RISK MANAGEMENT AND FINANCIAL SUSTAINABILITY OF SACCOs

IN BUSIA DISTRICT - UGANDA

BY
HANNIBAL WANDIBBA

REG.NO

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DECLARATION

I, the undersigned declare that this research report is my original work and affirm to the best of my knowledge that it has not been presented for any academic award in any University.

Signed..... **Date**.....7/11/19.....

HANNIBAL WANDIBBA

APPROVAL

This research process was supervised and approved by my supervisors;

PRINCIPAL SUPERVISOR:

Dr. Maurice Mary Nalwoga Mukokoma

Sign.....

Date 31/11/2019

SECOND SUPERVISOR:

Dr. Kasigwa Gerald

Sign.....

Date 11/11/19

DEDICATION

I dedicate this Research Report to my entire Family but more so my Daughters Maria Avery Magori Wandibba and Audrey Nansaka Wandibba and my Lovely Wife Allen Namutebi Wandibba for being my continuous inspiration.

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ABSTRACT

The purpose of this research was to assess the effect of risk management on the financial sustainability of SACCOs in Busia District. SACCOs in Busia District, Uganda, East Africa and indeed the world over are struggling to be financially sustainable which can be partly attributed to the frailties caused by constant exposure to numerous impactful risks.

This Study is based on comparative analysis of financial Sustainability of SACCOs that have formal risk management structures within their operations and those that do not have risk management engrained in their routine operations over a 5-year period of 2014 to 2018 by applying regression analysis.

The specific objective of the study was to investigate the effect of risk Assessment, control, and Monitoring on the financial sustainability of SACCOs in Busia District. Risk Assessment had dimensions such as; risk identification, analysis and Prioritization of all risks, Risk control included risk planning and Risk response to the risks identified while Risk Monitoring included continuous monitoring of risks. Current ratio and Return on Assets were used to analyze financial sustainability. The study was carried out on 66 SACCOs randomly selected from the district with respondents purposively selected due to the study knowledgeability selection criteria. The study used both qualitative and quantitative methods of data collection. Physical administration of questionnaires, structured interviews and financial data review was used to collect data. The data was processed using SPSS 20. Correlation analysis was used to analyze the relationships between the independent and dependent variables while regression analysis was used to analyze the degree of variation in the dependent variable explained by the independent variable.

The study findings indicated that risk management had a positive effect on financial sustainability of SACCOs in Busia District. The regression model used showed a good fit with an Adjusted R square of 0.595. This depicts how impactful risk management is towards financial sustainability of SACCOs.

The study also indicated that the major source of financial risks was the SACCOs receivables' collection process, their credit policies and expansion plans. Ninety percent of SACCOs did not depend on members' savings and loans only but rather expanded to other business ventures such as fish vending, events management, shops and transport. These activities increased the SACCOs exposure to risks which when not properly managed in the long run affected their financial sustainability.

The study also revealed that SACCOs that fully embraced risk management had twice as much more capacity to meet their financial obligations than those that did not have formal risk management structures, sixty-seven percent of SACCOs sited cost and skill requirement as a deterrent to formal risk management.

The study concluded that, whereas risk management had a positive effect on financial sustainability, the most crucial dimension in the process of risk management was risk control which showed significant impact in the hierarchical regression analysis used in this study. How well a SACCO responds to risks determined its long term survival, subsequently, the researcher recommended that local governments recruit risk management officers at district level that can be used as focal reference points by SACCOs including aiding the SACCOs' capacity build in terms of risk management so that the costs for this practice in SACCOs is minimized.

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LIST OF ACRONYMS

BOD: Board of Directors

BOU: Bank of Uganda

COOPEC bank: Cooperativa de Economia Credito.. Bank

CR: Current Ratio

FINCA: Foundation for International Community Assistance

MDIs: Micro Finance Deposit taking institutions

MFIs: Micro Finance Institutions

MTIC: Ministry of Trade, Industry and Cooperatives

PMBOK: Project Management Body of Knowledge

ROA: Return on Assets

SACCOs: Savings and Credit Cooperatives

UBOS: Uganda Bureau of Statistics

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

This study was conducted to examine the effect of Risk Management onto the Financial Sustainability of SACCOs in Busia District. The chapter reviewed the background to the study problem in historical, conceptual, theoretical and contextual perspectives and summarized it in a problem statement. It also presents the objectives of this study, the research questions, the scope and the definition of key concepts.

1.1 Background of the Study

This Section explained the background to the study in historical, theoretical, conceptual and contextual perspectives, it further presented discussions on the variables under study by previous scholars, researchers, authors and key conceptual definitions.

1.1.1 Historical Background

The financial sustainability of MFIs particularly SACCOs worldwide has generated divided debates due to the diverse performance trends across different regions of the world especially after the Indian microfinance crisis of 2010/2011 (Marr & Tubaro, 2011) that left most micro finance institutions cash strapped due to suspension of funding from commercial banks following an up rise in public hostility against microfinance institutions that was escalated by several clients ending their lives due to failure to pay back their loans. The crisis came at a time when India was being hailed for its use of MFIs to fight poverty by the international community (Marr & Tubaro, 2011).

This crisis highlighted the need for further investigation into the general performance and particularly the sustainability of microfinance institutions more so in sub-Saharan Africa where

very few extensive studies have been done to fully understand the performance of these micro finance institutions.

Similar turbulences to that of the Indian MFI crisis in the financial sustainability of microfinance institutions were witnessed in other regions for instance a study in Nepal in 2006 showed that most rural microfinance institutions are not sustainable (Acharya & Acharya, 2006), another study in Namibia by (Adongo & Stock, 2005) reveals that almost all microfinance institutions are not sustainable. However some microfinance institutions, such as Banco Sol in Latin America, the Grameen bank in Bangladsesh and the US owned by Dr. Yunus Muhammed a renowned proponent of micro credit to the poor, Credit Unions in the United States of America (USA), Equity bank in Kenya, Centenary bank in Uganda, and FINCA International (WBS, 2014), have been very successful.

Studies have been conducted in East Africa concerning the sustainability of SACCOs like (Marwa, 2015) who tested SACCO's efficiency and sustainability of SACCOs in Tanzania and (Kizza & Mugisha, 2004) that tested sustainability of SACCOs on outreach in Uganda. Marwa found out that there was a 31% correlation between his variables but noted that sustainability was low due to high dependency on aid, (Kizza & Mugisha, 2004) on the other hand concluded that the sustainability of micro credit institutions was dependent on how large their outreach was, this research however approached this study with in a different context and concept by testing the relationship between risk management and financial sustainability of SACCOs in Busia District

1.1.2 Theoretical Background

1.1.2.1 The Prospect Theory

This study was underpinned by the Prospect theory; which is one of the prominent contemporary decision making theories under conditions of risk.

The Prospect Theory was proposed by Kahneman and Tversky in 1975, the theory holds that under conditions of risk and uncertainty, decision makers will only be attracted to small short term gains rather than high long-term benefits that they possibly could enjoy.

SACCOs handle a lot of finances in form of contributions from members, donations and grants from external sources that they need to re-invest and accumulate profits for their members to share at particular intervals thereby exposing these institutions to risks right from the point of receipt of these funds up to the point they make successful investment decisions to accumulate returns for the members, however it's how risky conditions are managed along this process that defines the long term wealth accumulation and survival of these entities.

1.1.3 Conceptual Background

Although there are several dimensions of sustainability of MFIs, financial sustainability has become the critical point of focus in the analysis of SACCOs' sustainability. Khandker, (1996) notes that Financial Sustainability defines the ability of an MFI to continue operations owing to viability of operations, that is, ability to cover operational, financial and administrative costs. Whereas Filene, (2011) defines it as the ability of an entity to continue a defined behavior indefinitely, this definition clearly shows the importance of institutions operation as a going concern,

Financial sustainability can further be referred to as the ability of MFIs to cover all their costs from their own generated income from operations without depending on external support or subsidy

(Bayer, 2012) . Dunford (2003) too defines it as the ability to keep on going towards microfinance objectives without continued donor support. The definitions of financial sustainability focus on the ability of MFIs to depend on self-operation, and as much as possible making profit out of the microfinance operations.

According to Musoke, Senyonjo and Kyeyune, (2017) MFIs sustainability is their ability to streamline operations that guarantee long-term survival, they go further to assert that Financial sustainability can be measured at two levels namely, operational sustainability and financial self-sufficiency.

Operational sustainability is the ability of a SACCOs to cover its operating income regardless of whether it is subsidized or not. Financial self-sufficiency on the other hand is when MFIs are able to cover from their own generated income, both operating and financial costs and other form of subsidy valued at market prices. To be financially sustainable, MFIs must register good financial performance without subsidized resources or funds.

Therefore, for purposes of this study, Sustainability was defined according to Musoke, Senyonjo and Kyeyune, (2017) and accordingly operationalized through 2 dimensions which are financial self-sufficiency and operational sustainability.

Boehm, (1988) described risk management as the process that involves managing any anticipated "unsatisfactory Outcomes" he further asserts that this process involves two primary steps, Risk Assessment and Risk Control, each with three subsidiary steps. Risk Assessment involves risk identification, risk analysis, and risk prioritization. Risk Control involves risk management planning, risk resolution, and risk monitoring

Risk management emanates from the need to avoid loss or injury by organization or similarly from the inherent requirement of management to keep their organizations on course to achieve their objectives with efficiency (Evans & Brereton, 2007).

This definition is in line with Rejda, (2008) who also defines risk management as the process that identifies loss exposure to an institution

Dionne, (2013) Studied the evolution of risk management which he claims to have gained prominence after the Second World War in the 1950s. He accordingly says risk management was long defined and associated with the use of market insurance to protect individuals and companies from various losses associated with accidents where he quotes (Harrington & Neihaus, 2003). At the time risk management was associated with accidents and loss of assets which organizations fully overcame by buying insurance policies (Erich and Becker, 1972).

The concept of risk management in the financial sector according to Dionne, (2013) was revolutionized 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.

Dionne (2013) claims the definition of risk management took a comprehensive makeshift in the 1990s where practitioners grossly defined risk management as a set of financial or operational activities that maximize the value of a company or a portfolio by reducing the costs associated with cash flow volatility. The main risk management activities are diversification and risk hedging using various instruments, including derivatives and structured products, market insurance, self-insurance, and self-protection.

The main costs firms seek to minimize are costs of financial distress, risk premium to partners (stakeholders), expected income taxes, and investment financing. Managers' behavior toward risk (risk appetite and risk aversion) and corporate governance also affect the choice of risk management activities. For purposes of this study risk management is defined in accordance with Boehm (1988) since his operationalization of the variable best fits the context of this study.

1.1.4 Contextual Background

The concept of the credit union was developed by Friedrich Wilhelm Raiffeisen and his supporters in the late 1860s in German (Montgomery & Weiss, 2005). Their altruistic action was motivated by concern to assist the rural population to break out of their dependence on moneylenders and to improve their welfare. From 1870, the unions expanded rapidly over a large sector of the Rhine Province and other regions of the German States. The cooperative movement quickly spread to other countries in Europe and North America, and eventually, supported by the cooperative movement in developed countries eventually also to developing countries (Fiji National Microfinance Workshop, 2009).

In Africa, the concept of microfinance dates back to the 16th century where evidence of microfinance in the form of 'esusu' or 'susu'; a rotating savings and credit association (ROSCA) among the Yoruba. The 'esusu', a form of social capital used to be transported during the slave trade to Caribbean islands (Bascom, 1952: 69), where both the institution and the term still exist, and are now carried by a new wave of migrants to major American cities (Filene, 2011). Its origin is found in the rotating work associations, where labour as a scarce commodity was accumulated and allocated to one of the members at a time

The first SACCO Society, in Africa, was introduced in Ghana in 1959. The SACCO was intended to assist villagers improve their economic conditions (Ng'ombe & Mikwamba, 2004). English speaking nations were the first to adopt SACCOs. The first entrants into SACCO community

include Ghana, Uganda, Nigeria, Tanzania, and Kenya. Most of the Non-English speaking nations in Africa started appreciating SACCOs in 1960s, with major influx into SACCO community in 1970s, According to (Montgomery & Weiss, 2005)Modern microfinance was born in Bangladesh in the 1970s, in the aftermath of the country's war of independence, when Muhammad Yunus, an economics professor at the University of Chittagong, began an experimental research project providing credit to the rural poor. That experiment, driven by a strong sense of developmental idealism, developed into what is now the world's most famous microfinance institution, the Grameen Bank, and institutions that have adopted its methodology world over.

