



**INFLUENCE OF LOAN MANAGEMENT TECHNIQUES ON FINANCIAL PERFORMANCE OF DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN BUNGOMA COUNTY, KENYA**

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**ABSTRACT**

*The Deposit Taking Sacco Societies (DTs) are an integral part of the larger Sacco sub sector in Kenya which is majorly concerned with Deposit Taking and Non- Deposit Taking Sacco Societies. Besides taking deposits, they also issue loans to their members where the deposits act as collateral. Different DTs have been adopting different strategies to manage loans such as interest rates, loan follow ups, customer credit information sharing and loan appraisal .This study sought to determine the influence of selected loan management techniques on financial performance of DTs in Bungoma County, Kenya. The study was guided by the following theories; expectation theory, liquidity preference theory and the modern portfolio theory. The study adopted survey research design that targeted all the three DTs operating in Bungoma County according to SASRA report (2018); Ng'arisha Sacco Society Ltd, Stawisha Sacco Society and Mwalimu national Sacco Society Ltd. Sixty three respondents consisting of Chief Executive Officers, Credit Managers, Finance Managers, Internal auditors, credit officers and Loan field Officers were targeted. Since the target population was small, census sampling was adopted. Questionnaires were utilized to gather primary data. Data was analyzed using descriptive statistics (mean, standard deviation and percentages). Multiple regression model was used to determine the influence of loan management techniques on financial performance of DTs in Bungoma County. The findings revealed that loan management techniques have a positive influence on financial performance of DTs in Bungoma County. Therefore, loan management techniques such as interest rates, loan follow-ups, sharing customer credit information and loan appraisal are likely to improve the financial performance of DTs in Bungoma County. The study recommended that DTs should develop policies that guide the loan follow up strategy. This is to ensure the strategies were consistent and formal. DTs should enhance their credit monitoring techniques including the use of modern information technology to determine the location of defaulters and how to reach them with ease*

**Key Words:** Loan Follow-Ups, Loan Appraisal, Credit Information Sharing, Interest Rate

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## INTRODUCTION

Financial sector is one of the most important sectors in an economy. It is therefore important to monitor and manage their financial performance. Lending is the principle business of most SACCOs and as such the loan portfolio is the biggest asset and predominant source of revenue; and as such it is one of the biggest sources of risk to the SACCOs making its management of paramount importance. Loan portfolio problems historically have been the main causes of bank's losses and failures (Comptroller, 1998; Ramakrishnan, 2006).

Lending is one of the core functions of Sacco's which contributes significantly to its profit. SACCOs lending activities are generally governed by certain principals. Since the lending activities involve the depositor's money which is repayable on demand, SACCOs adheres to principal of safety and security, risk diversification, liquidity, profitability and loan purpose" (IIBF, 2005). Loan management is simply management of loan and advances. Success of SACCOs business depends on the efficient and effective management of loan. Poor loan management has proved to be one of the major causes of financial institution failure throughout the world. Thus loan management is always a challenging task in SACCOs since it involves risk linked with credit operations.

In Europe, a number of financial institutions saw a decline in their profits for various reasons; the Sampo Bank Group in Finland, profit before tax was negative in the first half of the year as impairment charges rose due to market conditions (Press release, August 11, 2009). Sampo Bank reiterated its earlier forecast that loan impairment charges would be high throughout 2009, and this will affect the earnings from banking activities. Impairments are where the bank provides for any losses from bad debts. The provision is made from profits earned and is reflected in the profit and loss account. This is a prudent measure to avoid forecasting on profits before they are actually earned.

An analysis of the Uganda financial sector predicted that the sector was "unlikely to repeat recent historic levels of asset and profit growth" because of high level on non-performing loans. The Uganda Banking sector report (African Alliance, 2001) said that despite the opportunities still available in the sector, factors beyond economics, such as competition, risk management will bear down on the profit margins of banks. This was because the percentage of the banking population in Uganda was very low and majority of people were multi-banked, multi-borrowed which in the long run causes bad debts as commitment to all the banks is hard to maintain (African Alliance report, 2019).

