International Journal of Economics, Commerce and Management

United Kingdom http://ijecm.co.uk/ Vol. IV, Issue 11, November 2016 ISSN 2348 0386

EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON THE FINANCIAL PERFORMANCE OF SACCOS IN KISII COUNTY

Moronya Asha Hesborn

MBA - Finance candidate, Jaramogi Oginga Odinga University of Science and Technology, Kenya asha.peter@ymail.com

Arvinlucy Onditi

Department of Management and Economics, School of Business and Economics, Jaramogi Oginga Odinga University of Science and Technology, Kenya

Michael Nyagol

Department of Finance and accounting, School of Business and Economics, Jaramogi Oginga Odinga University of Science and Technology, Kenya

Abstract

The general objective of the study was to analyze the effect of credit risk management practices on the financial performance of SACCOs in Kisii County while specific objectives focused on the effect of credit policies, client appraisal methods, collateral substitutes and the credit risk monitoring methods on SACCOs in Kisii County. The study was guided by Modern portfolio theory, Capital Asset Pricing Model Theory and Arbitrage Pricing Theory. Descriptive survey research design was used with a target population of 106 active SACCOs with 424 executive committee members and 318 credit officers. A sample size of 32 SACCOs (two respondents per SACCO) was selected through probability sampling using proportionate stratified sampling followed by purposive sampling. The questionnaire was formulated with both open ended and close ended questions based on the objectives of the study. Secondary data was collected from SASRA reports and internal financial statements. Quantitative data was analyzed using Statistical Package for Social Sciences (SPSS) version 23 while qualitative data was analyzed using observational and narrative analysis techniques. The research hypothesis was tested using ANOVA which indicated that the independent variables; credit policy, client appraisal, collateral substitutes and credit monitoring were statistically significant in predicting the financial



performance of SACCOs where F= 4.841 and P=.0005. The study concluded that SACCOs in Kisii County need credit risk management to prevent their recession. The study recommended for universal credit policies to the SACCOs, more training on client appraisal, collateralization and credit monitoring, restructuring and supervision of all Matatu SACCOs by the ministry.

Keywords: Credit risk, financial performance, share capital, SACCOs, Kenya

INTRODUCTION

Savings and credit societies, also known as credit unions are cooperative financial institutions (CFIs) that are by principle owned and controlled by their members and operated for the purposes of promoting thrift, providing credit at low interest rates and providing other financial services to their members. World over, systems in these organizations vary from slightly to significantly in terms of total system assets, average institution's asset price and regulatory control. This ranges from volunteer operations with a few members' organizations to the institutions with several billion asset value. The average credit union in the United States of America had USD 93 million worth of assets in 2007 as against an average commercial bank with USD 1.5 billion, World Council of Credit Unions (2008).

The world council of credit unions (WOCCU) defines a credit union as a non-profit making cooperative institution. In real practice however legal provisions relating to these institutions vary by jurisdiction. For example, in Canada credit unions are referred to those that are regulated as non-profit making institutions and view their mandate as earning a reasonable profit to enhance services to members to ensure stability just the same view as was shared in Kenya. These institutions have a relatively unique structure in that agency problems exist given that the owners of the institutions and users of the services are the same people as captured by one of their universal principles of "democratic member control". This indicates that the owners of these institutions are at the same time the members. The members have equal rights to take part democratically in the management and administration of the company of which they share their duties and the advantages proportionally with the transactions of each member regardless of their deposit amount or the number of shares they own, Tummala and Burchett (2004), pp.223-25.

In most African countries, the co-operatives in the 1950s and 1960s were supported mainly by the government under a control economy. In effect, they heavily relied on the government to boost their operations often in return to political support thereby adversely affecting their performance. This scenario changed significantly with market liberalization in the 1990s and subsequently saw the withdrawal of government support. Although stakeholders within SACCOs are increasingly seeking to understand the relationship between SACCOs' operational policies and their performance, various hurdles are standing in the way to capital utilization. SACCOs by default are guided by the seven principles of co-operatives (voluntary and open membership, democratic member control, member economic participation, autonomy and independence, education, training and information and concern for the community), an indication that the executives are answerable to the members. This justifies why SACCOs' overall performance should be linked with innovativeness of those charged with the responsibility of managing the organization. The fundamental objective of a SACCO is to promote by mutual aid, the economic and social welfare of its members by granting loans to cover their economic needs, supporting the spirit of innovation in agricultural or industrial work and careful use of the savings produced locally, WOCCU (August 2005).

By independence, rural co-operatives were firmly established in all East African countries, with a more-or-less identical institutional framework. There were four tiers: membership, primary societies, secondary unions (usually at an administrative district or regional level) and a national apex institution. Most rural primary societies were formed to market their members' export crops and the development of specialist co-operatives offering financial services. In Tanzania, SACCOs are identified as capable of promoting expansion and availability of Micro-finance services in rural areas. In many cases SACCOs do not have the necessary skilled staff to maintain good records in bookkeeping, accounting, cash management and credit operations. Because of this poor record keeping, many SACCOs could not provide proper accounting records or show audited accounts, Nkinda (2005).

Similarly the financial sector in Kenya has been vulnerable to effects of the global financial crisis and economic recession, as individuals and firms are likely to struggle to repay debts thereby resulting in a deterioration of the quality of loan portfolio and profitability in the financial system. The SACCO sub-sector is part of the larger cooperative movement in Kenya. The Cooperative movement in Kenya dates back to 1931 when the first cooperative ordinance to regulate operation of cooperatives was enacted. The following decades witnessed increased intervention with the eventual enactment of the Co-operative Ordinance Act of 1945, the predecessor of the current Co-operative societies Act, Cap. 490 of the laws of Kenya as amended in 1997. SACCOs are currently regulated by SACCO Societies Act, 2008 (Revised 2012) which replaced the Co-operative Societies Act 2004. SACCOs are registered and regulated under the cooperative Societies Act. Currently, SACCOs in Kenya lie under the department of cooperative development and marketing which is encompassed in the ministry of industrialization and enterprise development.