Africa too has recorded continuous deterioration in the performance of MFIs for the past 10 years due to inability of these MFIs to properly manage their financial and managerial risks (Kojo, 2015). (Adongo & Stock, 2005) Hinted on this factor in their famous study in Namibia citing 20% MFIs failing due to poor risk management practices, (Kombo, Justus, Murumba, & Edwin, 2011) (Mwangi, 2014) and (Marwa, 2015)were also in Agreement with Adongo and Stocks conclusion through their studies in Kenya and Tanzania respectively

Although micro credit is quite often a preserve of smaller micro finance institutions numerous commercial banks adopted products that offer microfinance to the poor, institutions such as Centenary Rural Bank (CERUDEB) in Uganda, Equity Bank and Kenya Rural Entrepreneurship Programme (K-REP) in Kenya, MFRC in Malawi, Afriland Bank, BICEC and Union Bank in Cameroon and CNCA in Senegal, have shown that commercial banks in Africa can be effective in providing microfinance on a substantially large scale. Banks in Benin, Chad and Zimbabwe have established microfinance subsidiaries to provide micro financial services to the financially excluded.

Risk management in MFIs particularly SACCOs is an area that has not been extensively studied by scholars world over, with most emphasis being placed on Tier 1 to 3 institutions that is;

commercial banks, Credit Institutions and Microfinance Deposit taking Institutions(MDIs) important to note is that Tier 1 to 3 institutions are highly regulated entities who according to (Musoke, Senyonjo, & Kyeyune, 2017) are quite often complacent to innovative risk management practices given that the central bank takes it upon its self to keep in check each banks risk profile and issue guidelines on how to manage any risks. This privilege however is not quite enjoyed by Micro credit institutions(MFIs) who are often not regulated by Central banks world over (Decker, 2000), Decker too asserts that the regulation of such MFIs is often vested in local or municipal dominions which often lack the necessary skills to regulate risks like central banks do.

SACCOS in Uganda boost the widest reach to the populace among the financial sector players (UBOS, 2015), Savings and Credit Co-operatives (SACCOs) are community membership based financial institutions that are formed and owned by their members in promotion of their economic interests (Nuwagaba, 2012) The SACCOs are recognized by the Government of Uganda as an important mechanism for supporting wealth generation across the country by providing financial services to the rural and urban poor as well as for supporting small and medium enterprises in rural and urban areas. They have thus been chosen as a linchpin of the government's microfinance policy initiatives (German Development Institute, 2011). These institutions mobilize and intermediate savings exclusively with in their membership under the Co-operative Societies ACT CAP 112.

SACCOs in Uganda, belong to tier 4 in the Bank of Uganda (BOU) categorization of financial institutions. Tier 4, shares two features: First, BOU does not exercise prudential supervision over them. Secondly, they are forbidden to mobilize deposits from the general public. SACCOs are further regulated under Cooperative Statute 1991 and Cooperative Regulations 1992.

According to the (MTIC, 2013) Uganda had 6,228 SACCOs but by the end of 2016, only 2,811 were fully registered and the rest were in progress or not registered, this huge number of SACCOs in the country in principle must be significant enough to elevate quite a large number of Ugandans'

poverty status above the poverty line if they are well managed, regulated, and utilized by the members (Distler & Schmidt, 2011) which is not the case as 28% of Ugandans are still living below the poverty line (UBOS, 2015). Kenya and Tanzania by far the leading nations in the East African community in terms of SACCOs success similarly average 5,000 SACCOs (MAFC, 2013) per nation but the impact in terms of economic empowerment these SACCOs have caused is enormous as compared to Uganda, Burundi and Rwanda (World Bank, 2013).

Although a few studies however have been conducted in Uganda to understand the extensive impact of risk management on the sustainability of SACCOs, most studies have been directed to commercial banks rather than MFIs particularly SACCOs, these studies as well have majorly been concerned with regulation (Okumu, 2007), outreach (Kizza & Mugisha, 2004), Governance (Musoke, Senyonjo, & Kyeyune, 2017) among others.

The trend in Uganda is equally double sided, where as there are so many SACCOs being set up by different interest groups including influence from government policy of setting up at least a SACCO in every of the 1344 sub-counties we have in Uganda (UBOS, 2015), the performance of the majority of the SACCOs and their sustainability have followed a negative trend especially in Eastern Uganda region (Obara, 2017), where most SACCOs are agro based i.e. historically dependent on cotton growing, maize, cassava and marketing which are faced with market and weather uncertainties unlike other regions like west and central which are coffee reliant a crop that has clear marketing channels and employment based. Of the 31 districts in Eastern Uganda (UBOS, 2015), Busia District has a high number of SACCO failure and low growth of SACCOs (MoTIC, 2018), quite a lot of them depend on subsidization both from donors and government which has left them vulnerable to sustainability challenges that emanate from the high inconsistent release of funds to support the daily operational needs of these SACCOs, it's upon this reason that

this study was centered in Busia in order to obtain an understanding of the effect of risk management on financial sustainability.

1.2 Statement of the Problem

Despite SACCOs playing a crucial role in providing financial services to the nationals that are often excluded from the formal main stream financial sector and who currently stand at 80% of the population (UBOS, 2015), it has been observed that over 50% of the SACCOs in Uganda have failed to sustain their operations beyond 5years of existence unless subsidized by donors (MoTIC, 2018). Obara (2017) asserts that 57% of standalone SACCOs in Uganda collapse within 5 years of starting up.

The registrar of cooperatives with the MTIC, in April 2018 decided to deregister 3,600 SACCOs (60% of registered SACCOs) country wide most of which were from Eastern Uganda claiming they had either collapsed or were dormant (MoTIC, 2018)which clearly shows that SACCOs in Uganda are struggling to sustain their operations, This is so despite the intensive risk management strategies SACCOs have employed (sekanjako, 2018). The effect of risk management on the sustainability of SACCOs in Uganda therefore is not clear. Thus this study is set to investigate the effect of risk management on the financial sustainability of SACCOs in Busia, Uganda.

1.3 General Objectives

The objective of this study was to examine the effect of Risk Management onto the Financial Sustainability of SACCOs in Busia District, Uganda.

1.4 Specific Objectives

1. To analyze the effect of risk assessment on to the financial sustainability of SACCOs in Busia District, Uganda
2. To examine the effect of Risk control on to the financial sustainability of SACCOs in Busia District, Uganda

3. To determine the effect of Risk Monitoring on financial sustainability of SACCOs in Busia District, Uganda.

1.5 Research Questions

1. What is the effect of Risk Assessment on financial sustainability of SACCOs in Busia District, Uganda?
2. What is the effect of Risk control on financial sustainability of SACCOs in Busia District, Uganda?
3. What is the effect of Risk monitoring on financial sustainability in Busia District, Uganda?

1.6 Scope of the Study

1.6.1 Content

This study was specifically limited to examining the effect of risk management on financial sustainability of SACCOs in Busia District, Uganda.

Specific content limitations under Risk management was Risk Assessment, Risk Control and Risk Monitoring as defined by (Boehm, 1988) while Financial Sustainability was limited to Financial Self-reliance and Operational self-reliance as adopted from (Musoke, Senyonjo, & Kyeyune, 2017)

1.6.2 Time

Basing on the study methodology, data collection and analysis will require six months, this will be adequate for traversing the large area with in which the sampled population is spread.

1.6.3 Geographical

The study was conducted on SACCOs in Busia District, Uganda, the district is located in Eastern Uganda at the border of Uganda and kenya. The District has 16 sub counties and one municipal administration unit, SACCOs sampled were spread in all these administrative units.

1.7 Significance of the Study

1. The study findings are expected to act as a guide to policy makers particularly the SACCOs management Board and the department of cooperatives in formulation of suitable SACCO management policies, which will be made possible through publication of this report and specifically sharing of the findings with this government body.
2. The study findings will provide knowledge that will act as reference to future researchers, readers and to scholars that may take interest in this area of study since this report will be easily accessible in the university library.
3. The study findings are expected to provide knowledge to SACCO managements and Associations on matters pertaining to risk management and sustainability of SACCOs through interactions between the researcher during and after the study

1.8 Operational Definition of key concepts and terms

1.8.1 SACCOs:

Savings and Credit Co-operatives (SACCOs) are community membership-based financial institutions that are formed and owned by their members in promotion of their economic interests. These institutions mobilize and intermediate savings exclusively with in their membership under the Co-operative ACT. Furthermore, they are one of the several types of cooperatives that are unique micro finance institutions categorized under tier four in the financial market and therefore not regulated by Bank of Uganda (Nuwagaba, 2012)

1.8.2 Risk Management

This is the process that identifies loss exposures faced by an organization and selecting the most appropriate strategies or techniques for treating such exposures (Basel Committee, 2008).

(Boehm, 1988)Also defines Risk management as the process that involves managing any anticipated "unsatisfactory Outcome" he further asserts that this process involves two primary

steps, Risk Assessment and Risk Control, each with three subsidiary steps. Risk Assessment involves risk identification, risk analysis, and risk prioritization. Risk Control involves risk management planning, risk resolution, and risk monitoring

1.8.3 Risk Assessment

Risk assessment will for purposes of this study involve the identification of risks, analysis and prioritization of risks in an institution, this definition is motivated by (Boehm, 1988)

Risk Identification produces lists of the SACCOs-specific risk items likely to compromise the desired goals of the SACCO. Typical risk identification techniques include checklists, comparison with experience, and examination of decision drivers.

Risk Analysis centers around assessments of the loss-probability and loss-magnitude associated with each of the identified risk items, and assessments of compound risks involved in risk-item interactions. Typical techniques include systems analysis, policies analysis, decision trees, cost and performance models, and statistical decision analysis.

Risk Prioritization involves a prioritized ordering of the risk items identified and analyzed based on probability of occurrence and loss magnitude of the risk. Typical techniques include risk reduction leverage analysis, particularly involving cost-benefit analysis.

1.8.4 Risk control

Risk control will be used to mean risk planning, risk mitigation and risk monitoring undertaken by institutions for purposes of managing risks (Boehm, 1988)

Risk Planning produces plans for addressing each risk item (e.g., via risk avoidance, risk transfer, risk reduction, or buying information), including the coordination of the individual risk-item plans with each other and with the overall organizational plan. Typical techniques include checklists of risk

steps, Risk Assessment and Risk Control, each with three subsidiary steps. Risk Assessment involves risk identification, risk analysis, and risk prioritization. Risk Control involves risk management planning, risk resolution, and risk monitoring

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Risk Execution produces a situation in which the risk items are eliminated or otherwise resolved (e.g., risk avoidance via relaxation of requirements). Typical techniques include benchmarks, systems design-to-cost approaches among others

Risk Monitoring involves tracking the SACCO's progress towards resolving its risk items and taking corrective action where appropriate. Typical techniques include risk management plan milestone tracking and a Top Ten Risk Item list which is highlighted at each weekly or monthly.

1.8.5 Financial Sustainability

Defined as the ability of an entity to continue a defined behavior indefinitely (Filene, 2011). In other words, it is the ability of an organization to meet its financial goals or targets over the long term (Marwa, 2015), this variable will be measured by computing;

Rate of Return on Assets **(ROA):** This rate measures the extent of profitableness achieved by the entity to against its assets in its numerous activities. (Farooq, Maqbool, Humanyun, Nawaz, & Abbas, 2015), and is calculated by dividing income (net profit after tax) on total assets, as follows:

(ROA= Profit after taxes /Assets)

1.8.6 Operational Sustainability

This is the measure of the extent to which the institution is able to cover its operating expenses with its internally generated operating income (Marwa, 2015)

Current Ratio: The idea behind this ratio is to establish whether an entity's current assets (cash, money equivalents, marketable securities, assets and inventory) when pronto on the market can pay off its short term liabilities (notes payable, current portion of term debt, payables, accrued expenses and taxes) (Farooq, Maqbool, Humanyun, Nawaz, & Abbas, 2015). In theory, the upper the current ratio, the better

(Current Ratio = Current Assets / Current Liabilities)

In conclusion therefore, the researcher was guided by the above scope in the gathering, presentation and analysis of data to answer the research questions posed in this chapter.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The purpose of this chapter was to analyze the literature from articles that are related to the study objectives and variables so as to improve the researchers' knowledge of the study and to also identify the knowledge gap that this study filled.

Saving and credit cooperatives are user owned financial intermediaries. They have many names around the world, including credit unions, SACCOs, COOPECs (Marwa, 2015). Members typically share a "common bond" based on a geographic area, employer, community, or other affiliations. Members have equal voting rights, regardless of how many shares they own. Saving and credit cooperatives are their principal services although many offer money transfers, payment services, and insurance as well. Sometimes savings and credit cooperatives join together to form second tier associations for the purposes of building capacity, liquidity management, and refinancing.

