# RISK MANAGEMENT AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS: A CASE OF CENTENARY BANK KABALE BRANCH, UGANDA

OWOMUGISHA ANNAH 2019/A/MBA/011/W

A RESEARCH DISSERTATION SUBMITTED TO THE FACULTY OF ECONOMICS AND MANAGEMENT SCIENCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE MASTER'S DEGREE IN BUSINESS ADMINISTRATION OF KABALE UNIVERSITY

MAY 2022

### DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any Institution or University other than Kabale for examination and award.

# NAME: OWOMUGISHA ANNAH

# REG NO: 2019/A/MBA/011/W

Signature. Date 23/05/2022

### APPROVAL

This is to certify that this work has been done under our supervision and has been submitted for examination with our approval.

Name: DR SUNDAY ARTHUR

Academic Supervisor

Date 25/05/222 day Signature ..

Name: DR BYAMUKAMA ELIAB Academic Supervisor

Signature:

Date: 25705 2022

## ACKNOWLEDGEMENT

I acknowledge my supervisors, family and friends for the tireless efforts rendered to me towards the completion of this dissertation.

## DEDICATION

I dedicate my work to Centenary Bank

DECLARATION	Error! Bookmark not defined.
APPROVAL	Error! Bookmark not defined.
ACKNOWLEDGEMENT	iii
DEDICATION	iv
LIST OF TABLES	ix
LIST OF ABBREVIATIONS	X
ABSTRACT	xi
CHAPTER ONE	1
INTRODUCTION	1
1.0 Introduction	1
1.1 Background to the study	1
1.1.1 Historical Background	2
1.1.2 Theoretical background	4
1.1.3 Conceptual background	7
1.1.4 Contextual background	8
1.2 Purpose of the study	
1.3 Specific objectives	11
1.4 Research Hypotheses	11
1.5 Scope of the study	
1.5.1 Content Scope	
1.5.2 Geographical scope	
1.5.3 Time Scope	
1.6 Significance of the study	
1.7 Definition of key terms	
CHAPTER TWO	

LITERATURE REVIEW	15
2.1 Introduction	15
2.2 Theoretical review	15
2.3 Conceptual framework	19
2.3.1 Model specification	20
2.4 Overview of Risk Management in Commercial Banks in Uganda	21
2.5 Overview of Financial Performance of Commercial Banks in Uganda	23
2.6 Empirical studies on financial risks	25
2.7 Credit Risk and Financial Performance	27
2.8. Liquidity Risk and Financial Performance	31
2.9. Operational Risk and Financial Performance	34
2.10 Literature gap	36
CHAPTER THREE	38
RESEARCH METHODOLOGY	
3.1 Introduction	
3.2 Research Design	
3.3 Study Population	38
3.4 Sampling and sample size selection	
3.5 Data sources	39
3.6 Research Instruments	39
3.7 Validity and Reliability of the instruments	40
3.7.1 Validity of the instruments	40
3.7.2 Reliability of the instruments	40
3.8 Data collection procedure	41
3.9 Data processing and analysis	41

3.11 Model specification	43
CHAPTER FOUR	45
RESULTS PRESENTATION	45
4.1 Introduction	45
4.2 Response Rate	45
4.3 Demographic characteristics of respondents	46
4.4 Credit risk management and financial performance of commercial banks	47
4.4.1 Correlation analysis between credit risk management and financial performa	nce50
4.4.2 Regression analysis between credit risk management and financial performan	nce51
4.5 Liquidity risk management and financial performance of commercial banks	51
4.5.1 Correlation analysis between liquidity risk management and financial perform	mance53
4.5.2 Regression analysis between credit risk management and financial performan	nce54
4.6 Operational risk management and financial performance of commercial banks	55
4.6.1 Correlation analysis between liquidity risk management and financial perform	mance56
4.6.2 Regression analysis between credit risk management and financial performan	nce56
4.7 Overall Results on Correlation regression between Financial Management and Fi	nancial
Performance	57
4.7.1 Overall Correlation	57
4.7.2 Overall regression	58
4.7.3 Model specification	58
4.7.4 Conclusions on the hypotheses	59
CHAPTER FIVE	61
DISCUSSION, CONCLUSION AND RECOMMENDATIONS	61
5.0 Introduction	61
5.1 Credit risk and financial performance of commercial banks	61
5.2 Liquidity risk and financial performance of commercial banks	62

5.3 Operational risk and financial performance of commercial banks	63
5.4 Conclusions	64
5.4.1 Credit risk and financial performance	64
5.4.2 Liquidity risk and financial performance	64
5.4.3 Operational risk and financial performance	64
5.5 Recommendations	65
5.6 Areas for further study	65
REFERENCES	66
APPENDIX	75
APPENDIX I: INTERVIEW GUIDE FOR STAFFS OF CENTENARY BANK	75
APPENDIX II: INTRODUCTORY LETTER	82

# LIST OF TABLES

Table 1: Content Validity Index for the questionnaires   40
Table 2: Content Reliability Indices for the questionnaire
Table 3: Response rate
Table 4: Demographic characteristics of respondents   46
Table 5: Credit risk management and financial performance of commercial banks
Table 6: Correlation analysis between credit risk management and financial performance50
Table 7: Regression analysis between credit risk management and financial performance51
Table 8: Liquidity risk management and financial performance of commercial banks52
Table 9: Correlation analysis between liquidity risk management and financial performance53
Table 10: Regression analysis between credit risk management and financial performance54
Table 11: Operational risk management and financial performance of commercial banks55
Table 12: Correlation analysis between liquidity risk management and financial performance56
Table 13: Regression analysis between credit risk management and financial performance57
Table 14: Overall Correlation
Table 15: Overall regression

## LIST OF ABBREVIATIONS

BOU..... Bank of Uganda

CRDB..... Centenary Rural Development Bank

ROA..... Return on Assets

ROE..... Return on Equity

ROI..... Return on Investment

### ABSTRACT

The purpose of this study was to assess the effect of financial risks on financial performance of commercial banks in Uganda taking a case study of Centenary bank Kabale branch. The specific objectives of this study included: to establish the effect of credit risk on financial performance of commercial banks in Uganda; to determine the effect of liquidity risk on financial performance of commercial banks in Uganda; and, to assess the effect of operational risk on financial performance of commercial banks in Uganda; and, to assess the effect of operational risk on financial performance of commercial banks in Uganda. Descriptive research design was adopted in this research. Both primary and secondary data were used in this study. Data was collected from 78 staff of Centenary Bank using structured questionnaire. The staff were sampled from a population of 97 staff. Both correlation and regression analyses were used to measure the effect of credit risk, liquidity risk and operational risk on financial performance of commercial banks.

The findings of this study indicated a significant association between credit risk management and financial performance of the bank. The findings also showed a significant relationship between liquidity risk and financial performance of the bank. From the findings of this study, it can be concluded that credit risk and liquidity risk could impact negatively on the financial performance and therefore, since proper management of these risks enhances financial performance, the commercial banks should put up strong structures to control these risks. This will in turn improve the financial performance of the banks. Therefore, there is need to set up strong structures for management of credit risk in order to enhance financial performance. The bank management should also give utmost priority to address the liquidity problems of the bank. This is because liquidity risk management positively influences financial performance. Therefore, the issues relating to liquidity should be promptly addressed, and immediate remedial measures taken to avoid the consequences of the bank becoming illiquid.

### **CHAPTER ONE**

### **INTRODUCTION**

### **1.0 Introduction**

This study was set to examine the effect of financial risks on financial performance of commercial banks, a case study of Centenary bank Kabale branch Uganda. This chapter presents the background to the study, the problem statement, purpose of the study, objectives of the study, research hypotheses, scope of the study, conceptual framework and definition of key terms

### **1.1 Background to the study**

Management of risks is a great ideal in business operations. This is because it helps to minimize the losses which could arise by identifying them, analyzing them, assessing them, controlling and possibly avoid or eliminate them (Epetimehin & Obafemi, 2015).

In the banking sector, the risks that financial institutions are concerned about are referred to as financial risks and financial risk management is a process undertaken by the financial institutions to control these risks (Al-Tamimi, Hussein, Miniaoui, & Elkelish, 2015). Financial risk management incorporates analyzing and understanding the kind of risk the institution is facing, devise the right strategies to address them putting in consideration the internal priorities of the institution and policies (Dionne, 2013). For the case of this study, the financial risks considered included liquidity risk, credit risk and operational risks.

When the financial institution gives credit to a client and the client fails to pay back, it gives rise to credit risk (Cechetti & Schoenholtz, 2011). Therefore credit risk is basically about failure of the borrower to pay back the credit. Liquidity risk arises in the circumstances whereby the financial institution to convert its short-term assets to liquid cash has to face some financial losses or capital losses (Drehmann & Nikolaou, 2013). When a financial institution conducts business without consideration of business ethics, it faces the operational risk (Epetimehin & Obafemi, 2015). On the other hand, financial performance of the financial institution refers to its capability to execute its plans and important choices so as to achieve its objectives, goals and attain high returns (Sathyamoorthi, Mapharing, Mphoeng, & Dzimiri, 2020). This section presents the historical, theoretical, conceptual and contextual background of this study.

### **1.1.1 Historical Background**

Financial risk refers to the unexpected variability or volatility of financial returns which includes credit risk, liquidity risk, and operational risks (Holton, 2004). The issue of financial risk is not a new field and its origin can be traced after World War II during the period from 1955 to 1964 (Crockford, 1982).

By that time, no reading materials were published on risk management and no universities offered courses in the subject (Snider, 1956). With time, reading materials were developed and the first two academic books were published by Mehr & Hedges (1963) and Williams & Heins (1964). The main content of their publications was pure risk management whereas corporate financial risk was left out. In parallel, engineers developed technological risk management models. Operational risk partly covers technological losses; today, operational risk has to be managed by financial institutions (Snider, 1956). In 1970s, there was an invention that led to the use of derivatives by financial institutions and individuals in management of their insurable and uninsurable risk and this spread faster in the early 1980s when the financial institutions started to take financial management or risk portfolios into their business considerations (Dionne, 2013).

The concept of risk management in the financial sector was transformed in the 1970s when financial risk management became a priority for many companies including banks, insurers, and non-financial enterprises exposed to various price fluctuations such as risk related to interest rates, stock market returns, exchange rates, and the prices of raw materials or commodities (Field, 2003)

In the recent years, many financial institutions have complemented the management of pure risk and financial risk management in order to widen their market operations and credit management operations (Field, 2003). According to Field (2003), financial risks management on liquidity and operations as well as international regulation on risks started in the late 1990s. Financial and insurance institutions designed internal risk management tools to shield their business operations from unanticipated risks and reduce regulatory capital. At the same time, governance of risk management became essential, integrated risk management was introduced, and the first risk manager positions were created (Dionne, 2013). Currently, financial risk management in the banking sector has grown tremendously as a result of technological advancement, accumulative dependence on third parties necessary information technology provision, competition from other financial institutions, widened client expectation and demands (Al-Tamimi, Hussein, Miniaoui, & Elkelish, 2015)

On the other hand, commercial banking activities were sufficiently important in Babylonia in the second millennium B.C. that written standards of practice were considered necessary (Akerlof, 1970). These standards were part of the Code of Hammurabi, the earliest known formal laws. These primitive banking transactions were very different in many ways to their modern-day counterparts (Lelgo & Obwogi, 2018). Deposits were not of money but of cattle, grain or other crops and eventually precious metals. Nevertheless, some of the basic concepts underlying today's banking system were present in these ancient arrangements. A wide range of deposits was accepted, loans were made, and borrowers paid interest to lenders. Banking activities were sufficiently important in Babylonia in the second millennium B.C. that written standards of practice were considered necessary. These standards were part of the Code of Hammurabi – the earliest known formal laws. Obviously, these primitive banking transactions were very different in many ways to their modern-day counterparts (Ongore & Kusa, 2013). Deposits were not of money but of cattle, grain or other crops and eventually precious metals. Nevertheless, some of the basic concepts underlying today's banking system were present in these ancient arrangements. A wide range of deposits was accepted, loans were made, and borrowers paid interest to lenders and their success was measured in terms of profits earned (Adolphus, 2011).

The ratios that were used in measurement of performance of financial institutions included Return on equity (ROE) and return on assets (ROA). For a good performing financial institution or firm, the ROE between 15% and 30% was considered fit and the ROA of at least 1% (Ongore & Kusa, 2013). Up to now, these measures are used as measures of financial performance by financial institutions, insurance companies, firms and organizations (Lelgo & Obwogi, 2018). However, there are other measures such as Return on investment (ROI), Cost-income ratio, total capital ratio and equity to asset ratio which have been adopted by the financial institutions to measure their performance(Sathyamoorthi, Mapharing, Mphoeng, & Dzimiri, 2020).