Currently, there are over 16,000 registered co-operative societies with a membership of over 12 million. About 63% of Kenyan population directly and indirectly depends on the cooperative related activities for their livelihood. The sector has mobilized over KES 230 billion in savings which is about 43% of the national savings. On the other hand, the combined assets of all SACCOs are worth approximately KES 300 billion, out of which approximately KES 250 billion are members' deposits, which consist of both shares and savings, SASRA report (2013).

The establishment of SACCO Societies Act in 2008 places the licensing, supervision and regulation of deposit taking under the armpit of the SACCO Societies Regulatory Authority (SASRA). Through this new legal framework, prudential regulations have been introduced to guide SACCOs' growth and development, Barrales (2012). Contrary to the popular belief that default rate in SACCOs is negligible, statistics from the department of cooperative development and Marketing indicates a considerable increase in the amount defaulted by SACCO members each year. The data from the ministry of industrialization and enterprise development (2015), showed that an average annual increase in the number of defaulters was 44% starting from the year 2011-2015. This observation showed that the financial performance of these SACCOs was deteriorating every year and there was great need for urgent measures to salvage them from eventual demise. This concurs with the Sacco societies regulatory authority report (SASRA) (2014) which revealed that the rate of non-performing loans was on an increasing trend and SACCOs needed to allocate provisions for loan losses as well as tighten their credit monitoring techniques. Therefore, increasing rate of non-performing loans results to higher amounts of defaulted loans and this reduces the interest income and the operating capital for the affected SACCOs.

Objectives of the study

General Objective

To establish the effect of credit risk management practices on the financial performance of SACCOs in Kisii County.

Specific Objectives

- To examine the effect credit policy on the financial performance of SACCOs in Kisii County.
- To establish the client appraisal methods used, and their effect on the financial performance of SACCOs in Kisii County
- iii. To evaluate the effect of collateral substitutes on the financial performance of SACCOs in Kisii County.

iv. To determine the effect of credit risk monitoring methods used by the SACCOs in Kisii County and their effect on financial performance.

Research Hypotheses

In an attempt to achieve the above objectives, this study developed the following null hypotheses;

- Ho₁: Credit policy has no statistical significant effect on the financial performance of SACCOs in Kisii County.
- ii. H0₂: Client appraisal methods have no statistical significant effect on the financial performance SACCOs in Kisii County.
- iii. H0₃: Collateral substitutes have no statistical significant effect on the financial performance of SACCOs in Kisii County.
- iv. H0₄: Credit risk monitoring has no statistical significant effect on the financial performance SACCOs in Kisii County.

LITERATURE REVIEW

Overview of Credit risk

Credit risk

Credit risk is the current and prospective risk to earnings or capital arising from an obligor's failure to meet the terms of any contract with the SACCO or otherwise to perform as agreed. Credit risk is found in all activities in which the success depends on the counterparty, issuer or borrower's performance. It arises any time SACCO funds are extended, committed, invested or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet, Wanyama (2008). Credit risk is most simply defined as the potential that a SACCO borrower or counterparty will fail to meet his obligations in accordance to agreed terms. The goal of credit risk management is to maximize a SACCO's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. SACCOs need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions, Owango (1998).

Credit risk can also be defined as the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. It can also be defined as a possible loss if the issuer of an investment defaults. In relation to loans, it refers to the probability that a borrower may not repay a loan. Credit risk is a significant concern for SACCOs. Decisions to issue loans are based on information about a borrower's ability and willingness to repay a loan at the time a loan is made. Thus, credit risk can be controlled to



some extent by the establishment of sound investments and lending policies and procedures. The management of SACCOs should be able to ascertain that investing and lending policies are adequate with elaborate account on how the SACCO intends to mitigate on these risks and ensure they are followed as well.

However, since economic and other factors may vary over the life of an investment or loan and the credit risk fluctuates over time, there is need to continuously appraise these investments in relation to the apparent risks. Credit risk management in a financial institution therefore starts with the establishment of sound lending principles and an efficient framework for managing the risk. Policies, industry specific standards and guidelines together with risk concentration limits are designed under the supervision of Risk management Committee, Manganelli & Englw (2004). In credit risk management, they use various methods such as credit limits, taking collateral, diversification, loan selling, syndicated loans, credit insurance, securitization and credit derivative, Colquitt (2007).

SACCO loans and financial performance

A loan is a debt like all debt instruments; a loan entails the redistribution of financial assets over time, between the lender and the borrower. The borrower initially receives an amount of money from the lender, which he pays back, but sometimes not always in regular installments, to the lender. This service is generally provided at a cost known as interest on the debt. The lender may subject the borrower to certain restrictions known as loan covenants. One of the principle duties of financial institutions is to provide loans which are typically the source of income to SACCOs. SACCO loans and credit also constitute one of the ways of increasing money supply in the economy, Wanyama (2008). SACCOs earn financial revenue from loans and other financial services in the form of interest fees, penalties and commissions. Financial revenue also includes income from other financial assets such as investment income. A SACCO's financial activities also generate various expenses, from general operating expenses and the cost of borrowing to provisioning for the potential loss from defaulted loans. Profitable institutions earn a positive net income that is, operating income exceeds total expenses, Grier (2007).

Financial health indicators

Health of an individual financial institution is a function of multiple factors such as quality of its assets, liquidity position, capital base, management quality, market sensitivity, growth, financial structure and earnings. All these factors affect the different types of risk to an individual financial institution. Different types of risks: credit, interest rate, liquidity, market, off-balance sheet,

foreign exchange, sovereign, technology and insolvency affect the health of an individual financial institution adversely if they are not managed in a sustainable manner, Saunders and Cornett (2004).