Ong'era and Onditi (2016) analyzed the influence of loan management on financial performance of commercial banks in Kenya. The study found a positive relationship between commercial banks' financial performance and loan lending policies. Moreover, banking sector regulation policies, competition and technology also have significant effects on the banks' financial performance. Based on the key findings from the study it is concluded that in line with the lending policies commercial banks did have competent personnel for appraising prospective borrowers. A good number of commercial banks embraced banking technology to enhance sufficient monitoring and follow-up of loans. Good evaluation is considered to reduce loan defaults consequently high.

In today's society, cooperative financial institutions hold a considerable market share, with the IMF estimates that across all banking sector assets in developing countries, the market share of co-operative finance was equivalent to 14 percent in 2004 (Lagat, 2011). Previous research on cooperative finance during crisis indicates that they tended to fare better than investor-owned savings and loans institutions, as they pursue more conservative investment policies (Mungai, Maingi, Muathe, 2014). For instance, analysis from the IMF indicates that co-operative banks in developed countries tend to be more stable than commercial banks, especially during financial crisis, as their

investment patterns tend to be less speculative and returns are therefore less volatile. According to Central Bank of Kenya (2015) SACCO'S in Kenya have mobilized over Kshs. 200 billion in savings, accounting for over 30% to National Domestic Saving (Co-operative Bank of Kenya, 2010). Liquidity risk is a failure of SACCO'S to honor approved loans due to inadequacy of loanable funds (Fiedler, Brown, & Moloney, 2002).

The Kenya Union of Savings and Credit Cooperative reported that the consequences of the global financial crisis have led to reduced growth savings: 7.6 per cent growth in savings in 2008 compared to 31.2 per cent in 2007, (WOCCU, 2009). It was reported in interviews that SACCO'S in Kenya have reported increase in demand for loans, but have exercised caution in responding to requests (Nguta & Guyo, 2013).

Various studies have reported that various loan management techniques have positive effects on financial performance of financial institutions. For instance, a study by Ndegwa, Waweru and Huka (2016) reported that interest rate significantly influenced financial performance of MFIs in Imenti North sub-county. Another study by Moronya, Onditi and Nyagol (2016) reported that loan monitoring had a significant effect on financial performance of SACCOs in Bungoma County. Ndungo, Olweny and Memba (2017) also reported that credit information sharing positively influenced the financial performance of licensed SACCOs in Kenya. While Kimotho and Gekara (2016) reported that credit appraisal positively influenced financial performance of MFIs in Baringo County.

### **Statement of the Problem**

The increased number of SACCOs leads to higher forms of credit risks due to the use of credit standards, credit analysis, appraisal and credit control as the firms seek to use the proper practices in loan management (Mathara, 2016). However the issue of loan delinquency is still a challenge for many of these firms even if they have tried to follow credit guidelines and policies and tried to lend prudently (Mathara, 2016). According to the

SASRA quarterly financial report there is an increase in the loan default rate (16%) and the non performing rate increased by 15% from in 2017 despite loan management practices in these organizations (SASRA, 2017). Such a trend is a threat to the sustainability of the institutions and also prevents them from achieving their mandate which they sought to meet when they were formed. These include the provision of quality loans and providing services that could satisfy the needs of those that could not afford to get loans from the traditional financial firms (Parrenas, 2018).

The relationship between loan management practices and financial performance of DTS in Kenya is largely unclear, and inconclusive. The available empirical work has largely dwelt on financial performance without attributing the same to loan management yet this is the core of DTS. Ayodele, Thomas, Raphael and Ajayi (2014) found that, loan management is important for any organization as it helps reduce bad debts. Owizy (2013) assessed the impact of credit management on financial performance of Nigerian banks, with particular reference to UBA Plc. The study found that the practices used in credit management significantly affected the Nigerian banks profitability. Muturi (2016) assessed the effect of loan management practices on loan performance in deposit taking microfinance banks in Kenya and found that credit collection policies, terms of credit, the standards of credit and the credit policies used had an effect on the performance of the institutions. Although the DTS are known to adopt credit management practices, very few studies been done on this area.

### **Research Objectives**

This study sought to determine the influence of loan management techniques on financial performance of Saccos in Bungoma County, Kenya. The specific Objectives were;

- To determine the influence of loan follow-ups techniques on financial performance of DTSs in Bungoma County.