This chapter therefore analyzes literature that has been brought forward by other scholars or researchers on issues identical or related to the concepts in this study. A theoretical review was done proceeded by a detailed analysis of all key concepts of this study, then a conceptual framework presented and discussed before a conclusion is made.

2.1 Theoretical Review

2.1.1 The Prospect Theory

Decisions should ideally be made under conditions in which all factors of influence and the decision-making methods result in predictable outcomes. However, decision-making often happens under conditions of risk and uncertainty. SACCOs never run under the ideal conditions

of certainty. A decision is made under conditions of risk if the decision maker is able to assess rationally or subconsciously, with a degree of certainty, the probability that a particular event will take place, using as a basis either information about similar past events or personal experience that will alter the preplanned objectives (Gitau, 2015)

Prospect theory is a theory of decision-making under conditions of risk (Tversky &Kahneman, 1979). Decisions involve internal conflict over value trade-offs. This theory is designed to better describe, explain, and predict the choices that a typical person makes in a world of uncertainty. The theory addresses how these choices are framed and evaluated in the decision making process. Prospect theory advances the notion that utility curves differ in domains of gain from those in domains of loss.

Prospect theory is designed to explain a common pattern of choice. It is descriptive and empirical in nature. Prospect theory looks at two parts of decision making: the editing, or framing phase, and the evaluation phase (Tversky, 1967). Framing refers to the way in which a choice, or an option can be affected by the order or manner in which it is presented to a decision maker. The evaluation phase of the prospect theory encompasses two parts, the value function and the weighting function. The value function is defined in terms of gains and losses relative to the reference point not in terms of absolute wealth. In prospect theory, value is a function of change with a focus on the starting point so that the change is either negative or positive (Tversky, 1967).

Prospect theory predicts that domain affects risk propensity. Losses have more emotional impact than an equivalent amount of gains and therefore weighted more heavily in our decision- making (Tversky & Kahneman, 1975). In making a decision, a decision maker multiplies the value of each outcome by its decision weight. Decision weights do not serve solely as measures of perceived likelihood of an outcome but also represent an empirically derived assessment of how people actually arrive at their sense of likelihood. An important function of weighting function is that low

probabilities are overweighed while high and medium probabilities are subjectively underweighted (Tversky & Kahneman, 1979).

MFIs are often faced with numerous micro decisions ranging from appointment of knowledgeable leadership, the choice of investment to undertake, interest to contribution and borrowing, expansion decisions among others which quite often are the reason for the failure of the entity or the growth and sustainability of the entity as well and quite more often these decisions are made by management without acknowledging the risk attached them.

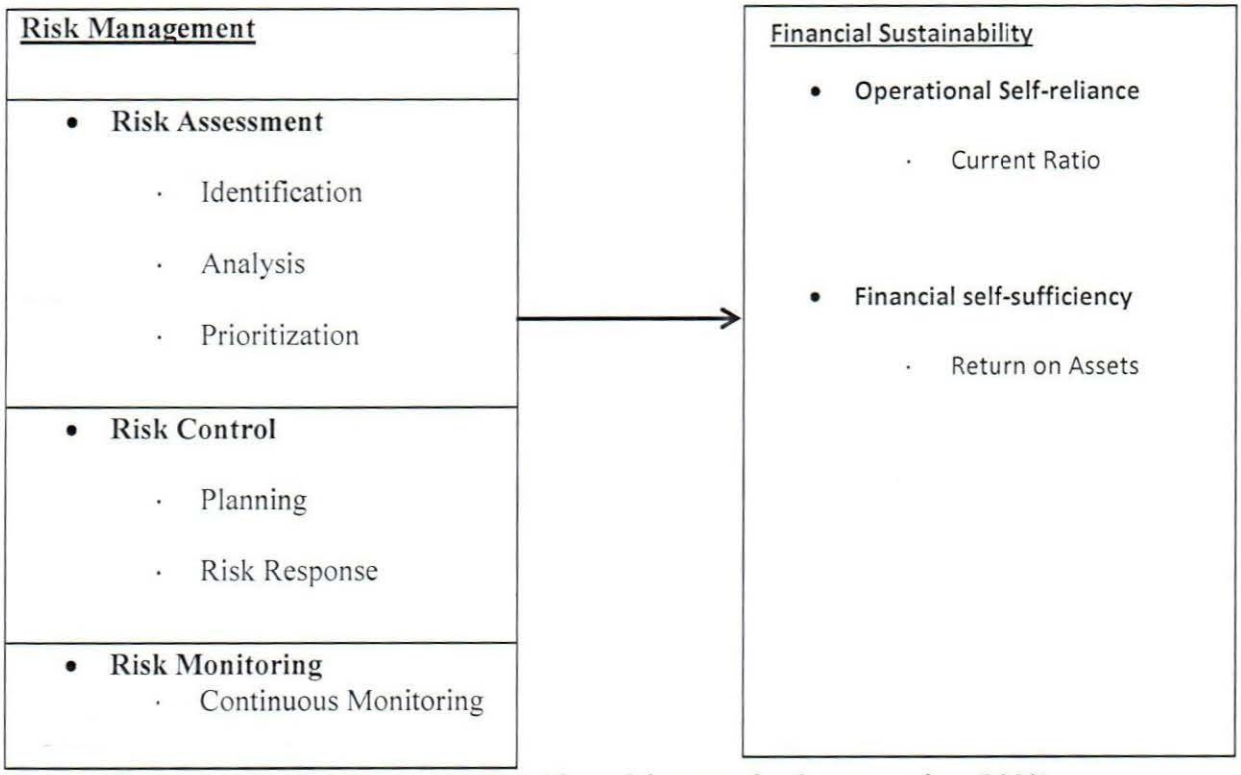
Risk is an exposure to the possibility of economic or financial loss or gains, physical damage or injury as a consequence of the uncertainty associated with pursuing a certain cause of action (Chapman, 1983). Many scholars have defined risk: Wideman(1986), Godfrey (1996), Kliem and Ludin (1997) and Smith (1999). Most definitions include the factors of chance or probability of events and the negative impact on the objectives of the entity. In mathematics, probability of an event is expressed statistically using the mean, dispersion, confidence interval and other statistical parameters. Relevant data must be available for a statistical analysis. When no data exists, the experience and knowledge of the decision maker is important in assessing the probability of an adverse event.

Risks impact MFIs by adversely affecting the planned objectives. Risk impact is often calculated both quantitatively and qualitatively. Risk exposure is the product of risk probability and risk impact. Risk management is the process that, when carried out, ensures that all that can be done will be done to achieve the objective of the organization, within the constraints of the organization (Clark,Pledger & Needler, 1990). Risk management includes planning for risk, identifying risks, analyzing risks, developing risk response strategies, and monitoring and controlling risks to determine how they have changed (Kerzner, 2009). Since risk affects the achievement of

organization objectives, risk management is one very crucial aspect of sound and sustainable organizational management.

2.2 Conceptual Framework

Independent Variable **Dependent Variable**



Source: (Boehm, 1988) & (Marwa, 2015), *with modifications by the researcher (2019)*

The framework above illustrates the hypothesized relationship between the independent variable (Risk management) and the dependent variable (Financial Sustainability), it is accordingly hypothesized that risk management has a positive effect on financial sustainability of SACCOs.

This framework was motivated by the studies of (Boehm, 1988) who studied extensively the concept of risk management providing operational definitions of the concept that were adopted for this study, and Marwa (2015) who studied and made publications on sustainability of MFIs in

Tanzania and Kenya. In his studies he measured sustainability by examining operational efficiency and sustainability of MFIs these two scholars therefore inspired the researcher to adopt their models and customize them for this study.

2.3 Empirical Review

2.3.1 Risk Assessment and Financial sustainability

Risk management is a difficult aspect in the management of any organization because of the resource and skill requirement needed for it to be effective and efficient. A manager must be able to recognize and identify the root causes of risks and correlate them to their effects on the financial performance of their organization for the process to have relevance (Apine & Valdés, 2016).

The risk analysis and management techniques have been described in detail by many authors (Ahmed, 2007, Cretu, 2011; Chapman C, 2003; Klemetti, 2006; Smith, 2006). According to these authors, a typical risk management process includes, risk assessment; risk execution and risk monitoring.

Financial sustainability refers to the ability of MFIs to cover all their costs from their own generated income from operations without depending on external support or subsidy (Bayer, 2012). It is the ability to keep on going towards microfinance objectives without continued donor or government support (Marwa, 2015).

The definitions of financial sustainability focus on the ability of MFIs to depend on self-operation, and as much as possible making continuous profit out of the microfinance operations that is adequate to keep the MFIs surviving (Bayai & Ikhide, 2016), however the notion of continuous profits according to Marwa (2015) is more theoretical than realistic given the challenges (risks) that befall these entities.

Risk Assessment starts with the risk identification process that attempts to identify the source, type and impact of risks (Dionne, 2013). The importance of this stage to financial sustainability is demonstrated in the ability of the risk assessment process to root out risks that have high financial implication to the entity (Evans & Brereton, 2007)

Risk identification involves the recognition of potential risk event conditions in the organization and the clarification of risk responsibilities (Wang, Dulaimi, & Aguria, 2004). Risk identification is the basis for analysis and control of risk and ensures risk management effectiveness.

Boehm (1989) concluded that the success of any project depends on the quality of risk management undertaken, this conclusion was reechoed by Iqbal, Choudhry, Holschemacher, Ali, and Tamošaitienė (2015), though found out that successful risk identification and mitigation is key to sustainable profitability in banking institutions which is consistent with (Bayer, 2012) that found out that sustainable MFIs in Ethiopia integrated strong risk identification and mitigation practices in their day to day operations than those that were not sustainable.

The identification of risks is a crucial step in managing successful MFIs according to (Carbone & Tippet, 2004, para. 1). Carbone & Tippet (2004) further reveals that MFIs that have embraced consistent risk assessment and control have been very successful and sustainable for years, they site the Gramean bank and credit unions in the US as a bench mark in this regard.

According to Dionne (2013) an MFI entity is bound to face Pure risk (insurable or not, and not necessarily exogenous in the presence of moral hazard), Market risk (variation in prices of commodities, exchange rates, asset returns), Default risk (probability of default, recovery rate, exposure at default), Operational risk (employee errors, fraud, IT system breakdown) and Liquidity risk of not possessing sufficient funds to meet short-term financial obligation without affecting prices.

Successful risk assessment must be carefully undertaken using techniques that are not only relevant to the conditions within which the entity operates but also efficient since this process can be costly if not well managed (Apine & Valdés, 2016)

2.3.1.1 Risk Assessment practices

Micro Finance Institutions in different countries use different kind of techniques in risk management to tackle risks identified during the risk assessment process, as not every approach can be appropriate for every situation (Apine & Valdés, 2016).

Several techniques used in risk management process can be identified, such techniques are: brainstorming, checklist, sensitivity analysis and risk registers among other are commonly preferred; thereafter, these techniques can be used in two different situations to tackle risks: preventive and remedial actions (Iqbal et al., 2015, p. 65-78), and of course remedial practices will depend on whether the risk is known or unknown,

Bayer, (2012) also discovered that unsustainable MFIs lacked knowledge and experience in accurately predicting basic risks that were impactful to their finances and operations than more sustainable MFIs, which gives merit to (Apine & Valdés, 2016) assertion with regards to the importance of customizing the risk identification and control process to the MFI.

The analysis of risks can be undertaken using two different approaches: quantitative and qualitative approaches.

2.3.1.2 Qualitative Risk Management Approach

According to the PMBOK (2008), Qualitative risk management practices deal with simple analysis of probability of occurrence and its impact on the project objectives. Assessing the major risks and conducting the risk register is usually a more rapid and less costly plan for risk response as an initial step.

The process of qualitative risk management consists of initial inputs such as risk register, risk management plan, and organizational process assets. For such inputs, the tools and techniques commonly applied in qualitative risk management are: risk probability/likeliness and impact assessment, probability and impact matrix, risk data quality assessment, risk categorization, risk urgency assessment, and expert judgment. After applying all the tools of the qualitative risk management approach, the output is an Updated Risk Register (PMBOK, 2008) which can be used further on in a quantitative approach.

2.3.1.3 Quantitative Risk Management Approach

Quantitative risk management deals with numerical assessment of risks of the project (Apine & Valdés, 2016). This approach allows to gather data and work on major risks in a more complex way. Normally quantitative approach comes after the qualitative approach as it already includes only the most important risks (Basel Committee, 2008). The tools and techniques that can be applied in quantitative analysis suggested by PMBOK (2008) are: data gathering and representation techniques, quantitative risk analysis and modelling techniques and expert judgment. One approach is the complement of the other. For an efficient risk management within organization, a qualitative, and later, a quantitative approach should be considered and used as a complete model (Rejda, 2008). This model is general for organizational risk management; however, different industries and projects can apply different techniques.