### **1.1.2 Theoretical background**

This study was underpinned by the finance distress theory, adverse selection theory and information asymmetry theory. Finance distress theory was invented by Baldwin and Mason in

1983. According to Baldwin and Mason (1983), a firm is considered to be in financial distress when its business fades to the point where it cannot meet its financial obligation. The signs for this situation include violations of debt payments and failure or reduction of dividends payouts. According to Whitaker (1999), firm's entry into the financial distress is defined as the first year in which cash flows are less than current maturities' long-term debt of that firm. The firm has enough to pay its creditors as long as the cash flow exceeds the current debt obligations. Firms enter into financial distress as a result of economic distress, declines in their performance and poor management especially on financial risks (Wruck, 1990).

Boritz (1991) argued that liquidity crisis may occur in commercial banks due to inability to provide cash to depositors and loans to borrowers as and when they are required. Financial risks in banks could be a possible cause of financial distress and hence there is a great need to address them. Loan portfolio management is an important determinant of the bank's liquidity. The banks should manage the credit and liquidity risk in order to avoid financial distress (Hussain & Al-Ajmi, 2012). This theory provides for a non-biased perspective on the relationship between financial risks and financial performance of commercial banks.

According to Kumar (2017), financial distress be used to define suspension of remittance to short-term lenders, liquidation and delay of payment on principal on bonds or payment of interest or the omission of a preferred dividend (Kumar, 2017). As a result, the financial institutions operating cash flows fail to meet the current maturing obligations and the institution is coerced to take corrective action (Akinsola, 2017). In other words, financial distress can be best explained plainly as failure of the business or institution, inability to clear maturing obligations, distressed restructuring of the institution or business bankruptcy (Gilson, 1989).

Andrade and Kaplan (1997) explained the two forms in which financial distress occurs. First and foremost, financial distress occurs when an institution fails to clear its maturing obligation. Secondly, financial distress occurs when an institution considers restructuring the debt in a bid to avoid being in default as the corrective action (Andrade & Kaplan, 1997). Thirdly, financial distress occurs when an institution is unable to meet its liabilities to third parties (Andrade & Kaplan, 1997).

Wruck (1990) stated that financial distress acts as a warning device to the financial and insurance institutions, for instance a decrease in the level of dividends issued or non-issue, or laying off of employees and resignation of top management which are the signs of an institution undergoing financial distress (Wruck, 1990). Akinsola, (2017) posited that an institution can be described as financially distressed if its first year of cash flow is lesser than the long-term debt of the company that is soon due.

According to Gordon (1971), financial distress refers to a state between solvency and insolvency. Financial distress illustrates the financial situation of an institution faced with temporary cash flow problems or an institution having problems in regard to meeting its maturing or current obligations (Gordon, 1971). An institution in financial distress is unable to fulfil its proceeds to the maturing obligations and hence faces insolvency state after the maturity of the debt obligations (Gordon, 1971).

Karels and Prakash (2006) categorized the possible causes of an institutions state of financial distress into two; that is exogenous and endogenous causes. The endogenous causes refer to the risk factors that are not system-based which are instead firm-specific. On the other hand, the exogenous causes refer to the risk factors that affect all businesses in the economy although not to the same extent (Karels & Prakash, 2006). Memba (2012) posited that most of the institutions'

6

risk factors to financial distress are related to exogenous factors. Adeyemi (2011) described another risk factor associated with financial distress which is lack of adequate capital (Adeyemi, 2011).

### 1.1.3 Conceptual background

In their daily operations, banks are faced with various financial risks which are hard to anticipate (Hussain & Al-Ajmi, 2012). Financial risks arise when returns fluctuate unexpectedly (Kioko, Olweny, & Ochieng, 2019). Financial risk takes many forms, for instance equity risk, liquidity risk, market risk, currency risk, asset risk, foreign exchange risk and credit risk, among others. These risks negatively impact on the financial performance of the commercial banks (Muriithi, 2016; Mansyur, 2017). They can lead to underperformance and collapse of commercial banks and other financial institutions if they are not well managed (Kioko, Olweny, & Ochieng, 2019). As depicted from the theoretical background, three forms of financial risks will be considered for this study. These include credit risk, liquidity risk and operational risk.

Credit risk arises when the borrowers fail to make required payments leading to a debt. When the borrower fails to pay the credit, the lender may lose interest in collecting the loan (Cechetti & Schoenholtz, 2011). In this instance, credit risk arises because of loss of principal and interest and amplified costs of collection (Al-Qudah & Jaradat, 2013)

Liquidity risk implies that the financial institution unable to meet its short-term financial demands when required to (Drehmann & Nikolaou, 2013). Liquidity risk arises when the financial institution fails to convert its short-term assets or security to liquid cash without incurring capital or income loss in the course.

7

Operational risk can be defined as the risk that the financial institution suffers when as a result of conducting its business in unethical ways. These risks can be in form of business interruption, control failures, errors, misdeeds or external events and these can cause monetary and reputational damage of the financial institution and in the end affect the profitability and its market share (Epetimehin & Obafemi, 2015)

On the other hand, financial performance refers to a firm's capacity to manage plans and important choices so as to realize its objectives, goals and attain high returns (Sathyamoorthi, Mapharing, Mphoeng, & Dzimiri, 2020). In the context of commercial banks, financial performance is measured by its profitability and it is measured in terms of the Return on Assets (ROA), net profits relative to total assets of the firm or the Return on Equity (ROE), net profits relative to the shareholders' funds, return on investment, cost-income ratio, total capital ratio and equity to asset ratio (Khrawish, 2011; Lelgo & Obwogi, 2018).

### **1.1.4 Contextual background**

The effective management of risk is critical to financial growth within Centenary Bank. The identification and management of risk remains a high priority and underpins all business activities. According to the Centenary Bank annual report 2019, the major risks to which Centenary Bank is exposed to include credit risk, operational risk, compliance risk, business risk, strategic risk, market risk, liquidity risk and taxation risk. Occurrence of these risks would cause of significant negative impact on profitability of to the bank (Centenary Bank, 2019).

Risk management in financial institutions of Uganda has been implemented through the guidance of essential guidelines from Bank of Uganda such as the guidelines issued in 2010 (Bank of Uganda, 2013). More to that, the Bank of Uganda introduced the Credit Reference Bureau (CRB) in its struggle to alleviate risks in the banking sector (Bank of Uganda, 2021) and the financial institutions and their borrowers are required to register.

The above background shows that both the banks and the regulatory authorities have been working together to mitigate the financial risks that affect the commercial banks and other financial institutions. Understanding the kinds of risks that a bank is mostly exposed to and how they possibly affect its financial performance is the first step to design clear mitigation measures. Therefore, this study examined the effect of financial risks on the financial performance of Centenary Bank.

### **1.2. Statement of the Problem**

Financial risks are inherent in the conduct of our business of the financial institutions and can represent both opportunities and threats. Since some undesirable risks cannot be eliminated entirely, they must be managed based on their significance, i.e. the scope and frequency of the effects they are likely to have on the bank if they materialize. It is therefore important for bank to adopt strategies, policies and procedures to be able to manage its risks effectively and efficiently. Risks have the potential of creating loss for the Bank as well as for its stakeholders. Such loss is not necessarily quantifiable. Sometimes an error affects the financials of more than the year of occurrence. Thus, risks are diverse in term of its effect.

For instance, in 1998 and 1999, four insolvent banks which together held 12.1% of Uganda banking system's deposits were closed by central banks. These included International Credit Bank (ICB), Greenland bank, Co-operative bank and Trust bank. The closure of these banks arose from the international audits that were conducted which found them suffering serious financial distress and were massively insolvent (Brownbridge, 2002)

Risks are also diversified in terms of their source. A loss may occur due to poor selection of borrower. A loss might be caused by the absence of strong collection force. Thus, Centenary Rural Development Bank Group Limited runs the risk of creating diversified losses for itself or for its stakeholders during its day-to-day operations. For instance in 2019, Centenary Bank reported a credit loss from loans accruing to Shs 31,916 million which was even higher than that of 2018 of Shs 28,879 million (Centenary Bank, 2019).

The financial risks have affected the financial performance of the bank as well. Financial performance has been reported to decrease between 2018 and 2019 due to increase in credit risks. The financial performance of the bank as measured by its return on equity (ROE) was 28.3% which was lower than that of 2018 of 24.8%, a reflection of decline in financial performance (Centenary Bank, 2019). However in 2020, its financial performance as measured by ROE also dropped to 19.2% (Centenary Bank, 2020). It is evidenced that the institution has been experiencing fluctuation in its financial performance. Although a number of studies have been undertaken on how financial risks impact on financial performance, there are few studies with contradicting results such as Afriyie and Akotey (2012), Cucinelli (2013), Epetimehin and Obafemi (2015), Wanjohi (2012).Some have positive relations and other negative findings. This study sought to bridge the gap by focusing on studying the Effect of Financial risks and Performance of CRDB.

### 1.2 Purpose of the study

The purpose of this study was to assess the effect of financial risks on financial performance of commercial banks in Uganda taking a case study of Centenary Bank Kabale branch.

### **1.3 Specific objectives**

- i. To establish the effect of credit risk on financial performance of commercial banks in Uganda
- To determine the effect of liquidity risk on financial performance of commercial banks in Uganda
- To assess the effect of operational risk onfinancial performance of commercial banks in Uganda

### **1.4 Research Hypotheses**

H0<sub>1</sub>: Credit risk has no significant effect on financial performance of Commercial Banks in Uganda

Ha1: Credit risk has a significant effect on financial performance of Commercial Banks in Uganda

H0<sub>2</sub>: Liquidity risk has no significant effect on financial performance of Commercial Banks in Uganda.

Ha<sub>2</sub>: Liquidity risk has a significant effect on financial performance of Commercial Banks in Uganda

H0<sub>3</sub>: Operational risk has no significant effect on financial performance of Commercial Banks in Uganda.

**Ha**<sub>3</sub>: Operational risk has no significant effect on financial performance of Commercial Banks in Uganda.

#### **1.5 Scope of the study**

### **1.5.1 Content Scope**

This study was intended to examine the effect of financial risks on financial performance of commercial banks, a case study of Centenary Bank Kabale branch. Specifically, this study looked at how credit risk, liquidity risk and operational risk affect financial performance of commercial banks in Uganda taking Centenary Bank as a case study.

### 1.5.2 Geographical scope

This study was conducted in Centenary bank, Kabale branch in Kabale district, South-Western Uganda.

### 1.5.3 Time Scope

This study considered a period of ten years, from 2011 to 2020. This was because in this period the financial performance of Centenary bank was fluctuating and therefore information collected provided rich evidence in relation to risk data within the same period.

### **1.6 Significance of the study**

This study was intended to provide an insight into the credit risk attributes of the commercial banks which may need to be incorporated in their investment decision processes.

The findings from this study would guide in the design, implementation and review of the existing risk management policy framework by the key actors in the financial sector of Uganda such as commercial banks and central bank.

The findings of this study would add to the body of knowledge on risk management and shoud guide future research in commercial banks in financial risk for better performance of the banks.

12

### **1.7Definition of key terms**

- **Credit risk:** This refers to the exposure faced by banks when a borrower defaults in honouring debt obligations on due date or at maturity (Coyle, 2000). It is the possibility of losing the outstanding loan partially or totally, due to credit events.
- Liquidity Risk: This is the risk of the bank being unable either to meet its obligations to depositors or to fund increases in assets as they fall due without incurring unacceptable costs or losses (Ismail, 2010)
- **Operational risk:** This is defined as the risks which would generate volatility in a bank's reserves, expenses and the value of its business, which is loss resulting from inadequate or failed internal processes, people and systems or from external events (Muriithi, 2016).
- **Financial performance:** This refers to the subjective measure of how well a bank can use assets from its primary mode of business and generate revenues(Akong'a, 2014).

### **CHAPTER TWO**

### LITERATURE REVIEW

### **2.1 Introduction**

This chapter presents theoretical and empirical literature on financial risk from previous studies. The literature was sourced from books, peer reviewed journal articles, websites, magazines among others

### 2.2 Theoretical review

This study was underpinned by finance distress theory which was propounded by Baldwin and Mason in 1983. According to Baldwin and Mason (1983), a firm is considered to be in financial distress when its business fades to the point where it cannot meet its financial obligation. The signs for this situation include violations of debt payments and failure or reduction of dividends payouts.

According to Whitaker (1999), a firm's entry into the financial distress is defined as the first year in which cash flows are less than current maturities' long-term debt of that firm. The firm has enough to pay its creditors as long as the cash flows exceeds the current debt obligations. The key factor in identifying firms in financial distress is their inability to meet contractual debt obligations. Firms enter into financial distress as a result of economic distress, declines in their performance and poor management, especially on financial risks (Wruck, 1990).

A firm facing financial distress is unable to meet the financial obligations of its debtors and this finally leads to its bankruptcy or restructuring (Andrade & Kaplan, 1997). In addition, such firms are faced with other challenges such as dividend reductions, operational insolvency, losses, plant

closings, reduced stock prices, and loss of customers, valuable suppliers, and key employees (Purnanandam, 2008).

Boritz (1991) argued that liquidity crisis may occur in commercial banks due to inability to provide cash to depositors and loans to borrowers as and when they. Financial risks in banks could be a possible cause of financial distress and hence there is a great need to address them. Loan portfolio management is an important determinant of the bank's liquidity. The banks should manage the credit and liquidity risk in order to avoid the financial distress (Hussain & Al-Ajmi, 2012).