- To determine the influence of loan appraisal techniques on financial performance of DTSs in Bungoma County
- To establish the influence of sharing of customer credit information techniques on financial technique performance of DTSs in Bungoma County
- To establish the influence of interest rate on financial performance of DTSs in Bungoma County.

The study was guided by the following Research hypotheses:

- **H<sub>01</sub>:** Loan follow-ups techniques has no significant influence on financial performance of DTSs in Bungoma County
- **H<sub>02</sub>:** Loan appraisal techniques has no significant influence on financial performance of DTSs in Bungoma County
- **H<sub>03</sub>:** Sharing of customer credit information techniques has no significant influence on financial performance of DTSs in Bungoma County
- **H<sub>04</sub>:** Interest rate has no significant influence on financial performance of DTSs in Bungoma County

## LITERATURE REVIEW

### The Modern Portfolio Theory (MPT)

The basic portfolio model was developed by Harry Markowitz in the 1950s and early 1960s. Markowitz is considered the father of modern portfolio theory since he originated the portfolio model that underlies modern portfolio theory. He derived the expected rate of return for a portfolio of assets and the expected risk measure. Markowitz established that under reasonable assumptions, the variance (or standard deviation) of the expected rate of return was a meaningful measure of portfolio risk. From his model, the expected rate of return of a portfolio is the weighted average of the expected return for the individual assets in the portfolio.

The traditional portfolio theory, Modern Portfolio Theory (MPT), is a theory which attempts to maximize investors' expected return for a given

amount of risk, or minimize investors' risk for a given level of expected return. MPT therefore includes two factors when choosing assets to form a portfolio, the mean and the variance and goes therefore also by the name of mean-variance theory. Portfolio theory deals with the selection of portfolios that maximize expected returns consistent with the individual acceptable levels of risk. The theory provides a framework for specifying and measuring investment risk and to develop relationships between risk and expected returns. Its main basic assumption is that investors often want to maximize returns from their investments for a given level of risk. The full spectrum of investments must be considered because the returns from all these investments interact hence the relationship between the returns for assets in the portfolio is important (Reilly & Brown, 2011).

This theory related to the study in such way that, it explains more about returns on investment where by DTSs equally invests by loan portfolios as assets with aim of getting returns from the investment. In such kind of investment, there are risks involved which in turn affect the financial performance of the DTS. It is therefore important for Saccos to deploy prudent loan management practices in order to instill control within the various portfolios with a target of maximizing returns on each portfolio.

### Liquidity Preference Theory

The general idea of the liquidity preference theory was developed by J.M Keynes's within a simplified model in which there is only two types of financial assets money, the liquid and the bonds with no maturity, the illiquid assets. According to him, an increased preference for liquidity in the model is equivalent to increased demand for money and therefore demand for money increases wherever more people think interest rates are likely to rise than believes they are likely to fall (Howel & Bain, 2008). The demand for money as an asset was theorized to depend on the interest foregone by not holding bonds (here, the term "bonds" can be understood to also represent stocks and other less

liquid assets in general, as well as government bonds). Interest rates, he argues, cannot be a reward for saving as such because, if a person hoards his savings in cash, keeping it under his mattress say, he will receive no interest, although he has nevertheless refrained from consuming all his current income. Instead of a reward for saving, interest, in the Keynesian analysis, is a reward for parting with liquidity.

According to the Liquidity Preference Theory money is held for different motives. These are the transactions motive, precautionary motive, and speculative motive. Transactions Motive: We get income only periodically. We must keep some money with us till we receive income next, in order to be able to carry out transactions. Transactions motive also includes business motive. It takes some time before the businessman can sell his product in the market. But he must be able to pay wages to the workers, cost of raw material, etc. as these become due. He must therefore keep some cash for this purpose. Precautionary Motive: Everyone puts something aside for a rainy day. Some money must be kept to meet unforeseen situations and emergencies. Speculative Motive: The future is uncertain and the rate of interest in the market continues changing. No one can guess what turn the change will take. But everybody hopes, and with confidence, that his guess is likely to be correct. It may or may not be so. Some money, therefore, is kept to speculate on these probable changes to earn profit (Tushar, 2016).

