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Credit Risk Management and Performance of Loan Portfolios of Deposit Taking Savings and Credit Co-Operative Societies in Garissa County, Kenya

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ABSTRACT

The SACCO sector significance cannot be ignored since it helps in the growth of the economy and realization of country's vision 2030. It also contributes the growth of gross domestic product, creation of jobs and creating opportunities for the young and women. The SACCOs have experienced a tremendous reduction of total loans to total deposits for the period 2014 to 2016 according to the current SASRA report. The industry reported a total loan to total deposits percentage of 110 in 2014, 108 percent in 2015 and a further decrease of 1 percent in 2016 to 107 percent. The trend raises the problem why the decrease, what will cure the decrease and what are the causes of the major decrease in Kenya. The challenge of credit risk has dominated in all financial sector in the world and majority of the institutions having faced increase in loan default rate. The functions of credit management is to facilitate the administration of loans and loan efficient management in ensuring funds are distributed equitably and liquidity is maintained. The study aimed to assess the effects of credit risk management on the performance of loan portfolios among SACCOs licensed by SASRA in Garissa County. The study sought to determine the effect of credit risk identification, risk analysis, risk monitoring and control and credit approval on performance of loans portfolio among SACCOs in Garissa Kenya. The study was anchored on the following theories which include liquidity theory of credit, portfolio theory, credit risk theory and agency theory. The study adopted a descriptive research design. The target population for the study was 6 Deposit Taking SACCOs. The sample size were 53 credit managers in the deposit taking SACCO'S who were selected using purposive sampling. The study used primary data; primary data was obtained through questionnaires. Data collected was analyzed using descriptive statistics that yield tables, charts, mean and standard deviation that was used to give meaning to the data collected. Additionally, multiple linear regression analysis was used. The findings and recommendations of the study be invaluable to a multiplicity of players. The SACCO managers appreciated credit risk management practices impact on loan portfolio performance. Management also had opportunity to review credit risk management practices as well as their impact on financial performance. To the academicians and researchers, the study broadened the knowledge on credit risk management practices and the practice of applying modern portfolio theory to credit risk and financial performance of SACCOs in Kenya. The study concluded that the SACCO had a credit monitoring policy. The study also concluded that that the Sacco monitors cash flows of borrowers continuously. It also concluded that Sacco had constant contact with borrowers. The study concluded that Sacco had response mechanisms for anticipated credit risks. It also concluded that

Sacco had mitigation strategies for anticipated losses. The study lastly concluded that the Sacco reviews client's loan repayment patterns. The studies recommended that all Sacco's should create credit risk monitoring on performance the loan portfolios as this will enable Sacco to monitors cash flows of borrowers. It would also help Sacco to be in contact with borrowers to identify and get quarries from them on the effect of credit approval on performance of loan portfolios among SACCO's in Garissa County, Kenya.

INTRODUCTION

Background of the Study

The structured risk management is necessitate by the changes in the competition, the expansion of businesses, financial activities globalization, technology, emergence of new products and level of deregulation of some the financial institutions activities. For a financial institution to do well in the current competitive market, it must ensure they monitor measure and control the credit risks facing them. The sophistication of risk management framework, the processes, controls used for used risk management depends on the size of the business and complexity of its operations. However, certain principles apply to financial institution regardless whether they are complex or huge and can be effectively utilized for the benefits of the institutions in general and help in the reduction of credit risk (Cuevas & Fischer 2006).

The composition of risk management framework entails the managed risk scope, systems of processes and the procedures of managing risks not forgetting the responsibilities and roles of individuals in managing risks (Uyemura & Deventer 2003). These frameworks should be all inclusive enough to capture all risks a financial institution is facing and that the financial institutions must face each challenge with flexibility in accommodating the changes in the operations.

Credit cooperatives in Kenya and in the globe play a very vital role in the development of the economy and growth of the regions in Africa which are disadvantaged. They perform the function of concentrating in that niche market where people with small income, small businesses, farmers and entrepreneurs who need funds to start or boost their businesses. They give credit without collaterals which are required by banks to secure credits (Cabo *et al.* 2006). Cooperative societies are therefore very important institutions who are able to finance a very important section in the society. The have been the leverage for many entrepreneurs and more so on agriculture sector in the country. In fact, some studies show the role of credit institutions in rural poverty improvement (Singh et al., 2007) or how financial activity promotes the growth of cooperatives.

Co-operatives have played an important role in the development of the economics of Kenya, Uganda and Tanzania and have led to the uplifting of the standards of living of the people. It is estimated that there are 8 million Co-operative members in Kenya and more than 3 million members in Savings and Credit Co-operatives (SACCOs) while there are about 6.000 SACCOs out of the 12,000 registered Co-operative Societies. According to the Minister of cooperatives, the co-operative movement is currently boasting of savings mobilization of Ksh 180 billion with an

asset base ofSh200 billion (The Standard 24th April 2016). Loans outstanding Kshs.95 billion (US$1.3 billion) Co-operatives have been involved in the provision of credit for the purchase of land, farm inputs, housing, education, medication and development of various business ventures (Private Sector Initiative for Corporate Governance, 2009).

The process of managing loan portfolio or loan portfolio management (LPM) entails the management and control of the risks facing various parts of the businesses. Loan portfolio management is very important and that it the main activity of every manager in the financial institutions. It involves the evaluation of steps of management of risks in identifying, control and monitoring the credit risks throughout the operations process. This involves the management getting involved in the risk issues before they extend to affect the business operations (Owira 2011).

Credit Risk Management

Credit Risk management is a process of managing and administering loan portfolio in the SACCOs thus enabling equitable distribution of resources and liquidity planning. Credit management should be guided by policies and procedures, the co-operative act, strategic plan, regulatory framework and by-laws which are clearly spelt out in order to achieve prudence and accepted best practice. Three operational aspects of the savings and credit co-operative are savings, credit and external funds channeling to members (Kealhofer, 2003).

The SACCO management committee is mandated to formulate, review and amend the policy of the loans. The committee on supervisory is mandated to ensure that the policy on loans is adequately exercised and it achieves the aim it is supposed to achieve. The SACCO committee occasionally determines whether the policy is being complied with by reviewing a sample of issued loans to the members. Some of the major goals the policy is supposed to achieve are; efficient establishment of credit administration procedures, recovery of loans funds, developing a fair loaning system and guiding the board members and staff on process of giving loans (Kealhofer, 2003).

Performance of Loan Portfolios

According to Kurui and Kalio (2014) Loan portfolio entails the loaned funds inform of various products to various customers. It entails the loans to individuals, salary loans, loaned to groups, and loans advanced to companies (murugu, 2010). According to Crabb and Keller (2006) loan portfolio refers to the loans advanced to the customers of the bank and the amount of money loaned out. Kurui and Kalio argued that to ensure survival of majority of the financial institutions, majority have relied on the pattern of giving out loans at the same time considering the agreement with the customers thus ensuring loans are paid in time. Kipchumba (2015) posited that these calls for restrictive policy on credit control to reduce the unnecessary lending of funds in order to improve the financial institutions financial performance.