A number of factors such as quality of assets, financial market condition, foreign exchange market, composition of assets, financial health of its clients, profitability and capital adequacy affect the degree of these risks. Financial health check-up of an individual institution should be made regularly to detect the adverse effect of these risks on its stability. Microprudential indicators such as capital adequacy, asset quality, management soundness, earning and profitability, liquidity, sensitivity to market risk and market based indicators like market price of financial instruments; credit ratings are used as indicators of the sound health of individual financial institutions, Evans (2005).

Credit Risk Management

Credit risk management is a structured approach to managing uncertainties through risk assessment, developing strategies to manage it, and mitigation of risk using managerial resources. The strategies include transferring to another party, avoiding the risk, reducing the negative effects of the risk and accepting some or all of the consequences of a particular risk. The process of risk management is a two-step process. The first is to identify the source of the risk, which is to identify the leading variables causing the risk. The second is to devise methods to quantify the risk using mathematical models, in order to understand the risk profile of the instrument. Once a general framework of risk identification and management is developed, the techniques can be applied to different situations, products, instruments and institutions. It is crucial for SACCOs to have a comprehensive risk management framework as there is a growing realization that sustainable growth critically depends on the development of a comprehensive risk management framework, Greuning & Igbal (2008).

Empirical Literature

Credit policy and financial performance

According to the World Council Of Credit Unions (WOCCU) the financial discipline of provisioning for loan losses has not been part of the SACCO development since SACCOs have relied on the check-off system for decades. SACCOs therefore end up having extremely low net institutional capital and fail to meet the WOCCU prudential standards of excellence of a minimum of 10% net institutional capital. Drzik (1995) made a survey which showed that only large banks and credit unions in the US had made a substantial progress in their development and implementation of risk measures

Friends Consult Ltd (2013) reported that failure of the SACCOs' board of directors to establish a proper loan policy, inefficient loan committees review and approval, poor organizational policies and strategy, inability of the staff to discharge their duties and roles as per the institutional rules and policies, poor sensitization by the field staff and failure of the clients to understand the institution's policies were some of the reasons which led to loans delinquency for Umurenge SACCO in Uganda. The study asserted that the application of corporate governance rules were essential for mitigation of loan default risks. The study also recommended for appointment of a knowledgeable credit committee and credit department staff that can be able to monitor and evaluate properly the loan applications before disbursement.

Client Appraisal

Loan appraisal plays an important role to keep the loan losses to minimum levels hence if those officers appointed for loan appraisal are not competent then there would be high chances of lending money to non-deserving customers, Boldizzoni (2008). Collection procedure is a systematic way required to recover the past due amount from clients within the lawful jurisdiction. The collection aspects may vary from institution to another but they should be subject to existing laws such as third party collection agencies may be involved in a collection process. It does not just involve only collection procedure details provided by the institution but also the procedure in which the lawful collection takes place, Latifee (2006). Well administered collection is needed for better performance of the loan. If financial institutions do not follow well administered collection procedures, this would results in loan defaults, Boldizzoni (2008).

Tesfamariam et al (2013) analyzed the variables which influence the efficiency of rural SACCOS in Ethiopia and they revealed that loans, income and expenses positively influenced the efficiency of SACCOS in Ethiopia. They also noted that loan appraisal techniques that were being implemented were not adhered to. These led to an increase in default rate which also jeopardized the growth and the future of these SACCOs. The study therefore, recommended that the management should comply with the set policies and also provide stringent appraisal methods which will be able to identify the clients whose financial records and ability to repay their loans can be predetermined. The study concluded that SACCOs have a potential to grow financially and promote the economic standards of the country if only more commitment and proper regulations are put in place.

Collateral substitutes

Crisis management entails a number of difficult policy trades-offs between recovery speed, economic efficiency and distribution fairness in Europe, Honohan and Klingebiel (2003). Due to deficiencies in prior disaster planning, it has become a common practice to issue blanket guarantees to arrest financial institutions management crisis including SACCOs. Advocate of using blanket guarantees to halt a systematic financial crisis argue that sweeping guarantees creates an expectation of their future financial safety and can immediately be helpful in stopping spread flight to quality. However, because blanket guarantees create these future expectations, they undermine business discipline and may prove greatly to be destabilizing in the long run. Honohan and Klingebiel (2003) analyzed the impact of blanket guarantees and other crisis management strategies on the full fiscal costs of resolving financial system distress. Their analysis of forty credit unions that experienced financial crisis between 1980 to 1997 indicated that unlimited deposit guarantees with open ended liquidity support and capital forbearance significantly increased the ultimate fiscal cost of revolving financial crisis.

There are diverse strategies used by banks, SACCOS and MFIs in mitigation of the credit risks. Fun Ho and Yusoff (2009) adopted the model of Wesley (1993) to examine how credit culture, criteria, diversification, proper training of the personnel, setting of standards and rewarding success influenced the credit risk management in Malaysian financial institutions. The study noted that the borrower's commitment of assets during loan default, the use of guarantee from the third party and insurance were important instruments for risk mitigation. The study also noted that diversification of loan services, training and development of staff and guidelines for loan approval, assets quality, adequacy of provision and reserve and disclosure were important strategies for managing the credit risks.

Credit Monitoring

In prior studies; Non Performing Loans (NPLs) are usually mentioned in East Asian countries' macroeconomic studies, while they run into serious economic downturn, as one of the financial and economic distress indicators among banks, SACCOs and other Micro financial institutions. Japan and China, are those of most mentioned in this regard. Moreover, IMF working paper from December 2001 encourages better account of NPL for macroeconomic statistics which makes NPL to be widely used in macroeconomic statistics. Al-Tamimi (2002) found that the UAE commercial banks and credit unions were mainly facing credit risk. The study also found that inspection by branch managers and financial statement analysis were the main methods used in risk identification.