When a firm is experiencing financial distress, another sign can be violation of loan contracts and incurring constant losses and fails to honour obligation when it is due(Maina & Muturi, 2013).

Since the banking sector serves almost all sectors of the economy, the failure of firms in this sector will have a direct impact on the firms in other sectors of the economy. For this matter, the financial institutions are very sensitive to factors that affect their financial health (Adolphus, 2011).

According to Kumar, (2017), financial distress can be used to define suspension of remittance to short-term lenders, liquidation and delay of payment on principal on bonds or payment of interest or the omission of a preferred dividend (Kumar, 2017). As a result, the financial institution's operating cash flows fail to meet the current maturing obligations and the institution is coerced to take corrective action (Akinsola, 2017). In other words, financial distress can be best explained plainly as failure of the business or institution, inability to clear maturing obligations, distressed restructuring of the institution or business bankruptcy (Gilson, 1989).

Andrade & Kaplan (1997) explained the two forms in which financial distress occurs. First and foremost, financial distress occurs when an institution fails to clear its maturing obligation. Secondly, financial distress occurs an institution considers restructuring the debt in a bid to avoid being in default as the corrective action (Andrade & Kaplan, 1997). Thirdly, financial distress occurs when an institution is unable to meet its liabilities to third parties (Andrade & Kaplan, 1997). Wruck (1990) stated that financial distress acts as a warning device to the financial and insurance institutions, for instance a decrease in the level of dividends issued or non-issue, or laying off of employees and resignation of top management which are the signs of an institution undergoing through financial distress (Wruck, 1990). Akinsola (2017) posited that an institution can be described as financially distressed if its first year of cash flow is lesser than the long-term debt of the company that is soon due.

According to Gordon (1971), financial distress refers to a state between solvency and insolvency. Financial distress illustrates the financial situation of an institution faced with temporary cash flow problems or an institution having problems in regard to meeting its maturing or current obligations (Gordon, 1971). An institution in financial distress is unable to fulfil its proceeds to the maturing obligations and hence faces insolvency state after the maturity of the debt obligations (Gordon, 1971). Karels and Prakash (2006) categorized the possible causes of an institutions state of financial distress into two; that is exogenous and endogenous causes. The endogenous causes refer to the risk factors that are not system-based which are instead firm-specific. On the other hand, the exogenous causes refer to the risk factors that affect all businesses in the economy although not to the same extent (Karels & Prakash, 2006). Memba (2012) posited that most of the institutions' risk factors to financial distress are related to exogenous factors. Adeyemi (2011) described another risk factor

associated with financial distress which is lack of adequate capital (Adeyemi, 2011).

### **2.2.1.1 Financial distress determinants**

### a. Firm size

Small firms have the likelihood to fail than big firms because small firms have poor market experience, limited connection, and limited financial resources(Maina & Muturi, 2013). Firm size is the most essential determinant in a firm's employment of public debt(Mungure, 2015). The firm size is negatively related to the probability of a firm going bankrupt(Maina & Muturi, 2013).

### **b.** Profitability

Profitability ratios indicate how effective a company is in generating profits given sales and/or its capital assets and measure a company's ability to generate revenue over expenses. The research conducted on a financially distressed firm suggests that taking actions of adjusting the business to increase profitability (Ongore & Kusa, 2013). Campbell et al. studied the determinants of corporate failure and the pricing of financially distressed stocks and shows lower profitability will lead to a higher level of financial distress that increases the chance to fall into bankruptcy (Tafri, Hamid, Meera, & Omar, 2009). Thus, it implies that there is an inverse relationship between profitability and financial distress.

### c. Liquidity

Liquidity, which indicates the firm's ability to meet short-term maturing obligations, has also been shown as an important determinant of corporate financial distress in various studies. An increase in liquidity leads to a decrease in corporate financial distress(Muriithi, 2016). Similarly,

18

studies have indicated that there is a negative link between liquidity and financial distress(Tafri, Hamid, Meera, & Omar, 2009).

### **2.3 Conceptual framework**

A conceptual framework is a diagrammatical representation that shows the relationship between dependent variable and independent variables. It illustrates the effect of financial risk on financial performance of Centenary Bank. The dependent variable in this study is the financial performance of the bank measured in terms of return on equity, return on assets, return on investment, cost-income ratio, total capital ratio and equity to asset ratio.

The independent variables for this study included credit risk measured by non-performing loans, liquidity risk measured by liquidity ratio and operational risk measured by operating expenses to net operating income ratio. The financial risks have been associated with negative effects on the financial performance of the financial institutions (Ahmed & Nauman, 2012; Akong'a, 2014; Cucinelli, 2013). The financial institutions that put strong financial risk management strategies have also been reported to minimize on the financial risks (Macha, 2010; Onaolapo, 2012). This implies that there is negative relationship between financial risks and financial performance, and a positive relationship between financial risk management and financial performance of the financial risk management and financial performance of the financial risk management and financial performance of the financial institutions (Fig 1).



Fig 1: Conceptual Framework. Adopted from Akong'a, (2014) and mod

### **2.3.1 Model specification**

A panel regression model was developed and utilized in the analysis of the data. Thus, the financial performance will be expressed as a function of credit, liquidity and operational risks.

 $Y = \beta o + \beta 1 X 1 + \beta 2 X 2 + \beta 3 X 3 + \varepsilon$ 

Where:

Y = Financial performance of commercial bank

X1=Credit risk

X2=Liquidity risk

X3=Operating risk

### 2.4 Overview of Risk Management in Commercial Banks in Uganda

Commercial banks in Uganda have been experiencing various forms of financial risks and have employed a range of strategies to mitigate them. Muwonge, (2012) defined risk management as a process aimed at eliminating, reducing and controlling risks to enhance benefits and avoid detriments from speculative exposure(Muwonge, 2012). The objective of risk management is to minimize future losses by the financial institutions. Commercial banks in Uganda have adopted various risk management techniques to mitigate and manage financial risks such as GAP analysis, Value at risk, training, and effective communication among others (Kasekende, 2010)

GAP analysis is one of the most widely adopted risk management techniques in financial institutions in mitigation of interest rate risk and it is based on the balance sheet of the bank. This strategy involves preparation of maturity schedules used to generate indicators of interest rate sensitivity of both earning and economic value to changing interest rates(Muwonge, 2012).

The GAP analysis uses duration model to measure the interest rate risk and managing net interest income derived by taking into consideration all individual cash inflows and outflows (Barclays bank, 2011)

Value at Risk (VaR) is another risk management tool used by commercial banks in Uganda to mitigate financial risks. This tool summarizes financial risk inherent in portfolios into a simple number and shows how much a commercial bank is likely to lose or make with a certain

probability in a given time horizon. This strategy is used to mitigate market risk of the bank as well as foreign currency risk and equities risk(Muwanga, 2007)

The commercial banks have also employed their financial derivatives to minimize the financial risks they face. A derivative is an instrument whose value depends on the value of something else (Kimani, 2011). The main categories of derivatives used include swaps and future options mainly to mitigate foreign exchange risk and market risk as well. These are aimed at stabilizing and standardizing the markets and it involves agreements between involved parties to exchange set of cash flows according to the specified conditions (Muwanga, 2007)

Risk adjusted rate of return (RAROC) is also used by the banks to estimate capital requirements for market risk, credit risk and operational risks (Equity Bank Uganda Limited, 2017). Risk adjusted Rate of return analysis shows how much economic capital different products and businesses need and determines the total return on capital of a firm.

Strengthening banks' internal controls is another risk management strategy used to mitigate financial risks. According to Stanbic Bank Uganda (2015) compliance report, an effective system of internal control includes an adequate process for identify and evaluating different kinds of risks and having sufficient information systems to support these (Stanbic Bank Uganda, 2015)

The strategy in internal controls involves conducting periodic internal audits of different process and producing regular independent reports and evaluations to identify areas of

22

weakness. An important part on internal control is to ensure that the duties of those who measure, monitor, and control risks are separated. This is used to curb the financial risks such as operation risks(Holton, 2004)

Commercial banks in Uganda have also employed securitization procedure to curb financial risks such as credit risk. This strategy raises the new funds for the bank and reduces the bank's exposures to risks. According to Bank of Uganda report, different techniques such as pooling a group of income-earning assets such as mortgages and sells securities against these in the open market were adopted by commercial banks hence transforming illiquid assets into tradable asset backed securities(Bank of Uganda, 2019). This strategy enables the bank to diversify its credit risk exposure and reduce the need to monitor each individual asset's payment stream hence shielding against credit risk and liquidity risk (Bank of Uganda, 2019). According to (Muwonge, 2012), securitization can be used to curb interest rate risk since the bank is able to harmonize the maturity of the assets to that of the liabilities by investing in a variety of available securities.

#### 2.5 Overview of Financial Performance of Commercial Banks in Uganda

Financial performance refers to the ability of the commercial bank to leverage operational and investment decisions and strategies to achieve a business' financial stability (Ahmed & Nauman, 2012). It is the measure of bank's achievement of its financial goals guided by its financial objectives and benchmarks.

The financial performance of commercial banks is measured by their profitability which is generally measured in ratios. The ratios used to measure the performance include Return on Assets (ROA), the Return on Equity (ROE), net profits relative to total assets of the firm or, net profits relative to the shareholders' funds and Return on Assets (ROA) ratio (Mallisa, 2013). Return on Assets shows how well the resource of the bank may be used to enhance profitability and a higher ROA indicates efficient utilization of the bank's resources, thus maximizing the shareholders wealth (Muwonge, 2012). Return on Equity and Return on assets are the most commonly used ratios to measure financial performance of commercial banks. A good financial performance of the bank is indicated by return on equity of between 15% and 30%, while return on assets is at least 1% (Ongore & Kusa, 2013)

In Uganda, there has been tremendous growth in the commercial banking sector with over 27 banks operating in Uganda. The commercial banking industry in Uganda is diverse, involving local private and foreign commercial banks.

The banking sector in Uganda has been characterized by steady progress over the years. In 2003, there were 14 commercial banks with a total asset base of UGX 5,116 billion, representing average assets per regulated bank of UGX. 370 billion. By the end of the year 2019, the sector's total assets had risen to UGX. 33,380 billion, representing average total assets per regulated bank of UGX. 1,280 billion, representing a percentage asset base growth of 251% over the 16 years (Ahumuza, 2020)

The performance of commercial banks of Uganda has been increasing at a slow rate in the past 2 years (Bank of Uganda, 2021). The profitability of Commercial Banks in Uganda has increased
though marginally by 6.4% to UGX 855Bn, while the value of non-performing loans was largely unchanged throughout the course of the year ending December 2020 (Bank of Uganda, 2021)

#### 2.6Empirical studies on financial risks

According to Kungwani(2014), financial risk means the probability that the returns expected by the financial institution would be different and lower than what was expected. This indicates that there is a chance in all probability that some part of the investment or major part or totally could be lost in the process (Kungwani, 2014).

An empirical study conducted by Jarrow & Protter (2005) focusing on different types of risks which are faced by banks reported that operating technology was a major challenge which was encountered and risk loss which was encountered due to agency. The study concluded that calculation of net present value in measuring operational risk was crucial and critical since it would lead to major deviations in the entire issue if it is not considered (Jarrow & Protter, 2005) A study conducted by Tafri et al., (2009) examined the relationship between financial risk and profitability of the conventional and Islamic banks in Malaysia for the period between 1996 and 2005. The components of financial risk comprised credit risk, interest rate risk and liquidity risks. The study employed panel data regression analysis of Generalized Least Squares of fixed effects and random effects models and found that credit risk has a significant impact on profitability of the conventional as well as the Islamic banks. The relationship between interest rate risk and ROE were found to be weakly significant for the conventional banks and insignificant for the Islamic banks. The effect of interest rate risk on ROA is significant for the conventional banks. Also liquidity risk to have an insignificant impact on profitability (Tafri, Hamid, Meera, & Omar, 2009)

A similar study conducted by Lake (2013) examined the impact of financial risk on the profitability of eight commercial banks in Ethiopia for the period of 2000-2011. The quantitative part of analysis was carried out by ordinary least square (OLS) method. The findings of the study showed that credit risk and liquidity risk have a negative and statistically significant relationship with banks' profitability. However, the relationship for interest rate risk and foreign exchange rate risk was found to be statistically insignificant (Lake, 2013).

A study conducted by Aruwa and Musa (2014) in Nigeria examined the effects of the various risk components like credit risk, interest rate risk and operational risk on the financial performance of Deposit Money Banks from the year 1997 to 2011. The data was analysed using descriptive statistic and ordinary least square regression. The findings showed that a strong relationship exists between risk components and the financial performance of the banks in Nigeria as was indicated by the r-squared value of 91%. However, variables that represent credit risk and the rate of capital to total weighted risk asset have positive relationship. Operational and interest rate risk affects the profitability of the banks negatively (Aruwa & Musa, 2014).