SACCO's in Garissa County, Kenya

The core function for every savings and cooperative society is the provision of credit. For equitable distributions of funds and planning for liquidity, it is prudent for SACCO managers to ensure that loan portfolio is efficiently managed and administered. Credit management should be guided by clear policies and procedures, regulations of the SACCOs, by-laws, cooperative act for in order to achieve best practice and prudence. Three operational aspects are clear in the normal operations of the SACCO that is; giving credit, saving services and channeling of external funds (Ogilo, 2011).

The SACCO committee on management is mandated to formulating, review and loan policy amendments. The work of the supervisory committee is to ensure that loan policy is adequately adhered to and that the management achieves the yearly goals. The committees establish if the loan policy was followed in giving and collected the loans from customers. The committees periodically review a sample of loans issued to customers in ensuring the policy and procedures were followed to the later. The policy on loans is supposed to ensure the following; determine whether proper loaning system was used, help in loan recovery, ensure proper credit administration procedures are followed and guiding the employees and members of the board on the loaning process (Labie, 2008).

Ownership of SACCOs, governance and management is done by the members who have a common characteristic. The characteristic could be employer, social fraternity, geographical among others. Unlike commercial banks, SACCOs are member owned and provide credit facilities which are guaranteed by members. In addition, SACCOs do not offer current accounts as they are not in the clearing house. In developing economies SACCO represents one of the most important source of finance to the entrepreneurs over the last decade, but they have faced a variety of challenges in their attempt to grow. The challenges have been researched by various researchers and scholars and similar studies have portrayed a contradicting results. Their active roles in the support of the economy has not been ignored at all with many researchers interested in their financial performance (Labie & Périlleux, 2008; Armendariz & Morduch, 2005; Magill, 1994).

Statement of the Problem

The SACCO sector significance cannot be ignored since it helps in the growth of the economy and realization of country's vision 2030. It also contributes the growth of gross domestic product, creation of jobs and creating opportunities for the young and women. The SACCOs have experienced a tremendous reduction of total loans to total deposits for the period 2014 to 2016 according to the current SASRA report (2017). The industry reported a total loan to total deposits percentage of 110 in 2014, 108 percent in 2015 and a further decrease of 1 percent in 2016 to 107 percent (Maiti, 2015). The trend raises the problem why the decrease, what will cure the decrease and what are the causes of the major decrease in Kenya. The challenge of credit risk has dominated in all financial sector in the world and majority of the institutions having faced increase in loan default rate.

A study by Esendi (2013) and Kimeu (2008) found that the managing credit risks process in commercial banks was not effective in securing bank loans. The study presented a gap in the failure to show the relationship between credit risk management and loan portfolio performance. The Stulz (1996) study found that some risks present opportunities through which the firm can acquire comparative advantage, and hence enable it to improve on financial performance. Generally, review of the literature on risk management seems to suggest that better risk management practices result in improved financial performance of the firm. By linking risk management and performance, insurance firms can more effectively and efficiently understand the value of implementing a risk management framework.

Silikhe (2008) studied the effect of credit risk management on loan default and found that loan recovery in the financial institutions is a challenge despite strict measures on credit risk management. The same challenges afflict loaning by SACCOs. The Aon Risk Solutions and Wharton School (2011) study found the existence of a positive relationship between the maturity of a firm's risk management framework and its financial performance. The findings of the study reflect that higher risk maturity is associated with improved ROA and stock performance for most firms. Ernst and Young (2012) also reinforces this point of view by suggesting that companies with more mature risk management practices outperform their peers financially, and tend to generate the highest growth in revenue.

A study on the impact of credit risk management practices on the commercial bank's financial performance in Kenya by Mwangi (2010) showed evidence that risk management and the related practices are considered significantly important to the operations and financial performance of these financial institutions in Kenya. The study indicates that credit management practices significantly affects financial performance. The study presents contextual gap in that the current study focuses on loan portfolio while this study concentrated on financial performance. This study filled this empirical gap by determining the effectiveness of credit risk management practices on loan portfolios performance of SACCOs in Garissa town.

Objectives of the Study

General objectives

The generalobjective of the study was to establish the effect of credit management on performance of loan portfolios among SACCOS in Garissa County, Kenya.

Specific Objectives

The study was guided by the following objectives;

i. To determine the effect of Credit risk monitoring on performance the loan portfolios of SACCO's in Garissa County, Kenya
ii. To establish the effect of credit approval on performance of loan portfolios among SACCO's in Garissa County, Kenya

iii. To establish the effect of credit risk identification on performance of loan portfolios of SACCO's in Garissa County, Kenya
iv. To assess the effect of Credit risk analysis on performance of loan portfolios of SACCO's in Garissa County, Kenya

Hypotheses

The study tested the following*null hypotheses:*

H_{01}: Credit risk monitoring had no significant effect on performance of loan portfolios of SACCO's in Garissa County, Kenya.
H_{02}: Credit approval had no significant effect on performance of loan portfolios of SACCO's in Garissa County, Kenya.
H_{03}: Credit Risk identification does not have significant effect on performance of loan portfolios of SACCO's in Garissa County, Kenya.
H_{04}: Credit risk analysis had no significant effect on performance of loan portfolios of SACCO's in Garissa County, Kenya.

Scope of the study

The study was conducted among deposit taking SACCOs licensed by SASRA in Garissa County, Kenya. The study on the effects of credit risk management on performance of loan portfolios was constrained by the study variables of risk identification, risk analysis, risk monitoring and credit approval. The population consisted of Savings and Credit Cooperative Societies licensed by SASRA as at December 2017 in Garissa County, Kenya. There were 6 Deposit Taking SACCOs licensed by SASRA in the Garissa County (SASRA, 2015). Therefore, the target population for the study was 6 Deposit Taking SACCOs. The performance of the SACCOs was assessed for the period 2013 to 2017.

LITERATURE REVIEW

This chapter reviews literature from other scholars on the aspect of credit risk management. The literature covers the theoretical and empirical studies on credit risk in financial institutions. Theoretical review covers Credit risk theory, Asymmetric Information theory and the Principal agent theory while empirical studies relate to credit risk management.

Asymmetric Information Theory

The asymmetric information concept was introduced by Akerlof in 1970s. The author used the paper "The market of Lemons". The theory postulates that in majority of markets the consumers of services and goods use market available statistics or information to measure the value attributed with certain goods. The seller on the other hand sees the market with a specific knowledge on specific item the seller is presenting in the market. The author argued that information asymmetry gives an incentive to the seller to sell goods of low quality than the market goods. These results to the average quality of goods presented in the market to reduce as the market size increases. Such

differences in market quality can be increased by sellers supplying goods of high quality in large quantities.

