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Credit Risk Management and Performance of Loan Portfolios among Saccos in Kisumu County, Kenya

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Abstract:
The purpose of this study was to determine the effect of credit management on performance of loan portfolios among SACCOS in Kisumu County, Kenya. 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 Kisumu Kenya.Descriptive research design was used. The sample size was 56 credit managers in the deposit taking SACCO'S who were selected using purposive sampling. Data collected was analyzed using descriptive statistics that will yield tables, charts, mean and standard deviation that was used to give meaning to the data collected. The study found a positive and statistically significant effect of credit risk identification, credit risk analysis, credit risk monitoring and credit approval on performance of loan portfolios of the SACCOs studied. Hence, the study concludes that much effort should be directed to credit risk management to achieve improvement in performance of the loan portfolios. The study therefore recommends that all SACCOs understudy should identify their credit risk, perform credit risk analysis, perform credit risk monitoring and control and perform approve credit so as to improve their loan performance. The Study finally suggested further studies on the credit risks management on performance of loan portfolios among banks in Kenya.

Keywords: credit risk management, performance, loan portfolio, SACCO.

1. Introduction and Background

Gwenyi (2013) defines risk analysis as systematic assessment (item by item - question every part of the system), identification of risks (local and global scale), assessment of risks (frequencies and consequences). This may involve a number of different analyses like establishing acceptable or tolerable levels of risk, evaluation of risks, determine whether the risks are as low as reasonably practicable, and determine risk reduction measures where appropriate.

Lending is the principal business activity for most SACCOs (Savings and Credit Cooperative Society) as such SACCOs develop loan portfolios. A loan portfolio refers to all the credit facilities that either a bank or a SACCO can offer to its client. It includes the various loan structures and processes encompassing interest rates, time frames and loan procedures (Tayari, Kimanzi & Mwiti, 2014). The loan portfolio is typically the largest asset and the predominate source of revenue. As such, it is one of the greatest sources of risk to a SACCO'S safety and soundness. Effective management of the loan portfolio and the credit function is fundamental to a bank's safety and soundness. Loan portfolio management (LPM) is the process by which risks that are inherent in the credit process are managed and controlled. Because review of the LPM process is so important, it is a primary supervisory activity. Assessing LPM involves evaluating the steps bank management takes to identify and control risk throughout the credit process. The assessment focuses on what management does to identify issues before they become problems (Owira 2011).

According to Kimuyu (1998), this brought about the SACCO industry in Kenya, the largest in Africa with over 3.5 million members and a $2 billion loan portfolio. Within the micro finance (MFI) sector, another potential 4 million clients exist with a $300 million portfolio. Their participation goes beyond simple information exchange. Credit creation is the main income generating activity for the SACCOs, but this activity involves huge risks to both the lender and borrower. The risk of a member not fulfilling his or her obligation as per the contract on due date or anytime thereafter can greatly jeopardize the smooth functioning of a SACCO's business (Honohan & Beck, 2007).

1.1. Problem Statement

Kenya has a long history of cooperative development that has been characterized by strong growth, thus making a significant contribution to the overall economy and easy realization of its blue print vision 2030. With the total population of

Kenya at approximately 40 million, it is estimated that 63% of Kenya's population participate directly or indirectly in co-operative based enterprises according to CIC (2014). It is constantly emphasized that SACCOs are the pre-eminent understudy, replacement or competitor to the commercial banks according to (CBK, 2014; SASRA, 2011). However, the performance of SACCOs especially the loaning has been met by some stern tests and challenges especially large number of non-performing loans and poor repayment of loans and irregular loaning courtesy of weak risk assessment mechanisms according to (SASRA, 2012; Njoroge, 2013).