Another study conducted in Tanzania by Amin et al., (2014) examined the simultaneous influence of the financial risk and financial performance of commercial banks. The study considered financial performance in terms of return on assets and return on equity, while financial risk was the average of financial risks. The study also employed unbalanced panel data of 21 banks from 2003 to 2012, and the findings showed that by applying both ROA and ROE in the performance equation, financial risk is significant. The findings revealed an inverse relation of financial risk and financial performance.

An empirical study was conducted by Al-Tamimi et al. (2015) to examine the relationship between financial risk and performance of Gulf Cooperation Council Islamic banks and the relative importance of the most common types of risk. The study covered 11 of the 47 Islamic banks of the Gulf Cooperation Council region from 2000 to 2012. ROA and ROE were used as measures for bank performance. The risks that were considered included credit risk, liquidity risk, operational risk, and capital risk. The findings revealed that there exists a significant negative relationship between the banks' performance, capital risk and operational risk. The results also confirm a significant negative relationship between banks' performance. Capital risk was the most important type of risk and then followed by operational risk(Al-Tamimi, Hussein, Miniaoui, & Elkelish, 2015)

# 2.7Credit Risk and Financial Performance

Credit risk is a situation where the borrower fails to pay back the acquired loan to the lender. In the context of commercial banks, credit risk refers to the exposure that a commercial bank faces when its client takes a loan and fails to honour payment obligations on due date or at maturity (Coyle, 2000). It is the possibility of losing the outstanding loan partially or totally, due to credit events. Failure to pay this credit affects the financial performance of the commercial bank.

According to Giesecke (2004), credit risk is the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risks. Various empirical studies have explored the effects of the credit risk on the financial performance of financial institutions.

Korir (2013) conducted a study to find out the impact of credit risk on the financial performance of Deposit Taking Microfinance institutions (MFIs) in Kenya and the findings showed a positive and significant impact on financial performance. The findings of this study implied that profitability increased with increase in credit risk of these financial institutions. This study was conducted in microfinance institutions while the current study is intended to consider the case of commercial banks. A similar empirical study by Afriyie&Akotey (2012) that examined the impact of credit risk on the profitability of rural and community banks in the BrongAhafo Region of Ghana also revealed a positive significant relationship between the credit risk management and profitability of selected rural banks in Ghana. This means that proper management of credit risk can increase boost the financial performance of financial institutions.

A study that was conducted by Kithinji (2010) to find out the relationship between credit risk management and performance of listed banks at the NSE, Kenya revealed a positive effect of credit risk and profitability of the commercial banks. These findings implied that commercial banks with higher credit risks were more profitable than those with low credit risks. Another study conducted by Ogboi and Unuafe (2013) to determine the relationships between credit risk and bank's profitability in Nigeria showed that better credit risk management had a positive significant effect on bank's financial performance.

Kargi (2011) conducted a study to evaluate the impact of credit risk on the profitability of Nigerian banks and the findings showed that credit risk management had a positive significant impact on the profitability of the banks. The findings of this study implied that profitability of

the bank was inversely related with its credit risks. Similarly, a study by Kolapo & Oke (2012)that investigated the quantitative effect of credit risk on the performance of commercial banks in Nigeria revealed a negative effect of credit risk on bank performance. These findings implied that as the credit risks increase, the profitability of the bank decreases.

Hosna et al., (2009) studied the relationship between non-performing loan and capital adequacy ratios and profitability for four Swedish banks covering a period of 2000 to 2008. The study showed that rate of non-performing loan and capital adequacy ratios was inversely related to ROE though the degrees vary from one bank to the other. This revealed an inverse relationships between profitability, performance and credit risk measures(Hosna, Manzura, & Juanjuan, 2009)

Kolapo et al., (2012) conducted an empirical study to assess the effect of credit risk on the performance of commercial banks in Nigeria over the period of 11 years (2000-2010). The traditional profit theory was employed to formulate profit, measured by ROA, as a function of the ratio of Non-performing loan to loan and advance, ratio of Total loan and Advances to Total deposit and the ratio of loan loss provision to classified loans as measures of credit risk. Five commercial banking firms were selected on a cross sectional basis for eleven years. Panel model analysis was used to estimate the determinants of the profit function. Their findings show that profitability was reduced by increase of non-performing loan and loan loss provision and that the effect of credit risk was similar across banks all banks considered in the study. However, an increase in total loan and advances increase the (Kolapo & Oke, 2012)

Poudel (2012) explored various parameters pertinent to credit risk management as it affect

banks' financial performance in Napel. Correlation and regression models were used to analyze the data where the study revealed that credit risk had an inverse impact on banks' financial performance (Poudel, 2012)

Onaolapo (2012) analyzed the relationship between the credit risk management efficiency and financial health in selected Nigerian commercial banking sector and the study hypothesized negative relationship between Efficiency of Credit Risk Management, bank performance and operational effectiveness. The findings revealed minimal causation between Deposit Exposure (DE) and performance but greater dependency on operational efficiency parameters (Onaolapo, 2012)

Fredrick (2012) analysed the impact of credit risk management determinants on the financial performance of commercial banks and also attempted to establish if there exists any relationship between the credit risk management determinants by use of CAMEL indicators and financial performance of commercial banks in Kenya. The data analysis method used was based on Pearson correlation analysis and a multiple regression model. The study found out that there is a strong impact between the CAMEL components on the financial performance of commercial banks. The study also established that capital adequacy, asset quality, management efficiency and liquidity had weak relationship with financial performance (ROE) whereas earnings had a strong relationship with financial performance. This study concludes that CAMEL model can be used as a proxy for credit risk management (Fredrick, 2012)

Ogboi and Unuafe (2013) carried the empirical evidence on the magnitude of the relationships

between credit risk and bank's profitability in Nigeria. They examined the impact of credit risk and capital adequacy on banks financial performance in Nigeria. Panel data model was used to estimate the relationship that exists among loan loss provisions (LLP), loans and advances (LA), non-performing loans (NPL) and capital adequacy (CA) which were the independent variables and return on asset (ROA) as the dependent variable to measure the profitability of the banks. The findings showed that sound credit risk management and capital adequacy impacted positively on bank's financial performance with the exception of loans and advances which was found to have a negative impact on banks' profitability during that period (Ogboi & Unuafe, 2013)

#### **2.8. Liquidity Risk and Financial Performance**

In the commercial banks, the term liquidity risk refers to the risk of the bank to fail to meet its responsibilities to depositors or to fund the rises in assets as they fall due without incurring unacceptable costs or losses (Ismail, 2010). Liquidity risk poses a high risk to the financial performance of the financial institutions as it is likely to affect its profitability. A number of empirical studieshave been conducted to find out how liquidity risk relates with the financial performance of financial institutions.

A study that was conducted by Cuong (2015) to determine the effect of liquidity risk on the financial performance of European banks revealed a significant and negative relationship between liquidity risk and the banks financial performance of these banks. Similarly, a study that was conducted by Muriithi (2016) to assess that effect of financial risk on profitability of commercial banks in Kenya also found a negative and significant effect of liquidity risk on the

profitability of commercial banks in Kenya (Muriithi, 2016).

Another empirical study conducted by Mamatzakis&Bermpei (2014) to discover the main factors that affect financial performance the G7 and Switzerland banks using a panel data analysis, revealed a significant negative association between liquidity and the banks performance. Ahmed &Nauman (2012) also conducted a study to examine the effect of liquidity risk of financial performance of banks in Pakistan using multiple regression analysis and the results indicated that liquidity risk had a significant negative effect on financial performance of the banks whereby the two measures of liquidity risk (liquidity gap and non-performing) negatively affected the profitability of the banks.

Similarly, when Cucinelli (2013) assessed the association between liquidity and financial performance of listed and non-listed European Banks, he found that the liquidity risk and the financial performance of these institutions were positively associated. However, the findings of these two empirical studies were not statistically significant.

From the literature above, it is evidenced that most of them reported a negative and significant effect of liquidity risk on the financial performance of the financial institutions with a few reporting a positive and insignificant relationship between the two. However, it can also be evidenced that these studies used different measures of liquidity risk and financial performance. An empirical study conducted by Koziol et al., (2008) assessed the risk of bank failures. The findings of the study showed that the major risks that were faced by these banks were amongst them liquidity risk. It was also revealed that risk identification, risk assessment and risk

analysis were the most influencing variables and the banks needed to give more attention to in order to make their risk management practices more effective (Koziol & Lawrenz, 2009).

Akhtar (2011) studied the association of liquidity risk with the solvency of a financial institution through a comparative analysis between conventional and Islamic banks of Pakistan. The study investigated the significance of size of the firm, networking capital, return on equity, capital adequacy and return on assets (ROA), with liquidity risk management in conventional and Islamic banks. Their study was based on secondary data that covers a period of four years (2006-2009). The study found positive but insignificant relationship of size of the bank and networking capital to net assets with liquidity risks. In addition, capital adequacy ratio in conventional banks and return on assets in Islamic banks is found to be positive and significant at 10% significance level (Akhtar, Ali, & Sadaqat, 2011).

Ogol (2011) conducted a study on liquidity risk management practices in microfinance institutions in Kenya. The study was aimed at understanding the process of liquidity risk identification by MFIs, the extent to which MFIs are classified, monitor liquidity risks, liquidity risk exposure of MFIs and to identify the various practices that the MFIs adopt in managing the liquidity risks. The findings of the study indicated that the financial institutions had liquidity management systems in place(Ogol, 2011)

Ahmed et al. (2012) examined liquidity risk and its effect on banks' profitability in Pakistani banks using multiple regressions. The findings of the study revealed that liquidity risk affected bank profitability significantly, with liquidity gap and non-performing loans as the two factors

aggravating the liquidity risk since they showed a negative relationship with profitability (Ahmed & Nauman, 2012)

#### **2.9.Operational Risk and Financial Performance**

Operational risk is defined as the risks which would generate volatility in a bank's reserves, expenses and the value of its business, which is loss resulting from inadequate or failed internal processes, people and systems or from external events (Muriithi, 2016). According to Macha (2010), financial institutions should focus on management of this risk because it can cause negative effects on their revenues and net worth and this can result into inconsistent performance of the financial institutions.

According to Akong'a (2014), organizational is paramount if it is to manage its financial risks successfully. Operational risks arise from two instances which were termed as an act of God (flood, earthquake and windstorm) and a person. The heart of the organization culture is the personnel who maintain processes and systems and cause operational risk events by doing things which are contrary to what they are supposed to do. Therefore, culture of an organization is very vital to organizational success in managing operational risk.

A number of studies have been conducted on operational risk and how it affects the financial performance of financial institutions. A study that was conducted by Macha, (2010), to find out the relationship that existed between operational risk management and financial performance of financial intermediaries in Tanzania and the findings revealed a negative effect of operational risks on the financial performance. The results showed that despite the fact that commercial banks were faced with a number of cash operation risks, the major risks identified were lack of

integrity among the staff members and the nature of business that the banking organizations were dealing with. Similarly, a study conducted by Kamau (2010) on the adaptation of risk management by commercial banks in Kenya, revealed that operational risk is critical in the institution. The findings showed that the main sources of operation risks arose from increase in automated technology, lack of qualified staffs, lack of management supports, and internal and external fraud.

Kimani (2011) assessed fraud risk for Barclays Bank of Kenya and the findings showed that the frequency of internal fraud is increasing drastically and has by far inflicted the most significant losses to the bank. This was associated with some dishonest employees and managers who had found ways to override systems and or collude with outsiders to defraud the bank (Kimani, 2011) The study of Cummins, Lewis and Wei (2004) examines the impact of operational risk on stock returns using three factor model. It was emphasized in the study that the market value response is larger for insurers than for banks, implying that the market value loss significantly exceeds the amount of the operational loss reported. This suggests that such losses have a negative impact on future cash flows. Similarly, institutions with higher market value proportionately exhibit larger losses. This implies that operational loss events produce a stronger market value impact for institutions with stronger growth prospects (Cummins, Lewis, & Wei, 2006)

Lyambiko (2015) conducted a study to determine the operational risks management practices and financial performance in commercial banks in Tanzania and to identify the sources of operational risks exposures among commercial banks in Tanzania. The study adopted a descriptive research design, a target population of 36 licensed commercial banks as at 31 st December 2013 with a

sample of the 36 commercial banks being analyzed. A regression model was developed with bank performance being measured by ROA and the independent variables consisting of credit risk, insolvency risk and operational efficiency. The research findings confirmed that operational efficiency was positively correlated with the financial performance of commercial banks while credit risk and insolvency risk negatively influenced the financial performance of commercial banks (Lyambiko, 2015)

Sewanyana (2011) also carried out a research to establish the relationship between operational risk and organizational environment in Stanbic bank. The study adopted both cross-sectional and descriptive survey design. The research findings established that there was a positive and significant relationship between operational risk management, organizational environment and organizational performance. The regression analysis further revealed that operational risk management and organizational environment were significant indicators of organizational performance (Sewanyana, 2015).