The Asymmetric Information Theory argues that to distinguish bad borrowers from good borrowers is a tasking job (Auronen, 2003). This may result to moral hazards problem- that is the borrowers directing the funds to other activities and adverse selection problem- selecting bad borrowers. This results to the accumulation of non-performing loans in the books of the SACCOs in Kenya (Bester, 1994; Bofondi & Gobbi, 2003). The ability to interpret three forms of problems facing asymmetry information such as ex ante, interim and ex post predicts the existence and survival of cooperatives in the long run (Uyemura & Deventer, 1993). It is true that the credit management process in the banks follow the process of risk identification, measurement, assessment, monitoring and control. Identification of risks involves identifying potential factors and monitoring the consequences in the identified factors. The identified factors are measured and control depending on the size and the industry the company is operating in and this is applied in the operational and strategic areas of the financial institutions.

Principal-Agent Theory

Agency theory was first developed by Stephen Ross & Barry Mitnick (1973). It was developed as a guide for analysing the conflict between various stakeholders. The theory postulates that there exist a conflict of interest between the agent and the principal in the management of resources belonging to the principal (Tipuric, 2008). Besides its applicability in corporate governance , the theory has been used and applied in various studies; it may be applicable in a setting where the principals instructs the agent to carry duties on his behalf who performs the duties assuming the responsibilities of the principal. Agency theory describes a mutual relationship between two parties who through trust manages to work with the common purpose of improving the principal welfare. The motivation behind the agency theory was to show the relationship between the agent and the principal in the larger corporations.

Credit Risk Theory

This theory was proposed by Melton in 1974. The theory postulates that the default occasions come from the company's evolution of assets modelled by the process of diffusion with constant parameters. Those evolution models are also called structural models and are based on models related to a particular issuer. Asset model represent an evolution of this category where default loss is caused by exogenous factors. Longstaff and Schwartz (1995) argue that the default may occur throughout the life of a particular bond but not only in the maturity

Since early ages individuals, companies and entrepreneurs have been facing credit risks but the area has not been widely studied until recently. Years before 1974 the literature on credit risk used traditional methods of analyzing credit risks which relied heavily on historical data. Current there are modern approaches of analyzing credit risks that is the structural approach, incomplete information approach and reduced form approach (Crosbie *et al.*, 2003).

EMPIRICAL REVIEW

Empirical literature reviews various studies in view of the study variables and objectives. The studies are reviewed hereunder.

Credit Risk Monitoring and Performance of Loan Portfolios

A Sacco must have in place a credit system for monitoring the terms of individual credits. Key indicators of credit terms should be specified and checked to identity and report potential credit problems. It entails indicators from the various areas such as: balances of assets and creditors and conditions of operations; how the account has been operated. The agreements in a loan, a market prices and external requirements. According to Al-Tamimi and Al-Mazrooei (2007) Moral hazard of the borrowers must also be monitored to ensure that funds are directed to the intended use without diversions.

SACCOs need to learn the process of risk identification which is vital for managing effectively the risk. Credit risk need to be identified appropriately by the SACCO management. The steps in risk identification involves; identifying and prioritizing major risks approved by the committee, determine the degree of risk the management committee will be able to handle, determine the risks negative impact if not controlled in time and analyze the risk faced by the SACCO in liquidity, credit, strategic and operations and interest rate risk (CBK Sacco, 2016).

Credit Approval and Performance of Loan Portfolios

Chilukuri and Rao (2015) conducted a study on appraisal and credit approval effectiveness and loan review in commercial banks. The study found that credit risk is the greatest risk faced by many commercial banks in the world. The study found that many banks face the uncertainty that some of its customers may fail to pay in the required time or may fail to pay at all, it is therefore the obligation of many banks to monitor and appraise each and every loan on a frequent basis to gauge the borrower's current and future ability to fulfill its interest and principal repayment. The study found that the loan review mechanism should aim at enabling improvement in terms of the unpaid interest and the level of non-performing loans in the books of account. The process of application, processing to disbursement must be smooth and predictable by many borrowers in the country. Banks facing high non-performing loans should intensify on loan recovery.

According to Iqbal and Mirakhor (2017) study, all the institutions studied had a policy on investment. The policy defined a group of allowable assets and limits in the commercial banks participation. The study found that majority of the financial institutions restrict majority of the activities by the treasury in employing change to their normal operations and in the attempt to change the bank lending rates in both the forward and cash market. The study found that some banks are unwilling to venture into in any derivative activity such as swaps caps, floor market, contracts and options in attempt to reduce unexpected surprises. Majority of the banks reported losses who ventured in the financial derivatives which in the current practice is considered different. The explanation of this was the variety of the franchises in the banking industry today. He study found that majority of the financial institutions see the activities regarding foreign

exchange beyond the franchise agreements. Many of the banks therefore will opt out of the complicated instruments such as financial derivatives which a quite involving and complex.

Credit Risk Identification and Performance of Loan Portfolios

Risk identification is a process that reveals and determines the possible organizational risks as well as conditions, arising risks. By risk identification the organization is able to study activities and places where its resources are exposed to risks (Williams, 2016). Risk management first stage was risk identification which developed the basis for the second stage of control and analysis. The study found that risk identification ensures effective risk management. The study found that risk managers may not succeed in possible losses identification and this may become unmanageable in the long run and possible losses. Identification of risks can be described by the following basic elements: sources of risks; hazard factors; perils and exposures to risk.

AL-Tamini (2012) studied the commercial banks' practice on risk management in UAE. The findings presented that all the commercial banks were facing a major risk on credit. The study found that risk identification was mostly done by inspecting the financial statement by the branch managers on a weekly basis. Other techniques used by the branch managers were credit scoring, analysis of customer credit worthiness, collateral used, risk class and establishing standards. Further AL-Tamini and AL-Mazrooei (2017) explored the national and foreign commercial banks risk management practices in UAE. The findings indicated that foreign exchange risks, credit risk and operational risks greatly affect the banks greatly.

Credit Analysis and Performance of Loan Portfolio

Strutt (1993) defined risk analysis as concept containing seven phases; systematic assessment which entails questioning every part of the system, risk identification which involves both global and local risk identification, risk assessment which involves frequencies of risk occurrence and consequences. This involves various analysis such as establishing tolerance risk levels, risk evaluation, determining whether risk is at minimum tolerable levels and determine risk reduction measures.

A study by Sundararajan (2017) on risk assessment and measurement found that a risk mitigating methods and measurement methods maybe applicable differently in different environments and the activities matters from time to time. The study concludes that modern approaches to measurement of risk, and mainly for credit in financial institutions is recommended. The study recommends the need to adopt modern risk measurement approaches especially in the financial institutions such as SACCOs since they face a combination of a multiple of risks.