According to this theory, investors will always prefer short term securities to long term securities. To encourage them hold long term bonds, long term securities should yield higher interests than short term bonds. Therefore, the yield curve will always be upward sloping. A hypothesis about the term structure of interest rates (the relationship between interest rates and term to maturity) holding that investors demand a premium for bearing interest rate risk. The extent of the premium increases with term to maturity but at a decreasing rate. The two reasons behind the

decreasing rate of increase are that duration, a measure of a bond's price sensitivity to interest rate changes, increases at a decreasing rate with term to maturity and that long term interest rates are typically less volatile than short term interest rates (Bibow, 2005)

This theory addresses the interest rate loan management technique. This theory is related to the study addresses the independent variable of time and interest rates. It evaluates the relationship between of time and interest rates in relation to loan repayment and financial performance.

### **Expectation Theory**

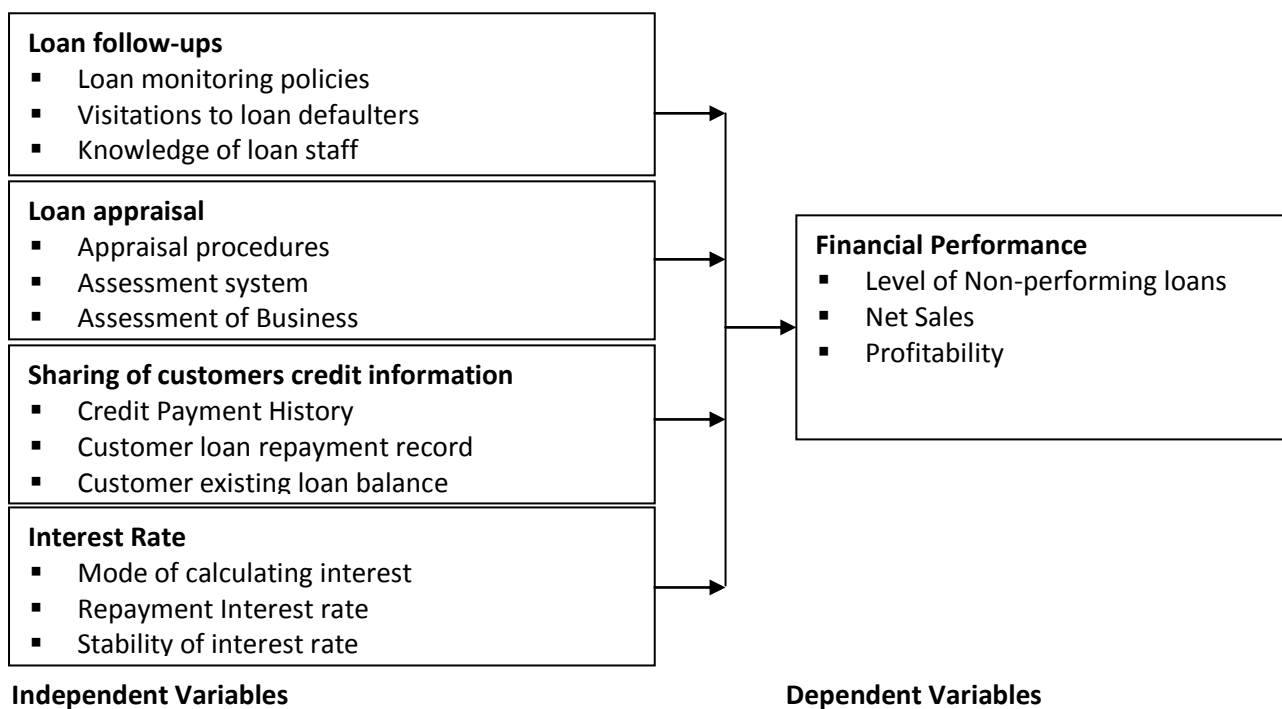
Lutz (1940) developed expectations theory as confirmed by Irungu (2013) who stated that the theory is built on the premise of expectations that people will have in regard to future conditions. If investors expect future interest rates to be high, they will prefer to hold long term securities and if the vice versa is true, they will prefer short term securities (Russel, 1992). Other expectations that will influence securities demand will include expectations on political conditions, expected inflation levels, among others. Investors expecting higher short-term interest rates are more likely to buy bonds maturing in the short term. If they were to invest money into a long-term debt they might not be able to make as much interest according to Auerbach (1988).