The literature above shows that operational risks that arise from the operational activities of the organization can cause negative impact on its financial performance. However, a literature gap still exists in Uganda because scanty of these studies were done in Ugandan context. This study was therefore set to bridge this gap.

#### 2.10 Literature gap

The reviewed literature indicated various studies that have been conducted to relate financial risks and the financial performance of financial institutions. For instance the studies that have been conducted such as Afriyie & Akotey (2012), Ahmed & Nauman (2012), Akong'a (2014)

Eppy (2005), Ismail (2010), Sathyamoorthi, Mapharing, Mphoeng, & Dzimiri (2020) among others have shown mixed findings whereby both positive and negative effects have been reported. It has also been observed that these studies were not conducted using uniform methods and were conducted in different contexts. In particular, there is a big empirical literature gap existing in Ugandan context about the financial risks and how they affect the financial performance of commercial banks.

#### **CHAPTER THREE**

#### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter presents the research methods that were employed to achieve the objectives of this study. It shows the research design, the study population, sampling and sample size, sampling procedures, research instruments, validity and reliability of instruments, data gathering procedures, data analysis, ethical considerations and limitations of the study.

#### **3.2 Research Design**

Research design is the arrangement or structure of examination expected to get answers to research questions or research hypotheses (Mugenda & Mugenda, 2003). The study adopted a quantitative paradigm since it involved theory testing and was made of variables which were measured in numbers and they were later analyzed with statistical tools. The study used a descriptive design in order to describe the profile of the respondents in terms of age group of owners, level of education

# **3.3 Study Population**

The study population for this study involved all the staff of Centenary bank, Kabale branch. These included all the 97 staff of the institution from all the departments

#### 3.4 Sampling and sample size selection

Sample size will be determined based on the formula by (Yamane, 1967);

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

Where;n<sub>r</sub>is the desired sample size,

N is the total number of staff from centenary bank Kabale branch, N=97

e is the allowable error, taken as 5%

$$n_{\rm r} = \frac{97}{1+97(0.05)^2} = 78$$

#### **3.5 Data sources**

Primary and secondary data sources were used in the study. The primary source was obtained with the use of the Self Administered Questionnaire. Primary data was collected the staffs of Centenary bank Kabalebranch. Questionnaires were prepared and administered to the staff working in the risk management department, IT department, Finance department, Credit department, operations department, branch manager and the branch supervisor. This helped to understand the risk management and financial performance of the institution since the response were considered to be knowledge in that field.

#### **3.6 Research Instruments**

A questionnaire was the major instrument which was used for data collection. The questionnaire was preferred for this study because it enabled the researcher reach a larger number of respondents within a short time, thus made it easier to collect relevant information. The first section in the questionnaire was the face sheet, to collect data on profile of respondents. The second section in the questionnaire was on variable of financial risk management (credit risk, liquidity risk, operational risk); the third section of the questionnaire had questions of financial performance of the bank. All the questions were measured on a Likert Scale on five points ranging from 1= strongly disagree, 2 = disagree, 3 = Neutral, 4 = Agree and 5=strongly agree. The questionnaire contained close-ended questions to collect quantifiable data relevant for

precise and effective correlation of research variables. They was also preferred to save time, enabled respondents to easily fill out the questionnaires and keep them on the subject and relatively objective.

#### 3.7 Validity and Reliability of the instruments

#### 3.7.1 Validity of the instruments

The researcher ensured the validity of the instrument by face validity analysis using research supervisors who went on checking if all the items which was constructed, helped achieve the aim of the study. This was done by giving copies of questionnaire to two lecturers (experts) to judge the validity of the questions according to objectives. A content validity index (CVI) was computed using the following formula:

Variable	Description	No. of items	CVI
Dependent variable	Financial performance	10	0.772
Independent variable	Risk management	17	0.861
	Liquidity Risk	10	0.754
	Operational risk	7	0.813

Table 1: Content Validity Index for the questionnaires

#### **3.7.2 Reliability of the instruments**

The research instrument was examined for its reliability by using Cronbach's Alpha value. All the items included in the scale adopted from reviewing literature were subjected to reliability testing. According to Cronbach Alpha Coefficient Test, the questionnaire is considered reliable if all the coefficients are greater than 0.70 (Sekaran, 2003)

Variable	Description	No. of items	Cronbach Alpha
Dependent variable	Financial performance	10	0.913
Independent variable	Risk management	17	0.832
	Liquidity Risk	10	0.884
	Operational risk	7	0.817

 Table 2: Content Reliability Indices for the questionnaire

#### **3.8 Data collection procedure**

The researcher sought the permission from the bank authorities to access the required data for the specified period. The panel data was extracted in excel format for easy arrangement and analysis. The Panel data was preferred since it helped to study the behavior of the variables in this study over time and across space. It also efficient and economical because data collection is typically the most time-consuming and expensive part of a research project.

Questionnaires were administered to the staff of centenary bank from departments concerned with risk management as well as the bank administrators, manager and supervisor. This was because they were knowledgeable about the risks and financial performance of the bank.

## 3.9 Data processing and analysis

The data was organized and financial ratios computed using Excel program inorder to obtain the study variables. The panel data collected was analyzed quantitatively using regression equations, which were analyzed using STATA v16.0 software. Data from questionnaireswas summarized, using frequencies and percentages.

#### **Objective one:**

The relationship between credit risk and financial performance of commercial banks was assessed using both correlation and regression analysis. Pearson correlation analysis was conductedtogether with linear regression. Credit risk measures were run against each of the measures of financial performance. The associations with p-values<0.05 was considered significant.

### **Objective two:**

The relationship between liquidity risk and financial performance of commercial banks was assessed using both correlation and regression analysis. Pearson correlation analysis was conducted together with linear regression. Liquidity risk measures were run against each of the measures of financial performance. The associations with p-values<0.05 were considered significant.

### **Objective three:**

The relationship between operational risk and financial performance of commercial banks was assessed using both correlation and regression analysis. Pearson correlation analysis was conducted together with linear regression. Operational risk measures were run against each of the measures of financial performance. The associations with p-values<0.05 were considered significant.

#### 3.10 Measurement of Study Variables

This study adopted financial performance as the dependent variable. Financial performance was measured using return on equity (ROE), Return on Assets (ROA) and Return on Investment (ROI). ROE was measured by the ratio of net profit to total equity.ROA was measured as ratio of

42

net income to total average assets. Return on investment was measure as a ratio of profit earned on investment to cost of the investment.

The independent variable for this study was the financial risks. These include credit risk, liquidity risk and operational risk. Credit ratio was measured by Credit risk measured using Non-performing loans tototal loans ratio, Liquidity risk was measured by measured using total assets to liquid assets ratio while operational cost was measured using operating expenses to net operating income ratio

### **3.11 Model specification**

A panel regression model was developed and utilized in the analysis of the data. Thus, the financial performance will be expressed as a function of credit, liquidity and operational risks.

 $Y = \beta o + \beta 1 X 1 + \beta 2 X 2 + \beta 3 X 3 + \varepsilon$ 

Where:

Y = Financial performance of commercial bank

X1=Credit risk

X2=Liquidity risk

#### X3=Operating risk

To answer the research hypotheses, each of the independent variables was run independently with the dependent variable and the association between the two was established. The coefficient of determination together with the correlation coefficient and regression coefficients were assessed and interpreted for each independent variable in order to answer the research hypotheses. The overall association was determined by combining all the independent variables and regressed against the dependent variables. The significant levels were assessed at 5% level of significance.

## **CHAPTER FOUR**

### **RESULTS PRESENTATION**

### **4.1 Introduction**

This chapter shows how data was analyzed including the results and findings of the study as per the research objectives. This study used a Likert scale in collecting and analyzing financial risk management, where a 5-points scale was used in computing the means and standard deviations. The findings were then presented in tables and suitable explanations were given in prose. The results of the rating of the impact of the risk management strategy on financial performance for the banks were presented and explanations were given. To measure the effects of financial risk management on financial performance, correlation and regression analyses were used. This chapter concludes with a brief interpretation of the findings.

#### 4.2 Response Rate

The response rate of study was ascertained to indicate whether the number of questionnaires that were returned was sufficient enough for analysis. All the 78 questionnaires that were distributed were all filled and returned, leading to achievement of 100% response rate (Table 3)

#### Table 3: Response rate

Issued questionnaires	Questionnaires	filled	and	Response rate
	returned			
78	78			100%

Source: Computation from data (2022)

# **4.3 Demographic characteristics of respondents**

The majority of the participants were males (n=48, 61.6%), most of the respondents had completed Bachelor's level of education (n=47, 60.3%). By age, 38.5% (n=30) were less than 30 years and 30.8% were between 30 to 39 years. This implied that the age category of most of the respondents was less than 40 years. By years of experience, 46.2% (n=36) had less than 5 years of experience and 39.7% had 5 to 10 years of experience. This implies that the majority of the respondents had experience of 10 years and below. By department, 33.3% were from Finance department, 24.4% were from ICT department, 21.8% from operations department and 20.8% from credit department (Table 4)

Variable	Frequency	Percentage
Sex		
Male	48	61.5
Female	30	38.5
Education level		
Diploma	26	33.3
Bachelors	47	60.3
Masters	5	6.4
Age category		
Less than 30 years	30	38.5
30 - 39 years	24	30.8
40 - 49 years	14	17.9

#### Table 4: Demographic characteristics of respondents

50 years and over	10	12.8
Years of experience		
Less than 5 years	36	46.2
5 - 10 years	31	39.7
11-15 years	7	9.0
Over 15 years	4	5.1
Department		
ICT	19	24.4
Finance	26	33.3
Credit	16	20.5
Operations	17	21.8

Source: Computation from data (2022)

### 4.4 Credit risk management and financial performance of commercial banks

The findings indicated that the credit risk management was being practiced by Centenary bank. The findings revealed that there was effective transformation and communication of the credit risk strategy set by the board of directors within the bank in the shape of policies and procedures by the top management (mean=4.2; SD=0.33).

It was also reported that the bank has a credit risk rating framework across all type of credit activities (mean=4.2; SD=0.21). The bank monitors quality of the credit portfolio on day-to-day basis and takes remedial measures as and when any deterioration occurs (Mean=4.6; 0.24). Also, the bank regularly prepares periodic report of credit risk (mean=4.5, SD=0.26). The risk department identifies and assesses core risks and opportunities for the microfinance (mean=4.3, SD=0.225).

The findings also showed that the bank has a credit risk identification policy that guide the risk process (mean=4.3, SD=0.189). The bank has an effective credit default assessment on the loans (mean=4.6; SD=0.177). The bank does loan recovery assessments on the loans provided to the borrowers (mean=4.3; SD=0.165). There is an utmost risk monitoring staff in the bank (mean=4.1, SD=0.153).

It was shown that the bank has established appropriate internal credit risk assessment practices and developed credit scoring analysis tools for preliminary analysis and pricing (mean=4.5; SD=0.129). The bank undertakes a credit worthiness analysis for loan request, reviews financial statements and future cash flows projections of borrower's business before grating loan (mean=4.2, SD=0.093).

The overall score of the credit risk management was very good (mean=4.2, SD=0.11). This implied that credit risk was considered a serious threat to the bank and therefore measures had to be put to minimize on its potential effects on business (Table 5)

Table 5:	Credit	risk manageme	ent and fina	ncial perform	nance of comm	nercial banks
----------	--------	---------------	--------------	---------------	---------------	---------------

Item of Credit Risk Management	Mean	SD	Interpretation
The credit risk strategy set by the board of Directors are effectively transformed and communicated within the bank in the shape of policies and procedures by the top management	4.2	0.33	Very good
The bank has an effective risk management framework (infrastructure, process and policies) in place for managing credit risk	3.8	0.31	Good
The bank has a credit risk rating framework across all type of credit activities	4.2	0.21	Very good

The bank monitors quality of the credit portfolio on day-to-day			Very good
basis and takes remedial measures as and when any	4.6	0.24	
deterioration occurs			
The bank regularly prepares periodic report of credit risk	4.5	0.26	Very good
The risk department identifies and assesses core risks and	13	0.225	Very good
opportunities for the microfinance	-1.5	0.225	
There is credit risk identification at the loan approval phase	3.9	0.213	Good
The bank conducts identification risk at the collateral security	37	0.201	Good
presentation	5.7	0.201	
The bank has a credit risk identification policy that guide the	13	0 180	Very good
risk process	4.5	0.107	
The bank has an effective credit default assessment on the	16	0 177	Very good
loans	4.0	0.177	
The bank does loan recovery assessments on the loans	13	0 165	Very good
provided to the borrowers	4.5	0.105	
There is an utmost risk monitoring staff in the bank	4.1	0.153	Very good
The bank considers physical and financial characteristics in	3.8	0.141	Good
credit scoring models for personal loans	5.0	0.141	
The bank has established appropriate internal credit risk			Very good
assessment practices and developed credit scoring analysis	4.5	0.129	
tools for preliminary analysis and pricing (rate)			
The bank conducts a credit risk analysis on businesses and	37	0.117	Good
individuals before lending	5.1	0.11/	

The bank refers to credit reference bureau report for decision			Good
making before lending to the customers	3.9	0.105	
The bank undertakes a credit worthiness analysis for loan			Very good
request, reviews financial statements and future cash flows	4.2	0.093	
projections of borrower's business before grating loan.			
OVERALL	4.2	0.11	Very good

Source: Computation from data (2022)

# 4.4.1 Correlation analysis between credit risk management and financial performance

The Pearson Correlation analysis showed that there was a positive significant correlation between credit risk management and financial performance of the bank (r=0.428, p<0.0001). This implied that if credit risk is not controlled, the financial performance of the bank can be negatively affected (Table 6).