Fuser (2015) study found that it essential to identify and classify different risks according to the possible damages. The study found that these will make possible for the managers to classify risks in accordance to the risks severity and class. Risks which may cause a slight damage may be ignored and priority given to much severe risks. The study found that there are negative and insignificant relationships between the amount expected from losses and the performance of the firms. Some of risks said to be causing high and unexpected damages are risks caused by fire,

which seldomly occur or foreign exchange risks. This also calls for development of risk measures Drzik (2013). A survey by BAI management of risk survey indicated that big banks or banks in Tier I had made a great progress in the implementation and development of measures of risks. These measures are not only used for purposes of control of risk but also for measurement of performance and setting prices.

Summary of Literature Review and Research Gaps

Table 2.1: Research Gaps

Table: Summary of Literature Review and Research Gap

Authors	Title	Methodology	Major Findings	Gaps Identified	Gap Filled
Parrenas (2015)	Effects of credit risk on performance of commercial banks	Descriptive analysis was used.	Financial institutions demands financial information as their right to evaluate risk management efficiency levels.	Only descriptive analysis was used, correlation and regression analysis was not presented.	Descriptive, inferential analysis and explanatory research design was used.
Al-Mazrooei (2014)	Risk control and monitoring between foreign banks and the local banks in UAE	Descriptive analysis was used.	Reported a significant differences in risk control and monitoring between foreign banks and the local banks in UAE	Cross country analysis was used	Local bank analysis was used in the current study.
Muasya (2013)	Assessed the relationship between loan losses and credit risk management	descriptive research design was used	Majority of the commercial banks in Kenya utilized to a great extent the risk management practices method of measuring, monitoring, identifying and control.	The conceptual gap identified was that the study concentrated on loan losses and credit risk	The current study filled the gap (conceptual gap) as it focused on performance of loan portfolio in commercial banks Kenya.

Chilukuri and Rao (2015)	Appraisal and credit approval effectiveness and loan review in Banks	Cross-sectional analysis was used	Credit risk is the greatest risk faced by many commercial banks	Cross country analysis was used and the findings may not be applicable in Kenyan banks	This study focused on local analysis hence the results was Kenyan specific
Iqbal and Mirakhor (2017)	Institutions policy on investment	Descriptive analysis	All the institutions studied had a policy on investment	The study dependent variable was investment	The current dependent variable of the study was loan portfolio
Githinji (2010)	Relationship between credit scoring practices by commercial banks and access to credit by small and medium enterprises	Descriptive and inferential analysis was used	There was significant relationship between variables	The study context was on access of loan by small and medium enterprises	This study focused on loan portfolio performance
Haron and Hin Hock (2014)	Risk identification effect on risk management	Descriptive was used	Risk identifications influences risk management practices positively and significant	Only Descriptive was used	Descriptive and inferential analysis were used
Haneef (2012)	Risk management on profitability and loan performance of commercial banks in Pakistan.	Descriptive was used	Risk management is complex decision and there is no better way to manage risk	The study was done in Pakistan	The current study was done in Kenya
Gakure (2012)	Effect of credit risk management practices on unsecured	Descriptive and inferential analysis	The findings indicated that performance of the non-secured loans are	The study concentrated on unsecured loans as the	The current study concentrated on loan

	loans performance by commercial banks in Kenya		moderately affected by risk identification.	independent variable	portfolio performance
Sundararajan (2017)	Risk assessment and measurement in Commercial banks	Cross-sectional research design	Risk mitigating methods and measurement methods maybe applicable differently in different environments and the activities matters from time to time.	A cross sectional research design was used	Descriptive and inferential research designs will be used
Mwithi (2010)	Relationship between the risk management practices on non-performing loans of the microfinance institutions in Nyeri County, Kenya.	Descriptive research design	Indicated that credit risk assessment level and management of risk was high in the microfinance institutions	The study utilized only descriptive methods	Both descriptive and inferential statistics was used
Ntiamoah, Egyiri, Fiaklou and Kwamega (2014)	Relationship between credit management practices and performance of loans in Ghana	Descriptive Research design	The relationship between loan portfolio performances and credit risk management was significant.	The study was done in Ghana	The findings related to Kenyan Banks

Source: Researcher's Literature Review (2019)

Conceptual Framework

As a study by Sammy (2013) indicates that a conceptual framework represents a group of related variables that are arranged systematically with a focus to show relationship between variables. The credit risk management indicators and loan portfolio management indicators were presented in figure 2.1.