2.3.1.4 Risk Prioritization/ Ranking

According to Bruett (2004) once risks are identified, they must be analyzed to determine their potential effects onto the MFI, wherever possible, quantifiable data rather than anecdotal evidence or assumptions should be used. However, Rafip and Mofep (2014) add that in many cases, especially in relation to reputation risk, there are too many variables to accurately determine a

precise likelihood or impact, so judgment, experience and sector trends and the results of similar events at other institutions must be used to predict a worse, or best, case outcome.

A risk score is developed by assessing two variables; the likelihood of a risk event or condition occurring; and the consequences of that event or condition.

From the above variables a risk/impact matrix is developed against which prioritization of risks is made. According to Evans and Brereton (2007) Impact rating can follow the following criterion Insignificant, Minor, Medium, Major or Critical where the first 2 would be classified as minor impact. This would result in minimal financial or other loss, delay, interruption or inconvenience. There would be little or no damage to the MFI's reputation. The impact could easily and quickly be put right.

The medium and major ratings would be categorised as major impact; this would have a major impact on costs, income and certain key objectives. This would affect a significant part of the entity, while Critical rating would equate to critical impact. This would result in services being seriously affected and a major loss of income and/or reputation, or high increase in costs.

On the other hand, Likelihood/Probability ratings would follow; Very Low representing 0% to 19% likelihood, meaning unlikely/rare, Low representing 20% to 39% likelihood meaning It is possible, Medium representing 40% to 59% likelihood meaning It is likely, High representing 60% to 79% likelihood meaning It is probable or very probable while Very High representing 80% to 99% likelihood meaning It is almost certain or certain

The literal meaning of the above probabilities according to Evans and Brereton, (2007) in terms of action would be that Very low and low probability rated risks could be cautiously regarded low probability risks that must be monitored and where possible mitigated and medium rated risks must be critically observed and responded to, they could easily become critical and heavily impact

on the institution. While High and very high rated probability level risks must be handled accordingly with immediate effect, there occurrence is imminent however their impact must be assessed to ascertain the right response strategy.

2.3.2 Risk Control and financial Sustainability

This is the level at which the risks identified and analyzed at the Risk assessment stage are handled or mitigated by the institution according to (Boehm, 1988). It is important for the entity to plan on appropriate risk response strategies, allocate risk ownership, communicate to relevant stakeholders and set time frames for handling these risks (Basel Committee, 2008).

The Basel Committee also emphasizes that planning must not be a one off event, it must be undertaken at the start of the risk management cycle and continued to the control level since at this point new information may be possessed that is crucial to the determination of a new course of action.

Adequate risk control will create operational efficiency according to (Marwa, 2015) that can act as a back bone upon which an MFI can achieve its objectives. Operational sustainability is the ability of MFI to cover its operating income regardless of whether it is subsidized or not (Bayer, 2012).

Financial self-sufficiency is when MFIs are able to cover from their own generated income, both operating and financial costs and other form of subsidy valued at market prices (Meyer, 2002). To be financially sustainable, MFIs must register good financial performance without subsidized resources or funds, this so because the risks associated with external funding can best be mitigated by the MFIs' ability to replace activities pegged on external funds with internally generated income (Marwa, 2015)

Since risks can alter the achievement of an entity's objectives both negatively and positively (Rejda, 2008), posits that an organization must prepare its self well to embrace and maximize on the benefits from positive risks and to accordingly avert the adverse effects of negative risks (Apine & Valdés, 2016).

The following are some response strategies that can be used to handle identified risks

Table 2.1: below shows risk response strategies

Avoid. Risk can be avoided by removing the cause of the risk or executing the activity in a different way while still aiming to achieve	***Exploit***. The aim is to ensure that the opportunity is realized. This strategy seeks to eliminate the uncertainty associated with a
Transfer. Transferring risk involves finding another party who is willing to take responsibility for its management, and who will bear the liability of the risk should it occur. The aim is to ensure that the risk is owned and	***Share***. Allocate risk ownership of an opportunity to another party who is best able to maximize its probability of occurrence and increase the potential benefits if it does occur. Transferring threats and sharing opportunities
Mitigate. Risk mitigation reduces the probability and/or impact of an adverse risk event to an acceptable threshold. Taking early action to reduce the probability and/or impact	***Enhance***. This response aims to modify the "size" of the positive risk. The opportunity is enhanced by increasing its probability and/or impact, thereby maximizing benefits realized for
Acceptance. This strategy is adopted when it is not possible or practical to respond to the risk by the other strategies, or a response is not warranted by the importance of the risk. When the Risk	

1Source (Apine & Valdes, 2016), (Dionne, 2013), (Siaw, 2013))

2.3.3 Risk Monitoring and Financial Sustainability

According to Boehm, (1988) Risk Monitoring involves tracking the entity's progress towards resolving its risk items and taking corrective action where appropriate. Typical techniques include risk management plan, milestone tracking and a Top Ten Risk Item list which is highlighted at each weekly, monthly, or annual review meetings.

The PMBOK (2000) describes risk monitoring as the process of keeping track of the identified risks and residual risks and identifying new risks, ensuring the execution of risk plans and evaluating their effectiveness in reducing risks. It goes ahead to emphasize that risk monitoring must be an ongoing process throughout the life of an entity since both the risks and the entity keep on changing or evolving through different conditions and environments.

Apine and Valdés (2016) Underlines the importance of risk monitoring in line with the PMBOK, (2000) by asserting that effective risk monitoring will provide information that is useful in handling risks before they occur or when they evolve. This too will aid the process of communicating information that may aid decisions pertaining to acceptability of risks to stakeholders.

The financial sustainability of an entity with regards to risk management depends on a robust risk management process that is able to continuously inform decision making (Iqbal, Choudhry, Holschemacher, Ali, & Tamošaitienė, 2015)

According Rejda (2008), Effective risk monitoring will provide information such as, whether the risk responses are being implemented as planned and if so, are they as effective as planned or new strategies must be developed, whether the entity's risk exposure changed or not, whether any risk trigger(s) have occurred, and are there new risks that were previously not identified. Or whether the risk management policies and procedures are being followed among others

From the above information new strategies can be developed, contingency plans enacted, policies revised alongside corrective measures if deviations have been identified by the monitoring team.

The PMBOK, (2000) further suggests some techniques in undertaking monitoring activities such as Risk response audits, periodic reviews, Variance analysis/earned value analysis, technical measurement analysis and additional risk response analysis

2.3.4 The Risk Management Structure and financial sustainability.

The PMBOK Guide (2000) defines risk management as the systematic process of identifying analyzing and responding to project risk. It includes maximizing the probability and consequences of positive outcomes and minimizing the probability and consequences of adverse events to project objectives.

The Risk management process first begins with the Board of Directors (BOD) of the MFI establishing a sound risk management policy which will serve as a guideline for all the employees and members in the firm. The Basel Committee, as a banking supervisory body, has provided at least three requirements for a BOD to carry out, which are summarized briefly below.

First of all, there is the need for the BOD to understand the risk profile of their financial institutions, bearing in mind their internal and external business environment in order to be able to determine their tolerance limit. Again, there is the need for the BOD to determine and approve the appropriate strategies, policies and risk management practices which they intend to adopt for their operations.

And finally, the BOD also needs to relate the content of this policy to the senior management and then guide them in order to implement it (Basel Committee, 2008). Policies are written statements which show an institution's commitment to pursue certain goals and objectives, by setting standards and courses of action. They are intended to clearly specify the institution's mission, values and principles, as well as defining how daily activities are to be carried out (Kimathi et al.,

2015). (Ibe, 2013), concluded that liquidity risk management was a grave problem in the Nigerian banking industry and it was crucial that banks gave it utmost priority if they are to not only be profitable but sustainable. Most banks were not giving this activity due consideration and ended up in liquidity problems.

The importance of this concept attracted some researchers to the field among which included Farooq et al.., (2015) in their study on liquidity risk management on banks in Pakistan concluded that there was significant impact of liquidity risk management on Return on Asset and its speed of multiplication. This conclusion is in line with

In contrast however, (Mwangi, 2014) brought on board different findings where he tested Liquidity risk management on performance of financial institutions and established a negative relationship between the 2 variables. The study concluded that liquidity risk management has a significant negative relationship with financial performance of commercial banks. Borrowings from banks by commercial banks to meet shorter liquidity needs do have the greatest impact on liquidity at 14.2% and was significant at 5%.

2.3.5 Review of the Financial Sustainability of SACCOs

According to Distler and Schmidt (2011), Member deposits are the principle contributors to the funding of SACCOs and thus the reason why they are increasingly providing formal saving opportunities as a core service. SACCOs have realized that savings especially from long-term deposits, are a cheap and reliable refinancing tool and can increase their funding base thereby contributing to their sustainability. SACCOs are practically excluded from capital markets and wholesale loans (Bayer, 2012); loans from other lending institutions would only be available at prohibitively high interest rates. The only external financier for SACCOs in Uganda is the state-owned Microfinance Support Center (MSC) that provides loans at interest rates that are way above the interest rates depositors demand.

SACCOs have comparative advantages over other Tier 1to 3 financial services providers. People in rural areas often lack financial services providers that lie within range and are regularly accessible. SACCOs with their "brick and mortar" structure (Distler & Schmidt, 2011) are often the only formal financial institutions people in rural areas can access; this quasi-monopolistic position in the countryside gives SACCOs a distinct comparative advantage over Commercial Banks or MDIs that are mainly present in the urban areas in Uganda.

Distler and Schmidt (2011) in their study on credit saving institutions in Uganda concluded that although the financial results of most of the SACCOs surveyed do not seem very alarming, several issues might put their financial sustainability at risk in the future. Many SACCOs, especially smaller ones, are over-dependent on subsidization, his conclusion is in line with the purpose of this study, whereas most SACCOs where sustainable years back, it was discovered that most were dependent on donor funding, subsidies among others.

Whereas this position was re-echoed by (Marwa, 2015) in Tanzania, he asserted that financial sustainability was an issue of concern to the industry. He concluded that "there is a significant potential for performance improvement in both efficiency and sustainability. While SACCOs are on average sustainable, the fact that about 49% of them are not financially sustainable is a matter of concern".

Kizza and Mugisha (2004) Tested sustainability of SACCOs basing on outreach and concluded that the high the level of outreach (numbers of members) a SACCO has the more sustainable it is, this conclusion is in tandem with the previous researchers however, he carried out a case study on one entity, that is the Teso rural development trust, quite often most SACCOs don't have many members. Adongo and Stock (2005) Concluded that selected microfinance institutions in Namibia were not financially sustainable. The degree of financial unsustainability was lowest for term

micro-lenders and was highest for multi-purpose co-operatives involved in the provision of microfinance.

2.4 Gap in literature reviewed

Although studies have been made in Uganda about risk management by some scholars like Mwesigwa (2016), Tirole and Holmstrom (2000) among others they have mainly been carried out on commercial banks or deposit taking micro finance institutions rather than Tier 4 micro finance institutions like SACCOs. A number of studies as well have been carried out on the sustainability of SACCOs in Uganda from as far back as 2004 when (Kizza & Mugisha, 2004) concluded that sustainability was based on outreach, (Musoke, Senyonjo, & Kyeyune, 2017) examined sustainability in relation to Board size, (Distler & Schmidt, 2011) assessed sustainability basing on financial growth among others little however has been provided to conclusively provide a link between risk management and financial sustainability of SACCOs in Uganda, it's upon this gap that this Study examined how financial sustainability of SACCOs is affected by risk management so as to add knowledge onto the existing pool of previous researchers findings.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter identifies the type of design that was used in carrying out the study and also describe the process and procedures that were adopted to collect and analyze data for the study. The study was conducted to assess the effect of risk management on the financial sustainability in selected SACCOs, specifically in Busia, Uganda. It delved into the current risk management of these institutions to identify the various risk management practices as well as the strategies that are instituted to assess, control and monitor risks in these SACCOs and how they affect their financial sustainability.

3.1 Research Design

The research study design was based on a Mixed Methods Approach. According to Creswell & Plano Clark (2011) as cited by (Halcomb & Hickman, 2015) mixed methods approach in research refers to research that integrates both qualitative and quantitative data within a single study.

Halcomb and Hickman, (2015) identifies 4 research designs under mixed methods Approach; the convergence design, sequential Explanatory, sequential Exploratory and Embedded design.

