on Diamond Trust Bank profitability levels, cumulatively the larger percentage (55.6%) agreed with 23.3% disagreed and 20.4% were undecided. The mean = 3.35 meant that the respondents the respondents agreed that Interest free deposits are negatively impacting on Diamond Trust Bank profitability levels.

The credit risk officer noted*" acquiring interest free deposits has not been easy for example if expenses are high, then it will not be easy"*

As to whether investing in government securities has helped Diamond Trust Bank increase its profitability levels, cumulatively the majority percentage (67.7%) agreed while 24.1% disagreed.

The mean = 3.68 indicated that investing in government securities has helped Diamond Trust Bank increase its profitability levels

The credit risk officer note*d that "these days the bank invests in government security to make more profits and this is working for the bank perfectly well"*

Similarly, Oliver (2010) noted that traditional banking is not the only option that the bank has to enhance its profitability levels but it can diversify by taking on other businesses

As to whether the bank investments generate sustainable income, cumulatively an equal percentage (69%) agreed and disagreed respectively while 23.6% disagreed and 7.5% were undecided. The mean =3.82 indicated that the bank investments generate sustainable income.

In consideration of the above item, interview findings revealed that the current bank investments generate sustainable income for Diamond Trust Bank. In conclusion, profitability of the bank depends on the prevailing economic conditions. It was noted that the collapse of the real estate sector is affecting Diamond trust profitability. Even some staff who acquire loans end up not paying when they are dismissed.

4.6 Objective One: To establish the relationship between credit criteria and profitability in Diamond Trust Bank.

The first objective of the study was to establish the relationship between credit criteria and profitability in Diamond Trust Bank. Findings to address this objective were obtained using a variety of methods including survey instrument and interviews. The self-administered questionnaire measured credit criteria using 8 items. The items under credit criteria which are presented in Table 4.7, scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. For each of the above items, descriptive statistics that include frequencies, percentages and means are presented in table 4.7.

Table 4.7: Descriptive Statistics for Credit criteria and Profitability in Diamond Trust Bank.

Question	Code	Percentage	Mean
Credit in Diamond Trust Bank is extended to borrowers who have the capacity	SD	11	3.12
	D	28.3	
	N	11.2	
	A	35.2	
	SA	13.8	
The bank analyses the financials before extending credit to borrowers	SD	7.6%	3.30
	D	28%	
	N	10.8%	
	A	33.1%	
	SA	20.4%	
The character of the borrower is paramount when it comes to borrowing in Diamond Trust Bank	SD	6.2%	3.66
	D	11.1%	
	N	19.9%	
	A	55.6%	
	SA	17.3%	
Credit in Diamond Trust Bank is given when there is collateral security	SD	3.1%	3.64
	D	12.4%	
	N	18%	
	A	49.7%	
	SA	16.8%	
Before credit is extended to a sector or individuals, the prevailing economic conditions are put into consideration by Diamond Trust Bank management	SD	4.4%	3.82
	D	8.1%	
	N	15%	
	A	45.6%	
	SA	26.9%	
Credit in Diamond Trust Bank is extended to mainly SMEs and corporate entities	SD	7.4%	3.48
	D	16%	
	N	14.8%	
	A	44.4%	
	SA	17.3%	
Micro lending is not common in Diamond Trust Bank	SD	6.7%	3.56
	D	16.5%	
	N	7.9%	
	A	51.8%	
	SA	17.1%	
The bank sets the interest depending on the bank rate	SD	5%	3.68
	D	11.8%	
	N	13%	
	A	50.3%	
	SA	19.9%	

Source: Primary Data (2017)   *N = 85*

As to whether credit in Diamond Trust Bank is extended to borrowers who have the capacity, the respondents responses indicated that cumulatively, the larger percentage (49%) of the respondents agreed, 39.3% disagreed while 11.2% were undecided. The mean = 3.12 was near four, which on the five-point Likert scale used to measure the items implies agree. This implied that credit in Diamond Trust Bank is extended to borrowers who have the capacity.

A customer relations manager noted

Credit is extended to borrowers based on capacity, valuation of security is done before credit is extended to the borrower

Olupot (2012) noted that capacity is one of the basic requirements for extending credit to the borrowers. Responses to the question as to whether the bank analyses the financials before extending credit to borrowers (53.5%) disagreed while 35.6% agreed. The mean = 3.30 near four indicated that the majority agreed with the item implying that the bank analyses the financials before extending credit to borrowers.

The respondents further noted that the character of the borrower is paramount when it comes to borrowing in Diamond Trust Bank, cumulatively the majority percentage (72.9%) agreed and 17.3% disagreed. The mean = 3.66 close to four which corresponded to agree indicated the respondents agreed with the question that the character of the borrower is paramount when it comes to borrowing in Diamond Trust Bank

A respondent noted *"The bank carefully assesses the character of the borrower before extending credit, the credit reference bureau will help to the whether the customer seeking a loan has multiple loans with other banks"*

Terry and Franklin (2012) noted that the credit reference bureaus have helped to prevent extending multiple loans to borrowers of which some are not paid.

In contrast, a key informant noted that some times the Credit Reference Bureau may bring names of people who already finished paying loans with other banks, so this system is not reliable calling for further verification of the history of the borrower

As to whether credit in Diamond Trust Bank is given when there is collateral security, cumulatively the larger percentage (66.6%) agreed with 15.5% disagreed and 18% were undecided. The mean = 3.64 meant that the respondents the respondents agreed that credit in Diamond Trust Bank is given when there is collateral security.

A Relations Manager during Interviews noted*" Collateral security could be a requirement but we have other requirements like audited accounts for the customer financial statements and cash progressions"*

In corroboration, Arbore (2009) pointed out that the Bank does not focus on only one requirement when extending credit but focuses on a series of requirements

Regarding whether before credit is extended to a sector or individuals, the prevailing economic conditions are put into consideration by Diamond Trust Bank management, cumulatively the larger percentage (72.5%) disagreed with 12.5% agreeing and 23.6% were undecided. The mean = 3.82 implied that before credit is extended to a sector or individuals, the prevailing economic conditions are put into consideration by Diamond Trust Bank management

Whether credit in Diamond Trust Bank is extended to mainly SMEs and corporate entities, cumulatively the larger percentage (61.7%) disagreed with 23.4% agreed and 14.8% were

undecided. The mean = 3.48 implied that credit in Diamond Trust Bank is extended to mainly SMEs and corporate entities.