Another study was by Nair and Kloeppinger-Todd (2007) found that Sri Lanka and Kenya had the weakest regulatory environments in which neither prudential regulation nor financial supervision for SACCOs existed. In contrast, Brazil presented a case of well-developed regulation and effective supervision. This study recommended that SACCOs would provide

financial services in rural areas in developing countries and be profitable if they operate better in environments with prudential regulation and financial supervision. The study concludes that supervision is one of the measures that must be practiced from the initial stages after a loan has been awarded to the member and it should be done by all financial institutions if at all they want to minimize the levels of losses that arise from their financing.

Conceptual framework

The credit risk management practices are the Independent Variables and are employed by SACCOs to explain the variation or changes in the performance of SACCOs (Dependent variable). The listed variables are Credit policy, Client appraisal, Collateral substitutes and Credit monitoring; Credit policy formulation, credit risk monitoring and control, internal rating system and credit scoring models. The application or use of these practices will determine the level of performance of the SACCOs

Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

The research design used in this study was descriptive survey. The study focused on SACCOs within Kisii County, located in the western part of Kenya, South of Nyanza province. Categories of SACCOs were a target of 106 active SACCOs which were stratified into Teachers, farmers, Youths, Women and transport/Matatu SACCOs.

A sample size of 32 SACCOs was selected. The study utilized probability sampling using proportionate stratified sampling followed by purposive sampling where only respondents who were knowledgeable on credit matters were engaged. The main focus of this study was quantitative. Quantitative data was collected by use of questionnaires. Qualitative data was analyzed using observational and narrative techniques.

Quantitative data was analyzed using the Statistical package for Social Sciences (SPSS) software version 23. Qualitative data was analyzed using observational and narrative analysis techniques. The research hypothesis was tested by use of analysis of variance (ANOVA). Correlation was used to establish the relationship between credit risk management practices and SACCOs' financial performance while multiple regression was used to determine the strength of the relationship.

ANALYSIS AND RESULT DISCUSSION

Multiple regression Analysis

A multiple regression model was applied to determine the strength of the relationship between credit risk management practices and financial performance of saving and credit cooperative societies in Kisii County.

The logistic regression used in this model was;

 $Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \alpha$

Where Y(Dependent variable)= Return on Assets, $\beta 0$ = Constant term (regression coefficient), β 1, β 2, β 3, and β 4 = slopes of the regression equation, X1= Credit policy, X2= Client appraisal, X3= Collateral substitutes, X4= Credit Monitoring and α = Error Term.

Table 1. Variable analysis

Variables Entered/ Removed^a

Model	Variables Entered	Variables Removed	Method
1	Credit policy, Client appraisa Collateral substitutes, Cred monitoring ^b		Enter

a. Dependent Variable: Financial performance

Table 1 informs of the variables in the analysis and it turns out that all the independent variables were useful to predict the financial performance of SACCOs in Kisii County



b. All requested variables entered.

Table 2: Model summary

Model	R	R Squared	Adjusted R Square	Std. Error of the Estimate		
1	.874	.763	.762	.223		

Predictor variables: (Constant), Credit policy, client appraisal, collateral substitutes and credit monitoring Dependent Variable: Return on Assets (Financial performance). methods.

R is the square root of R-squared and is the correlation between the observed and predicted values of dependent variable implying that the association of 0.874 between financial performance and credit risk management practices which include credit policy, client appraisal, collateral substitutes and credit monitoring methods was strong.

Adjusted R squared is the coefficient of determination which tells us how financial performance of savings and credit cooperative societies varies with variations in credit risk management practices which include credit policy, client appraisal, collateral substitutes and credit monitoring procedures. From table 4.28, the value for R squared was 0.763 which implies that there was a variation of 76.3% on financial performance varied with variation in credit policy, client appraisal, collateral substitutes and credit monitoring procedures at a confidence level of 95%. This shows that 76.3% changes in financial performance of SACCOs in Kisii County could be accounted to Credit policy, Client appraisal, Collateral substitutes and Credit monitoring procedures.

R is the correlation coefficient which shows the relationship between the study variables. It was notable that there exists a strong positive relationship between the study variables as shown by 0.874. It was found out that the adjusted R^2 of our model was 0.763 with the R = .762that means that the linear regression explains 76.3% of the variance in the data. Due to the fact that difference between R square and Adjusted R square is small (0.001) shows that the independent variables were precise. These findings are similar to those of Makori (2015) which revealed that credit policy, client appraisal, collateral substitutes and credit monitoring were statistically significant in measuring the financial performance of SACCOs.

Table 3: Analysis of Variance

Model		Sum of Squares	Df	Mean Square	F	Sig.	
_	Regression	2.188	4	.547	4.841	.001 ^b	
1	Residual	4.294	48	.113			
	Total	6.482	52				

Critical value =2.50 Predictor variables: (Constant), Credit policy, client appraisal, collateral substitutes and credit monitoring methods. Dependent Variable: Financial performance.



From the ANOVA table, it is shown that all the independent variables which includes; credit policy, client appraisal, collateral substitutes and credit monitoring helps to predict the financial performance, (F= 4.841, P (.0005). This implies that the null hypotheses were therefore rejected and the alternate hypotheses of the variables accepted. These findings concur with the study by Ochogo (2015) on the effect of credit risk management on the financial performance of SACCOs which was supported by F value (6.144) and P value (0.000) that was less than the conventional probability of 0.05 significance level.

Table 4: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		В	Std. Error	Beta	-	
	(Constant)	1.342	1.023		1.312	.001
	Credit policy	.311	.118	.213	2.636	.002
1	Client appraisal	.341	.125	.207	2.728	.000
	Collateral substitutes	.322	.124	.206	2.597	.001
	Credit monitoring	.336	.114	.211	2.947	.000

Predictor variables: (Constant), Credit policy, client appraisal, collateral substitutes and credit monitoring methods.