In Kenya the Saccos registered an increased performance increase of 20% in the year 2016 form the previous year. However, the value of non-performing loans (NPL's) grew by 22.2 percent from Ksh 7.9 billion in April 2014 to 19 billion in April 2015 (Bosek, 2016). The SACCOs in Kisumu town have not been an exception. They recorded 19% increase in non-performing loans in the year 2015. The non-performing loans further increased to 23% in the year 2016.

1.2. Objectives of the Study
The study sought to achieve the following specific objectives:
  i.   To establish the effect of credit risk identification on performance of loan portfolios of SACCO's in Kisumu County, Kenya.
  ii. To assess the effect of Credit risk analysis on performance of loan portfolios of SACCO's in Kisumu County, Kenya.
  iii. To determine the effect of Credit risk monitoring on performance the loan portfolios of SACCO's in Kisumu County, Kenya.
  iv. To establish the effect of credit approval on performance of loan portfolios among SACCO's in Kisumu County, Kenya.

* Null hypotheses were formulated and tested (using p-value method) for each respective specific objective.

2. Literature Review
The study reviewed theoretical literature, general literature as well as empirical literature.

2.1. Theoretical Framework
The study reviewed theories relevant to the study variables and study conceptualization as presented below. Portfolio theory was proposed by Harry max Markowitz (1952). He stated that investment which tries to maximize portfolio expected return for a given amount of portfolio risk or equivalently minimize risk for a given level of expected return, by carefully choosing the proportions of various assets. Portfolio theory was developed in 1950'sthrough the early 1970's, and was considered an important advance in the mathematical modelling of finance. Since then, many theoretical and practical criticisms have been developed against it. This include the fact that financial returns do not follow a Gaussian distribution or indeed any symmetric distribution, and those correlations between asset classes (Micheal & Sproul, 1998).

The Melton (1974) study, introduced the credit risk theory otherwise called the structural theory which said, 'the default event derives from a firm's asset evolution modelled by a diffusion process with constant parameters'. Such models are commonly defined "structural model' and based on variables related a specific issuer. An evolution of this category is represented by asset of models where the loss conditional on default is exogenously specific. In these models, the default can happen throughout all the life of a corporate bond and not only in maturity (Longstaff & Schwartz, 1995). This theory guided the study in evaluating the modalities of risk assessment especially the source and effectiveness of information used by SACCOs to assess the creditworthiness of individuals in the various credit risk assessment stages. The study guided in evaluating how the SACCOs bridge the information asymmetry that exist in lending and get to understand the applicant repayment capacity and the inherent risk of loaning in some cases.

2.2. Empirical Review
The study reviewed various empirical studies with the objective of documenting gaps. Chilukuri and Rao (2014) investigated effective credit approval and appraisal system: loan review mechanism of commercial banks. The biggest risk faced by commercial banks is the credit risk, which is associated with the uncertainty of borrower's default to pay the loan amount. It is the obligation of bankers to adopt the effective credit approval and appraisal mechanism while granting the loan. It involves evaluation of borrowers' current and future ability to fulfill its interest and principal repayment. The bankers should act pro-actively in administering credit approval and appraisal system. For this Loan Review Mechanism can be used as an effective tool aiming to cover the entire portfolio of credit and credit cycle starting from the documentation process, sanctioning of loan, disbursement, grading, monitoring the post sanction of loan and problem of recovery. Bankers should have through knowledge of prudential norms and Basel accord guidelines on credit risk in managing and administering of loan review mechanism.

Kwagara (2006) assessed credit risk management techniques adopted by micro-finance institutions in Kenya. It was also found that most institutions have distinctive separate departments where micro credit activities are organized, an indication of growth in the development of micro credit institutions in the country. It was also found that most of the institutions work with pre-set targets that are closely monitored and those micro credit departments had specific credit officers. Further, the study found that a majority of the institutions that as early as one late repayment, a loaned was

considered a defaulter and thus collection efforts were intensified. This partly explains why microfinance institutions command low default rates. On dealing with difficult-to-repay-on-time clients, the study found that most indicated the preferred method was sale of property to recover the money, followed by write-off of the balance while others would consider writing off the interest and allowing defaulters to repay the principal loan only.