An Official from the Risk Management department noted *"Our bank mainly focuses on extending credit to SMEs and corporate entities than micro lending which is common in Centenary Bank".* This indicates that not all Banks in Uganda are into micro lending given the growing number of accumulated bad debts when it comes to micro lending

As to whether micro lending is not common in Diamond Trust Bank, cumulatively the majority percentage (68.9%) agreed while 23.2% disagreed. The mean = 3.56 indicated that micro lending is not common in Diamond Trust Bank

As to whether the bank sets the interest depending on the bank rate, cumulatively the larger percentage (70.2%) disagreed while 16.8% agreed and 13% were undecided. The mean = 3.68 implied that the respondents agreed with the item. This meant that the respondents indicated that the bank sets the interest depending on the bank rate.

A customer relations manager noted *"The bank sets the interest rate depending on the Bank of Uganda Guidelines and the prevailing economic environment in the country. However each bank has its own interest rate it charges"*

In conclusion, the qualitative data from interviews and the quantitative data from surveys both agree hence pointing in the same direction. Therefore on the basis of the responses given and the data analysed below quantitatively, there is a positive significant relationship between credit criteria and profitability in commercial banks in Uganda

4.7 Hypothesis Testing One:

Hypothesis One Stated that there is a positive significant relationship between credit criteria and profitability in commercial banks in Uganda. The hypothesis (H_1) was tested using the Pearson correlation coefficient and the results of the hypothesis are given below.

Table 4.8: Correlation Matrix for credit criteria and profitability in commercial banks in Uganda

Correlations

		Credit criteria	Profitability
Credit Criteria	Pearson Correlation	1	.353[**]
	Sig. (2-tailed)		.000
	N	85	85
Profitability	Pearson Correlation	.353[**]	1
	Sig. (2-tailed)	.000	
	N	85	85

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Primary Data (2017)

The results show that the correlation coefficient is 0.353(**) and its significance level 0.000. This implied that credit criteria influences profitability in Diamond Trust Bank. Therefore according to the results there is a positive significant influence of credit criteria on profitability in Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld

Table 4.9: Regression Coefficients for Credit Criteria and Profitability in Diamond Trust Bank

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.353[a]	.125	.114	7.53860

a. Predictors: (Constant), credit criteria
Source: Primary Data (2017)

Table 4.9 provides the R and R^2 value. The R value is 0.353, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how

much of the dependent variable, profitability in Diamond Trust Bank can be explained by the independent variable credit criteria. The standard error of the estimate is 7.538 and the adjusted R square value is 0.125. Therefore the adjusted square value of .114 implied that credit criteria positively predicts profitability in Diamond Trust Bank; in other words profitability in Diamond Trust Bank is dependent on credit criteria by 11.4%

4.8 Objective Two: To investigate the relationship between credit policies and profitability in Diamond Trust Bank

The second objective of the study was to investigate the relationship between credit policies and profitability in Diamond Trust Bank. Findings to address this objective were obtained using a variety of methods including survey instrument and interviews. The self-administered questionnaire measured credit policies using 06 items. The items under credit policies which are presented in Table 4.10, scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. For each of the above items, descriptive statistics that include frequencies, percentages and means are presented in table 4.10

Table 4.10: Descriptive Statistics for credit policies and profitability in Diamond Trust Bank

Question	Code	Percentage	Mean
Diamond Trust Bank has a good credit policy	SD	1.2%	4.44
	D	1.2%	
	N	0.6%	
	A	46.1%	
	SA	50.9	
Diamond Trust Bank has effectively utilized the existing credit policy	SD	4.8%	3.29
	D	19.4%	
	N	23%	
	A	46.7%	
	SA	6.1%	
The current credit policy has loopholes	SD	9.5%	3.22
	D	31%	
	N	15.8%	
	A	38.6%	
	SA	4.4%	
There have been cases of noncompliance with the current credit policy	SD	5.5%	3.88
	D	8%	
	N	12.3%	
	A	41.1%	
	SA	33.1%	
The existing credit policy has helped the bank increase its profitability	SD	10.4%	3.68
	D	7.9%	
	N	13.4%	
	A	39%	
	SA	29.3%	
The credit policy is in line with the Bank of Uganda requirements	SD	1.9%	4.23
	D	5%	
	N	5.6%	
	A	42.5%	
	SA	45%	

Source: Primary Data (2017)   *N =85*

As to whether Diamond Trust Bank has a good credit policy, the respondent's responses indicated that cumulatively, the larger percentage (97%) of the respondents agreed, 1.4% disagreed while 0.6% were undecided. The mean = 4.44 was near 5, which on the five-point Likert scale used to measure the items implies agree. This implied that Diamond Trust Bank has a good credit policy.

An Official from the Risk Management Department noted *" we have a strong credit policy that has been operation for some time now, for example under our policy, a loan is disbursed after a thorough review of the application*

Oliver (2010) noted that it is important for the bank to have a strong credit policy if it is to make profits. As to whether Diamond Trust Bank has effectively utilized the existing credit policy, the respondent's responses indicated that cumulatively, the larger percentage (52.8%) of the respondents agreed, 24.2% disagreed while 23% were undecided. The mean = 3.29 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank has effectively utilized the existing credit policy.

A customer relations manager noted

The policy has been effectively utilised, we don't extend credit anyhow, it is a step by step process. This indicates that the credit policy has not remained on paper, it is thoroughly being implemented.

As to whether the current credit policy has loopholes, the respondent's responses indicated that cumulatively, the larger percentage (43%) of the respondents agreed, 40.5% disagreed while 15.8% were undecided. The mean = 3.22 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that the current credit policy has loopholes.

A credit officer noted

Like any other policy, loopholes cannot be avoided but to a greater extent we have tried to ensure that the loopholes don't hinder the implementation of the policy. Okumu(2013) pointed out that that the credit policy has loopholes but these should not be fronted during the implementation exercise.

As to whether there have been cases of noncompliance with the current credit policy, the respondent's responses indicated that cumulatively, the larger percentage (74.2%) of the respondents agreed, 13.5% disagreed while 12.3% were undecided. The mean = 3.88 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that there have been cases of noncompliance with the current credit policy.