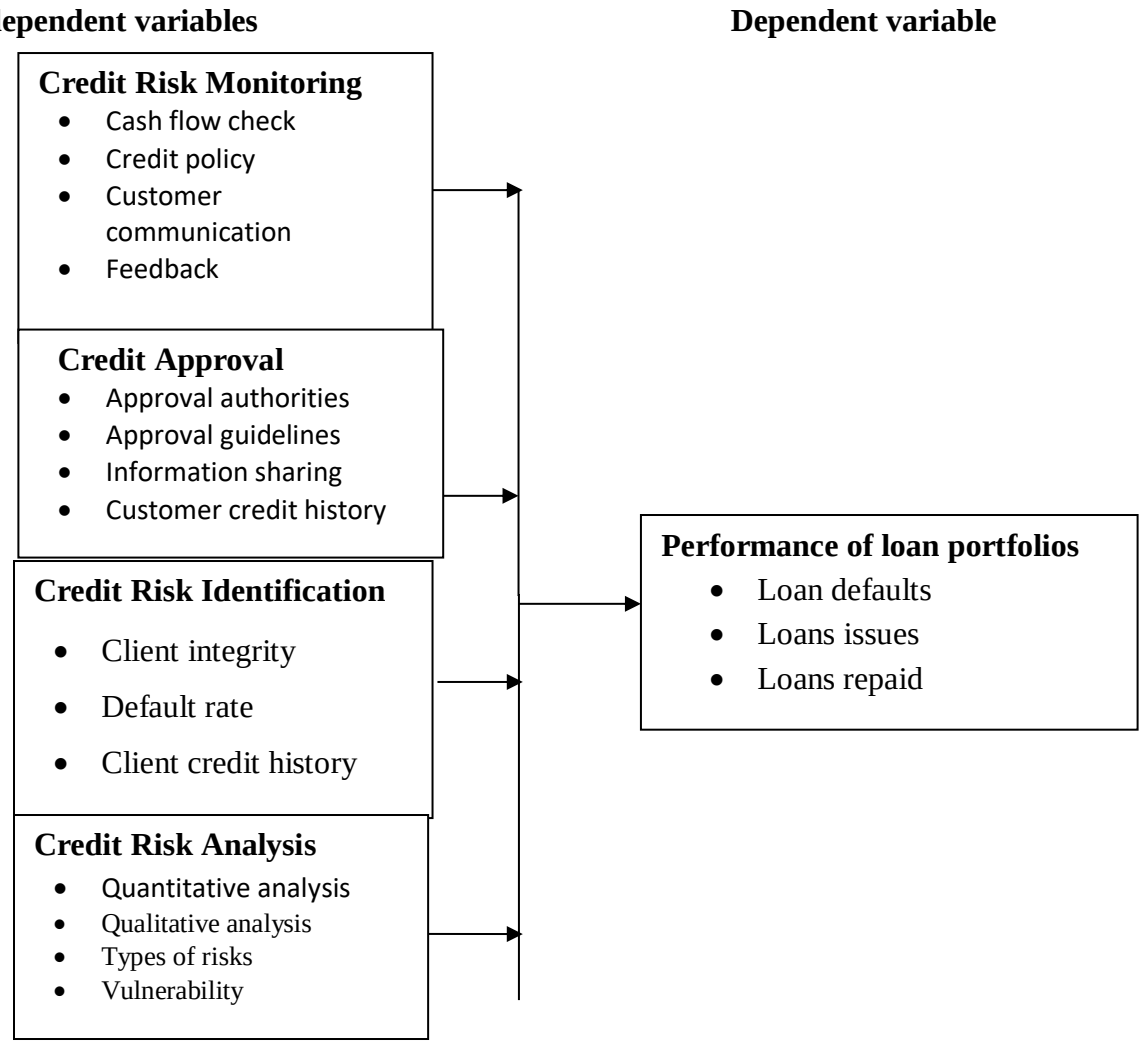


Figure 2.1:.Conceptual Framework

Source: Researcher (2019)

RESEARCH METHODOLOGY

This chapter begins by addressing the research design of the study. It then goes ahead and discusses the population and sample size and procedures. Research procedures are also discussed. A method of pretesting was reviewed and finally discusses the methods of data collection and data analysis used

Research Design

The study used descriptive research approach. This research design was used because it provided a means to interpret the concept of credit risk management in the SACCOs in Kenya. It describes the phenomenon, attitudes and conditions under study through observation techniques and interpretation. The study was able to generalize the effects of credit management practices in SACCOs in Kenya on loan portfolio.

Validity and Reliability of Research Instruments

Validity

It is the degree to which the data captured by the research instruments represents accurately the theoretical concepts and measurements required for the variables. According to Mugenda and Mugenda (2003) where validity has been established any inferences are sought from the data to check whether they are meaningful and accurate. Various sources of evidence is also used in this study. A pre-test was conducted at the Garissa County Youth Bunge SACCO which will not be included in the main study. This will enable refine the study questionnaire for the main research.

Reliability

To test reliability Cronbach's Alpha was used and the coefficient generated used to interpret the level of instruments reliability. The Cronbach Alpha will be based on internal consistency of the questionnaires. It measures the measures the correlation and averages of units being measured. Reliability of the collected data was also verified through SPSS version 24. A rate above 0.7 was deemed acceptable in this study which is desirable state according to Hair *et al.,* (1998).

Data collection Procedures

Data collection is an important exercise to the researcher as it allows the communication of the data required for analysis. The data must be accurate and complete for it to be useful for interpretation and comparison. Questionnaires ensures success in the collection and communication of the required data for analysis. Drop and pick later method was used in the study.

Data Analysis and Presentation

Before the analysis, the completed questionnaires were edited to ensure consistency and completeness. Descriptive analysis was used to analyze quantitative data using SPSS version 22. Means, frequencies, standard deviation and percentages was used to analyze the descriptive data. The data was presented in graphs, pie charts, prose-form and bar chart. The data was computed to arrive at percentages, variations and response rate using SPSS to arrive at the study objectives thus enabling communication of findings. Qualitative data was analyzed through the use of content analysis. A multiple regression analysis was used to present the relationship between variables. In addition, the study conducted regression analysis to show the relationship between variables.

The multiple regression model was used;

$$Y= \beta_0 +\beta_1X_1 +\beta_2X_2 +\beta_3X_3 +\beta_4X_4 +\alpha$$

Where Y is loan portfolio performance in Garissa County

β_0 is the constant of the model

β_1,β_2,β_3 andβ_4 are the slopes of the regression equation,

X_1=Credit Risk Monitoring

X_2=Credit Approval

X_3=Credit Risk Identification

X_4=Credit Risk Analysis

α =

Error term

DATA ANALYSIS AND PRESENTATION

The chapter shows the analyzed data and the interpretation of data presented in tables and charts. The study purposed to establish the influence of credit management on performance of loan portfolios among SACCOS in Garissa County, Kenya. Data was collected through a structured questionnaire. SPSS version 22 was used to code the data. Descriptive and inferential analysis were used to analyze qualitative data. Tables and figures were used to present data.

Study Response Rate

The population of the study was the licensed cooperative societies by SASRA operating in Garissa County as at December 2017.

Table 4.1: Response Rate

	Frequency	**Percentage**
Filled Questionnaire	44	78%
Unfilled Questionnaire	12	22%

Source: Field Data (2019)

The researcher issued 56 questionnaires and 44 of them were completed fully and availed to the researcher for analysis. A response rate of 78% was evidenced which according to Mugenda and Mugenda response rates above 50% is adequate for carrying out data analysis, above 60% is regarded as good response while a rate above 70% is a very good response. The was echoed by Babbie (2010) who argued that a response above 70% is an excellent response and thus the current study response of 78% was excellent in analyzing and presenting the data.

Background Information

The Bio-data of the respondents was sought by the researcher which included the gender of the respondents, level of education, use of credit risk and years of being served by Sacco.

Gender of the Respondents

Gender of the responded were presented and interpreted in table.

Table .Gender of the Respondents

	Frequency	Percent
Male	25	56.8
Female	19	43.2
Total	**44**	**100.0**

Source: Field Data (2019)

As per the results in Table 4.2, above 56.8% of the respondents were male while 43.2% were female. The researcher therefore involved all the gender as it is consistence with the third gender rule as presented in the constitution of Kenya.

Age of the Respondents

The study determines the viability of the response by determining age of the respondents.