From the data in table 4, the established regression equation was

 $Y = 1.342 + 0.311X_1 + 0.341X_2 + 0.322 X_3 + 0.336 X_4$

From the findings in the multiple regression, it showed that all the independent variables which includes; credit policy, client appraisal, collateral substitutes and credit monitoring had predictive value on the dependent variable (Financial performance) meaning that they were all statistically significant, hence the null hypotheses were rejected and the alternate hypotheses accepted since the P value is less than 0.05,

From the Unstandardized Coefficients, the model predicts that an increase in credit policy (.311) would results into an increase in the financial performance of SACCOs in Kisii County, holding other independent variables (client appraisal, collateral substitutes and credit monitoring) constant. Furthermore, an increase in client appraisal (.341) would results into an increase the financial performance of SACCOs in Kisii County, holding other independent variables (credit policy, collateral substitutes and credit monitoring) constant. Moreover, an increase in collateral substitutes (.322) would results into an increase in financial performance

holding other independent variables (credit policy, client appraisal and credit monitoring) constant. Finally, an increase in credit monitoring (.336) would results into an increase in the financial performance of SACCOs in Kisii County holding other independent variables (credit policy, client appraisal and collateral substitutes) constant. The findings are similar to those of Gatuhu (2013) which indicated that holding credit policy, credit monitoring, collateral substitutes and client appraisal to a constant zero will lead to an increase by factors of 0.218, 0.392, 0.284 and 0.239 respectively, an indication that the variables were statistically significant in influencing financial performance.

On the other hand, Beta expresses the relative importance of each independent variable in standardized terms. Firstly, the results show that all the independent variables (credit policy, client appraisal, collateral substitutes and credit monitoring) are significant predictors. In conclusion, a multiple regression was run to predict the financial performance of savings and credit cooperative societies in Kisii County from the independent variables (credit policy, client appraisal, collateral substitutes and credit monitoring). These variables statistically, significantly predicted financial performance of SACCOs in Kisii County. All four variables added statistically significantly to the prediction, p < .05. The study concurs with another study by Ugirase (2013) which indicated that credit policy, risk monitoring, client appraisal and collateral substitutes had statistical significance in explaining the financial performance.

CONCLUSION

From the findings, the study concluded that credit policies are owned by most of the SACCOs but many of the SACCOs in the Matatu sector did not embrace the actual ownership and adherence to these policies. The study also found that although most SACCOs had credit policies forming part of their management strategies, most of them did not have stringent or well customized policies that could govern their actual loan processes to certainty. Majority of the respondents believed that diversification of the loan products was prudent in meeting the demands of their members. It was also found that basic loaning terms such as borrowing limits were observed by the SACCOs.

The study also established that although client appraisal was being done by the SACCOs, not all of them had competent staffs that were qualified to efficiently conduct this process. The study confirmed that client appraisal was an important process that needed to be done every time a member requested for a loan to avoid extending credit facilities to clients who were not financially capacitated to settle the loan as per the terms provided. It was observed that considering several qualities such as the income of the client, collateral substitutes, credit history of the member, bankruptcies and loan delinquencies was key in the entire client appraisal process.

On the other hand, the findings revealed that shares and cash deposits (savings) were the most commonly used forms of collateral substitutes by SACCOs in Kisii County. Assets were also considered to a great extent although it was observed that most SACCOs tend to combine several other substitutes such as loan insurance and real estate with an effort to spread the credit risk across other investments. Besides, it was found that SACCOs only diversified their financial investments in the banking sector, agricultural sector and government bonds and securities.

Most respondents believed that credit risk monitoring played a great role in credit risk management although most SACCOs only reviewed their policies whenever need arose since their management was fairly involved in the credit assessment processes. This affected their experience in credit judgment at equal measure as most SACCOs sometimes took their time to evaluate their overall credit performance. It was also revealed that most SACCOs in the Matatu sector did not have the necessary experience in the process of credit risk management. The study also established that most SACCOs were still using manual credit reminders as well as manual reporting systems. This indicated that most SACCOs especially those operating under back office service activities (BOSA) did not embrace technology (ICT) as this would enhance sufficient monitoring and supervision of loans. The study further concluded that there was a positive relationship between credit risk management and the financial performance of savings and credit cooperatives in Kisii County.

RECOMMENDATIONS

The study sought to investigate the effect of credit risk management practices on the financial performance of savings and credit cooperative societies in Kisii County. Although most SACCOs had credit policies in place, the study recommended that SASRA and the department of cooperatives should consider formulating a universal credit policy document that will be adopted by all SACCOs from which rating of their financial performance through credit risk management can be measured and regulated. Stringent policies will always be useful in regulating the whole process of loan application, loan appraisal, loan issue and loan repayment. The government of Kenya should also consider allocating enough funds towards training of the SACCO management, staff and members on matters of strategic management, credit risk management, loan management respectively which will include but not limited to credit policy formulation, client appraisal techniques collateral substitutes and credit monitoring methods. The SACCO management should also consider hiring consultants and experts to train their

staffs on client appraisal techniques which will help in assessing the credit worthiness of their members before extending credit facilities.

The department of cooperatives should review the compliance of Matatu SACCOs with the 7 cooperative principles. This will assist in controlling credit risk by ensuring proper securities are attached to issued loans. These SACCOs should also be advised to submit periodic financial reports to the ministry/SASRA and allow for external monitoring, supervision and guidance on credit risk management and overall financial performance. This will also help in identifying risk gaps in good time and allow for retaliatory measures.

The SACCOs should also invest in trainings especially to their credit officers on credit monitoring techniques which will help to ensure prompt loan repayments are made. This can also be accompanied by refresher trainings on matters of credit management and strategic loan monitoring. Credit monitoring will assist in keeping a close financial record for every loan beneficiary hence such trainings will always keep them up to date with the most convenient tract tactics.