As to whether the existing credit policy has helped the bank increase its profitability, the respondents responses indicated that cumulatively, the larger percentage (68.3%) of the respondents agreed, 18.3% disagreed while 13.4% were undecided. The mean = 3.68 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that the existing credit policy has helped the bank increase its profitability.

A credit Officer noted*" that the policy alone cannot enhance profitability, it is an interplay of a number of factors for example the prevailing economic climate plays a big role in determining the profitability of the bank"*

This indicates that the prevailing economic environment is a big tool for determining profitability within the bank.

As to whether the credit policy is in line with the Bank of Uganda requirements, the respondents responses indicated that cumulatively, the larger percentage (87.5%) of the respondents agreed, 6.9% disagreed while 5.6% were undecided. The mean = 4.23 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that the credit policy is in line with the Bank of Uganda requirements.

A key informant noted *"like elsewhere this is a requirement hence the credit policy must be in line with the Bank of Uganda requirements"*

In most cases when the Bank of Uganda enacts guidelines, the banks below must follow these guidelines to ensure that they are a success. For example in case of a bad debt, the bank follows these steps: when it is due for payment, and three months have elapsed without payment, the loan is subjected to legal recovery. A demand notice is issued and after a three months legal notice is issued hence notice of default is valid for 45 days. In case of no response a notice of sale for 21 days is issued followed by advertising in newspapers for 30 days and after 30 days the property is sold. However, some customers run to court seeking interim orders.

In conclusion the qualitative data from interviews and the quantitative data from surveys both agree hence pointing in the same direction. Therefore on the basis of the responses given and the data analysed below quantitatively, there is a positive relationship between credit policies and profitability in commercial banks in Uganda

4.9 Hypothesis Testing Two:

Hypothesis One Stated that there is a positive significant relationship between credit policies and profitability in commercial banks in Uganda. The hypothesis was tested using the Pearson correlation coefficient and the results of the hypothesis are given below.

Table 4.11: Correlation Matrix for credit policies and profitability in commercial banks in Uganda

<table>
<tr><th colspan="4">Correlations</th></tr>
<tr><td></td><td></td><td>Policies</td><td>Profitability</td></tr>
<tr><td rowspan="3">Policies</td><td>Pearson Correlation</td><td>1</td><td>.197</td></tr>
<tr><td>Sig. (2-tailed)</td><td></td><td>.000</td></tr>
<tr><td>N</td><td>85</td><td>85</td></tr>
<tr><td rowspan="3">Profitability</td><td>Pearson Correlation</td><td>.197</td><td>1</td></tr>
<tr><td>Sig. (2-tailed)</td><td>.000</td><td></td></tr>
<tr><td>N</td><td>85</td><td>85</td></tr>
</table>

Source: Primary Data (2017)

The results show that the correlation coefficient is 0.197 and its significance level 0.000. This implied that credit policies influences profitability in Diamond Trust Bank. Therefore according to the results there is a positive influence of credit policies on profitability in Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld

Table 4.12: Regression Coefficients for credit policies and profitability in commercial banks in Uganda

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.197ᵃ	.039	.028	10.03951

a. Predictors: (Constant), Credit policies

Source: Primary Data (2017)

Table 4.12 provides the R and R^2 value. The R value is 0.457, which represents the simple correlation and, therefore, indicates independent degree of correlation. The R^2 value indicates how much of the dependent variable, profitability in Diamond Trust Bank can be explained by the independent variable credit policies. The standard error of the estimate is 10.039 and the adjusted R square value is 0.39. Therefore the adjusted square value of .028 implied that the credit policies positively predicts profitability in Diamond Trust Bank; in other words profitability in Diamond Trust Bank is dependent on credit policies by 2.8%

4.10 Objective Three: To examine the relationship between risk mitigation measures and profitability in Diamond Trust Bank

The third objective of the study was to investigate the relationship between risk mitigation measures and profitability in Diamond Trust Bank. Findings to address this objective were obtained using a variety of methods including survey instrument and interviews. The self-administered questionnaire measured risk mitigation using 06 items. The items under management factors which are presented in Table 4.13, scaled using the five-point Likert scale where code 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree and 5 = Strongly Agree. For each of the above items, descriptive statistics that include frequencies, percentages and means are presented in table 4.13

Table 4.13: Descriptive Statistics on Risk Mitigation

Question	Code	Frequency	Percentage	Mean
Diamond Trust Bank is able to identify potential loss avenues	SD	9.0	5.5%	3.61
	D	16	19.8%	
	N	35	21.3%	
	A	73	44.5%	
	SA	31	18.9%	
Diamond Trust Bank determines the extent of credit risk	SD	13	8.0%	3.20
	D	34	21%	
	N	33	20.4%	
	A	71	43.8%	
	SA	11	6.8%	
Diamond Trust Bank uses a variety of ways to manage risk	SD	12	7.4%	3.39
	D	29	17.8%	
	N	37	22.7%	
	A	70	42.9%	
	SA	14	8.6%	
Diamond Trust Bank has a credit risk management framework	SD	7	4.3%	3.37
	D	42	25.9%	
	N	19	11.7%	
	A	71	43.8%	
	SA	23	14.2%	
Diamond Trust Bank has a functioning credit risk management plan	SD	13	8.0%	3.59
	D	29	17.9%	
	SA	33	20.1%	

Source: Primary Data (2017)   *N =85*

As to whether Diamond Trust Bank is able to identify potential loss avenues, the respondent's responses indicated that cumulatively, the larger percentage (63.4%) of the respondents agreed, 25.3% disagreed while 21.3% were undecided. The mean = 3.61 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank is able to identify potential loss avenues.

A Credit Officer noted " *the board sets a risk plan for the bank and this is depicted through a risk management framework for the board. The framework is the guiding tool on how management will handle risk in the bank* "

According to Okumu(2013), the framework points to regulations or regulators Bank of Uganda guidelines for example insider lending should not be more than 20%.

As to whether Diamond Trust Bank determines the extent of credit risk, the respondent's responses indicated that cumulatively, the larger percentage (50.6%) of the respondents agreed, 29% disagreed while 20.4% were undecided. The mean = 3.20 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank determines the extent of credit risk

Relatedly, a credit risk manager noted

The risk management team ensures that everyone at the branch manages risk. The risk management department reports to the board hence the board risk management committee and functionally to the Chief Executive Officer.