Respondent age were determine and presented in the subsequent Table 4.2

Table. Respondents Age

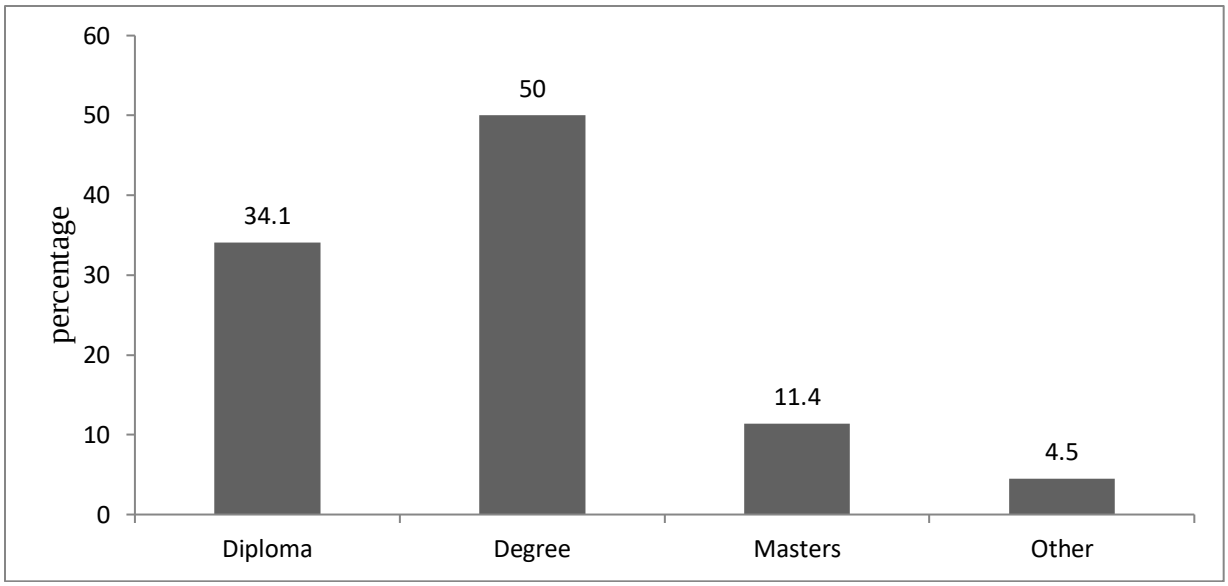
	Frequency	Percentage
25-34 years	3	6.8
35-44 years	11	25.0
45-54 years	12	27.3
55-64 years	8	18.2
65 years and above	10	22.7
Total	**44**	**100.0**

The study indicated that the age group between 45-54 years were the majority with 27.3% followed by 35-44 years with 25.0%, 65 years and above had 22.7%, 55-64 years with 18.2% and 25-34 years with 6.8%. The ages were considerably distributed in all age groups therefore the researcher concluded that the respondents valid because the respondent are distributed from youths to mature to know all the information needed for the case study.

Education Level

The study determines the viability of the response by determining Education Level of the respondents. Respondent education level were determine and presented in the subsequent Figure 4.1

Figure 4. 1: Education Level



Source: Field Data (2019)

The study indicated that degree level were the majority with 50%, followed by diploma with 34.1%, masters were 11.4% and lastly other with 4.5% (which many respondents stated to be PhDs)

Credit Risk Identification and Loan Portfolio Performance

	Mean	Std. Deviation
The SACCO identifies credit risks in time and mitigate them	3.4545	.99894
The SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks	3.6818	.82892
The SACCO relies on customer credit history to identify credit risk	3.5227	1.43848
The SACCO relies on credit information sharing to identify credit risks among its clients	3.8409	.96311
The Sacco quantifies the organizations risk profile	3.9773	1.04522
The SACCO updates client financial records to help risk identification	3.4545	1.13002

Source: Field Data (2019)

The findings indicated that the SACCO identifies credit risks in time and mitigate them with a mean of 3.4545. This finding is consistent with Williams (2016) who identified that Risk identification is a process that reveals and determines the possible organizational risks as well as conditions, arising risks. By risk identification the organization is able to study activities and places

where its resources are exposed to risks. The findings also identified that the SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks with 3.681. This finding is consistent with Greene and Trieschmann, (2014) who found that the first stage of risk management was risk identification which develops the basis for the next step, analysis and control of risk management. Proper risk identification ensures risk management is done effectiveness. That risk managers may not succeed in possible losses identification and this may become unmanageable in the long run and possible losses.

Credit Risk Analysis and Loan Portfolio Management

	Mean	Std. Deviation
The SACCO analyses customer credit history regularly	3.5682	1.31887
There had been analysis of credit risk based on the SACCO credit policy	3.2273	1.49205
The SACCO uses client financial records to analyses credit risk	3.9545	1.03327
Our Sacco had been weighing and prioritizing risk events and clients	3.0682	1.20845
The SACCO had a risk analysis policy	3.8409	.96311
Scientific method is used to analyze the credit risk among its borrowers	3.1818	1.12628

Source: Field Data (2019)

The study indicated that the SACCO analyses customer credit history regularly with a mean of 3.5682. This finding is consistent with Strutt (1993) who defined risk analysis as concept containing seven phases; systematic assessment which entails questioning every part of the system, risk identification which involves both global and local risk identification, risk assessment which involves frequencies of risk occurrence and consequences. This involves various analysis such as establishing tolerance risk levels, risk evaluation, determining whether risk is at minimum tolerable levels and determine risk reduction measures.

The study established that there had been analysis of credit risk based on the SACCO credit policy with a mean of 3.2273. This finding concurred with Sundararajan, (2017) who found that a risk mitigating methods and measurement methods maybe applicable differently in different environments and the activities matters from time to time. The study also identified that the SACCO uses client financial records to analyses credit risk with a mean of 3.9545. This finding is consistent with Fuser (2015) who found that it is useful to classify the different risks according to the amount of damage they possibly nature.

1.1.Credit Approval and Loan Portfolio

The study investigated the level of credit approval and loan portfolio management. The findings were presented in the below table.

Table : Credit Approval and Loan Portfolio Management

	Mean	Std. Deviation
The SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks	3.6818	.82892
The SACCO had a standard policy for credit approval	3.7273	1.14858
The firm had a laid down procedures for credit approval	3.5455	1.45402
There are selected credit approval authorities in the SACCO management	3.2500	1.31406
The Sacco ensures there are visits to the clients premises for their credit approval	3.5227	.97620
The Sacco had pre-set templates on maximum amount to loan on any class of loan	4.0000	1.03430
The Sacco credit approval guidelines are always followed by credit officers	3.5227	.97620
Credit analysis informs approval	3.0455	1.29318

Source: Field Data (2019)

The study indicated that the SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks with a mean of 3.6818. This finding concurred with Chilukuri and Rao (2014) who conducted a study on effective appraisal system and credit approval. The study found that the biggest risk faced by commercial banks is the credit risk, which is associated with the uncertainty of loaners default to pay the amount borrowed. The study found that the obligation of bankers is to adopt the effective credit approval and appraisal mechanism while giving out the loans. The study also indicated that the SACCO had a standard policy for credit approval with a mean of 3.7273. This finding agrees with Iqbal and Mirakhor, (2017) who found that the financial institutions restrict majority of the activities by the treasury in employing change to their normal operations and in the attempt to change the bank lending rates in both the forward and cash market. The study found that some banks are unwilling to venture into in any derivative activity such as swaps caps, floor market, contracts and options in attempt to reduce unexpected surprises. Majority of the banks reported losses who ventured in the financial derivatives - In this area there is considerable difference in current practice. This can be explained by the different franchises that coexist in the banking industry. Most banking institutions view activity in the foreign exchange market beyond their franchise. The study identified that the firm had a laid down procedures for credit approval with a mean of 3.5455.