SUGGESTIONS FOR FURTHER RESEARCH

Although the study done was aimed at establishing the effect of credit risk management practices on the financial performance of SACCOs in Kisii County, further studies should be done to establish the relationship between the credit risk management practices employed by SACCOs and the profitability indicators like the ROE, ROA and NPLRs. In addition, studies should be done on the effect of other types of risks like market risk and liquidity risk which are not considered in this study. The extent to which external regulation, internal supervision and governance contributes to the employment of credit risk management practices to the eventual performance of the SACCOs need to be explored. Lastly, since the results of this study were based on the sample selected for Kisii County, further study should be carried out to include a larger sample and possibly include regional based SACCOs or SACCOs in Kenya as a whole.

REFERENCES

Aballey F. (2009), 'Bad Loans Portfolio: The Case of Agriculture Development Bank' Master's Dissertation, Kwame Nkrumah University of Science and Technology, Kumasi, pp. 6-73.

Abdelrahim, K. (2013), 'Effectiveness of Credit Risk Management of Saudi Banks in the Light of Global Financial Crisis'. A Qualitative Study, Asian Transactions on Basic and applied Sciences, 3 (2), pp. 73-91. Available at: http://asian-transactions.org.

Abraham G. (2002), 'Loan repayment and its determinants in small-scale enterprise financing in Ethiopia, Addis Ababa, University Ethiopia'.

Adeyemo R. & Bamire, A. (2005), 'Saving and investment Patterns of Co- operative farmers in South western Nigeria'. Journal of Social Science, 11(3):183-192.



Al-Tamimi, H. (2002), 'Risk Management Practices'. An Empirical Analysis of the UAE Commercial Banks. Finance India, Vol. XVI, 1045-1057'.

Al-Tamimi, H. Mohammed F. (2007), 'Banks' Risk Management'. A Comparison Study of UAE national and Foreign Banks. The Journal of Risk Finance, Vol. 8, No.4, pp. 394-409.

Anam S., Hasan S., Huda, H., Uddin, A., & Hossain, M. (2012), 'Liquidity Risk Management'. A Comparative Study between Conventional and Islamic Banks of Bangladesh. Research Journal of Economics, Business and ICT, 5, 1-5.

Basel Committee on Banking Supervision and International Organisation of Securities Commissions (February 1999).

Bessis W. (2011), 'Risk management in banking, 3rd Edition'. John Wiley & Sons, Chichester, New York.

Bichanga O. & Aseyo L. (2013), 'Causes of loan default within micro finance in Kenya'. Jomo Kenyatta University of Agriculture and Technology'.

Boldizzoni F. (2008), 'Means and ends: The idea of capital in the West'. 1500-1970, New York: Palgrave Macmillan.

Bunning A. (2004), 'A microcredit success story'. Women make the difference. Development Bulletin. no. 64, pp. 63-66.

Campbell A. (2007), 'Bank insolvency and the problem of nonperforming loans'. Journal of Banking Regulation, 9(1), 25-45.

Caprio G. and Klingebiel D. (1996), 'Bank Insolvencies: Cross Country Experience', Finance and Private Sector Development Division Policy Research Department, The World bank, Washington, DC

Drzik J. (1995), 'CFO Survey: Moving Towards Comprehensive Risk Management, Bank Management'. Vol. 71, pp.40.

Evans D. (2005), 'Where Are We Now? Real-Time Estimates of the Macro Economy'.

Fidrmuc P., Marc G and Luc R. (2006) 'Insider Trading, News Releases and Ownership Concentration,' Journal of Finance 61, 2931-2973.

French, C. W. (2003). The Treynor Capital Asset Pricing Model. Journal of Investment Management 1 (2): 60-72.

Friends consult Ltd (2013), 'SACCOs and MFIs'.

Fun Ho, C. & Yusoff, N. (2009), 'A preliminary study on Credit Risk Management Strategies of Selected Financial Institutions in Malaysia'. Journal Pengurusan.

Gasbarro D. (2002), 'The Changing relationship between CAMEL ratings and Bank Soundness during the Indonesian Banking Crisis'.

Gabarro D. and Zumwalt J. (2008), 'Accounting and capital market measures of risk: Evidence from Asian banks during'. 1998-2003.

Gilberto D. and Cresente S (2005), 'Performance standards and financial prudence'.

Gisemba P. (2010), 'The Relationship between Credit Risk Management Practices and Financial Performance of SACCOs in Kenya'. Unpublished MBA Dissertation, University of Nairobi.

Glen A. (2005), 'Corporate Financial Management (3. ed., 354) Harlow: Financial Times/Prentice Hall'.

Gordon V. & McClatchey A. (1999), 'Deposit insurance and risk-taking behaviour in the credit union industry'. Federal Reserve Bank of Atlanta working paper 2001-10, Journal of banking and finance(online)'.

Greuning H. & Igbal Z. (2008), 'Risk analysis for Islamic banks'

Greuning V. Joselito G. and Bikki R. (1999), 'A Framework for Regulating Microfinance Institutions'. Policy Research Working Paper No. 2061, World Bank: Washington, DC.

Grier A. (2007) 'Credit Analysis of Financial Institutions 2nd Edition, Published by Euro money Books'.



Gyamfi D. (2012), 'Assessing the Effectiveness of Credit Risk Management Techniques of Microfinance Firms in Accra'. Journal of Science and Technology, 32 (1): 96- 103.

Harker T. and Stavros A. (1998), 'What Drives the Performance of Financial Institutions?' Working paper 98-21, Financial Institutions Center, The Wharton School, University of Pennsylvania.