The "expectations theory of the term structure of interest rates" (Lutz, 1940) gives an explanation on the relationship between the yield and maturity for money- and capital market investments. In other words, it explains the correlation between short- and long-term interest rates. The theory states that „the expected return from holding a long term money or capital market investment until maturity is equal to the expected return from rolling over a series of short term investment with a total maturity equivalent to that of the long term investment“. This implies that the long term investment yield is the average of the expected short rates (Brink, 2011). Equally, the forward rate is the expected future short rate (Kim &

Orphanides, 2007). Expectations of market participants determine variations in the yield curve. If market participants expect the interest rate to increase, the slope of the yield curve is also expected to rise and vice versa (Redmond, 2014).

The underlying assumption of the expectations theory is the rational expectations hypothesis. The hypothesis states that investors form their expectations of future interest rates rationally. This implies that: (1) there is a stable economic environment. (2) Investors understand this environment and are able to make predictions about future interest rates, that (3) are not systematically wrong and (4) are formed using all public information available at that time. This means that market participants do not systematically over- or under-valuate the current and future interest rate (Cook & Hahn, 1990).

An important implication of the expectations theory is that of the information content in the forward rates. The forward rate is supposed to be equal to the future short term rate. In other words, the forward rate derived today predicts the spot rate tomorrow. This theory is related to the study in the fact that when DTSs invest in lending money to the borrowers they expect to get high returns from the loans as interest which in turn will lead to high financial performance. This study aims at evaluating the effects of loan management techniques on financial performance of DTSs. Also interest rates is a cost attached to the borrowers on the money they borrow and can be used as either an incentive for the borrowers to borrow more or it can be raised to block the borrowers from taking more loans.



**Figure 1: Conceptual Framework**

**Empirical Literature Review**

Kagoyire and Shukla (2016) sought to determine the effect of credit management on the financial performance of commercial banks in Rwanda. The study adopted a descriptive survey design. The target population of study consisted of 57 employees of Equity bank in credit department.

Entire population was used as the sample giving a sample size of size of 57 employees. The study found that loan follow-up; credit risk control and collection policy had effect on financial performance of Equity bank. The study established that there was strong relationship between

financial performance of Equity bank and client appraisal, credit risk control and collection policy.

Namutenda and Muturi (2017) sought to establish the effect of lending policies on financial performance of microfinance institutions in Kisii County, Kenya with a specific interest on KWFT. The study adopted a descriptive case study research design with a target population of 116 KWFT loan officers. The study found out that financial performance has strong correlation with lending policies which include joint liability (0.754), loan follow-up (0.859) and regular loan repayments (0.758). Lending policies explain 76.8% of variance in financial performance. Financial performance improves when lending policies are complimented with other credit risk management approaches as shown on regression model; between financial performance and lending policies

Gatuhu (2013) examined the impact of loan management on the financial performance of Microfinance Institutions in Ghana. The qualitative case study research method was identified as the most appropriate method to achieve the objectives of the study. Mainly, secondary sources of information were applied in the development and analysis of the research. In order to acquire relevant information on the credit management practices, the Credit Manager of the institution was contacted on telephone to assist the author. The study revealed that Credit's loan appraisal have positive impact on total assets, total deposits, profit before tax, and profit after tax, and return on equity.

Njeru, Mohhamed and Wachira (2017) analyze effectiveness of credit management system on loan performance of commercial banks in Kenya. Descriptive research design was used. The population comprised of 86 respondents. That is, one credit manager and one credit officer from one branch of each of the 43 commercial banks registered with central bank of Kenya as at this year. A census study was conducted since the target population was small. Data was collected using a self-administered questionnaire through

drop and pick later method. The study established that credit terms has an effect on performance, just like credit appraisal was equally found to be very important in influencing performance of commercial banks. Similarly, a stringent policy was found to have a far greater influence to performance than a libel policy.