# Table 6: Correlation analysis between credit risk management and financial performance

		CR	FP
CR	Pearson Correlation	1	0.428**
	Sig. (2-tailed)		.000
	Ν	78	78

\*\*. Correlation is significant at the 0.01 level (2-tailed).

*CR*=*Credit Risk; FP*=*Financial Performance* 

#### 4.4.2 Regression analysis between credit risk management and financial performance

The coefficient of determination (R-Square=0.183) implied that 18.3% of changes in the financial performance of Centenary bank were due to credit risk management. This being a small percentage implied that credit risk management alone is not sufficient to improve financial performance of Centenary bank. The overall relationship between credit risk management and financial performance was significant (f-statistic=17.003, p<0.0001). The regression analysis showed that for each measure that is towards credit risk management improves financial performance by 0.344 units. (Table 7)

 Table 7: Regression analysis between credit risk management and financial performance

Measure	Value
R-Square	0.183
~ <b>1</b> ~~.	
F-Statistic (p-value)	17.003 (<0.0001)
Coefficient	0.344
P-value	<0.0001

Source: Computation from data (2022)

### 4.5Liquidity risk management and financial performance of commercial banks

It was found out that the bank had put measures for liquidity risk management. The findings showed that the bank has set in place principles of short term crediting (mean=4.6, SD=0.32). The bank also reconciles the volumes of assets and liabilities in terms of maturity (mean=4.2, SD=0.22). In addition, the bank undertakes regular monitoring of total value of gross daily payments made and received (mean=4.8, SD=0.18).

It was revealed that there was implementation of internal controls so as to monitor liquidity in this bank (Mean=4.8, SD=0.23). Also, the bank monitors obligations which must be settled at a specific time within the day or have an expected settlement deadline (mean=4.6, SD=0.26). It was reported that the bank's liquidity decision involves identification of existing sources of liquidity risk as well as liquidity risk that may arise from new business products or activities (mean=4.7, SD=0.30). In addition, liquidity decision involves bank's actions in case of temporary or long-term liquidity disturbances (mean=4.2, SD=0.33).

The overall liquidity risk score was scored as very good (mean=4.3, SD=0.13). This was an implication that the bank does not take liquidity risk for granted and hence establishes the measure to minimize its negative impacts on business operations of the bank (Table 8).

Table 8:	Liquidity ri	sk management	t and financial	performance of	of commercial banks
----------	--------------	---------------	-----------------	----------------	---------------------

Items of liquidity risk management	Mean	SD	Interpretation
The bank has set in place principles of short term crediting	4.6	0.32	Very good
The bank reconciles the volumes of assets and liabilities in terms of maturity	4.2	0.22	Very good
The bank frequently uses short term financial instruments compared to long term financial instruments	3.8	0.41	Good
The bank undertakes regular monitoring of total value of gross daily payments made and received	4.8	0.18	Very good
There is implementation of internal controls so as to monitor liquidity in this bank	4.8	0.23	Very good
The bank monitors obligations which must be settled at a specific time	4.6	0.26	Very good

within the day or have an expected settlement deadline			
Liquidity decision involves identification of existing sources of liquidity			
risk as well as liquidity risk that may arise from new business products or	4.7	0.30	Very good
activities			
Liquidity decision involves bank's actions in case of temporary or long			
Equility decision involves bank s actions in case of temporary of long-	4.2	0.33	Very good
term liquidity disturbances.			
Liquidity decision involves analysing the data on the level and trends of			
cash inflows in the previous period, taking into account seasonal effects,	3.5	0.37	Good
sensitivity of interest rates and macroeconomic factors.			
Departs are recularly married and reviewed by everythe to determine			
Reports are regularly provided and reviewed by experts to determine	3.8	0.40	Good
necessary information for liquidity decision	5.0	0.40	Good
Overall	4.3	0.13	Very good

Source: Computation from data (2022)

# 4.5.1 Correlation analysis between liquidity risk management and financial performance

There was a positive significant correlation between liquidity risk management and financial performance of Centenary bank (r=0.361, p=0.001). This implied that liquidity risk management created a positive impact on financial performance of the bank. It also implied that failure to control liquidity risk would create a negative impact on financial performance of the bank (Table 9).

# Table 9: Correlation analysis between liquidity risk management and financial performance

		FP	LR
FP	Pearson Correlation	1	0.361**
	Sig. (2-tailed)		0.001
	Ν	78	78
**. Cor	rrelation is significant at the 0.01 level (2-tailed).		

Source: Computation from data (2022)

## 4.5.2 Regression analysis between credit risk management and financial performance

The coefficient of determination (R-Square=0.131) implied that 13.1% of changes in the financial performance of Centenary bank were due to liquidity risk management. This was a small percentage and implied that liquidity risk management alone is not sufficient enough to improve financial performance of Centenary bank. The overall relationship between liquidity risk management and financial performance was significant (F-statistic=11.415, p=0.001). The regression analysis showed that for each measure that is towards liquidity risk management improves financial performance by 0.376 units. (Table 10)

<b>Table 10: R</b>	egression	analysis	between	credit	risk	management	and	financial	performance	9
										۰.

Measure	Value
R-Square	0.131
F-Statistic (p-value)	11.415 (0.001)
Coefficient	0.376
P-value	0.001

Source: Computation from data (2022)

# 4.6 Operational risk management and financial performance of commercial banks

Operational risk management was also implemented by the centenary bank. It was reported that Operational risk management efforts of the bank were supported by senior Management (mean=4.2, SD=0.42). It was also revealed that management efforts of the institution were well communicated to them (mean=4.2, SD=0.18). There were regular reviews of operational risk management efforts and reporting to senior Management (mean=4.3, SD=0.31). Risks were subdivided into individual levels for further analysis (mean=4.1, SD=0.22). The overall operational risk management was rated as good (mean=3.9, SD=0.32).

Items of operational risk management	Mean	SD	Interpretation
Operational risk management program is well documented	3.8	0.32	Good
Operational risk management efforts are supported by senior	4.2	0.42	Very good
Management.			
Employees are properly trained on risk management policies of this	3.3	0.13	Good
institution.			
The roles and responsibilities of each employee in the operational	3.5	0.37	Good
risk			
Management efforts of this institution are well communicated to	4.2	0.18	Very good
them.			
Controls are in place to evaluate the efficiency of the operational	3.8	0.26	Good
riskmanagement programs			
Regular reviews of operational risk management efforts and	4.3	0.31	Very good

reporting to senior Management.			
Risks are subdivided into individual levels for further analysis	4.1	0.22	Very good
Overall	3.9	0.32	Good

Source: Computation from data (2022)

#### 4.6.1 Correlation analysis between liquidity risk management and financial performance

The results showed that there was no significant correlation between operational risk management and financial performance (r=0.074, p=0.520).

Table 12: Correlation analysis between liquidity risk management and financial performance

		FP	OR
FP	Pearson Correlation	1	0.074
	Sig. (2-tailed)		0.520
	Ν	78	78

Source: Computation from data (2022)

# 4.6.2 Regression analysis between credit risk management and financial performance

The coefficient of determination (r2=0.005) indicated that operational risk only impacted on 0.5% of the variations in the financial performance of the bank. The overall significance of the relationship between operational risk management and financial performance of the bank (F=0.417, P=0.520). The coefficient (0.068) also showed a positive relationship between operational risk management and financial performance of the bank. However, the relationship was not statistically significant (P=0.520).

# Table 13: Regression analysis between credit risk management and financial performance

Measure	Value
R-Square	0.005
F-Statistic (p-value)	0.417 (0.520)
Coefficient	0.068
P-value	0.520

Source: Computation from data (2022)

# 4.7 Overall Results on Correlation regression between Financial Management and

# **Financial Performance**

# 4.7.1 Overall Correlation

There was a positive and significant correlation between credit risk management and financial performance of commercial banks (r=0.448, p<0.0001), There was also a positive significant correlation between liquidity risk management and financial performance of commercial banks (r=0.372, p=0.003). However, there was no significant correlation between operational risk management and financial performance of commercial banks (r=0.061, p=0.640)

# **Table 14: Overall Correlation**

	Financial performance	P-Value
Credit Risk management	0.448	<0.0001
Liquidity Risk management	0.372	0.003
Operational risk management	0.061	0.640

# 4.7.2 Overall regression

The coefficient of determination (R-Square=0.643) implied that 64.3% of variations in the financial performance of Centenary bank were due to credit risk and liquidity risk management. This implied that credit risk management and liquidity risk management contributed over 50% to the changes in financial performance of Centenary bank, which was a good fit. The overall relationship between credit risk management, liquidity risk management and financial performance was significant (F-statistic=19.271, p<0.001). The regression analysis showed that for each measure that is towards credit risk management increases financial performance by 0.542 units and each measure towards liquidity risk management improves financial performance by 0.378 units. (Table 15)

# 4.7.3 Model specification

A regression model was developed and utilized in the analysis of the data. Thus, the financial performance was expressed as a function of credit, liquidity and operational risks.

### FP = -0.659 + 0.542CR + 0.378LR + 0.023OR

# Table 15: Overall regression

Measure	Value
R-Square	0.643
F-Statistic (p-value)	19.271 (<0.0001)
Constant	-0.659 (<0.0001)
Credit risk management (CR)	0.542 (<0.0001)
Liquidity risk management (LR)	0.378 (0.0021)

Operational risk management (OR)	0.023 (0.943)

## 4.7.4Conclusions on the hypotheses

## i. Credit risk

H0<sub>1</sub>: Credit risk has no significant effect on financial performance of Commercial Banks in Uganda

Ha1: Credit risk has a significant effect on financial performance of Commercial Banks in Uganda

Since the p-value for the relationship between credit risk management and financial performance was less than 0.05, we concluded that there was enough evidence to reject the null hypothesis and concluded that credit risk has a significant effect on financial performance of Commercial Banks in Uganda.

### ii. Liquidity risk

H0<sub>2</sub>: Liquidity risk has no significant effect on financial performance of Commercial Banks in Uganda.

Ha<sub>2</sub>: Liquidity risk has a significant effect on financial performance of Commercial Banks in Uganda.

The p-value for the relationship between liquidity risk management and financial performance was less than 0.05, we concluded that there was enough evidence to reject the null hypothesis and concluded that liquidity risk has a significant effect on financial performance of Commercial Banks in Uganda.

#### iii. Operational risk

H0<sub>3</sub>: Operational risk has no significant effect on financial performance of Commercial Banks in Uganda.

**Ha**<sub>3</sub>: Operational risk has no significant effect on financial performance of Commercial Banks in Uganda.

The p-value for the relationship between operational risk management and financial performance was greater than 0.05, we concluded that there was no enough evidence to reject the null hypothesis and concluded that operational risk has no significant effect on financial performance of Commercial Banks in Uganda.
#### **CHAPTER FIVE**

#### DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### **5.0 Introduction**

The study investigated the effect of to establish the effect of credit risk, liquidity risk and operational risk on financial performance of commercial banks in Uganda. This chapter presents discussion, conclusions and recommendations of the study.

#### 5.1 Credit risk and financial performance of commercial banks

The study indicated a significant relationship between credit risk management and financial performance of commercial banks. In this case, credit risk was considered a threat to business operations and the measures put in place by the bank were directed towards minimizing the negative impacts of this risk. These findings were consistent with other previous studies (Afriyie & Akotey, 2012)(Akong'a, 2014) which reported that commercial banks have to manage credit risks effectively, the management must understand the risks that face the bank and design appropriate measures. In line with these findings, Akong'a (2014) argued that it is vital for

commercial banks to gather information on all the risks by establishing an appropriate credit risk environment. He added that the board of directors should take the responsibility to approve and periodically review the credit risk strategy and significant credit risk policies of the bank (Akong'a, 2014). Moreover, the findings of this study showed that the bank had effective transformation and communication of the credit risk strategy set by the board of directors within the bank in the shape of policies and procedures by the top management. This implies that the board of directors of centenary bank is very keen about credit risk and doing its best to minimize the impacts it can cause on the performance of the institution.

Other studies have also shown the negative relationship between credit risk and financial performance of commercial banks. Previous studies revealed that credit risk was critical due to the fact that default of a small number of important customers can generate large losses, which can lead to insolvency(Hussain & Al-Ajmi, 2012). Much as credit risk was eminent at the bank, management had done a lot to put in place the necessary internal control to mitigate risks relating to credit.