Findings from interviews revealed that monthly reports are produced on risk and reports are evaluated by the board committee and the Chief Executive Officer. The board compensation committee manages people risk e.g salary reviews. The board audit committee is an oversight committee that checks what everybody has done,

As to whether Diamond Trust Bank uses a variety of ways to manage risk, the respondent's responses indicated that cumulatively, the larger percentage (50.5%) of the respondents agreed, 25.2% disagreed while 22.7% were undecided. The mean = 339 was near 4, which on the five-

point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank uses a variety of ways to manage risk

A Respondent noted *" risk management framework guides us on risk generally, there is a board credit committee to manage credit risk for example compliance risk. Credit application is handled by the relationship manager that goes for credit risk assessment before going to the management credit committee".*

This implies that applications that require board credit committee approval proceed to board credit committee.

Findings from interview revealed that the main board handles strategic risk. All committees report to the main board.

As to whether Diamond Trust Bank has a credit risk management framework, the respondents responses indicated that cumulatively, the larger percentage (58%) of the respondents agreed, 32.2% disagreed while 11.7% were undecided. The mean = 3.37 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank has a credit risk management framework.

A credit risk manager noted that *there is a credit risk management framework in place at Diamond Trust. The management framework highlights the parameters for managing risk as the credit policy, checklist are made in relation to credit*

As to whether Diamond Trust Bank has a functioning credit risk management plan, the respondents responses indicated that cumulatively, the larger percentage (69.8%) of the respondents agreed, 25.9% disagreed while 4.3% were undecided. The mean = 3.59 was near 4,

which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank has a functioning credit risk management plan.

A respondent noted" *there is a risk management plan in place, the plan requires that the risk management department reports to the board hence board risk management committee.*

Diamond Trust Bank Report (2015) noted that internally, the board is involved in the process of managing risk although it may not play the technical role which is left to the risk management department.

As to whether Diamond Trust Bank board is solely involved in matters of risk management, the respondent's responses indicated that cumulatively, the larger percentage (73.8%) of the respondent's agreed, 13.4% disagreed while 12.8% were undecided. The mean = 3.76 was near 4, which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank board is solely involved in matters of risk management.

A credit risk officer noted*" the board sets the risk appetite and this is depicted in the risk management plan drawn"*

This implies that like in any other organization, risk is managed from the top of the organization down wards hence it's a top-bottom approach.

As to whether Diamond Trust Bank board is solely involved in matters of risk management, the respondent's responses indicated that cumulatively, the larger percentage (73.8%) of the respondents agreed, 13.4% disagreed while 12.8% were undecided. The mean = 3.76was near 4,

which on the five-point Likert scale used to measure the items implies agree. This implied that most of the respondents agreed that Diamond Trust Bank board is solely involved in matters of risk management. Findings revealed that board is involved in matters of risk management; the main board always handles any type of risk.

In conclusion the qualitative data from interviews and the quantitative data from surveys both agree hence pointing in the same direction. Therefore on the basis of the responses given and the data analysed below quantitatively, there is a positive relationship between risk mitigation and profitability in commercial banks in Uganda

4.11 Hypothesis Testing Three:

Hypothesis One Stated that there is a positive significant relationship between risk mitigation measures and profitability in commercial banks in Uganda. The hypothesis was tested using the Pearson correlation coefficient and the results of the hypothesis are given below.

Table4.14: Correlation Matrix for risk mitigation measures and profitability in commercial banks in Uganda

Correlations

		Risk mitigation	Profitability
Risk mitigation	Pearson Correlation	1	.457[**]
	Sig. (2-tailed)		.000
	N	85	85
Profitability	Pearson Correlation	.457[**]	1
	Sig. (2-tailed)	.000	
	N	85	85

**. Correlation is significant at the 0.01 level (2-tailed).
Source: Primary Data (2017)

The results show that the correlation coefficient is 0.457(**) and its significance level 0.000. This implied that Risk mitigation influences profitability in Diamond Trust Bank. Therefore according to the results there is a positive significant influence of risk mitigation on profitability in Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld (H_3 upheld).

20.2%

Table 4.15: Risk mitigation and Profitability in Diamond Trust Bank.
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.486ª	.236	.200	7.29374

a. Predictors: (Constant), risk mitigation
   Source: Primary Data (2017)

Table 4.15 provides the R and R^2 value. The R value is 0.486, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, profitability in Diamond Trust Bank can be explained by the independent variable risk mitigation. The standard error of the estimate is 8.7608 and the adjusted R square value is 0.236. Therefore the adjusted square value of .200 implied that the risk mitigation positively predicts profitability in Diamond Trust Bank; in other words the profitability in Diamond Trust Bank is dependent on risk mitigation by 20.0%

In conclusion, this Chapter focused on presenting the findings, interpretation and analysis , the next chapter focuses on the summary of findings, discussion of the findings, conclusions, recommendations and areas for further research. The researcher now turns to chapter five to present the summary of findings, discussion of the findings, conclusions and recommendations.

CHAPTER FIVE

SUMMARY, CONCLUSIONAND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the findings, conclusions obtained from the findings and the recommendations on analysis and interpretation of the findings on the relationship between credit risk management and profitability of commercial banks in Uganda

5.2 Summary of the findings

5.2.1: Credit Criteria and Profitability

The Pearson Correlation Coefficient was carried out and results revealed that the correlation coefficient is 0.353(**). This implied that credit criteria influences profitability in Diamond Trust bank. Therefore according to the results there is a positive significant relationship between credit criteria and profitability of Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld.

Regression Coefficients was run and findings revealed that the R value was 0.353. The R2 value indicates how much of the dependent variable, profitability of Diamond Trust Bank can be explained by the independent variable credit criteria. The standard error of the estimate is 7.538 and the adjusted R square value is 0.125. Therefore the adjusted square value of .114 implied that the credit criteria positively predicts the profitability of Diamond Trust Bank; in other words the profitability of Diamond Trust Bank is dependent on the credit criteria by 11.4%

5.2.2: Credit Policies and Profitability

The Pearson Correlation Coefficient was carried out and results revealed that the correlation coefficient is 0.197. This implied that credit policies influences profitability in Diamond Trust bank. Therefore according to the results there is a positive significant influence of credit policies on the profitability of Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld.