Kisengese (2014) assessed the impact of the credit reference bureaus on nonperforming loans of commercial banks in Kenya. The research objectively sought to find out the impact of introduction of Credit Reference Bureau (CRB) on non-performing loans in commercial banks. Specifically the study sought to answer the following questions; what is the extent of usage of Credit Information Sharing in Commercial Banks of Kenya? And how does sharing of customer credit information affect the nonperforming loans in Commercial Banks of Kenya? Sharing of customer credit information affected the Non-performing loans as it helped the banks to decline loaning chronic defaulters; Including all credit history from other credit suppliers (positive information) would increase credit approval by commercial banks, while low default rate would result from lending to borrowers based solely on all credit suppliers positive information which would increase credit approval by commercial Banks.

Kiage, Musyoka and Muturi (2015) investigated the influence of positive credit information sharing determinants among commercial banks in Kenya. The target population was 34 credit managers and branch managers working in the 17 commercial banks in Kisii town. A survey questionnaire was developed and employed to collect data. The data was presented in descriptive form supported by frequency counts and percentages. The study established that competition had a positive influence on financial performance of Commercial Banks. Privacy protection had a negative influence on financial performance of commercial banks. Further, costs of information sharing had a negative influence on financial performance of commercial banks.



Mutai (2016) sought to establish the factors influencing financial performance of deposit taking savings and credit cooperative societies in Kericho County. More specifically the study sought to determine the influence of information technology; loan repayment, interest rates charged by SACCO and competition from commercial banks on financial performance of Deposit Taking SACCOs in Kericho County. Descriptive research design was used in this study. The target population of this study was all the six deposit taking SACCOs in Kericho County consisting of 234 employees, from whom a sample of 75 employees was selected. The correlation analysis revealed that interest rate had a positive correlation relationship on the dependent variable.

Maithya (2017) aimed to provide an understanding of how loan policies affect the financial performance of church based SACCO's and bridge the knowledge gap that exists. The study adopted descriptive research design study in which secondary data from SASRA reports and the published audited financial statements. The data was gathered between the period 2011 to 2015 for 33 church based SACCOs both registered by SASRA and those regulated by county cooperative commissioner. The study found that, loan policies have insignificant effect on ROA of church based SACCOs according to the evidences gathered since the p-values were more than the acceptable significance level therefore there is a weak negative relationship between loans interest rate policies and ROA.

## METHODOLOGY

A descriptive study design was adopted for this study. The study targeted 63 respondents from three Deposit Taking Saccos in Bungoma County. This include; Ngarisha Saccos, Mwalimu National and Stawisha Saccos. The study targeted the Chief Executive Officers, Credit managers, Finance managers, internal Auditors, credit officers and Loan Field Officers from the DTSs operating in

Bungoma County. A total of 63 respondents were used as the sample size using census sampling technique. Structured questionnaire was used to gather primary data. The researcher conducted a pilot test in IG Sacco, Kakamega County to confirm both validity and reliability of the study during pilot study. Data was summarized, edited and coded. Both descriptive and inferential statistics was used to analyze the data collected. SPSS version 20 software was used for analysis. Multiple regression model was used to test the statistical significance of the relationship involving the dependent and independent variables. The general multiple regression model was as shown below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where Y is the dependent variable (Performance),

$\beta_0$  is the regression constant,

$\beta_1, \beta_2, \beta_3$  and  $\beta_4$  are the coefficients of independent variables,

$X_1$  is Interest rate

$X_2$  is Loan Follow ups

$X_3$  is Sharing of Customer Credit Information

$X_4$  is Loan Appraisal

$\epsilon$  is error term

## FINDINGS

### Analysis of Descriptive Data

These are descriptive statistics based on summarized responses on the structured questions about the effects of loan management techniques on financial performance of Saccos in Bungoma County, Kenya. The responses were based on Likert scale with values ranging from 5 to 1; that is; 5=Strongly Agree, 4=Agree, 3= Uncertain, 2=Disagree and 1= Strongly Disagree. The results were presented in the table form showing frequencies of responses as per each statement and its corresponding percentage score in brackets, means and standard deviations.

### Interest rate and Financial performance

These were descriptive statistics on the influence of Interest rate on financial performance of SACCOs in Bungoma County, Kenya as summarized in table 1.