Haque, M., Akter, R. & Laoubi, K. (2011), 'Effectiveness of Community Based Organization (CBO) Microcredit Programme of Concern Worldwide'. A Case Study of Bangladesh. African Journal Business Management, 5(24), 10101-10107.

Hippolyte, F. (2009) 'Nonperforming Loans in Sub-Saharan Africa: Causal Analysis And macroeconomic Implications', World Bank Policy Research Working Paper 3769, November 2005

Honohan P & Klingebiel, D. (2003), 'The fiscal cost implications of an accommodating approach to banking crises,' Journal of Banking & Finance.

Ibid S. (2006), 'Determinants of savings and credit cooperatives (SACCOs) operational performance in Ethiopia'.

International Monetary Fund (2001), 'Financial Soundness Indicators: Policy Paper.'

International monetary fund (2011), 'Financial soundness indicators: policy paper'.

Kablan S. (2010), 'Banking Efficiency and Financial Development in Sub-Saharan Africa'. IMF working paper.

Kairu K. (2009), 'Credit Management', 2nd Ed., Focus Publishers Ltd Nairobi

Kaloi, J. (2004), 'Factors contributing to liquidity problems on saving credit co operatives'. Unpublished MA thesis, Moi University, Eldoret, Kenya.

Kamajou, F. And Baker.C (1980) 'Reforming Cameroon's Government Credit Programs: Effects on Liquidity Management by Small Farm Borrowers'. Amer. J. Agr. ~ 62(4):709-718.

Khambata D. (2006) 'The practices of Multinational Banking'. Macro-policy Issues and Key Concepts.

Korir M. (2010), 'Effects of credit risk management practices on financial performance of deposit taking microfinance institutions in Kenya'.

Kuo H. and Enders W. (2004), 'The term structure of Japanese interest rates'. The equilibrium spread with asymmetric dynamics'.

Lagat, F. Mugo, R. and Otuya R. (2013) 'Effect of Credit Risk Management Practices on Lending, Portfolio among Savings and Credit Cooperatives in Kenya'. International journal of Science Commerce and Humanities, Volume No 1 No 5.

Latifee, H. (2006), 'The future of Micro-Finance: Visioning the who, what, when, where, why and how of micro-finance; expansion Over the Next 10 Years,' Grameen Trust publication.

Lyman A. Keith P. and Carles E. (1978) 'Introduction to Business Enterprise', 4th Edition, Keong Printing Company PTE Limited, Republic of Singapore.

Magali, J. (2013), 'The Impacts of Credits Risk Management on Profitability of Rural Savings and Credits Cooperative Societies (SACCOS), The Case Study of Tanzania. International Journal of Management Sciences and Business Research, Vol- 2, Issue 12:62-77'.

Maina W. (2003), 'Risk based capital standards and the riskiness of bank portfolio in Kenya'.

Makori, J., Munene, C. and Muturi, W. (2013), 'The Challenges Facing Deposit-Taking Savings and Credit Cooperative Societies' Regulatory Compliance in Kenya'. A Case of the Gusii Region. Interdisciplinary Journal of Contemporary Research In Business, April 2013 Vol 4, No 12'.

Manganelli S. and Englw R. (2001), 'Value at Risk models in Finance'.

Margrabe K. (2007), 'Credit Risk Management of Commercial Loan Portfolio'.

Margrabe K. (2007), 'The incidence of secured debt: evidence from the small business community', Journal of Financial and Quantitative Analysis, Vol. 24 pp.379-94'.



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

Mbaabu A. (2004) 'Determinants of loan non performers in commercial banks in Eldoret'.MBA thesis, Moi University, Eldoret, Kenya'.

McCahery J. (2002), 'Corporate governance regimes: convergence and diversity'. Oxford -University Press.

Michael R. Gibbons, Stephen A. and jay S. (1987), 'Test of the efficiency of a given portfolio'.

Ministry of industrialization and enterprise development, Kisii County annual report (2014).

Ministry of Co-operative Development and Marketing (2007), 'Investment Policy and guidelines for Cooperative sector'.

Ministry of Cooperative Development and Marketing Annual Report, 2015.

Mudiri, J. (2003) 'Credit management techniques applied by financial institutions offering micro-credit in Kenya'. (Unpublished MBA project, University of Nairobi).

Mugenda O. & Mugenda A. (2003), 'Research methods: Quantitative and qualitative approaches. African Centre for Technology Studies'.

Mutua J. (2016), 'Effect of credit risk management on performance of MFIs in Kenya'

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

Nagarajan M. (2001), 'Credit risk management practices for microfinance institutions in Mozambique'. Unpublished MBA Project - University of Maputo.

Nair A. & Kloeppinger -Todd R. (2007) 'Reaching rural areas with financial services'. Lessons from Financial Co-operatives in Brazil, Burkina Faso, Kenya, and Sri Lanka. Discussion Paper No. 35, World Bank, Washington, DC: USA'

Nawaz M. and Munir S. (2012), 'Credit risk and financial performance of Nigerian Banks'.

Neuberger D. And Rathke, S.(2009), 'Microenterprises and multiple bank relationships'. The case of professionals. Small Business Economics 32, 207'.

Nduta R. (2013), 'The effect of credit management on the financial performance of microfinance institutions in Kenya'.

Niinmak P. (2004), 'The Effects of Competition on Banks Risk Taking'. Journal of Economics 81(3):199-222 • March 2004 with 18 Reads'.

Njiru G.M. (2003), 'Credit Risk Management by Coffee Cooperatives in Embu District'. Unpublished MBA Project. University of Nairobi.

Njoku, J. (1997). 'Determinants of loan repayment under the special emergency loan scheme (SEALS)'. A study in Imo state. African Review of Money Finance and Banking, 1, 39-51.

Nkinda A. (2005), 'The establishment of cooperatives in Tanzania'.

Nyamsogoro D. (2010), 'Financial Sustainability of Rural Microfinance Institutions (MFIs) in Tanzania.'