Sequential Explanatory mixed method design gives high priority to quantitative data while qualitative data is utilized to give detailed explanations for the quantitative findings (Creswell & Plano Clark, 2011) while sequential Exploratory mixed method design priority is placed on qualitative data where quantitative data is later used to provide a basis for generalizability of qualitative findings (Wisdom, 2012)

According to Halcomb and Hickman, (2015) Embedded mixed method design is almost similar to convergence in that they both consider qualitative and quantitative at the same time with the

difference being that the embedded design collects and analyses data inclusively, simultaneously and at the same time while the Convergent design collects and analyses quantitative and qualitative data independently (Halcomb & Hickman, 2015).

For purposes of this study a convergent mixed methods design was adopted because it provides a better understanding of the study variables through collection of different but complementary data, where quantitative data collected pertaining to financials of SACCOs was complemented with data pertaining to choices and the reasons for those choices during risk management.

The study adopted a Cross sectional research design, this design involves gathering data or views of respondents or informants at a given period in time (Oso & Onen, 2009) while Documentary reviews were done on records cutting across different periods of time.

3.2 Population

The study was conducted on SACCOs in Busia district Uganda, Busia district provides a good stage for this study due to its high SACCOs start up and failure rate (NewVision, 2016), there are about 100 registered and functional SACCOs according to the district commercial office and over 200 unregistered though functional according to the district commercial office database 2018.

3.2.1 Target Population

Given the high number of operational SACCOs in the district the study targeted only registered SACCOs from which a sample was made, registered and functional SACCOs added up to 100 according to the district commercial office database 2018, this population is appropriate for this study due to its legal status and the requirement by the MDIs ACT, 2003 under which they are currently governed and required to keep financial records.

3.2.2 Population Sample size and Sampling Procedure

Since the target population was 100 SACCOs, the sample based on Krejcie & Morgan (1970) sample selection guide is 80 SACCOs. Simple random sampling technique was used to select the

SACCOs to be included in the sample. The selection of SACCOs to be included in the sample was based on a raffle where the SACCOs were assigned random numbers, put in a box, shaken and picked randomly without replacement, this ensured objectivity in selection of respondents and equal chance of selection of Samples. The respondents were then segmented between those SACCOs that formal risk management structures within their daily routine operations (formal risk management) and those that did not have risk management structures within their routine operations (informal risk Management).

The respondents selected among the SACCOs purposively for the study based on their position and level of knowledge on the subject matter and these included the Chairman, Finance committee head, Accountant, Secretary, and Treasurer among others. The researcher issued a questionnaire to all selected SACCOs including Interviews for some.

3.2.3 Target Population of SACCOs

Table 3.1: Target Population.

Status	Number of SACCOs	Sampled SACCOs	No. of respondents per SACCO	Total No. of Respondents
Registered & functional	100	80	1	80
Total	100	80		80

Source: Krejcie & Morgan (1970) sample size table, (Commercial office Data Base, 2018)

3.3 Data Collection Methods and Instruments

The study used Questionnaire, interviews and Document review methods of data collection. Questionnaires and Document review were used to aid the gathering of quantitative data whereas interviews were used to gather qualitative data used in the study.

Questionnaires, were the main tools used to collect data during this study, the choice of this tool was based on the nature of data to be collected, the short time within which to collect and analyze the data and the study variables which cannot be easily observed.

A questionnaire is a tool that is best suited for this study as it collects a lot of data in a short period from a large population (Oso & Onen, 2009), this study designed a questionnaire that captured quantitative data that included correspondence on both the dependent and independent variables

Interviews, face to face interviews through an interview guide, were conducted as well where need arose to supplement, complement or triangulate data collected in the questionnaires. The data collected from this tool was mainly qualitative correspondences that was used to give meaning to the values analyzed.

Document Review was used to collected financial data relating to annual profits, total Assets, current assets, current liabilities that was crucial in computing the return on capital and current ratios.

3.4 Validity and Reliability

Validity and Reliability tests were conducted by the researcher to ascertain the level of accuracy, relevancy and reliability of the data and data collection instruments used.

3.4.1 Validity

According to Messick (1989), Validity refers to the degree to which empirical evidences and theoretical rationales support the adequacy and appropriateness of interpretations and actions based on test scores, whereas, (Heale & Twycross, 2015) define validity as the extent to which a concept is accurately measured in a study

Mesick (1989) identifies 4 basic types of validity in a study, Face Validity, Content Validity, Construct and criterion validity

Face validity is the degree to which a measure appears to be related to a specific construct, in the judgment of non-experts such as scholars, supervisors. It evaluates the appearance of the questionnaire in terms of feasibility, readability, consistency of style and formatting, and the clarity of the language used (Taherdoost, 2016), in this study face validity was done by engaging fellow research scholars and supervisors where an 90% positive review was realized.

Content Validity is the degree to which items in an instrument reflect the content universe to which the instrument will be generalized" (Straub et al. 2004), this was done by engaging experts in the fields of study and experts from the Academia.

Construct validity refers to how well you translated or transformed a concept, idea, or behavior that is a construct into a functioning and operating reality, the operationalization. (Taherdoost, 2016) For purposes of this study, a factor analysis was carried out

Table 3.2: Content Validity Index

CVI = items considered /total items	
items used	33
total items	36
CVI	91%

Table 3.3: Deleted Items

Items Deleted
We have both internal and external sources of income
Our externally generated incomes are very reliable
Our receivables days are lesser than our payables days

Criterion or concrete validity is the extent to which a measure is related to an outcome. It measures how well one measure predicts an outcome for another measure (Taherdoost, 2016) however, Mesick, (1989) asserts that if a study has a valid Construct and Content validity, it is certain that it will have an acceptable criterion validity hence the researcher concentrated on construct and content validity.

3.4.2 Reliability

According to Heale and Twycross (2015) Reliability relates to the consistency of a measure. Reliability is concerned with the extent to which a measurement of a phenomenon provides stable, repetitive and consistent result (Carmines & Zeller, 1979).

It is suggested that reliability should be equal to or above 0.60 (Straub et al., 2004). Hinton et al. (2004) have suggested four cut-off points for reliability, which includes excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70) and low reliability (0.50 and below). Although reliability is important for study, it is not sufficient unless combined with validity. In other words, for a test to be reliable, it also needs to be valid (Wilson, 2010)

When running reliability tests for the study the following Cronbach Alpha reliability was realized and was in conformance to the research guide of Kyambogo University.

Table 3.4: Reliability

Reliability				
Variables		Cronbach's Alpha		
		Pre Test	Final	Items Deleted
Sub Variables of the Independent variable.	Risk Assessment	0.920	0.920	0
	Risk Control	0.895	0.895	0
	Risk Monitoring	0.864	0.864	0
Dependent Variable.	Financial Sustainability	0.652	0.853	3

3.5 Data Collection Procedure

Data collection was preceded by the researcher generating a research proposal under the guidance of two supervisors assigned by the university, the proposal was completed and ready by the end of May 2019. The researcher then proceeded to acquire authorization from the University to undertake the study.

3.6 Data Analysis

Data analysis is the process of bringing order, structure and meaning to the mass of collected data (Marshall & Rossman 1990), the data collected will then be analyzed through descriptive analysis using measures of central tendency and dispersion, and inferential statistical analysis.

Inferential statistical analysis was used to draw conclusions on the relationships and differences identified in the results using correlation(r) and Regression(R) analysis techniques using SPSS statistics 20 research software.

3.6.1 Qualitative Data

A thematic data analysis and presentation approach was adopted to analyze qualitative data along with discussion and presentation of research findings, data analysis also involved identifying

common patterns within the interviewed respondents and unique propositions that shall critically be analyzed in order to achieve research aims and objectives.

3.6.2 Measurement of Study Variables

The measurement of the study variables is based on generally accepted indicators as adopted by different scholars in different research studies. The sections below summarizes how each variable will be measured.

3.6.2.1 Risk management

Risk management is the process of identifying, controlling and monitoring events that may have a positive or negative effect on an entity's objectives (Boehm, 1988) however, different scholars have come with different ways of measuring the effectiveness of risk management, but for purposes of this study, the measures were adopted as stated by (Minsky, 2016) and ISO 31000:2009.

In 2009 the first global standard on risk management was published: ISO 31000:2009. This is different from most other codes in that it concentrates on how and the practicality of risk management implementation, the preferred means for measuring performance in risk management is to use lead indicators that are concerned with the processes that supports the achievement of desired outcomes. Examples used include the: Proportion of treatment tasks for high risks that have been completed in a given period, Proportion of the actions in the risk management plan for the year actually completed, Number of people trained in risk management this quarter against target, Number of contracts that have been subjected to risk assessment in a given period against target, Number of root cause analysis conducted in a project this quarter to learn lessons from successes and failures, Number of control self-assessments conducted this month against target.

Minsky, (2016) simplified the process of measuring risk management through indicators such as, Number of systemic risks identified, Percentage of process areas involved in risk assessments, Percentage of key risks mitigated, Percentage of key risks monitored

This study adopted and modified both measurement bases as presented in the study questionnaire while analyzing the effect of risk management on the financial sustainability of SACCOs in Uganda.

3.6.2.2 Financial Sustainability

This is the ability of an entity to continue a defined behavior indefinitely (Filene, 2011). it is also the ability of an organization to meet its short and long term financial goals or targets over the long term (Marwa, 2015) which can be measure through Return on Assets and Current ratios

Rate of Return on Assets (ROA): This rate measures the extent of profitableness achieved by the entity to against its assets in its numerous activities. (Farooq, Maqbool, Humanyun, Nawaz, & Abbas, 2015), and is calculated by dividing income (net profit after tax) on total assets, as follows:

(ROA= Profit after taxes /Assets)

Current Ratio: The idea behind this ratio is to establish whether an entity's current assets (cash, money equivalents, marketable securities, assets and inventory) when pronto on the market can pay off its short term liabilities (notes payable, current portion of term debt, payables, accrued expenses and taxes) (Farooq, Maqbool, Humanyun, Nawaz, & Abbas, 2015). In theory, the upper the current ratio, the better; this is done using the formula,

(Current Ratio = Current Assets / Current Liabilities)

3.7 Limitations

This study considered only registered and operational SACCOs given that such SACCOs had some records to audit as required by regulations unlike the unregistered, however the unregistered SACCOs are very many compared to the registered SACCOs which rendered the sample unrepresentative of the total population, ideally a sample from the unregistered SACCOs should have been included however unregistered SACCOs do not give a valid and accepted view against

which an inferential conclusion can be drawn since they are legally nonexistent. The high sample percentage also shall be enough to neutralize this limitation for the study.

This study is highly quantitative and technical in nature and was undertaken in a population that was mainly semi illiterate, understanding the concepts of the study to give a clear and accurate response was a very big challenge. This was however addressed by the exclusive participation of the researcher in each of every sample to help explain the concept in an understandable manner and language to the respondents in most instances respondents were comfortable the researcher ticking the questionnaire as they provided the answer.

3.8 Ethical Considerations

The researcher took all ethical issues very seriously and did all he can not to acquire any data or knowledge at the expense of human dignity, this study involved access to confidential financial and non-financial information which was handled with care and with confidentiality. All the aspects of ethics such as informed consent, privacy and confidentiality, anonymity and the researcher's responsibility were observed as below.

3.9 Informed consent

The researcher fully appraised the respondents with all the necessary information about the study like, the purpose of the study, privacy and confidentiality efforts, the period of participation in the study by the respondent, the possible benefits of the study, the meaning of key concepts and then interviewed respondents who were fully willing to be interviewed.

3.10 Privacy and confidentiality

The researcher treated all private information and data acquired during this study with utmost confidentiality, the researcher did not disclose any data that can be regarded private and confidential except for purposes of this study.

3.11 Anonymity

All respondents to this study that wanted to maintain anonymity were kept anonymous while using the data they provided.

3.12 Researcher's responsibility

The Researcher had a responsibility to ensure that the research meets high scientific and ethical standards that respect and protect the participants even after the approval or publication of the research paper. The research complied with all applicable laws and data safety and observed any copyright requirements during the study.

CHAPTER FOUR

PRESENTATION, INTERPRETATION AND ANALYSIS OF FINDINGS

4.1 Introduction

This chapter provides the presentation, analysis and interpretation of the study findings based on the study objectives: to analyze the effect of risk assessment on the financial sustainability, to examine the effect of risk control on the financial sustainability, to determine the effect of risk monitoring on the financial sustainability of SACCO's in Busia District, Uganda. This chapter begins with the descriptive statistics to explain the background of the respondents. A correlation matrix was used to determine the relationship between the constructs (financial sustainability, risk assessment, risk control and risk monitoring). A simple linear regression was used to explain the relationship and predictability of the constructs in regards to financial sustainability.