3. Methodology

The research methodology adopted is summarized hereunder. The study adopted a descriptive research design. The target population for the study was 106 Deposit Taking SACCOs. The sample size was 56 credit managers in the deposit taking SACCO'S who were selected using purposive sampling technique. The study used both primary data and secondary data. Primary data was obtained through questionnaires. The instrument was tested for validity and reliability. Data collected was analyzed using descriptive statistics (using means, percentages and standard deviation), correlation analysis and multiple linear regression analysis. Data presentation was I the form of Tables. Relevant ethical considerations were taken into account in the course of data collection and data analysis.

4. Results and Findings

The section presents results of the study, interpretation of the output, findings in view of specific objectives, hypotheses tests and a discussion.

4.1. Descriptive Analysis

Descriptive analysis is presented in the form of percentages, means and standard deviation.

4.1.1. Credit Risk Identification on Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our SACCOinvolve internal and external auditor in risk identification	6.10%	18.40%	16.30%	42.90%	16.30%	3.45	1.15
Risk identification assists the management to develop risk management strategy to allocate resources efficiently	10.00%	6.30%	8.20%	44.90%	30.60%	3.9	1.02
The SACCO do comprehensive analysis of present and future risks frequently	2.00%	6.10%	16.30%	53.10%	22.40%	4.02	0.98
The SACCO quantifies the organizations risk profile	8.20%	10.20%	6.10%	46.90%	28.60%	3.78	1.21
The SACCO reviews of the credit risk environment	4.10%	20.40%	2.00%	38.80%	34.70%	3.8	1.24
Average						3.79	1.12

Table 1: Credit Risk Identification and Performance

The findings in Table 1 above indicate that majority of the respondents who were 59.2% agreed with the statement that their SACCO involve internal and external auditor in risk identification which means that the internal controls system is kept in check. The results further showed that majority of the respondents who were 75.5% agreed with the statement that risk identification assists the management to develop risk management strategy to allocate resources efficiently hence improving the performance of the SACCOs. The results further showed that majority of the respondents who were 75.5% agreed with the statement that the SACCO do comprehensive analysis of present and future risks frequently implying that repetition of risks that would result to losses is controlled.

The results further showed that majority of the respondents who were 7.5% agreed with the statement that the SACCO quantifies the organizations risk profit which means that the management is in a position to apply an effective risk management strategy. The results further showed that majority of the respondents who were 73.5% agreed with the statement that the SACCOs review of the credit risk environment hence ensuring that changes in the political and economic aspects are incorporated. The average mean score was 3.79, In view of the likert rating scale of 1-5 where 5 was strongly agree, then 3.79 mean score is an indication that most of the respondents agreed to the statement posed to them.; however, the answers were varied as shown by a standard deviation of 1.12.

4.1.2. Credit Risk Analysis on Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our SACCO have been reviewing the credit history of the members and borrowers	4.10%	10.20%	22.90%	42.90%	20.00%	3.54	0.90
There has been analysis of credit risk based on decisions in our organization	4.10%	2.00%	10.20%	63.30%	20.40%	3.94	0.98
Our organization has been screening clients before advancing credit	2.00%	2.00%	10.20%	65.30%	20.40%	4.00	1.06
Our SACCO has been weighing and prioritizing risk events and clients	2.00%	16.30%	16.30%	49.00%	16.30%	3.61	1.02
Risk analysis improves the organization performance	0.00%	16.30%	8.20%	44.90%	30.60%	3.90	1.03
Average						3.80	1.00

Table 2: Credit Risk analysis and Performance

Results in Table 2 above indicate that majority of the respondents who were 62.9% (42.9% + 20.00%) agreed with the statement that their SACCO have been reviewing the credit history of the members and borrowers and this helps in determining the credit worthiness of the borrowers. The results also showed that majority of the respondents who were 83.7% agreed with the statement that their there has been analysis of credit risk based on decisions in our organization which implies that the SACCOs are able to determine their liquidity. The results also showed that majority of the respondents who were 85.7% agreed with the statement that their organization has been screening clients before advancing credit which means that the SACCOs incur minimal losses due to customer defaulting in payment.