Correlation Co-efficient

Correlations

		Loan Portfolio	Credit Approval	Risk Monitoring	Risk Analysis	Risk Identification
Loan Portfolio	Pearson Correlation	1	-.107	.111	-.067	.038
	Sig. (2-tailed)		.359	.341	.567	.746

Credit Approval	N	44	44	44	44	44
	Pearson Correlation	-.107	1	.104	.066	-.182
	Sig. (2-tailed)	.359		.371	.570	.116
Risk Monitoring	N	44	44	44	44	44
	Pearson Correlation	.111	.104	1	.048	.104
	Sig. (2-tailed)	.341	.371		.679	.372
Risk Analysis	N	44	44	44	44	44
	Pearson Correlation	-.067	.066	.048	1	.127
	Sig. (2-tailed)	.567	.570	.679		.276
Risk Identification	N	44	44	44	44	44
	Pearson Correlation	.038	-.182	.104	.127	1
	Sig. (2-tailed)	.746	.116	.372	.276	
	N	44	44	44	44	44

Source: Field Data (2019)

The findings in table 4.11 shows no possibility of autocorrelation since all significant values are less than 0.8. The highest significant value is presented between performance of loan portfolio and risk identification (0.746).

Multiple Regression Analysis

The multiple regression co-efficients indicated how independent variables affected the dependent variable. The main objective of the study was to establish the influence of credit management on performance of loan portfolios among SACCOS in Garissa County, Kenya. The result in Table4 Credit Risk Monitoring

X_2 = Credit Approval

X_3 = Credit Risk Identification

X_4 = Credit Risk Analysis

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.835[a]	.698	.646	1.95835

Source: Field Data (2019)

Findings in Table 4.14 indicates the model of fit. It shows whether the model is fit to predict the results. The adjusted R^2 was used to determine the extent to which the independent variables affects the dependent variables. A score of 64.6% indicated that changes in performance of loan portfolios was explained by credit Approval, credit risk Identification, credit risk analysis and credit risk analysis leaving 35.6% unexplained.

Table : ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	215.246	4	53.812	28.891	.000[b]
Residual	93.129	40	1.8626		
Total	**308.375**	**30**			

a. Dependent Variable: Performance of loan portfolios among SACCOs
b. Predictors: (Constant), credit Approval, credit risk Identification, credit risk analysis and credit risk analysis

The probability value of 0.000 indicates that the regression relationship was highly significant in predicting credit approval, credit risk identification, credit risk analysis and credit risk analysis influenced performance of loan portfolios among SACCOs. The F calculated at 5 percent level of significance was 28.891 since F calculated is greater than the F critical (value = 2.6060), this shows that the overall model was significant.

Regression Coefficients[a]

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	6.729	2.158		3.118	.000
Credit Risk Monitoring	.230	.077	.184	2.985	.004
Credit Approval	.255	.092	.238	2.784	.003
Credit Risk Identification	.736	.230	.707	3.201	.008
Credit Risk Analysis	.461	.124	.312	3.708	.001

The established model for the study was:
$Y = 6.729 + 0.230X_1 + 0.255X_2 + 0.736X_3 + 0.461X_4$
The regression equation above had established that taking all factors into account (credit risk monitoring, credit approval, credit risk identification, credit risk analysis and credit risk analysis), performance of loan portfolios among SACCOs was 6.729. The study also found that one unit change of credit risk monitoring would lead to a 0.230 increase Performance of loan portfolios among SACCOs. The variable was significant since P value 0.004<0.05. Further the study found that a unit increase in credit approval would lead to a 0.255 unit increase Performance of loan portfolios among SACCOs. The variable was significant since P value 0.003<0.05. Further, the findings showed that a unit increases in credit risk identification lead to a 0.736 unit increase performance of loan portfolios among SACCOs. The variable was significant since P value 0.008<0.05. Further, the findings showed that one unit increase of credit risk analysis would lead to a 0.461 unit increase in performance of loan portfolios among SACCOs. The variable was significant since P value 0.001<0.05. The study established that there was a significant positive relationship between credit approval, credit risk identification, credit risk analysis and credit risk analysis and performance of loan portfolios among SACCOs.

The study concurs with Ntiamoah, Egyiri, Fiaklou and Kwamega (2014) study on relationship between credit management practices and performance of loans in Ghana. The correlation results showed that the

relationship between credit approval and loan performance was significant. The correlation results showed that the relationship between credit risk identification was positive and significant. The correlation results showed that the relationship between credit risk analysis was positive and significant.

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This section of the chapter presented a summary of major findings, conclusions based on the objectives and recommendations based on the conclusions made.

The study aimed to determine the effects of Credit risk monitoring on performance the loan portfolios of SACCO's in Garissa County, Kenya. The first objective of the study was to establish the effect of credit monitoring on performance of loan portfolio. The study found that the SACCO had a credit monitoring policy. The study also found that the Sacco monitors cash flows of borrowers continuously. The study identified that the Sacco had constant contact with borrowers. The study also found that the Sacco had response mechanisms for anticipated credit risks. The study identified that that the Sacco had mitigation strategies for anticipated losses. The study also indicated that the Sacco reviews client's loan repayment patterns.

The second objective of the study was to establish the effects of credit approval on performance of loan portfolio. The study found that the SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks. The study also found out that the SACCO had a standard policy for credit approval. The study identified the firm had a laid down procedures for credit approval. The study also found that there were selected credit approval authorities in the SACCO management. The study identified that the Sacco had pre-set templates on maximum amount to loan on any class of loan. Lastly the study identified that that the credit approval guidelines are always followed by credit officers in the SACCO

The third specific objective was to establish the effects of credit risk identification on performance of loan portfolios of SACCO's in Garissa County, Kenya. The study found that the SACCO identifies credit risks in time and mitigate. The study also found out that the SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks. The study identified that the SACCO relies on credit information sharing to identify credit risks among its clients. The study also identified that the Sacco quantifies the organizations risk profile. The study established that the SACCO updates client financial records to help risk identification.