4.2 Response Rate

The total number of questionnaire distributed were 80, in which 66 were returned back fully filled.

Table 4.1 Response rate

METHOD	Target Population	Actual Response	Percentage
Questionnaire	80	66	82.5%
Document reviews	40	28	70.0%
Interviews	20	17	85.0%
Total Response	140	111	79.17%

Source: Primary Data

The above table 4.2.1 indicates a response rate of 83.75%, According to Amin, (2005), an acceptable response rate should be at least seventy percent, which makes the results of this research study credible. There were 66 valid questionnaires returned of the 80 issued making a response rate of 82.5%. Since the questionnaires were entity based, a response of 66 entities is adequate to investigate the research questions of this study given the identical mode of operations the sampled SACCOs had. Out of the 20 face to face interviews sought, 17 were successfully attained by the researcher

4.3 Demographic findings of the respondents

This section provides information in regards to characteristics of the respondents. These includes the gender, registration status, length in service, position of respondent, experience, education level and reasons for setting up SACCOs, lastly formality of risk management. Clear understanding of the study variables is premised on some demographic conclusions such as level of education, experience reason for setting up the SACCOs among others. Population characteristics improve the researcher's confidence in the chosen population sample.

Table 4.2: Characteristics of the respondents

Variables	Category of response	Frequency	Percent (%)
Gender	Male	41	62.1
	Female	25	37.9
Age of SACCO	1-3 years	14	21.2
	4-6 years	28	42.4
	7-9 years	15	22.7
	10 and Above	9	13.6
Position of member	Committee Member	8	12.1
	Secretary	1	1.5
	Treasurer	11	16.7
	Vice Chairperson	4	6.1
	Chairperson	42	63.6
Experience of respondent	1 -3 year	30	45.5
	4 -6 years	33	50
	7- above years	3	4.5
Education level	Secondary	18	27.3
	Diploma	14	21.2
	Degree	33	50.0
	Masters	1	1.5
Reason for setting up SACCO	Social Needs	14	21.2
	Political or government	5	7.6
	Employment	13	19.7
	Market Demand	3	4.5
	Business Motive	27	40.9
	Church Based	4	6.1
Risk Management	Formal	22	33.33
	Informal	44	66.67

Source: (Primary Data, 2019)

In regards to table 4.2 the findings indicate that majority of the respondents are male (62.1%) as compared to females who constituted 37.1percent the management of SACCOs had both sexes represented in leadership positions, it was discovered that majority of respondents 54.5percent had 4 years and above experience in SACCO management implying that they had good knowledge of the concept of financial sustainability of SACCOs

Risk management was formally undertaken in 22 of the 66 SACCOs, representing a 33.33 percent rate, given that risk management is a formal and compulsory practice in all commercial banks, MDI, and credit institutions, the significance of this revelation is that most SACCOs don't have risk identification and control mechanisms in place hence they to suffer from financial shocks without adequate preparedness.

It was also discovered that 63.6 percent of SACCOs are aged between 1 to 6 years, this shows that they have only recently been set up mostly because old SACCOs failed and closed. It is important to note that SACCOs have existed in Uganda particularly in Busia District for over 20years and finding such a high number of new entities justifies the researchers 'concern that SACCOs are not financially sustainable in the district.

27 SACCOs of the 66 sampled SACCOs (40.9%) were set up with a purely business motive of which only 9 (33%) appreciated risk management, the SACCOs mostly invested in Transport, events management materials, fishing and agriculture, this inadequate consideration for risks is bound to negatively affect the financial and operational capability of these SACCOs, which explains the high failure rate stated in chapter one. 48.5 percent of SACCOs were managed by leaders with average qualifications of Secondary/tertiary/diploma certificates, important to note is that at these levels of education there is less integration of business management skills in the curriculums particularly risk management, such graduates do not have adequate skills to manage

a financial institution effectively and efficiently without professional assistance hence failing their institutions over time, however majority of respondents had a degree

Structured interviews revealed high inability of leaders in this education group towards internalization of the instrument and concepts of this study.

4.4 The Conceptual Study Findings

The study findings in this chapter will first present the findings of the dependent variable followed by findings related to the study objectives in their order as presented in the introduction to this chapter. The subsection is intended to present the actual views and findings related to specifically the variables of the study.

4.4.1 Financial Sustainability

The Researcher intended to assess the level of financial sustainability of SACCOs in Busia District by measuring the effect of risk management on to financial self-sustainability and operational self-sustenance.

Financial self-sustainability was measured basing on both structured questionnaire responses and review of financial records to compute the return on Assets(ROA) in these SACCOs where data pertaining to Annual profits and assets from 2014 to 2018 was analyzed, whereas Operational sustainability was measured using both structured questionnaires responses and document review where data pertaining to current asset and current liabilities for 2014 to 2018 was gathered and analyzed to establish the current ratio (CR) in these SACCOs.

This Approach was intended to not only complement data from both methods but also to check for relevance and reliability of data gathered and analyzed.

Table 4.3: Descriptive Findings on Financial Sustainability of SACCOs in Busia District

Item Variables	Mean	Std. Deviation
Our internal income sources contribute over 50% of our total income	4.14	1.188
Our internally generated incomes are majorly loan interest	4.48	1.180
We always collect all receivables on time	3.01	1.119
We supplement our expenditure with a loan/(s) from other financial	3.50	1.748
The SACCO has invested in other income generating businesses other	4.55	.995
The investments contribute significantly to our income	4.45	.661
There is no claim against any fixed assets stated in the financials	4.15	1.180
We have an up to date financial plan for the year	4.24	.878
Our working capital expenditure is 100% financed by internally generated	4.21	1.271
Our payables can be paid off by our internally generated incomes at any	4.17	1.104
Sometimes we borrow money to supplement our working capital	3.06	1.263
There is a match between our receivables days and our payables days	3.89	1.125
Our receivables days are lesser than our payables days.	2.45	.863
We have met our due financial obligations on time for the past one year	3.36	.987
Average Mean	**3.69**	**0.477**

Mean: (0-1 very low, 1.1-2.0 low, 2.1-3.0 Average, 3.1-4.0 High, and 4.1-5.0 Very High) based of researcher's computation.

Results in table 4.3 depict an Average mean response of 3.69 with SD 0.477 which implies that majority of respondents agreed with the indicators in this variable, notably though is the item 2 that respondents agreed to claiming that their major sources of internal revenue was loans to members (Mean 4.48, SD 1.180) however , 90 percent of Respondents also agreed that their

SACCOs had invested in other income generating businesses and that these businesses contributed significantly to their finances (Mean 4.55, SD 0.995 and Mean 4.45, SD 0.661 respectively)

The significance of the above observation is that most SACCOs cannot sustain themselves on only members' savings and loans which traditionally is the way SACCOs operate, this has influenced them to start up other business ventures to supplement their incomes.

Interviews revealed that 70 percent of SACCOs once operated or still operate using external funding sources such as government handouts through projects like NAADS, Operation wealth Creation, Hard Cash from politicians and international donors, of the 17 respondents interviewed, 12 alluded to this fact.

Important to note is item 3 and 13 that tested whether SACCOs collect all their receivables on time which as noted above are mostly loans issued to members, as discovered in the table above, a (mean of 3.01, SD 1.119) clearly shows that SACCOs are not effective when it comes to collecting their receivables. Item 13 revealed that the credit policy of most SACCOs leaves them susceptible to cash flow problems, which is consistent with the interview results which revealed that indeed the biggest risk identified by most respondents was delayed or failure to recover loans.

4.4.2 Level of financial Performance of SACCOs in Busia District

The researcher reviewed financial records of respondents to compute their Return on Capital and Current ratios, the data was segmented in to 2 segments, the first segment analysed data from SACCOs that formally recognized risk management and the second segment had responds to whom risk management was incidental to their business or informally practiced it.

Table 4.4: ROA for SACCOs with Formal Risk Management of SACCOs in Busia District

(ROA= Profit after taxes /Assets) UGX (Millions)			
Period	**Profits**	**Assets**	**ROA**
2014	2,367	20,290	11.67%
2015	2,659	19,565	13.59%
2016	3,735	21,336	17.51%
2017	6,744	30,225	22.31%
2018	7,766	31,225	24.87%
Average	**4,654.20**	**24,528.20**	**18.97%**

From the table 4.4 above, shows Aggregated net profits and Asset Portfolios of SACCOs sampled and their respective return on Assets, the Return on assets is not only high but showed growth trends from 2014 to 2018, an average return on investment of 18.97 percent is good especially if economic factors and risks are considered. This implies that SACCOs with risk management as part of their routine operations are bound to record higher and growing ROA which may improve their financial sustainability.

Table 4.5: ROA for SACCOs without Formal Risk Management Structures

(ROA= Profit after taxes /Assets) UGX (Millions)			
Period	Profits	Assets	ROA
2014	5,522	39,655	13.92%
2015	4,152	40,222	10.32%
2016	6,223	38,225	16.28%
2017	3,956	37,556	10.53%
2018	5,421	40,151	13.50%
Average	**5,054.78**	**39,161.80**	**12.91%**

From the above Table 4.5, financial data analysed revealed that SACCOs without formal risk management practices had good Average returns on Assets (12.91%) however when compared to their counter parts with formal risk management practices (18.97%), their returns are comparably lower on average.

Secondly the Annual returns are inconsistent and fluctuate in nature as compared to SACCOs with formal risk management which showed a predictable trend of growth.

The significance of the above observations to this study is that it is true SACCOs that embrace risk management have stable and high returns on Assets as compared to those without this practice as witnessed above.

Table 4.6: Current Ratio for SACCOs with Formal Risk Management

Current Ratio = Current Assets/Current Liabilities UGX (Millions)				Ratio (ideal
Period	Current Assets	Current Liabilities	Current	
2014	6,554	653	10.0	1
2015	5,112	688	7.4	1
2016	7,325	956	7.7	1
2017	8,522	941	9.1	1
2018	10,566	1,025	10.3	1
Average	**7,615.80**	**852.60**	**8.9**	1

From the table above, Data analyzed showed very healthy current ratios over the years from SACCOs whose risk management functions were formal and part of the organizational hierarchy, the ideal current ratio is 2:1 however it was revealed that these SACCOs had a very healthy current ratio 8.9: 1

Table 4.7: Current Ratio for SACCOs without Formal Risk Management

Current Ratio = Current Assets/Current Liabilities UGX (Millions)				Ratio (ideal
Period	Current Assets	Current Liabilities	Current	
2014	16,552	2,362	7.0	1
2015	16,958	1,903	8.9	1
2016	18,522	1,645	11.3	1
2017	15,664	4,698	3.3	1
2018	15,955	8,564	1.9	1
Average	**16,730.30**	**3,834.38**	**4.4**	1

From the above table, data analysed showed that SACCOs without risk management practices registered a good Current ratio of 4.4:1 as seen above, however when compared to their counterparts with formal risk management practices it was revealed that SACCOs with formal risk management practices had twice as much better current ratio (8.9:1) than those without Risk management practices.

The significance of this finding is that, entities with formal risk management are twice more likely to meet their financial obligations than their counter parts without formal risk management practices.

4.4.3 Risk assessment and Financial Sustainability

This objective aims at measuring the capacity of SACCOs in Busia district to operate sustainably through undertaking risk assessment activities. Various indicators of risk assessment were shared with respondents where subsequent Means and standard deviations were computed so as understand the interpretation of the data.

Table 4.8: Descriptive findings on Risk Assessment

No.	Variables	Measures of Central Tendency	
		Mean	Std. Deviation
1	We always gather and identify the risks our SACCO faces	1.29	.456
2	We always record all identified risks	1.32	.469
3	Risk identification is carried out with all members	1.56	.636
4	We maintain a risk register	2.41	1.370
5	we always update the risk register whenever new	2.45	1.372
6	we have external audits annually	2.77	1.465
7	We analyze these risks using modern techniques	1.91	.940
8	After ranking these risks, only top 10 are	1.55	.612
	Average Mean	**1.97**	**.819**

Source: Primary output Data (Mean*: 0-0.8 Very Low, 0.9-1.6 Low, 1.7-2.4 Average, 2.5-3.2 High, 3.3 -4 Very high)*

Basing on the results in the Table 4.8 above, the Average mean is 1.97 which is low, this therefore means that respondents in this section agreed that most times they associated with the above indicators which explain whether the process of risk identification, analysis and prioritization was undertaken by these organizations while managing risks. Proper analysis of risks was done mostly in SACCOs that had formal risk management structures as compared to those without,

Item 4 and 5 in the descriptive statistics above showed that most SACCOs did not maintain a well updated risk register which I s one of the most common contemporary risk assessment technique employed by all risk conscious entities in all industries. Interviews revealed that the most risk analysis techniques used by majority of SACCOs were the probability/Likelihood matrices and expert opinion. It was also discovered that majority of SACCOs do not employ external auditors as seen from the high mean value of 2.77 and SD 1.165 implying that less third party advice is not periodically received to foster sustained growth.