Regression Coefficients was run and findings revealed that the R value was 0.457, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R2 value indicates how much of the dependent variable, profitability of Diamond Trust Bank can be explained by the independent variable credit policies. The adjusted square value of .028 implied that the credit policies positively predicts the profitability of Diamond Trust Bank; in other words the profitability of Diamond Trust Bank is dependent on the credit policies by 2.8%

5.2.3: Risk Mitigation and Credit Policies

The Pearson Correlation Coefficient was carried out and results revealed that the correlation coefficient is 0.457(**). This implied that risk mitigation influences profitability in Diamond Trust bank. Therefore according to the results there is a positive significant relationship between risk mitigation and profitability of Diamond Trust Bank. Therefore the alternative hypothesis that was earlier postulated is upheld.

Regression Coefficients was run and findings revealed that the R value was 0.486. The R2 value indicates how much of the dependent variable, profitability of Diamond Trust Bank can be explained by the independent variable risk mitigation. Therefore the adjusted square value of

.200 implied that risk mitigation positively predicts the profitability of Diamond Trust Bank; in other words the profitability of Diamond Trust Bank is dependent on risk mitigation by 20.0%

5.3 Discussion

The section below presents the discussion of findings on the basis of the research objectives

5.3.1: Credit Criteria and Profitability

Findings revealed that credit is extended to borrowers based on capacity, valuation of security is done before credit is extended to the borrower. The findings are in line with Oliver (2010) who notes that the commercial institutions must set stringent requirements for extending credit to the general public.

Findings revealed that collateral security is a requirement for extending credit to a borrower but there are other requirements like audited accounts for the customer financial statements and cash progressions. Similarly, Olupot (2012) noted that credit in Ugandan Banks is extended to a borrower basing on his or her capacity.

It was revealed that Diamond Trust bank mainly focuses on extending credit to SMEs and corporate entities than micro lending which is common in Centenary Bank". The findings are in line with Okumu (2013) who notes that micro lending is costly, if not carefully monitored, many microfinance institutions in Uganda will lose a lot of money while using this product as an avenue to make money.

It was observed that the bank sets the interest rate depending on the Bank of Uganda Guidelines and the prevailing economic environment in the country. However, each bank has its own interest rate it charges. The findings are supported by Kaye(2012) who notes that the guidelines

of the Regulatory institution must be followed clearly. Banks like Teffe Bank, Cooperative and Greenland failed because of failure to follow the laid down guidelines of Bank of Uganda for example on insider lending

5.3.2: Credit Policies and Profitability

It was established from the findings that there is a positive significant relationship between credit policies and profitability. Findings revealed that Diamond Trust Bank has a strong credit policy that has been operation for some time now, for example under the policy, a loan is disbursed after thorough review of the application. Okumu(2013), similarly notes that credit must be extended basing on the prevailing credit requirements of the lending institution. He further notes that a follow up on the application to verify the character and credit history of the borrower is relevant.

It was revealed that credit policy has been effectively utilise, this is supported by the existing credit process which is a step by step process . In support Kakuba (2012) notes that the credit policy must not remained on paper. Every bit of the policy should be implemented hence a system that makes the policy functional must be in place. Kakuba (2012) further notes that like any other policy, loopholes cannot be avoided but to a greater extent the policy must be implemented.

It was observed that the current levels of profitability cannot be attributed to credit policy hence the policy alone cannot enhance profitability, it is an interplay of a number of factors for example the prevailing economic climate plays a big role in determining the profitability of the bank, if poor profits will vary. The findings are consistent with Jordan(2014) who noted that the prevailing economic environment is a big tool for determining profitability within the banking sector.

5.3.3: Risk Mitigation and Credit Policies

Findings revealed that the board sets a risk plan for the bank and this is depicted through a risk management framework for the board. The framework is the guiding tool on how management will handle risk in the bank. Hassanet (2011) notes that like in any other institution where risk is managed formerly, there must be a framework that points to regulations or regulators guidelines

It was further observed that the risk management team ensures that everyone at the branch manages the risk. The risk management department reports to the board hence the board risk management committee and functionally to the Chief Executive Officer. Findings from interviews revealed that monthly reports are produced on risk and reports are evaluated by the board committee and the Chief Executive Officer. The board compensation committee manages people risk e.g salary reviews. The board audit committee is an oversight committee that checks what everybody has done. Similarly, Jordan(2014) noted that the board must be involved in the risk management process, a special committee on the board should be tasked with the responsibility of risk management.

It was observed that in DTB, there is a board credit committee to manage credit risk for example compliance risk. Credit application is handled by the relationship manager that goes for credit risk assessment before going to the management credit committee.

The findings are in line with Hassanet(2011) who notes that for any commercial banking institution, applications that require board credit committee approval must proceed for approval before risk is mitigated.

Findings from interview revealed that in DTB, the main board handles strategic risk. All committees report to the main board. There is a credit risk management framework in place at Diamond Trust. The management framework highlights the parameters for managing risk as the

credit policy, checklist are made in relation to credit. Relatedly, Hann (2012) noted that a bank can effectively handle risk if there is a functioning credit risk management plan in place, similarly findings revealed that there is a risk management plan in place, the plan requires that the risk management department reports to the board hence board risk management committee. Findings revealed that a good risk mitigation culture has played a significant part in the development of the solutions to risk mitigation. This culture is characterized by introspection, insight or sufficient, reliance on external praise and, above all, fear from top to bottom of this organization. Such a culture does not develop overnight but is a symptom of a long-standing positive and effective direction at all levels. Efficiency remains one of the greatest challenges for DTB risk management department. It reflects an organization's ability to manage costs per unit of output, and thus is directly affected by both cost control and level of outreach.

Similarly it was observed by Okumu (2013) that financial risk mitigation depends on a strong mitigation culture, the integrity of the information system, including the accounting and portfolio management systems. Mitigation of risk in DTB has involved checking the quality of the information entering the system, verifying that the system is processing the information correctly, and ensuring that it produces useful reports in a timely manner.

5.4 Conclusions

On the basis of the study findings, a number of conclusions were made in line with the objectives of the study as stated in chapter one

5.4.1 Credit Criteria and Profitability

It was established that there is a positive significant relationship between credit criteria and profitability in Diamond Trust Bank. Findings revealed that credit is extended to borrowers based on capacity, valuation of security is done before credit is extended to the borrower. Collateral security is a requirement for extending credit to a borrower but there are other requirements like audited accounts for the customer financial statements and cash progressions.