The fourth specific objective of the study was to assess the effect of Credit risk analysis on performance of loan portfolios of SACCO's in Garissa County, Kenya. The study found that the SACCO analyses customer credit history regularly. The study also found out that there had been analysis of credit risk based on the SACCO credit policy. The study also indicated that the SACCO uses client financial records to analyses credit risk. The study identified that that respondents Sacco had been weighing and prioritizing risk events and clients. The study established that the SACCO had a risk analysis policy. Lastly the study identified that scientific method was used to analyze the credit risk among its borrowers.

Conclusion

Based on the findings on the effects of Credit risk monitoring on performance the loan portfolios of SACCO's in Garissa County, Kenya. The study concluded that the SACCO had a credit monitoring policy. The study also concluded that that the Sacco monitors cash flows of borrowers continuously. It also concluded that Sacco had constant contact with borrowers. The study concluded that Sacco had response mechanisms for anticipated credit risks. It also concluded that Sacco had mitigation strategies for anticipated losses. The study lastly concluded that the Sacco reviews client's loan repayment patterns.

From the findings on the effect of credit approval on performance of loan portfolios among SACCO's in Garissa County, Kenya, the study concluded that SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks. It also concluded that the SACCO had a standard policy for credit approval. The study concluded that the firm had a laid down procedures for credit approval. The study also concluded that there were selected credit approval authorities in the SACCO management. The study also concluded that the Sacco had pre-set templates on maximum amount to loan on any class of loan. Lastly the study concluded that the credit approval guidelines are always followed by credit officers in the SACCO.

Based on the findings on the effects of credit risk identification on performance of loan portfolios of SACCO's in Garissa County, Kenya, the study concluded that SACCO identifies credit risks in time and mitigate. The study also concluded that the SACCO engages both internal and external auditors to help identify, mitigate and manage credit risks. The study also concluded that SACCO relied on credit information sharing to identify credit risks among its clients. The study also concluded that the Sacco quantifies the organizations risk profile, lastly the study concluded that SACCO updates client financial records to help risk identification.

Based on the findings on the effect of Credit risk analysis on performance of loan portfolios of SACCO's in Garissa County, Kenya, the study concluded that SACCO analyses customer credit history regularly. The study also concluded that there had been analysis of credit risk based on the SACCO credit policy. The study concluded that that the SACCO uses client financial records to analyses credit risk. The study concluded that that respondents Sacco had been weighing and prioritizing risk events and clients. The study lastly concluded that scientific method was used to analyze the credit risk among its borrowers.

REFERENCES

Akperan, J. (2005). Bank Regulation, Risk Assets and Income of Banks in Nigeria (Online) Available at: http://www.ndic-ng.com/pdf/adam.pdf (Accessed 08 March 2010).

Alexandra, F. (2006).Effect of wholesale lending to SACCOs in Uganda. Retrieved from www.LSBF.org.uk/Finance.

Basel, (1999). *Principles for the Management of Credit Risk*. Basel Committee on Banking Supervision, Basel

Bosek, J. C. (2016). *Credit risk evaluation systems and non-performing loans among SACCOs in Bomet county, Kenya* (doctoral dissertation, department of finance and accounting in partial fulfillment of the requirements for the award of the degree of master of business administration (MBA), University of Nairobi)

Cheron, E.J., Boidin H. &Daghfous, N. (1999), Basic financial services of low income individuals comparative study in Canada. *International journal of Bank Marketing*, 17(2), 49-64.

Chilukuri, S., &Rao, K. S. (2015). Effective Credit Approval and Appraisal System: Loan Review Mechanism of Commercial Banks. *International Journal of Innovative Research and Development|| ISSN 2278–0211*, *3*(12).

Chipembere. (2009). Unlocking funding opportunities for farmers through grass root SACCOs. Available from: *www.snvworld.org/en/document/mz*

Focus Group, 2007. Credit Risk Management Industry Best Practices. Available at: *http://www.bangladeshbank.org/mediaroom/corerisks/creditrisks.pdf (Accessed 02 Oct 2012).*

Githinji, M. W. (2010). *The relationship between credit scoring practices by commercial banks and access to credit by small and medium enterprises in Kenya* (Doctoral dissertation, University of Nairobi, Kenya).

Higgins, P (1999) Hyper competitive can lead to poor credit assessment Australian banking and finance.

Honohan, P., & Beck, T. (2007).*Making finance work for Africa*. World Bank Publications.

Kwagara, M. P. (2006). *An assessment of credit risk management techniques adopted by micro-finance institutions in Kenya* (Doctoral dissertation, University of Nairobi.).

Kwamega, M., BrakoNtiamoah, E., OforiwaaEgyiri, P., &Fiaklou, D. (2015).Impact of Customer Service Practices on Customer Satisfaction and Retention.*International Journal of Management and Business Research*, *5*(1), 43-52.

Markowitz, H. M (1952) Portfolio Selection. *Journal of Finance*, Vol 7 no1.

Mugenda, O. &Mugenda A. (2003); *Research methods: Quantitative and Qualitative approaches*.

Mwisho, A. M. (2001) "Basic lending conditions and procedures in commercial banks "The Accountants, Vol.13 NO.3, pp.16-19

Naceur, S. B., &Goaied, M. (2003, December). The Determinants of Bank Interest Margin and Profitability: Evidence from Tunisia. In *10th Conference of Economic Research Forum, World Bank, Marrakech* (pp. 16-19).

Nigerian Microfinance system, Nigeria. Retrieved from www.csae.ox.ac.uk/conferences, on July, 2013

Njoku, J. E. (1997), Determinants of loan repayment under special emergency loan scheme in Niger. *African review of money finance and banking*.

Ogilo, F. (2011). *Impact of credit Risk Management on Financial Performance of Commercial Banks in Kenya*. Unpublished Phd Thesis.

Olomola, S. Ade. (2000). *Determinants of small holder loan repayment, performance, Evidence, Nigerian Microfinance system*, Nigeria.

Osoti, R. N. (2014). Effect of the growth of savings and credit co-operative societies' front office services activity on demand for credit by members.

Owira, O. P. (2011). The determinants of financial Risks faced by SACCOs in Kenya. *Unpublished MBA proposal, University of Nairobi*.

Owusu, K. D. (2008). Credit management policies in Rural banks in Accra Ghana.

Reilly, F. K. & Brown, K. C. (2011). Investment Analysis and Portfolio Management. Australia: South-Western.

Santomero, A. M. (1997). *Commercial Bank Risk Management: An Analysis of the Process*. A paper presented at Wharton Financial Institution Centre Conference on Risk Management in Banking.

Sproul, (1998). The Quantity Theory versus the Real Bills Doctrine in Colonial America. In Economics Working Papers.

Uchendu, O. (2009. Monetary Policy Management in Nigeria in the Context of Uncertainty. Available at: http://www.naijalowa.com/wp-content/uploads/2009/08/Monetary-Policy Management-in-Nigeria-in-thecontext-of-uncertainty.pdf (Accessed 08 Oct 2012).