Majority of the respondents who were 65.7% agreed with the statement that their SACCO has been weighing and prioritizing risk events and clients which means that they have been working on minimizing risks that puts members funds in jeopardy. The results also showed that majority of the respondents who were 75.5% agreed with the statement that risk analysis improves the organization performance. On a five-point scale, the average mean of the responses was 3.80. In view of the likert rating scale of 1-5 e.g. if 5 was strongly agree, then 3.80 mean score is an indication that most of the respondents agreed to the statement posed to them; however, the answers were varied as shown by a standard deviation of 1.00.

4.1.3. Credit Risk Monitoring on Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
The SACCO monitors cash flows of borrowers continuously	2.00%	0.00%	8.20%	61.20%	28.60%	4.14	0.74
The SACCO has constant contact with borrowers	4.10%	2.00%	8.20%	55.10%	30.60%	4.06	0.92
The SACCO has response mechanisms for anticipated credit risks	4.10%	2.00%	8.20%	57.10%	28.60%	4.04	0.91
The SACCO has mitigation strategies for anticipated losses	0.00%	0.00%	6.10%	63.30%	30.60%	4.24	0.56
The SACCO reviews clients loan repayment patterns	2.00%	0.00%	10.20%	51.00%	36.70%	4.20	0.79
Average						4.14	0.78

Table 3: Credit Risk Monitoring and Performance

In view of Table 3 above, majority of the respondents who were 89.8% agreed with the statement that the SACCO monitors cash flows of borrowers continuously which imply that they regularly review the credit worthiness of the borrowers. From the results, 85.7% agreed with the statement that their SACCO has constant contact with borrowers which imply that they can easily do a follow up on the customers to ensure that they do not default in payments and use the borrowed funds for the intended purpose. The results further showed that majority of the respondents who were 85.7% agreed with the statement that the SACCO has response mechanisms for anticipated credit risks which imply that the SACCOs incur little or no losses on the members' funds. The results further showed that majority of the respondents who were 93.9% agreed with the statement that the SACCO has mitigation strategies for anticipated losses. The results further showed that majority of the respondents who were 87.7% agreed with the statement that the SACCO reviews clients' loan repayment pattern which means that they can offer favorable repayment schedules to clients who have shown doubtless repayment patterns. On a five-point

scale, the average mean of the responses was 4.14. In view of the likert rating scale of 1-5 e.g. if 5 was strongly agree, then 4.14 mean score is an indication that most of the respondents agreed to the statement posed to them; however, the answers were varied as shown by a standard deviation of 0.78.

4.1.4. Credit Approval on Performance

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
Our SACCO have adequate manpower for credit approval	0.00%	6.10%	16.30%	53.10%	24.50%	3.96	0.82
The money allocated for credit appraisal is enough	2.00%	2.00%	10.20%	57.10%	28.60%	4.08	0.81
There is adequate training done to employees on credit approval	0.00%	6.10%	14.30%	55.10%	24.50%	3.98	0.80
The SACCO ensures there are visits to the client's premises for their credit approval	8.20%	8.20%	12.20%	57.10%	14.30%	3.61	1.10
The SACCO has pre-set templates on maximum amount to loan on any class of loan	4.10%	10.20%	14.30%	26.50%	44.90%	3.98	1.18
Average						**3.92**	**1.04**

Table 4: Credit Approval and Performance

Results presented in Table 4 above indicate that most of the respondents (77.6%) agreed with the statement that their Sacco have adequate manpower for credit approval which means that the borrowers do not have to wait for a long period for their loan application feedback. The results further showed that majority of the respondents who were 85.7% agreed with the statement that the money allocated for credit appraisal is enough implying that the SACCOs do not have to outsource for appraisal funds which in return would lower their profits. The results further showed that majority of the respondents who were 79.6% agreed with the statement there is adequate training done to employees on credit approval implying that the employees are aware of the lending policies and overall organizational goals.