O'brien, R. M. (2007), 'A Caution Regarding Rules of Thumb for Variance Inflation Factors'. Quality and Quantity, 41, 673-690

Ochogo G. (2015), 'Effects of Credit Risk Management Practices on Profitability of Deposit Taking Sacco's In Nairobi County'.

Olomola, A. (2002), 'Credit Control Policy for Improved Agricultural Financing in Nigeria'. Panacea, Placebo or Structural Bottleneck? African Review of Money Finance and Banking, (1): 23-38'.

Omisore I. (2012), Journal of Accounting and Taxation Vol. 4(2) 'The modern portfolio theory as an investment decision Tool'.



Owango M., Lukuyu B., Staal S. J., Kenyanjui M., Njubi D. & Thorpe W. (1998) Dairy Cooperatives and Policy Reform in Kenya: Effects of Livestock Service and Milk Market Liberalization, Food Policy, Vol. 23, No. 2, p. 173-185

Pandey I. (2008), 'Financial Management'. Vikas Publishing House (PVT) Ltd, New Delhi.

Parast M. and Fini E. (2010), 'The effect of productivity and quality on profitability in US airline industry'.

Pollio, G., & Obuobie, J. (2010), 'Microfinance default rates in Ghana: evidence from individual-liability credit contracts'. Microfinance Information exchange, Inc. Micro- banking Bulletin, 20, 8-14'.

Porvali, H. (1993), 'The Development of Cooperatives and Other Rural Organizations, Agriculture and Rural Development Series'. No. 8, the World Bank, Washington, D.C.

Porvali, H. (2013), 'The Development Of Cooperatives and Other Rural Organizations, Agriculture and Rural Development Series'. No.8, The World Bank, Washington, D.C.

Pyle D. (1997), 'Bank Risk Management Theory conference on Risk Management and Deregulation in Banking Jerusalem'.

Quigley M. (2001), 'Real estate and Asian crisis' Journal of Housing Economics', 10,129–161 (2001)

Reta, F. (2011), 'Determinants of Loan Repayment Performance'. A Case Study in the Addis Credit and Saving Institution, Addis Ababa, Ethiopia, Masters' Thesis, Wageningen University, Netherlands.

Richard E. Chijoriga M. Kaijage. E, Peterson, C & Bohman. H (2008), 'Credit risk management system of a commercial bank in Tanzania'. International Journal of Emerging Markets, vol 3, no. 3, pp. 323-332., 10.1108/17468800810883729

Roselyne, J. (2007), 'Loan de faulting among members in SACCOs' - A case study of kevom cooperative society, MBA Thesis, Jomo Kenyatta University of Agriculture and Technology, Juja, Kenya.

SASRA (2013), 'Sacco annual supervision report 2013'. Deposit taking Saccos.

SASRA (2015) 'Summary of SASRA Required Reports' Retrieved from http://www.sasra.go.ke.

Saunders A. and Cornett M. (2001) 'Financial Markets and Institutions: An Introduction to the Risk management Approach'. McGraw Hill Pub. 2001.

Scheufler B. (2002) 'Five Risks You Can Target with Best Practices. Intermediate Financial Management'. 4, 35-46.

Shanken T. (1989), 'A Test of the Efficiency of a Given Portfolio.' Econometrica. 57:5, pp. 1121–152.

Sharpe F. (1964), Capital Asset Prices: A Theory of Market Equilibrium under Conditions of Risk." Journal of Finance. 19:3, pp. 425-42.

Sindani, R. (2012), 'An overview of fraud and money laundering in the East Africa financial services industry. Nairobi: Deloitte Forensic'.

Sjomark M. (2005), 'Credit risk management and financial indicators'.

Soke Fun Ho, C., & Yusoff, N. (2009) 'A preliminary study on Credit Risk Management Strategies of Selected Financial Institutions in Malaysia'. Journal Pengurusan'.

Stambaugh, F. (1982) 'On The Exclusion of Assets from Tests of the Two-Parameter Model: A Sensitivity Analysis'. Journal of Financial Economics. 10:3, pp. 237.

Tadele H. and Rao P. (2014), 'Corporate Governance and Ethical issues in Microfinance Institutions (MFIs)'. A study of Micro finance Crises in Andhra Pradesh, India. Journal of Business Management & Social Sciences Research, Volume 3, No.1, 21-26'.

Tehulu A. (2013), 'Determinants of Financial Sustainability of Microfinance Institutions in East Africa'.

Tesfamariam, K. Tesfay H. and Tesfay, A. (2013), 'Relative Efficiency of Rural Saving and Credit Cooperatives'. An Application of data envelopment Analysis. International Journal of Cooperative Studies Vol. 2, No. 1, 16-25.

Tummala et al. (2004), 'Assessing and managing risks using supply chain risk management processes'.



Ugirase J. (2013) 'The effect of credit risk management on the financial performance of commercial banks in Rwanda'.

Vigano L. (1993), 'A credit-scoring model for development banks: An African case study of Savings and Development'. 17(4), pp 441{482}.

Wambugu M. (2005), 'Credit risk management practices in savings and credit cooperative societies (SACCOs) offering front office service activity (FOSA) in Kenya'.

Wanjira, L. (2010), 'The relationship between non-performing loans management practices and financial performance of commercial banks in Kenya'. Unpublished MBA project, University of

Wanyama, F. (2008), 'The Qualitative and quantitative growth of the Cooperative Movement in Kenya, in Develtere'. P.Pollet L. & Wanyama F. (Eds.).

World Council of Credit Unions, (2005), 'Credit union Best Practices'. Retrieved 3rd October 2016. (Online topical documents available at: //www.woccu.org)

World Council of Credit Unions (WOCCU), '(2008), 'Statistical report, World Council of Credit Unions'. Washington D.C.