4.4.4 Risk control and Financial Sustainability of SACCOs in Busia District

The intention of this objective was to establish the effect risk control activities had on SACCOs' financial sustainability, which necessitated ascertaining whether SACCOs analysed risks using effective modern techniques, establishing the level of effort placed on mitigating risks pertaining to loans, the methods used when responding to risks and the level of contingency planning.

Descriptive results of this sub variable with mean and standard deviation we carried out and interpreted as below, the mean scores were interpreted basing on table 4.9 above.

Table 4.9: Descriptive Statistics of Risk Control

Variables	Measures of Central	
	Mean	Std. Deviation
We conduct periodical risk planning sessions to ascertain	1.92	.640
the SACCO promptly allocates resources to address risks	1.57	.612
All direct financial risks identified are transferred to third	3.11	1.010
We carry out thorough vetting of loans to all members.	1.35	.668
Every identified risk is always allocated to a person to handle it	1.68	.768
Contingency plans are in place to handle unavoidable risks	1.65	.620
Average Mean	**1.87**	**0.636**

Source: Primary output Data (Mean*: 0-0.8 Very Low, 0.9-1.6 Low, 1.7-2.4 Average, 2.5-3.2 High, 3.3 -4 Very high)*

According to Table 4.9 above, there is a general agreement to the indicators used to measure risk control as seen from the average mean of 1.87 SD 0.636. all SACCOs that had formal risk management structures as established from interviews used modern risk control techniques such as use of Risk matrix to decide risk responses, use of insurance policies among others in comparison to the other segment that inconsistently tried to use modern risk control techniques, this is consistent with the interpretation of the above mean for items 1 and 2 (1.92 & 1.57) respectively.

However, data revealed a gap at the level of risk response. Most of the pure risks were not well handled, ideally pure business risks can be best handled by transferring them to third parties such as insurance entities, this was common and it resulted to financial loss in some SACCOs.

Interviews revealed that basic risk policies like Motor insurance, workman's compensation policies, cash in transit were not transferred to third parties which explains the high mean Value for item 3 (Mean 3.11, SD 1.010)

The questionnaire showed the presence of risk contingency plans in SACCOs as seen from the mean of 1.65, however upon using Interviews and document review tools, it became evident that there were no reliable risk contingency plans in place to assure the researcher in terms of effective mitigation of risks in case of occurrence. This was predominant in SACCOs with informal risk structure whereas 35 percent of SACCOs with formal risk management structures also didn't have effective contingency plans.

4.4.5 Risk Monitoring and Financial Sustainability of SACCOs in Busia District

The researcher's objective was to ascertain whether there existed a relationship between risk monitoring and financial sustainability, risk monitoring sought to find out the effect of continuous monitoring of identified risks, identification of emerging risks, level of reoccurrence of prior handled risks, reviews of the risk management process and risk communication systems.

The descriptive statistics below were computed to aid the researcher interpret this relationship

Table 4.10: Descriptive statistics of Risk Monitoring

Variables	Measures of Central Tendency	
	Mean	**Std. Deviation**
All risk response strategies we use are effective and efficient	1.61	.579
Our team keeps track of all risks identified	1.55	.637
Most re occurring risks are similar to old risks handled before	2.02	.328
This department has adequate resources and support from management	1.95	.935
Risk management processes are always reviewed twice a year.	1.71	.780
We have a standard risk communication plan to share information	2.26	1.232
Average Mean	**1.85**	**0.618**

Source: Primary output Data (Mean*: 0-0.8 Very Low, 0.9-1.6 Low, 1.7-2.4 Average, 2.5-3.2 High, 3.3 -4 Very high)*

Basing on the above Table, majority of respondents agreed to associating with the above indicators as witnessed from the average mean of 1.85 and SD of 0.618, the most notable gaps at this level were the degree of reoccurrence of risks (27%, table 11) of risks mitigated often reoccurred which means the risk response strategies used are often ineffective.

Secondly, the monitoring section is not effective at risk communication strategies, lack of clear risk communication plans is bound to leave the SACCOs vulnerable to new risks that cannot easily be communicated to management, and the mean of 2.26 with SD 1.232 justifies this concern.

4.4.6 Correlation between Risk Management and Financial sustainability of SACCOs in Busia District

Pearson correlation coefficient (r) was carried out by the researcher to ascertain the correlation coefficients between study sub variables in relation to the study objectives, a bivariate correlation analysis was carried out to establish the relationship between study variables and the following results in the Table 4.11 below were established.

Table 4.11 Shows Zero-Order correlation between Risk Management and Financial sustainability of SACCOs in Busia District

Correlations				
	Risk Assessment	Risk Control	Risk Monitoring	Financial Sustainability
Risk Assessment	1			
Risk Control	**.782****	**1**		
Risk Monitoring	**.901****	**.835****	**1**	
Financial Sustainability	**.589****	**.626****	**.329****	**1**
** Correlation is significant at the 0.01 level (2-tailed).				

4.4.6.1 Relationship between Risk Assessment and Financial Sustainability

Basing on the Information from Table 4.11, there is a positive significant relationship between risk assessment and financial sustainability ($r=0.589$, $P<0.000$) which implies that a change in risk assessment results into positive change in financial sustainability.

4.4.6.2 Relationship between Risk Control and Financial Sustainability

Results in Table 4.11 also indicates that there is a positive significant relationship between risk Control and financial sustainability ($r=0.626$, $P<0.000$) which implies that a positive change in risk control results into positive change in financial sustainability.

44.6.3 Relationship between Risk Monitoring and Financial Sustainability

The Table 4.11 also indicates that there is a positive significant relationship between risk monitoring and financial sustainability ($r=0.329$, $P<0.000$) which implies that a positive change in risk monitoring results into positive change in financial sustainability.

4.4.7 Multi Regression analysis

To determine the level, the independent variable predicts variations in the dependent variable, the researcher carried out a multi regression analysis on the study dimensions and established the followed results.

Table 4.12 Multi Regression analysis on Risk Management and Financial Sustainability

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.938	.090		14.809	.001
	Risk assessment	.005	.078	.009	.067	.947
	Risk Control	.705	.077	.939	7.125	.004
	Risk Monitoring	.033	.116	.043	.287	.775

a. Dependent Variable: Financial Sustainability

Source: (Primary Data, 2019)

Table 4.13 Regression Model Summary

Model	R	R Square	Adjusted R Square	Sig
1	.697[a]	.604	.595	.001

a. Predictors: (Constant), Risk Monitoring, Risk Control, Risk assessment

The Model summary presented in Table 4.13 above indicates that three independent variable dimensions considered in this study had an adjusted R square value of 0.595. This implies that 59.5 percent of variations in the dependent variable (financial sustainability) can be explained by risk management and 40.5 percent explained by factors not considered in this study. Which clearly shows that the model adopted for analysis of this regression is a good fit.

CHAPTER FIVE

DISCUSSION, SUMMARY, CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS

5.0 Introduction

This chapter presents the discussion of findings, conclusions, summary of findings and recommendations towards improving risk management practices in micro credit institutions. This chapter contains in-depth discussions on how risk Assessment, Risk Control and Risk Monitoring affects financial sustainability. An overall view on the extent to which risk management can be used to improve sustainability of SACCOs is presented as well as the degree to which study findings depicted relate to the theory.

5.1 Discussion of Study Findings

This section discusses how actually risk assessment, control and monitoring affects financial sustainability, and how the findings complemented, or contrasted with those advanced by prior researchers and authors.

5.1.1 The Effect of risk assessment on financial sustainability of SACCOs in Busia District.

The study findings revealed that there is significant positive relationship between risk assessment and financial sustainability of SACCOs, this finding emphasizes the importance of carrying out extensive and in-depth assessment of the possible organizations' risks if they are to successfully improve their financial sustainability.

The above finding is consistent with (Carbone & Tippet, 2004, para. 1). Who found out that MFIs that have embraced consistent risk assessment and control have been very successful and sustainable for years, Dionne, (2013), and Boehm, (1988) emphasized too that any project functioning on weak risk assessment foundations cannot effectively and efficiently meet its objectives, this analysis is very applicable to SACCOs in this study since in the course of achieving

their preset objectives they are often exposed to quite a number of financial risks that must be thoroughly assessed to establish appropriate response strategies.

Bayer, (2012) also discovered that unsustainability of MFIs was due to lack of knowledge and experience in accurately predicting risks that were impactful to their finances and operations, which is also evident in this study, most SACCOs do not have specialized risk management knowledge and rely on basic risk identification techniques such as experience and discussions where often at this point the effect of the threat is already impacting the SACCO

In relation to the study theory, Decisions are riskier if this process is ineffective and where adequate risk assessment is undertaken a high degree of certainty facilitates effective and informed decision making which reduces an entity's risk exposure.

The key revelation in this study area too is that majority of SACCOs do not embrace risk management practices where majority of interviewed respondents cited cost as the main deterrent to risk management this finding is consist with (Apine & Valdés, 2016) who recommended that MFIs must customize this process to fit in their budget due to the possible cost implication, almost all SACCOs do not maintain risk registers and hence cannot regularly monitor and update their list of risks, it is also evident that majority of SACCOs do not employ the services of external audit experts, these are avenues they would use to improve performance and sustainability since audit involves identification of possible threats to the client and presentation of possible mitigation strategies,. This observation complements (Okumu, 2007) who assessed the micro finance industry performance in relation to regulation and recommended the need to upscale SACCOs to levels that can be regulated which would call for regular audits on key performance and sustainability functions.

5.1.2 Effect of risk Control on financial sustainability of SACCOs in Busia District

The findings of this study revealed a significant positive relationship between risk control and financial sustainability, which explains the fact that risks are actually mitigated or neutralized at this stage, the actual impact of risks on the financial performance of SACCOs is checked only if identified risks are adequately and appropriately handled at this stage.

This strong relationship between the variables means that proper planning and implementation of planned strategies is bound to improve the SACCOs financial health, (Marwa, 2015) reechoed this observation in his study where he revealed that strong control of financial risks had a direct correlation with operational efficiency.

The study findings too showed consistency with (Siaw, 2013) who revealed that successful mitigation of risks is key to sustainable profitability, whereas most SACCOs were profitable, the trend showed a sustained reduction in that industry when compared to low risk control functions exercise by SACCO management, the implication is that over time some SACCOs will close.

5.1.3 Risk Monitoring and financial sustainability of SACCOs in Busia District

The study findings revealed a weak positive relationship between risk monitoring and financial sustainability of SACCOs, which is logical given the fact this point at which the risk management process is consolidating the whole function through monitoring priority risks, bench marking best practice and improving communication with in the entity.

However this low relationship also explains why there were high numbers of risks re occurring over the years, according to documents reviewed, on average 27 Percent of risks re occurred at one point, which leaves a big gap in how risks are monitored and given the dynamics involved, how the entities evolve in order to appropriately handle these risks. (Apine & Valdés, 2016) and (Iqbal et etal.,2015) Underlined the importance of risk monitoring in line with the PMBOK, (2000)

by asserting that effective risk monitoring will provide information that is useful in handling risks before they occur or when they evolve, the study found out a big gap in this particular variable which explains the high and persistent re occurrence of risks.

The gap at this level costed SACCOs valuable information which according to (Rejda, 2008), would consist of information such as, whether the risk responses are being implemented as planned and if so, are they as effective as planned or new strategies must be developed, whether the entity's risk exposure changed or not, whether any risk trigger(s) have occurred, and are there new risks that were previously not identified. Or whether the risk management policies and procedures are being followed among others.

5.2 Summary of Study Findings

Whereas it is evident a positive relationship exists between risk management and financial sustainability of SACCOs in Busia District, there are a lot of variables in the risk management process that must be given due consideration for an organization to reap the benefits, first and foremost, risk management needs to be customized to the entity's internal and external environment by putting in place systems that will appropriately identify, analyze, mitigate and monitor risks that are relevant to the financial health of that organization. In most SACCOs in Busia District, this process was non-generic in practice, every risk that was perceived as one was given equal resources as the risks that looked generic, and this always led to failure to fully control relevant risks leading to continuous re occurrence of the same risks over and over.

Secondly, over 65 percent of SACCOs in the district do not have formal risk management structure either by just having a risk officer on to the management committee or having an independent department or section charged with risk management activities which justifies the high SACCO failure rate in the district.