The results further showed that majority of the respondents who were 71.4% agreed with the statement their SACCO ensures there are visits to the client's premises for their credit approval, which enables the management to establish the creditworthiness of the client. The results further showed that majority of the respondents who were 71.4% agreed with the statement their SACCO has pre-set templates on maximum amount to loan on any class of loan, this helps in enhancing consistency and accuracy in loan interest calculation. On a five-point scale, the average mean of the responses was 3.92. In view of the likert rating scale of 1-5 e.g. if 5 was strongly agree, then 3.92 mean score is an indication that most of the respondents agreed to the statement posed to them; however, the answers were varied as shown by a standard deviation of 1.04.

4.1.5. Performance of Loan Portfolios

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean	Std. Dev
There has been an increase in return on assets and return on equity over time	6.10%	8.20%	6.10%	24.50%	55.10%	4.14	1.23
The return on assets and return on equity is higher compared to those of similar SACCOs	4.10%	4.10%	10.20%	16.30%	65.30%	4.35	1.09
The return on assets and return on equity is expected to increase in the foreseeable future	8.20%	14.30%	0.00%	8.20%	69.40%	4.16	1.42
The return on assets and return on equity reflect the	6.10%	8.20%	16.30%	51.00%	18.40%	3.67	1.07
performance of the SACCO	4.10%	14.30%	36.70%	26.50%	18.40%	3.41	1.08
Average						**3.95**	**1.18**

Table 5: Performance of loan portfolios

In view of Table 5 above, majority of the respondents (79.6%) agreed with the statement that there has been an increase in return on assets and return on equity over time. This can be explained by the SACCOs activities in monitoring the credit risk. The results further showed that majority of the respondents who were 77.6% agreed with the statement that the return on assets and return on equity is expected to increase in the foreseeable future which would be attributed to the risk

identification activities which enhances mitigation of possible losses. The results further showed that majority of the respondents who were 44.9% agreed with the statement that the return on assets and return on equity reflect the performance of the SACCO.On a five-point scale, the average mean of the responses was 3.95.

In view of the likert rating scale of 1-5, if 5 was strongly agree, then 3.95 mean score is an indication that most of the respondents agreed to the statement posed to them; however, the answers were varied as shown by a standard deviation of 1.18. On a five-point scale, the average mean of the responses was 3.95. In view of the likert rating scale of 1-5 e.g. if 5 was strongly agree, then 3.95 mean score is an indication that most of the respondents agreed to the statement posed to them; however, the answers were varied as shown by a standard deviation of 1.18.

4.2. Inferential Analysis

4.2.1. Correlation Analysis
The section seeks to establish the nature and strength of relationship between the variables of interest as presented in Table 6 below.

		Performance	Credit Risk Identification	Credit risk analysis	Credit risk monitoring	credit approval
Performance	Pearson Correlation	1.000				
	Sig. (2-tailed)					
Credit Risk Identification	Pearson Correlation	.614**	1.000			
	Sig. (2-tailed)	0.000				
Credit risk analysis	Pearson Correlation	.686**	.379**	1.000		
	Sig. (2-tailed)	0.000	0.007			
Credit risk monitoring	Pearson Correlation	.439**	.374**	0.131	1.000	
	Sig. (2-tailed)	0.002	0.008	0.371		
credit approval	Pearson Correlation	.566**	.480**	.366**	0.234	1.000
	Sig. (2-tailed)	0.000	0.000	0.01	0.106	
** Correlation is significant at the 0.01 level (2-tailed).						