#### 5.2Liquidity risk and financial performance of commercial banks

The findings of this study revealed that liquidity risk management had a significant association with financial performance of commercial banks. There was a positive correlation between liquidity risk management and financial performance. In other words, this implied that liquidity risk could otherwise have negative impact on the financial performance of commercial banks if not managed. These results were in line with the results of studies by Adolphus (2008) and Ahmed *et al.*, (2012) that the there is a positive relationship between bank liquidity management and profitability. These studies showed that bank liquidity risk could have negatively affect the

profitability of the banks since they hold liquid assets as an obligation to the requirements imposed by the authorities(Adolphus, 2011). Liquidity risk is created mismatch of assets and liabilities and differences between their maturities. Therefore, putting up structures to manage this risk minimizes such negative impacts (Ahmed & Nauman, 2012).

The regression and correlation results revealed that controlling liquidity risk could enhance the financial performance of the bank. Liquidity risk can adversely affect both banks' earnings and the capital and therefore, it becomes the top priority of a bank's management to ensure the availability of sufficient funds to meet future demands of providers and borrowers, at reasonable costs(Ahmed & Nauman, 2012). Therefore liquidity risk management being part and parcel of the enterprise-wide risk management process could lead to improved financial performance. On the other hand, the findings contracted with the findings of Cucinelli (2013) whose findings indicated an insignificant effect of liquidity on financial performance of the listed and non-listed European banks in the long term (Cucinelli, 2013).

#### 5.3 Operational risk and financial performance of commercial banks

The findings of this study revealed a positive but insignificant association between operational risk management and financial performance of commercial banks. The findings contradicted with the findings of other studies which reported that effective operational risk management was a critical component of bank's success and a foundation for the financial performance(Macha, 2010)

In disagreement with these findings, Epetimehim and Obafemi revealed a negative relationship between operational risk and financial performance of the bank and concluded that if operational risk is not addressed systematically it could result in inconsistent performance and earnings surprises for the stakeholders and hence operational risk exposures could have an impact on banks' revenues and net worth (Epetimehin & Obafemi, 2015)

#### **5.4 Conclusions**

The purpose of this study was to assess the effect of financial risks on financial performance of commercial banks in Uganda taking a case study of Centenary bank Kabale branch.

#### **5.4.1 Credit risk and financial performance**

The overall conclusion from the findings of this study was that credit risk has a negative significant effect on financial performance of Commercial Banks in Uganda. It has been evidenced that credit risk management could improve financial performance of commercial banks.

#### **5.4.2 Liquidity risk and financial performance**

The findings of this study have provided enough evidence to conclude that liquidity risk has a negative significant effect on financial performance of Commercial Banks in Uganda. It has been evidenced that liquidity risk management could improve financial performance of commercial banks

#### 5.4.3 Operational risk and financial performance

The findings of the study have revealed that operational risk has no significant effect on financial performance of Commercial Banks in Uganda

Overall, it can be concluded that credit risk and liquidity risk could lead the commercial banks into financial distress situation and as a results could decline their financial performance

64

#### **5.5 Recommendations**

Based on the findings of this study, the following recommendations were made;

- i. The findings of this study showed evidence that credit risk management influence financial performance. Therefore, there is need to set up strong structures for management of credit risk in order to enhance financial performance.
- ii. The bank management should also give utmost priority to address the liquidity problems of the bank. This is because liquidity risk management positively influences financial performance. Therefore, the issues relating to liquidity should be promptly addressed, and immediate remedial measures should be taken to avoid the consequences of the bank becoming illiquid.

#### 5.6 Areas for further study

This study analyzed the effect of financial risk management on the financial performance of commercial banks. The study did not include all the financial risks and there is need to analyze effect of other risks which includes compliance and legal, technological, reputational and strategic risks.

#### REFERENCES

- Adeyemi, B. (2011). Bank failure in Nigeria: a consequence of capital inadequacy, lack of transparency and non-performing loans? . *Banks and Bank Systems*, 6(1), 12-14.
- Adolphus, T. (2011). Modelling bank management, rural lending and small business finance in Nigeria. . *Global Journal of Management and Business Research*, , 11(7).
- Afriyie, H., & Akotey, J. (2012). *Credit risk management and profitability of selected rural banks in Ghana*. Ghana : Catholic University College of Ghana.
- Ahmed, A., & Nauman, A. (2012). Liquidity risk and performance of banking system. *Journal of Financial Regulation and Compliance*, 20(2), 182-195.
- Ahmed, A., & Nauman, A. (2012). Liquidity risk and performance of banking system. . *Journal of Financial Regulation and Compliance*, 20(2), 182-195.

Ahumuza, T. (2020). A snapshot of the 2020 performance of the Ugandan Banking Sector .

Akerlof, G. (1970). The Market for 'Lemons': Quality Uncertainty and the Market Mechanism. *The Quarterly Journal of Economics*, 84 (3): 488–500.

- Akhtar, M., Ali, K., & Sadaqat, S. (2011). Liquidity risk management: a comparative study between conventional and Islamic banks of Pakistan. *Interdisciplinary Journal of Research in Business*, 1(1), 35-44.
- Akinsola, B. (2017). Financial distress & corporate failure: Causes, Prediction and avoidance of financial distress and corporate-failure. . *Small Business Economics*, 5(7), 54-64.
- Akkizidis, I., & Khandelwal, S. (2008). *Financial Risk Management for Private Hospitals and Finance*. Palgrave Macmillan.
- Akong'a. (2014). Effect of financial risk management on the financial performance of commercial banks in Kenya. University of Nairobi: Unpublished MBA project.
- Al Karim, R., & Alam, T. (2013). An evaluation of financial performance of private commercial banks in Bangladesh: ratio analysis. . *Journal of Business Studies Quarterly*, 5(2), 65.
- Al-Qudah, A., & Jaradat, M. (2013). The Impact of Macroeconomic Variables and Banks Characteristics on Jordanian Islamic Banks Profitability: Empirical Evidence. *International Business Research*, 6, (10).
- Al-Tamimi, H., Hussein, A., Miniaoui, H., & Elkelish, W. (2015). Financial Risk and Islamic Banks' Performance in the Gulf Cooperation Council Countries. . *The International Journal of Business and Finance Research*, 9(5), 103-112.
- Andrade, G., & Kaplan, S. (1997). How costly is financial (not economic) distress? Evidence from highly leveraged transactions that became distressed. *National Bureau of Economic Research.*, w6145.
- Armendariz, A., & Morduch, J. (2010). *The Economics of Microfinance. 2nd Ed.* . Cambridge: The MIT Press .

- Arrow, K. (1963). Uncertainty and the Welfare Economics of Health Care. *American Economic Review*, 53 (5): 941–973.
- Aruwa, S., & Musa, A. (2014). Risk components and the financial performance of deposit money banks in Nigeria. *International Journal of Social Sciences and Entrepreneurship*, , 1(11), 514-522.
- Bank of Uganda. (2013). Annual Supervision Report.
- Bank of Uganda. (2019). Annual supervision report 2019. Bank of Uganda.
- Bank of Uganda. (2021). Credit Reference Bureau (CRB) Services.
- Barclays bank. (2011). Annual Report. Barclays bank Uganda Limited.
- Barron, J., & Staten, M. (2008). The Emergence of Captive Finance Companies and Risk Segmentation in Loan Markets: Theory and Evidence. Journal of Money Credit and Banking., 40, 173-192.
- Brownbridge, M. (2002). Resolving Bank failures in Uganda: Policy lessons from recent bank failures. *Development policy review*, 20(3), 279-291.
- Cechetti, S., & Schoenholtz, K. (2011). *Money, banking and financial markets (3rd ed)*. NewYork: Mchraw Hill Education.
- Centenary Bank. (2019). Annual report.
- Centenary Bank. (2020). Annual Report.
- Centenary Bank. (2020). Annual Report.
- Centenary Bank. (2021). 2020 Centenary Bank Financial Performance.
- Coyle, B. (2000). Framework for Credit Risk Management, London: Chartered Institute of Bankers.

- Crockford, G. (1982). The Bibliography and History of Risk Management: Some Preliminary Observations. *The Geneva Papers on Risk and Insurance*, 7, 169-179.
- Cucinelli, D. (2013). The relationship between liquidity risk and probability of default: evidence from the Euro Area. Risk governance & control. *financial markets & institutions*, 3(1), 42-50.
- Cummins, J., Lewis, C., & Wei, R. (2006). The Market Value Impact of Operational Risk Events for U.S. Banks and Insurers. *Journal of Banking and Finance*, 30, 2605-2634.
- Cuong, L. (2015). Liquidity Risk, Regulation and Bank Performance: Evidence from European Banks. . *Global Economy and Finance Journal*, 8(1), 11-33.
- Dionne, G. (2013). Risk Management: History, Definition and Critique CIRRELT-2013-17.
- Drehmann, M., & Nikolaou, K. (2013). Funding liquidity risk: definition and measurement. . Journal of Banking and finance, 37(7), 2173-2182.
- Epetimehin, F. M., & Obafemi, F. (2015). Operational risk management and the financial sector development: An overview. *International Journal of Economics, Commerce and Management*, 3(3).
- Eppy, I. (2005). Perceived Information Asymmetry, Bank lending Approaches and Bank Credit Accessibility by SMEs in Uganda Unpublished PHD Thesis, Makerere University.

Equity Bank Uganda Limited. (2017). Annual Report and Financial Statement .

- Field, P. (2003). Introduction to Modern Risk Management, A History. London: Incisive RWG, Haymarket House.
- Fredrick, O. (2012). The impact of credit risk management on financial performance of commercial banks in Kenya. . *DBA Africa Management Review*, 3(1), 22-37.

- Gilson, S. (1989). Management turnover and financial distress. . Journal of Financial Economics, 25(2), 241–262.
- Gordon, M. (1971). Towards a Theory of Financial Distress. . *The Journal of Finance*, 26(2), 347–356.
- Holton, G. (2004). Defining risk. Financial Analysts Journal, 60(6), 19-25.
- Hosna, A., Manzura, B., & Juanjuan, S. (2009). Credit risk management and profitability in commercial banks in Sweden. . *Master Degree Project*, 36.
- Hussain, H., & Al-Ajmi, J. (2012). Risk management practices of conventional and Islamic banks in Bahrain. . *The Journal of Risk Finance*. , 18, 144-148.
- Ismail, R. (2010). The management of liquidity risk in Islamic Banks: the case of indonesia (Doctoral dissertation, Durham University).
- Jarrow, R., & Protter, P. (2005). Liquidity risk and risk measure computation. . *Review of Futures Markets*, 11(1), 27-39.
- Karels, G., & Prakash, A. (2006). Multivariate Normality and Forecasting of Business Bankruptcy. . *Journal of Business Finance & Accounting*, 14, 573–593.
- Kasekende, T. (2010). Role of credit management on the performance of commercial Banks in Uganda .
- Kimani, J. (2011). *Fraud Risk Assessment Plan for Barclays Bank of Kenya*. Tampere University of Applied Sciences.
- Kioko, C., Olweny, T., & Ochieng, L. (2019). Effect of financial risk on the financial performance of commercial banks in Kenya listed on the Nairobi Stock Exchange. . *The Strategic Journal of Business & Change Management*, 6 (2), 1936–1952.

Kish, & Leslie. (1965). Survey Sampling. New York: John Wiley and Sons, Inc.

- Kithinji, A. (2010). Credit risk management and profitability of commercial banks in Kenya. . Nairobi: School of Business, University of Nairobi.
- Kolapo, T. A., & Oke, M. (2012). Credit risk and commercial banks' performance in Nigeria: a panel model approach. *Australian Journal of Business and Management Research*, 2(2), 31.
- Korir, S. (2013). Effects of Credit Risk Management and financial performance of Deposit Taking Microfinance Institutions in Kenya.
- Koziol, C., & Lawrenz, J. (2009). What makes a bank risky? Insights from the optimal capital structure of banks. *Journal of Banking & Finance*, 33(5), 861-873.
- Kumar, D. (2017). Financial Distress: Causes and Remedies. . Computer Science, , 4, 15-18.
- Kungwani, P. (2014). Risk management-an analytical study. . *IOSR Journal of Business and Management*, 16(3), 83-89.
- Lake, E. (2013). *Financial risks and profitability of commercial banks in Ethiopia*. Addis Ababa University Addis Ababa, Ethiopia: Unpublished Doctoral dissertation.
- Lelgo, K., & Obwogi, J. (2018). Effect of financial risk on financial performance of micro finance institutions in Kenya. . *International Academic Journal of Economics and Finance*, 3(2), 357-369.
- Lyambiko, R. (2015). The Effect of Operational Risk Management Practices on The Financial Performance in Commercial Banks in Tanzania. Master of Business Administration, School of Business University of Nairobi.
- Macha, J. (2010). *Operational Risk Management in the Financial Sectors in Tanzania*. . University of Dar Es Salaam: Unpublished Paper.