5.4.2 Credit Policies and Profitability

It was established that there is a positive significant relationship between credit policies and profitability in Diamond Trust Bank. Findings revealed that Diamond Trust Bank has a strong credit policy that has been in operation for some time now, for example under the policy, a loan is disbursed after thorough review of the application. The credit policy has been effectively utilised, this is supported by the existing credit process which is a step by step process.

5.4.3 Risk Mitigation and Profitability

It was established that there is a positive significant relationship between risk mitigation and profitability in Diamond Trust Bank. The board sets a risk plan for the bank and this is depicted through a risk management framework for the board. The framework is the guiding tool on how management will handle risk in the bank. The risk management team is in place to ensure that everyone at the branch manages the risk. There is a board credit committee to manage credit risk for example compliance risk.

5.5 Recommendations

In light of the study conclusions, a number of recommendations were made which were in line with the objectives of the study.

5.5.1 Credit Criteria and Profitability

Instead of focusing on the credit criteria that has gaps, the bank should cast its eye on a low cost fund source through intensive mobilization for example focus on urgency banking and use of platform fees for services like checking account balances using ATM.

5.5.2 Credit Policies and Profitability

DTB should strengthen the implementation of the existing credit policy by ensuring enough resources and manpower is in place to implement the policy. For example the staff implementing the policy should be supported by the main committee of the board that handles risk. The risk management plan and framework should be periodically reviewed to ensure thorough risk mitigation.

5.5.3 Risk Mitigation and Profitability

There is need to identify and determine the extent of risk at an early stage take. There is need to invest more resources in the sections that carry out planning. Planning in most instances involves avoiding risk in a number of ways for example sharing risk, retention and avoidance. There is need for DTB to communicates early any risk threat so that its averted.

5.6 Limitations of the Study

- There were a number of limitations associated with decisions made regarding the methodology. They relate to the choice of participants, the type of data collected and the analytic process.

- Another limitation was the time frame in which data was collected. The data constituted a snapshot of one point on the implementation continuum. Interviews date is limited in a number of ways including the limitations present in the questions themselves and also in the nature of the responses from participants. The participant's responses were based only on the questions that the researcher asked but there could have been more information through observation hence sometimes misleading information is given during interviews.

- The researcher encountered some limitations during the study especially when it came to interviewing some respondents. Some were not willing to give information unless paid and at some instances, the researcher had to wait till late in the evening when the respondents are through with their work so as to interview them.

- The study used a small sample and so it was not easy to generalize results. Adopting a mixed methodological approach required a lot of skills and reading about the two approaches which was not easy.

- For the key informants, given their busy schedules, some interviews were rescheduled to fit their timetables, but these also sometimes failed. The research took slightly long to conduct particular interviews which delayed the study. There was also a problem of absenteeism by some of the respondents at the designated place of carrying out the interviews. Therefore collecting data from them through the questionnaires proved to be a big challenge.

- The researcher managed these problems by making use of the supportive team leader who in one instance was willing to introduce the researcher in person to the respondents a through

sensitization of respondents on the importance and significance of the study. The Uganda Management Institute letter helped to allay any fears and doubts among some respondents. Efforts were made to maintain confidentiality of the responses. The absenteeism of some officials was tackled by frequent visits to their offices, and above all establishing good rapport. In general, the following measures were taken, aimed at reducing non-response for the initial mailing, an introduction letter on Uganda Management Institute logo was sent out and this emphasized academic relevance of this research project.

- A summary of results was offered to the respondents, reporting on the main conclusions of the study. Five weeks after the initial mail out, a replacement questionnaire was emailed to all non-respondents (follow-up mail). Two weeks after follow-up mailing, remaining response received an email, asking them for the third and last time to participate in the survey and a replacement questionnaire added as an attachment. Even though the researcher knew very well that use of pre-notification was likely to affect the response rate, in this study, the respondents were not pre-notified as there was no adequate time to do so.

5.7 Contribution of the Study to New Knowledge

In closing the profitability gaps in banks so as to avert risk, the study found out that profitability of the bank cannot be only enhanced through micro lending, corporate and SME lending but even other activities can equally enhance profitability if the money available is profitably invested for example in government securities. Instead of focusing on the credit criteria that has gaps, the bank should cast its eye on a low cost fund source through intensive mobilization for example focus on urgency banking and use of platform fees for services like checking account balances using ATM. The board must be actively involved in risk mitigation in the bank and in

this case the bank board should have a special committee on credit risk, financial risk, strategic risk and market risk if risk mitigation is to succeed. The board committee must sets a risk plan for the bank and this is depicted through a risk management framework for the board.

5.8 Areas for further Research

This research investigated the relationship between credit risk management and profitability in commercial banks. Given the time factor, it was not possible to assess the entire subject of credit risk management. It was not also possible to investigate credit risk management beyond my study area (scope). Therefore further research should focus on

1. The relationship between credit risk management and financial performance in SACCOs and Microfinance Institutions

2. Credit Criteria and financial performance in other SACCO

References

Abuka. C.A. and Egesa, K., (2010). "Services Sector Development in Uganda: An Analysis of the Role of the Financial Services Sector." Final Report. University of Mauritius January 2010. Association of African Central Banks, November, 2003,http://www.aacb.org/rubrique916.html visited on 5 October 2017

Alera, M.(2014). *Restructuring and Managing the Enterprise in Transition, Economic Development institute of the World Bank*

Arbore, D. (2009). "Efficiency of commercial banks: international survey and directions for future research", *European Journal of Operational Research*, 98(2), 175-212.

Barclays Bank Customer Care Centre Trackers (2015)

Bategeka, L. N, (2009). "Uganda's Achievements and Challenges in the Financial Sector: Whose Interest Count?" The Ugandan Banker, Journal of the Uganda Institute of Bankers 7 (4), p. 6-10. Uganda Institute of Bankers: Kampala, Uganda

Beck, T. and Hesse, H., (2006). "Bank Efficiency, Ownership and Market Structure: Why Are Interest Spreads So High in Uganda?", World Bank Working Paper Series WPS4027. The World Bank: Washington, D.C.

Berry, M and Parasuraman, B. (2011*). Finance and changing patterns in Developing countries'*

Bikker, Y & Metzmakerz, G. (2005). *Commercial Bank Risk Management: An Analysis of the Process*, The Wharton School Wesley Publishing, Reading, MA .