Table 6: Correlation Matrix

These results showed that credit risk identification and performance are significantly related and have a moderately strong positive correlation (r = 0.614, p= 0.000). The table also intimated that credit risk analysis and performance are significantly related and have a moderately strong positive correlation (r = 0.686, p =0.000). It was further determined that credit risk monitoring and performance were significantly related and have a fairly weak positive correlation (r= 0.439, p= 0.002). The results also indicated that credit approval and performance were significantly related and have a moderately strong positive correlation (r=0.566, p=0.000). This denotes that an increase in any unit of the variables results in improvement in performance.

4.3. Regression Analysis
The output is presented in the 3 conventional tables as shown below.

Indicator	Coefficient
R	0.840
R Square	0.705
Adjusted R Square	0.678
Std. Error of the Estimate	0.326393

Table 7: Model Fitness

In view of the output in Table 7 above, the simple correlation of 0.840 indicates a strong positive correlation between credit risk management and performance of loan portfolios. An adjusted coefficient of determination of 0.678 indicates that credit risk identification, credit risk analysis, credit risk monitoring and credit approval collectively explain 67.8 % of changes in performance of loan portfolios. The results also insinuate that the model adopted to demonstrate that there exists a relationship of the different variables was deemed to be satisfactory.

Table 8 provided the outcomes on the analysis of the variance (ANOVA) for purposes of testing the goodness of fit.

	Sum of Squares	df	Mean Square	F	Sig.
Regression	11.215	4	2.804	26.317	**0.000**
Residual	4.687	44	0.107		
Total	15.902	48			

Table 8: Analysis of Variance

The results in Table 8 above indicate that the model overall was a good fit. This is an indication that credit risk identification, credit risk analysis, credit risk monitoring and credit approval as independent variables are suitable predictors of performance of loan portfolios. This was reinforced by a reported p-value of (0.000) which was less than the significance level of 0.

	B	Std. Error	t	Sig.
(Constant)	-1.688	0.584	-2.888	0.006
Credit risk identification	0.301	0.128	2.346	**0.024**
Credit risk analysis	0.585	0.11	5.332	**0.000**
Credit risk monitoring	0.32	0.12	2.661	**0.011**
Credit approval	0.24	0.105	2.285	**0.027**

Table 9: Regression of Coefficients

Thus, the optimal model for the study is;
Performance of loan portfolios = *-1.688+ 0.301 CRI + 0.585 CRA + 0.32 CRM + 0.24 CA*
Regression of coefficients results in Table 9 above indicate that credit risk identification has a positive and statistically significant effect on performance of loan portfolios (B=0.301, p=0.024). These findings concur with that of Ntiamoah, Egyiri, Fiaklou and Kwamega (2014) who concluded that that there was high positive correlation between the credit terms and policy, lending, credit analysis and appraisal, and credit risk control and loan performance .The results further indicates that credit risk analysis has a positive and statistically significant effect on performance of loan portfolios (B=0.585, p=0.000); credit risk monitoring has a positive and statistically significant effect on performance of loan portfolios (B = 0.32, p = 0.011). Similarly, the study established that credit approval had a positive and statistically significant effect on performance of loan portfolios (B=0.24, p=0.027). Consequently, all the four null hypotheses were rejected.

5. Summary, Conclusion and Recommendations

5.1. Summary
The study sought to establish the effect of credit risk identification, credit risk analysis, credit risk monitoring and credit approval on performance of loan portfolios among SACCOs in Kisumu County, Kenya. The study adopted a descriptive research design. The target population for the study was 106 Deposit Taking SACCOs. The sample size was 56 credit managers in the deposit taking SACCO's who were selected using purposive sampling. The study used both primary data; primary data was obtained through questionnaires. Data collected was analyzed using descriptive statistics, correlation analysis and multiple regression analysis. Hypotheses were tested at a significance level of 0.05. The findings of the study indicate a positive and statistically significant effect of all credit risk management components on performance of loan portfolios of the SACCOs studied.