The strategies or risk control methods majorly preferred by SACCOs in this study were mainly inappropriate, risks that needed transferring to a third party were not, risks that needed avoidance were instead mitigated, risks that could have been embraced due to their possible positive benefits in the future were avoided in favor of short term low short term gains, this is an area that disadvantaged most of these entities.

With exception to some of the SACCOs in the municipal area, NABUSACCO that had operations in Bugiri, Namayingo, Busia, the risk appetite for most of the SACCOs was averseness and neutral in nature, they all tended to go for safe investments such as buying chairs, tents, saucepans, bodabodas, fishing gears among others other than investing in exportable products that could easily be exported through the busy boarder point in the district taking advantage of the trade opportunities brought by the East African Community or the COMESA among others

5.3 Conclusion

The objective of this study was to establish the effect of risk management on to the financial sustainability of SACCOs in Busia district. The study findings indicated that continuous risk management will improve the financial health of the SACCOs, however, the study indicated that the most important and significant contribution in this process is risk control, how well the response strategy adopted to address the risks identified determines the success of the whole process, even in SACCOs that had formal risk management structure but with ineffective risk response strategies, their finances followed a very fluctuative pattern, therefore, financial sustainability is best explained by changes in risk control than any other subvariable in this study.

The main concern this study indicated too basing on interviews, was the low level of appreciation for risk management in the SACCOs, whereas most of them intimated that this process is expensive, lack of information on the benefits of this process was evident, some SACCOs associated this process to tax compliance saying they did not want to do businesses that will attract

a lot of taxes, some rightly so said skilled risk officers may be expensive to maintain on full time basis, some said they feared expanding because other SACCOs that tried had failed among others, all these concerns are legitimate however, they can all be appropriately addressed in the risk management process

5.4 Recommendations

Basing on the study findings, the researcher recommends that the district leadership comes up with a programme to sensitize SACCOs in the whole district about the potential benefits of risk management, how it can be incorporated in the SACCOs' management structures and where necessary how to undertake the whole process. This sensitization must be followed by where possible identifying one member of the SACCO management committee that can be trained in risk management especially for SACCOs that cannot afford to hire a risk officer, that member can then start undertaking this process which will stabilize these entities' finances over time.

Basing on the key findings, the researcher also recommends that policy makers at national level and particularly local government level add a position in the local government structure in every district, Municipality, city and townships of a risk officer SACCOs to supplement the work of the current commercial officers, having this position will enable SACCOs which cannot afford having an internal risk officer consult from this person with regards to risk management, this position occupant must also be well facilitate to go in the field and carry out risk management activities for numerous SACCOs as he/she capacity builds them.

The researcher recommends too that SACCOs need to localize or customize the risk management process for it to address possible risks that are inherent to the particular SACCOs, the strategies adopted by one entity to address a particular risk may not be the same another entity needs to address that very risk, this is so because the study revealed a lot strategy benchmarking and

implementation by most SACCOs without customization of the strategies to the particular SACCO.

The government needs to enforce the MFI law so that proper regulatory oversight is done in this industry, this is due to the extremely low culture of both internal and external audit which exposes the SACCOs to numerous internal and external risks.

5.5 Suggestions for Further Research

This study focused on SACCOs that were registered with the district commercial office, which were only 45% of all the SACCOs in the district, further research may be needed that integrates all the population elements to give a broader view on how risk management associates with financial sustainability.

This study also focused on the risk management process with less consideration to the particular risk management practices and how they affect financial sustainability, further studies may be conducted in this area to establish the particular effect of risk management practices on the financial sustainability of SACCOs in the District.

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APPENDICES

Appendix 1. Study Questionnaire

KYAMBOGO UNIVERSITY

ACADEMIC RESEARCH QUESTIONNAIRE

Dear Respondent,

I am Hannibal Wandibba a student of Kyambogo University pursuing Master of Business Administration (MBA) degree. I am undertaking a research on Risk Management and Financial sustainability of SACCOs Busia District, Uganda.

You have been identified as a key person to give accurate data about the study, kindly spare 20 minutes of your time and participate in this study by filling the questionnaire. The study is purely academic and all data provided shall be treated with utmost confidentiality. I hope that timely completion of this questionnaire will indicate your continued support.

SECTION A: Background information (*Please tick the appropriate box*)

a) Gender: Male ☐ Female ☐

b) Name of your SACCO: .....

c) Registration Status of the SACCO: Registered ☐ Unregistered ☐

d) How long has your SACCO existed

1 to 3years	4 to 6 years	7 to 9 years	10 and Above

e) Indicate your position

Committee member	Secretary	Treasurer	Vice Chairperson	Chairperson

f) How long have you worked in top management of the SACCO (years)

1	2	3	4	5	6	7	8	9	10	Above

g) Education Level

Primary	Secondary	Diploma	Degree	Post Graduate	Master	PHD

h) What was the reason for setting up this SACCO?

Social Needs	Political/Government Program	Employment	Market Demand	Business Motive	Church Based	Others: Specify

i) Is Risk Management an independent section/department in the SACCO?

Yes	No

SECTION B: RISK MANAGEMENT

Please tick (√) the appropriate box or correct response on the basis of the following basis:

Most Times	Some Times	Not Sure	Not At All
1	2	3	4

A	**RISK ASSESSMENT**	1	2	3	4
1	We always gather and identify the risks our SACCO faces				
2	We always record all identified risks				
3	Risk identification is carried out with all members involved				
4	We maintain a risk register				
5	we always update the risk register whenever new risks emerge				
6	we have external audits annually				
7	We analyze these risks using modern techniques				
8	After ranking these risks, only top 10 are controlled or handled				
B	**RISK CONTROL**				
9	We conduct periodical risk planning sessions to ascertain appropriate risk response strategies				
10	The SACCO promptly allocates resources to address risks identified				
11	All direct financial risks identified are transferred to third parties s such as insurance companies				
12	We carry out thorough vetting of loans to all members.				

13	Every identified risk is always **allocated** to a person to handle it				
14	Contingency plans are in place to handle unavoidable risks				
C	**RISK MONITORING**				
15	All risk response strategies we use are effective and efficient				
16	Our team keeps track of all risks identified				
17	Most re occurring risks are similar to old risks handled before.				
18	This department has adequate resources and support from management				
19	Risk management processes are always reviewed twice a year.				
20	We have a standard risk communication plan to share information				

Other Questions

1. How many risks have you **identified in the past 12 months**.....
2. How many could have had a direct negative impact on the financial performance of the SACCO? .....
3. How many could have had a direct positive impact on the financial performance of the **SACCO**.....
4. How many loan contracts have been subjected to risk assessment? .....
5. How many risk assessment sessions have been conducted this year? .....
6. Of the risks identified how many have been analysed by management? .....
7. Of the analysed risks how many have been prioritized as critical this year? .....
8. Of the risks ranked as critical this year how many have been mitigated or handled this year? .....
9. Of the mitigated risk, how many have been forwarded for intense monitoring? .....
10. Of those not handled yet, how many have been forwarded for monitoring? .....
11. Of all the monitored risks, how many have re occurred with in this period? .....

SECTION C: FINANCIAL SUSTAINABILITY

Please tick (√) the appropriate box or correct response on the basis of the following scale:

Strongly Disagree	Disagree	Not Sure	Agree	Strongly Agree
1	2	3	4	5

	FINANCIAL SELF-SUSTAINENCE	1	2	3	4	5
1	We have both internal and external sources of income					
2	Our internal income sources contribute over 50% of our total income					
3	Our internally generated incomes are majorly loan interest					
4	Our externally generated incomes are very reliable					
5	We always collect all receivables on time					
6	We supplement our expenditure with a loan/(s) from other financial institution/(s)					
7	The SACCO has invested in other income generating businesses other than loans and fixed deposits					
8	The investments contribute significantly to our income					
9	There is no claim against any fixed assets stated in the financials					
10	We have an up to date financial plan for the year					
	OPERATIONAL SELF SUSTAINENCE	**1**	**2**	**3**	**4**	**5**
11	Our working capital expenditure is 100% financed by internally generated incomes					
12	Our payables can be paid off by our internally generated incomes at any time					
13	Sometimes we borrow money to supplement our working capital effectively					
14	There is a match between our receivables days and our payables days					
15	Our receivables days are lesser than our payables days.					
16	We have met our due financial obligations on time for the past one year					

FINANCIALS

Income

Total annual Profits

2018	
2017	
2016	
2015	
2014	

Total annual Assets Value

2018	
2017	
2016	
2015	
2014	

Current Assets/Liabilities

Annual Current Assets	
2018	
2017	
2016	
2015	
2014	

Annual Current Liabilities	
2018	
2017	
2016	
2015	
2014	

Thank you for your time and cooperation

Please contact me on 0756 877110 for any clarity.

Appendix 2. Study Interview Guide

Study Interview Guide

1. Does your SACCO have both internal and external source of income_ External may include: political tokens, grants from gov't, donors.....?
2. To what extent do you think risk management is crucial to your SACCO's success? **And why**.....
3. Briefly, take me through your risk management process_ **probe process knowledge, skill, modernity of approach, level of process customization, probe for RM practices used**

   .....
4. What challenges do you think may hinder successful implementation of risk management?.....
5. Are you familiar with the concept of financial sustainability? If respondent isn't give a brief.....
6. In your view, do you think successful implementation of RM can improve your SACCO's financial sustainability? .....

Appendix 3. Document Review Guide

DOCUMENT REVIEW GUIDE

1. **Confirm approval to review respondent data**.....

2. **Respondent code/no**.....

3. **Document review tracker**

Details Of Data To Be Reviewed	Status Of Review	Remarks
Current Asset (2014-2018)		
Current Liabilities(2014-18)		
Total annual Income (2014-18)		
Total assets value (2014-18)		

Appendix 4. Study Progress Approvals

KYAMBOGO UNIVERSITY
P. O. BOX 1 KYAMBOGO
Tel: 041 - 4286792 Fax: 256-41-220464
Website: www.kyu.ac.ug
Office of the Dean, Graduate School

10th June 2019

To Whom It May Concern

RE: LETTER OF INTRODUCTION

Dear Sir/Madam,

This is to introduce **Mr. Hannibal Wandibba** Registration Number **16/U/13341/GMBA/PE** who is a student of Kyambogo University pursuing a Masters Degree.

He intends to carry out research on **"Risk Management and Financial Sustainability of SACCOs in Eastern Uganda: A case of Busia District"** as partial fulfillment of the requirements for the award of the Masters in Business Administration.

We therefore kindly request you to grant him permission to carry out this study in your institution.

Any assistance accorded to him will be highly appreciated.

Yours sincerely,

KYAMBOGO UNIVERSITY
★ 19 JUN 2019 ★
OFFICE OF THE
DEAN GRADUATE SCHOOL

Assoc. Prof. Muhamad N. Wamboga
DEAN, GRADUATE SCHOOL

Form: KYU/GS/NS/2

APPENDIX 3: NOTICE OF SUBMISSION OF THESIS

The student to submit three (3) copies of this form and submit it to the Graduate School

TO: The Chairperson, Kyambogo University Graduate School Board

FROM:
Student's Name: KIANDIBBA HANNIBAL
Registration Number: 16/U/13341/GMBA/PE
Student Number: 1606800133 41
Department: MANAGEMENT SCIENCE
Faculty/School: SOME
(Part Time/Full time)

I propose to submit my thesis (MAG, MARS, MBA, MeD.PPM. MAH, MSc.SCM, MSP, MOPP or PhD) For examination on or before Day:.....Month .....
Year:.....

Area of Specialization MBA-FINANCE (e.g. Sport science, Literature etc)
Thesis Title: RISK MANAGEMENT AND FINANCIAL SUSTAINABILITY OF SACCOS IN EASTERN UGANDA: A CASE OF BUSIA DISTRICT.

Student's signature ..... Date: 28/06/19

Comments from the following:

(a) Principal Supervisor:

Approved for examination

Name: Dr. MAURICE MUKOKOMA
Sign: ..... Date: 5/07/2019

(b) 2nd supervisor(s) comments:

APPROVED

Name: DR KIASIGWA GERALD

Sign: ..... Date: 3/07/2019

(c) Programme Coordinator

Good program

Name: Hajjat Bakari Hamad

Sign: ..... Date: 5th/7/2019

(d) Chairman Departmental Graduate & Research Comments:

Name: Hajjat Bakari Hamad

Sign: ..... Date: 5th/7/2019

(e) Chairman Faculty Graduate & Research Comments:

Submitted

Name: .....

Sign: ..... Date: 8/7/2019