Birungi, K. (2009). *Finance and competitiveness in Developing countries* roustledge, London, UK.

Brown bridge, H (1998). Research on Bank Credit Risk Assessment and Prevention of Small-
and-Medium-Sized Enterprises of Zhejiang Province, *Chinese finance, 2015*.5, p.51-61.

Buttimer, T. (2001). *A survey of techniques of credit risk management in Micro finance
institutions in Kenya*.

Campel, A. (2013). *A survey of credit risk management practices by Commercial
Banks in Kenya.*

Charabarty. K.C. (2014). "Indian Banking: The New Landscape", Southern Economist" Vol.52,
No.23&24, PP.40-45. 7.

Creswell, J.W (2009). *Research Design: Qualitative, Quantitative and Mixed Methods
Approaches* 2nd Edition

Danford, K. (2009). *Managerial Economics.* 6th Revised Edition. Vikas publishing House PVT
Ltd. New Delhi, India.

Dedan, L. (2012). "Financial aspects of economic development". *American Economic Review*,
45, (4), pp. 515-38.

Diamond Trust Bank Report (2014)

Diamond Trust Bank Report (2015)

Earl, P. (2013). *Banking Sector: Emerging Challenges*, Yojana, Vol.54, and PP.5-10. 3.

Earl-Babbie, M. (2013).*The Practice of Social Research*, 10th edition, Wadsworth, Thomson
Learning Inc., ISBN 0-534-62029

Ezeani, M. (2009).*Social science, research, conceptual, methodology and analysis.* University of
Lagos: Nigeria

Fan Li, T and Yijun Zou, L (2014)"Bankruptcy in a bank credit card portfolio", *Journal of Retail Banking*, Vol. 13 No.4, pp.33-41.

Glenn-Firebaugh, G. (2008). *Seven Rules for Social Research*, Princeton University Press, 2008, ISBN 978-0-691-13567-0

Government of Uganda (2000), *Bank of Uganda Act, 2000*. Uganda Printers and Publishing Corporation: Entebbe, Uganda.

Groves, R.M.; Fowler, F. J; Couper, M.P.; Lepkowski, J.M.; Singer, E.; Tourangeau, R. (2009). *Survey Methodology*. New Jersey: John Wiley & Sons.

Gronroos, L. (2012). "Penetration of E-Banking in Rural Area", Southern Economist, Vl.53, No.5, pp.23-25.

Hann, J. (2012). *Challenges of banking in the 21st century.* A Thesis Submitted to Makerere University for an MBA

Hassanet, N. (2011). Modern day banking in East Africa

Jordan, E. (2014). *Credit Management History in England: A theoretical Review*

Jodarn, Y. (2011) *Prudential Regulation and Banking Supervision: Building an Institutional Framework for Banks*, Economic Development Institute of the World Bank; The World Bank Washington D.C.

Junker, M and Pennink, Y. (2010). (2004). *Research Methodology: Methods and Techniques*, 2nd Edition New Delhi; India : New Age International Publishers

Kakuba, G. (2012), *Banking System, credit and Developments,* Akashdeep publishing House, New Delhi.

Kakuba, D. (2012) "Characteristics and Control of Credit Risks of Commercial Bank for Group Customer", *Financial Teaching and Research, 2015*.3, p.45-48

Kolapo, D Ayeni, K & Oke, T (2012). Risk management, capital structure and lending at banks. *Journal of Banking & Finance.* Volume 28, Issue 1, January 2004, P.19–43.

Kargi, K. (2011), "Credit risk rating systems at large US banks". *Journal of Banking & Finance,* Volume 24, Issues 1–2

Kasozi, S. (2014) "Improving accountability in banking", *Commercial Lending Review*, Vol. 12 No.3, pp.44-50.

Kaye, W. (2012). *Banking System, credit and Developments*

Kibada, A. (2015) "The credit policy of financial institutions and the factors underlying it", paper presented at the 8th Conference of Financial Institutions, AICC, 5-7 December,

Kithingi, J. (2010) "Bank branch operating efficiency: evaluation with data envelopment analysis", *Journal of Banking & Finance*, Vol. 9 No.2, pp.297-315.

Kivumbi, L.(2008) *Managing Indian Banks : The Challenges Ahead,* Sage publications, New

Kothari, C.R (2004). *Research Methodology: Methods and Techniques*, 2nd Edition New Delhi; India : New Age International Publishers

Krejcie, M & Morgan, R. (1970). *"Determining Sample Size for Research Activities" (Educational and Psychological Measurement* pp. 607-610)

Lubya, H. (2013). *"Banking Market Structure, Financial Dependence and Growth: International Evidence from Industry Data",* The Journal of Finance, Vol. LV1, No.2.

Macmillan, R. (2002) "On the determinants of corporate hedging", *The Journal of Finance*, Vol. 48 pp.267-84.

Matovu, D and Okumu, O (2013). *Credit Business of Commercial Bank*. financial Press

Nelu, O. (2010). *The Role of Small and Large Businesses in Economic Development in Australia*

Okumu, L. J. (2013). *Microfinance Industry in Uganda: sustainability, outreach and regulation.* Unpublished PhD Dissertation. University of Stellenbosch, South Africa.

Okumu, P. (2009). *An assessment of credit risk management techniques adopted by micro finance institution in Kenya.* Unpublished MBA Research.

Oliver, A. (2010). Innovation and entrepreneurship. London: Heinemann

Olupot, M. (2012). *Banking In India,* Anmol Publications, New Delhi.

Omona Somekh, B and Lewin, C.(2005) (eds) *Research Methods in the Social Sciences*: London, Sage Publications

Ragin, C.C. (2007). *Constructing Social Research: The Unity and Diversity of Method,* Pine Forge Press, 2007, ISBN 0-8039-9021-9

Ragin, C. C. (2011). *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies.* University of California Press 2011.

Stanbic Bank Uganda Ltd (2008). *Annual Report for 2007.* Stanbic Bank Uganda Ltd, Kampala, Uganda.

Somekh, B and Lewin, C.(2005) (eds) *Research Methods in the Social Sciences*: London, Sage Publications

Terry, K. and Franklin, H. (2012). *The Economics of Money Banking and Financial Markets* 5th edition an important of addition Wesly Longman.