- Maina, G., & Muturi, W. (2013). Determinants of financial performance of commercial banks in kenya. *Jomo kenyatta university of agriculture and technology*, 207.
- Mallisa, T. (2013). Credit risk management and financial performance in housing finance bank, Uganda . Unpublished Masters Thesis.
- Mansyur, N. (2017). Impact Financial Risk on Financial Performance Bank in Indonesia. . *The International Journal Of Business & Management*, 5(10), 305-310.
- Mehr, R., & Hedges, B. (1963). Risk Management in the Business Enterprise. Homewood, Illinois: Irwin.
- Moore, E. (2007). *Measuring Credit Risk in Finance: The Regulatory Challenge*. John Wiley & Son (Asia) Pte Ltd.
- Mugenda, O., & Mugenda, A. (2003). *Research Methods: Quantitative and Qualitative approaches*. Nairobi: Acts Press.
- Mugenda, O., & Mugenda, A. (2003). *Research methods: Quantitative and Qualitative Approaches*. Nairobi: African Centre for Technology Studies.
- Mungure, M. (2015). The Causes and Impacts of Loan Default to Microfinance Institution's activities: The Case of Pride Tanzania Ltd Pamba Branch. Mzumbe, Tanzania.: Mzumbe University.
- Muriithi, J. (2016). Effect of financial risk on financial performance of commercial banks in Kenya. JKUAT: COHRED.
- Muwanga, P. (2007). Bank of Uganda Quarterly Economic Report: Commercial Banking Activities— Kampala, Uganda.

Muwonge, M. (2012). Risk management and fraud elimination in Uganda's Banking Sector.

- Ogboi, C., & Unuafe, O. (2013). Impact of credit risk management and capital adequacy on the financial performance of commercial banks in Nigeria. . *Journal of Emerging Issues in Economics, Finance and Banking*, 2(3), 703-717.
- Ogol, G. (2011). Liquidity risk management practices in micro-finance institutions in Kenya . University of Nairobi, Kenya: Unpublished Doctoral dissertation.
- Onaolapo, A. (2012). Analysis Of Credit Risk Management Efficiency In Nigeria Commercial Banking Sector,(2004-2009). Far East Journal of Marketing and Management, 2(4), 39-52.
- Ongore, V., & Kusa, G. (2013). Determinants of Financial performance of Commercial Banks in Kenya. *International Journal of Economics and Financial Issues*, 3(1), 237-252.
- Ongore, V., & Kusa, G. (2013). Determinants of financial performance of commercial banks in Kenya. . *International Journal of Economics and Financial Issues*, 3(1), 237.
- Padilla, A., & Pagano, M. (2000). Endogenous Communication among Lenders and Entrepreneurial Incentives.
- Pagano, M., & Tullio, J. (1993). Information Sharing in Credit Markets. . *The Journal of Finance* , 43(5), 1693-1718.
- Parrenas, J. (2005). Risk Monitoring Procedures used by Commercial Banks: A Survey of Commercial Banks in Four Asian Emerging Market.
- Poudel, R. (2012). The impact of credit risk management on financial performance of commercial banks in Nepal. . *International Journal of arts and commerce*, 1(5), 9-15.
- Purnanandam, A. (2008). Financial distress and corporate risk management: Theory and evidence. *Journal of Financial Economics*, 87(3), 706–739.

- Sathyamoorthi, C., Mapharing, M., Mphoeng, M., & Dzimiri, M. (2020). Impact of Financial Risk Management Practices on Financial Performance: Evidence from Commercial Banks in Botswana. . *Applied Finance and Accounting*, 6(1), 25-39.
- Sewanyana, N. (2015). Operational Risk Management, Organizational Environment and Organizational Performance at Stanbic Bank Uganda Limited. Degree of Masters of Science in Accounting and Finance, Makerere University.
- Snider, H. (1956). Reaching Professional Status: A Program for Risk Management, in Corporate Risk Management: Current Problems and Perspectives. American Management Association.
- Stanbic Bank Uganda. (2015). Compliance Report.
- Stieglitz, J., & Weiss, A. (1981). Credit Rationing in the Market with Imperfect Information . American Economic Review, 71(3), 393–409.
- Tafri, F., Hamid, Z., Meera, A., & Omar, M. (2009). The impact of financial risks on profitability of Malaysian commercial banks: 1996-2005. . International Journal of Social, Human Science and Engineering, 3(6), 268-282.
- Weinberg, J. (2006). Borrowing by U.S. Households. Federal Reserve Bank of Richmond. . Economic Quarterly, 92(3), 3-6.
- Williams, A., & Heins, M. (1964). Risk Management and Insurance. New York .: McGraw Hill.
- Wruck, K. (1990). Financial distress, reorganization, and organizational efficiency. *Journal of financial economics*, 27(2), 419-444.
- Yamane, T. (1967). Statistics an introductory analysis (2nd edition). New York: Harper and Row.

#### APPENDIX

# APPENDIX I: INTERVIEW GUIDE FOR STAFFS OF CENTENARY BANK

#### **Introduction:**

Dear respondent, I am **OwomugishaAnnah**, a Graduate student of Kabale University pursuing a Master's Degree in Business Administration. I am conducting an academic research entitled **"FINANCIAL RISKS AND FINANCIAL PERFORMANCE OF COMMERCIAL BANKS: A CASE OF CENTENARY BANK KABALE BRANCH".** You have been selected to participate in this study because you are one of the staffs of Centenary bank working and therefore you are considered to be knowledgeable about the risks and financial performance dynamics of this bank. You are kindly requested to spare about 30-45 minutes of your time to assist and provide your honest feedback to the questions.

Please note that the responses given will be treated with utmost confidentiality and will only be used for academic purpose only. Anonymity of the respondent is also guaranteed. Thank you in advance

# SECTION A: BACKGROUND INFORMATION

### 1. Gender (Please tick)

 $\Box$  Male  $\Box$  Female

# 2. Education level (Tick highest)

□ Diploma □ Bachelors □ Masters

Other (specify) .....

### **3. Age bracket** (Please tick)

 $\Box$  Less than 30 years  $\Box$  30 -39 years

 $\Box$  40 -49 year  $\Box$  Above 50 years

# **4. Years you been working with the organization** (Please tick)

 $\Box$  Less than 5 years  $\Box$  5-10 years

 $\Box$  10-15 years  $\Box$  More than 15 years

### **5. Department you work in (Tick appropriate)**

 $\Box$  Finance  $\Box$  Audit  $\Box$  Risk management

 $\Box$  Loans  $\Box$  IT  $\Box$  Human resource  $\Box$  Other.....

# SECTION B: RISK MANAGEMENT

### Evaluate each statement about risk management in your bank to reflect to what degree you

agree or disagree with it (1-SD=strongly disagree, 2-D= disagree, 3-N= neutral, 4-A =Agree, 5-

SA= strongly agree)

RISK MANAGEMENT	5	4	3	2	1
a. Credit risk					

The credit risk strategy set by the board of Directors are effectively			
transformed and communicated within the bank in the shape of policies			
and procedures by the top management			
The bank has an effective risk management framework (infrastructure,			
process and policies) in place for managing credit risk			
The bank has a credit risk rating framework across all type of credit			
activities			
The bank monitors quality of the credit portfolio on day-to-day basis			
and takes remedial measures as and when any deterioration occurs			
The bank regularly prepares periodic report of credit risk			
The risk department identifies and assesses core risks and opportunities			
for the microfinance			
There is credit risk identification at the loan approval phase			
The bank conducts identification risk at the collateral security			
presentation			
The bank has a credit risk identification policy that guide the risk			
process			
The bank has an effective credit default assessment on the loans			
The bank does loan recovery assessments on the loans provided to the			
borrowers			
There is an utmost risk monitoring staff in the bank			
The bank considers physical and financial characteristics in credit			
scoring models for personal loans			

The bank has established appropriate internal credit risk assessment					
practices and developed credit scoring analysis tools for preliminary					
analysis and pricing (rate)					
The bank conducts a credit risk analysis on businesses and individuals					
before lending					
The bank refers to credit reference bureau report for decision making					
before lending to the customers					
The bank undertakes a credit worthiness analysis for loan request,					
reviews financial statements and future cash flows projections of					
borrower's business before grating loan.					
b. Liquidity Risk	5	4	3	2	1
The bank has set in place principles of short term crediting					
The bank has set in place principles of short term crediting         The bank reconciles the volumes of assets and liabilities in terms of					
The bank has set in place principles of short term crediting         The bank reconciles the volumes of assets and liabilities in terms of         maturity					
The bank has set in place principles of short term crediting         The bank reconciles the volumes of assets and liabilities in terms of         maturity         The bank frequently uses short term financial instruments compared to					
The bank has set in place principles of short term crediting         The bank reconciles the volumes of assets and liabilities in terms of         maturity         The bank frequently uses short term financial instruments compared to         long term financial instruments					
The bank has set in place principles of short term crediting         The bank reconciles the volumes of assets and liabilities in terms of         maturity         The bank frequently uses short term financial instruments compared to         long term financial instruments         The bank undertakes regular monitoring of total value of gross daily					
The bank has set in place principles of short term creditingThe bank reconciles the volumes of assets and liabilities in terms of maturityThe bank frequently uses short term financial instruments compared to long term financial instrumentsThe bank undertakes regular monitoring of total value of gross daily payments made and received					
The bank has set in place principles of short term creditingThe bank reconciles the volumes of assets and liabilities in terms of maturityThe bank frequently uses short term financial instruments compared to long term financial instrumentsThe bank undertakes regular monitoring of total value of gross daily payments made and receivedThere is implementation of internal controls so as to monitor liquidity					
The bank has set in place principles of short term crediting The bank reconciles the volumes of assets and liabilities in terms of maturity The bank frequently uses short term financial instruments compared to long term financial instruments The bank undertakes regular monitoring of total value of gross daily payments made and received There is implementation of internal controls so as to monitor liquidity in this bank					
The bank has set in place principles of short term crediting The bank reconciles the volumes of assets and liabilities in terms of maturity The bank frequently uses short term financial instruments compared to long term financial instruments The bank undertakes regular monitoring of total value of gross daily payments made and received There is implementation of internal controls so as to monitor liquidity in this bank The bank monitors obligations which must be settled at a specific time					

Liquidity decision involves identification of existing sources of			
liquidity risk as well as liquidity risk that may arise from new business			
products or activities			
Liquidity decision involves bank's actions in case of temporary or			
long-term liquidity disturbances.			
Liquidity decision involves analysing the data on the level and trends			
of cash inflows in the previous period, taking into account seasonal			
effects, sensitivity of interest rates and macroeconomic factors.			
Reports are regularly provided and reviewed by experts to determine			
necessary information for liquidity decision			
c. Operational risk			
Operational risk management program is well documented			
Operational risk management efforts are supported by senior			
Management.			
Employees are properly trained on risk management policies of this			
institution.			
The roles and responsibilities of each employee in the operational risk			
Management efforts of this institution are well communicated to them.			
Controls are in place to evaluate the efficiency of the operational risk			
management programs			
Regular reviews of operational risk management efforts and reporting			
to senior Management.			
Risks are subdivided into individual levels for further analysis			

# SECTION C: FINANCIAL PERFORMANCE

# Evaluate each statement concerning financial performance to reflect to what degree you

agree or disagree with it (1-SD=strongly disagree, 2-D= disagree, 3-U= undecided, 4-A

=Agree, 5-SA= strongly agree)

Profitability of this institution has improved over time as a result of our risk	5	4	3	2	1
management system					
The risk management system has enabled the institution to reduce the					
number of fraud cases					
There is a steadily moving sales growth in the operations					
The adoption of risk management practices by the bank has contributed to					
financial performance					
Your bank liquidity ratios for this institution have been healthy over the					
past three years.					
The bank current ratio for this bank is following accounting norms					
The bank quick ratio for this bank is following accounting norms					
The bank performance in term of timeless, quality, accuracy of financial					
reporting has been progressing well					
Debt default rate for this bank is declining among borrowers over the past					
three years.					
The loan portfolio performance for this bank has been good in the last three					
years					

# -End-

Thanks for your time and responses

# **APPENDIX II: INTRODUCTORY LETTER**

KABALE P.O Box 317 Kabale - Uganda Email: info@kab.ac.ug admissions@kab.ac.ug



UNIVERSITY Tel: 256-392-848355/04864-26463 Mob: 256-782860259 Fax: 256-4864-22803 Website: www.kab.ac.ug

#### DIRECTORATE OF POSTGRADUATE TRAINING

December 13<sup>th</sup>, 2021

To whom it may concern

This is to certify that Ms. Owomugisha Annah Reg. No. 2019/A/MBA/011/W is a postgraduate student of Kabale University studying a Masters of Business Administration in the department of Management science, Procurement and Business Studies

She has successfully defended her Research Proposal for a study entitled,

"Risk Management and Financial performance of Commercial Banks: A case of Centenary Bank Kabale Branch"

The student is now ready for field work to collect data for her study. Please give the student any assistance you can to enable her accomplish the task.

Thanking you for your assistance,

Yours sincerely ABALE UNIVERSITY DIRECTORATE AND DIRECTORATE TRAINING DIRECTOR BOSTORIA CADE A TE TRAINING BOX 317, KABALE