5.2. Conclusion
The study found that there was a positive and significant association between credit risk identification and performance of loan portfolios and therefore the study concluded that credit risk identification helps in improving performance in SACCOs. In addition, risk identification assists the management to develop risk management strategy to allocate resources efficiently. The study also found that that there was a positive and significant association between credit risk analysis and performance of loan portfolios and therefore the study concluded that there is credit risk analysis improves performance of SACCOs. Also, risk analysis improves the organization performance. In addition, there has been screening of clients before advancing credit in most Saccos. It was also concluded that risk analysis improves the organization performance.
There was a positive and significant and positive association between credit risk monitoring and performance of loan portfolios and therefore the study concluded that credit risk monitoring helps in improving performance in SACCOs. The study also concluded that SACCOs monitors cash flows of borrowers continuously and they have constant contact with borrowers. In addition, SACCOs has mitigation strategies for anticipated losses and reviews client's loan repayment patterns. The findings also showed that there was a positive and significant association between credit risk approval and performance of loan

portfolios. The study further concluded that adequate training helps to improve the loans performance. In addition, clear established process for approving new credits and extending the existing credits has been observed to be very important while managing Credit Risks in SACCOs.

5.3. Recommendations

The study recommends that Saccos should do comprehensive analysis of present and future risks frequently so as to boost their loan performance. They should also quantify the organizations risk profile. In addition, SACCOs should ensure they been review the credit history of the members and borrowers. The SACCO should also monitor cash flows of borrowers continuously. In addition, the SACCO should have a constant contact with borrowers so as to improve their loan performance. In addition, adequate training should be done to employees on credit approval so as to improve the loan performance.

5.4. Contribution to Knowledge

The SACCOS will benefit from the study as they will gain knowledge on impact of credit risk management on performance of loan portfolios among SACCOs. The study will present varied practices which can be shared by many SACCOs in Kenya. This study will be of benefit to the management staff of various SACCOs that are yet to be formed. It will also be a source of literature for related studies. The study would also contribute to the understanding of the credit risk management variables that contribute to performance of loan portfolios. This paper also contributes to the emerging body of research by examining how the diffusion of credit risk identification, credit risk analysis, credit risk monitoring and credit approval has affected the performance of loan portfolios among SACCOS.

5.5. Suggestions for Further Study

The study sought to determine the effect of credit risks management on performance of loan portfolios among SACCOS in Kisumu County, Kenya and therefore an area for further studies could consider the credit risks management on performance of loan portfolios among banks in Kenya. Future researchers could also consider introducing different variables other than credit risk identification, credit risk analysis, credit risk monitoring and credit approval. This is because as much as this study used this variable; there are other variables which may influence the performance of loan portfolios among SACCOS.

6. References

i. Basel, (1999). Principles for the Management of Credit Risk. Basel Committee on Banking Supervision, Basel.
ii. Bosek, J. C. (2016). *Credit risk evaluation systems and non-performing loans among sacco 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).
iii. Chilukuri, S., & Rao, K. S. (2014). Effective Credit Approval and Appraisal System: Loan Review Mechanism of Commercial Banks. *International Journal of Innovative Research and Development|| ISSN 2278–0211*, *3*(12).
iv. Honohan, P., & Beck, T. (2007). *Making finance work for Africa*. World Bank Publications.
v. Kwagara, M. P. (2006). *An assessment of credit risk management techniques adopted by micro-finance institutions in Kenya* (Doctoral dissertation, University of Nairobi.).
vi. Kwamega, M., Brako Ntiamoah, E., Oforiwaa Egyiri, 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.
vii. 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*,16-19.
viii. Owira, O. P. (2011). The determinants of financial Risks faced by SACCOs in Kenya. *Unpublished MBA project, University of Nairobi.*