Ragin, C.C. (2011). *Constructing Social Research: The Unity and Diversity of Method,* Pine Forge Press, 1994, ISBN 0-8039-9021-9

Ragin, C. C. (2007). *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies.* University of California Press 2007.

Ruthworth, B. (2012). Rural Customer Preference of Banking Services in India – Factor Analysis and Reliability Test, *European Journal of Scientific Research*, Vol.74, No.1, and PP.143-153.

Ruthrock, T. (2011) "Risk management in financial institutions", *Sloan Management Review*,

Vol. 39 No.1, pp.33-46.

Somekh, B and Lewin, C. (2005) (eds) *Research Methods in the Social Sciences*: London, Sage Publications

Vandhi (2013). *A peep in to the Private sector Banks,* kanishka publishers Delhi

APPENDICES

APPENDIX 1: QUESTIONNAIRE INTERVIEW GUIDE FOR TOP ADMINISTRATORS AND EMPLOYEES OF DIAMOND TRUST BANK

My name is Aaron Opiding a student of Masters in Business Administration of Uganda Management Institute. In partial fulfillment of the requirements for the degree, I am required to conduct a research in an area of my interest. My interest in this study is to evaluate the **Credit Risk Management and Profitability in Commercial Banks in Uganda: A Case Study of Diamond Trust Bank.** You have been sampled to participate in this study and the information you give will be used strictly for academic purposes and will never be used against you or your office. The information obtained from you will be kept highly confidential. You are also requested not to write your name on this questionnaire. Fill out the questionnaire and return to me.

Thank you for your cooperation.

SECTION A   BIO-DATA
Please tick the appropriate option

Age	20-29	30-39	40-49	Above 50	
Sex	Male	Female			
Marital status	Married	Single	Widowed	Divorced	
Level of Education	Masters	Bachelors	Diploma	Certificate	Others Specify

Instructions from question 1- tick the number that best indicates your opinion on the questions using the following scale.

Scale	5	4	3	2	1
	Strongly agree	Agree	Not sure	Disagree	Strongly disagree

SECTION B: Please rank the following statement on Likert scale ranging from strongly disagree to strongly agree; Where; 1= strongly disagree, 2= disagree, 3= not sure, 4= agree, 5= strongly agree

Statements	1	2	3	4	5
Credit criteria	1	2	3	4	5
Credit in Diamond Trust Bank is extended to borrowers who have the capacity					
The bank analyses the financials before extending credit to borrowers					
The character of the borrower is paramount when it comes to borrowing in Diamond Trust Bank					
Credit in Diamond Trust Bank is given when there is collateral security					
Before credit is extended to a sector or individuals, the prevailing economic conditions are put into consideration by Diamond Trust Bank management					
Credit in Diamond Trust Bank is extended to mainly SMEs and corporate entities					
Micro lending is not common in Diamond Trust Bank					
The bank sets the interest depending on the bank rate					

Statements	1	2	3	4	5
Risk Mitigation	1	2	3	4	5

Statements	1	2	3	4	5
Diamond Trust Bank is able to identify potential loss avenues					
. Diamond Trust Bank determines the extent of credit risk					
. Diamond Trust Bank uses a variety of ways to manage risk					
. Diamond Trust Bank has a credit risk management framework					
. Diamond Trust Bank has a functioning credit risk management plan					
. Diamond Trust Bank board is solely involved in matters of risk management					
. Credit risks can be easily be mitigated in Diamond Trust Bank					
Statements	**1**	**2**	**3**	**4**	**5**
Credit Policies	**1**	**2**	**3**	**4**	**5**
. Diamond Trust Bank has a good credit policy					
. Diamond Trust Bank has effectively utilized the existing credit policy					
. The current credit policy has loopholes					
. There have been cases of noncompliance with the current credit policy					
. The existing credit policy has helped the bank increase its profitability					
. The credit policy is in line with the Bank of Uganda requirements					

Statements	**1**	**2**	**3**	**4**	**5**
Profitability	**1**	**2**	**3**	**4**	**5**
. The decline of key sectors like the real estate sector has affected Diamond Trust Bank profitability					
. The fluctuating nature of the economy has affected Diamond Trust Bank profitability					
. Interest free deposits are negatively impacting on Diamond Trust Bank profitability levels					
. Investing in government securities has helped Diamond Trust Bank increase its profitability levels					
. The bank investments generate sustainable income					

APPENDIX II: INTERVIEW GUIDE FOR TOP ADMINISTRATORS AND

EMPLOYEES

1. When did you join Diamond Trust Bank?

Credit Criteria

1. How does the Diamond Trust Bank advance credit?

2. To what extent is it right to assert that credit is given when there is collateral security?

3. Comment on the assertion that credit is given after fulfilling the Bank credit   requirements

Risk Mitigation

1. How does Diamond Trust Bank mitigate risk?

2. Comment on the view that the bank is able to identify potential loss avenues

3. Comment on the notion that Diamond Trust Bank has a credit risk management framework

4. Comment on the view that the bank has a functioning credit risk management plan

5. To what extent is DTB able to mitigate risk

6. What challenges exist in mitigating credit risk?

Credit Policies

1. What policies guide the Bank when it comes to advancing credit to customers?

2. Comment on the assertion that the Bank gives a loan basing on the credit history of someone

3. To what extent are bank applications assessed by experts in Banking?

4. To what extent does the existing credit policy in Diamond Trust Bank meet the credit needs of the bank

Profitability

1. Comment on the assertion that the bank applies the benchmark strategy in order to avoid risk in its investments.

2. To what extent are DTB's investment plans approved by the relevant authorities before implementation

3. Comment on the assertion that the decline of key sectors like the real estate sector has affected Diamond Trust Bank profitability

4. Comment on the assertion that the fluctuating nature of the economy has affected Diamond Trust Bank profitability

5. To what extent are the interest free deposits negatively impacting on Diamond Trust Bank profitability levels

APPENDIX III

1. The researcher will review the following documents during the data collection process.

2. DTB Annual Financial Reports

3. DTB Financial Statements

4. Credit Management Manuals

5. DTB Minutes of meetings

6. Any other relevant materials

APPENDIX IV: DOCUMENTARY REVIEW CHECKLIST

DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION BY SMALL SAMPLE TECHNIQUE FOR

SELECTION OF SAMPLE

N	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364