**Table 1: Descriptive statistics: Interest rate**

Statement	5	4	3	2	1	Mean	Std Dev
My SACCO uses interest rate as the most appropriate loan management technique	12 (22.2)	29 (53.7)	9 (16.7)	2 (3.7)	2 (3.7)	3.87	0.93
Setting of interest rate depends on the characteristics of the loan product	13 (24.1)	17 (31.5)	20 (37)	4 (7.4)	0 (0)	3.72	0.92
Setting of interest rate depends on the characteristics of operational factors	9 (16.7)	26 (48.1)	17 (31.5)	2 (3.7)	0 (0)	3.78	0.77
The SACCO uses interest rates to control loan volume more so by increasing or decreasing interest rates	7 (13)	17 (31.5)	24 (44.4)	4 (7.4)	2 (3.7)	3.43	0.94
Short term loans attracts high interest rates which in turn leads to high rate of non-performing loans	13 (24.1)	16 (29.6)	18 (33.3)	5 (9.3)	2 (3.7)	3.61	1.07
<b>Valid listwise 54</b>							
<b>Grand mean = 3.68</b>							

From table 1, most respondents agreed (53.7%) and strongly agreed (22.2%) that their SACCO used interest rate as the most appropriate loan management technique. A mean of 3.87 postulated SACCO used interest rate as the most appropriate loan management technique to moderate extent. More so, 31.5% and 24.1% of respondents agreed and strongly agreed respectively that setting of interest rate depends on the characteristics of the loan product. However, 37.0% of the respondents were not sure on the same.

Further, slight majority respondents agreed (48.1%) that setting of interest rate depends on the characteristics of operational factors and additional 16.7% strongly agreed on the same. A mean of 3.78 revealed that, to a moderate extent, setting of interest rate depends on the characteristics of operational factors.

The study also revealed 31.5% agreed that their SACCO uses interest rates to control loan volume more so by increasing or decreasing interest rates

while 13.0% agreed on the same. A mean of 3.43 indicated that the SACCO used interest rates to control loan volume more so by increasing or decreasing interest rates at moderate extent. Lastly, small majority of the respondents agreed (29.6%) that short term loans attracts high interest rates which in turn leads to high rate of non-performing loans and further supported by 24.1% of the respondents who strongly agreed. This finding agreed with findings by Kariuki and Ngahu (2016) that interest charged by micro-finance institutions in Naivasha had an influence on loan repayment which further influenced financial performance of the MFIs. If the interest rate charged was higher, the level of loan default will be higher therefore poor financial performance.

#### **Loan follow-ups techniques on Financial performance**

These were descriptive statistics on the influence of Loan follow-ups techniques on financial performance of SACCOs in Bungoma County, Kenya as summarized in table 2.

**Table 2: Descriptive statistics: Loan follow-ups techniques**

Statement	5	4	3	2	1	Mean	Std.dev
My SACCO uses loan follow-ups to the borrowers as the most appropriate loan management technique	8 (14.8)	25 (46.3)	15 (27.8)	4 (7.4)	2 (3.7)	3.61	0.96
Follow ups addresses the risks and helps to control breaches at early stages of the loan portfolio	9 (16.7)	14 (25.9)	15 (27.8)	15 (27.8)	1 (1.9)	3.28	1.11
Follow ups enables stakeholders to determine activities or conditions that require attention before it becomes a problem	9 (16.7)	24 (44.4)	9 (16.7)	9 (16.7)	3 (5.6)	3.50	1.13
Follow ups enables borrowers to use the loans for the purpose intended for hence repayment is prompt	5 (9.3)	30 (55.6)	14 (25.9)	3 (5.6)	2 (3.7)	3.61	0.88
Appropriate loan follow ups leads to reduced incidences of loan defaulting	13 (24.1)	23 (42.6)	8 (14.8)	9 (16.7)	1 (1.9)	3.70	1.08
<b>Valid listwise 54</b>							
<b>Grand mean = 3.54</b>							

From table, 2, 46.3% and 14.8% of respondents agreed and strongly agreed respectively their SACCO uses loan follow-ups to the borrowers as the most appropriate loan management technique. On the other hand, 27.8% of the respondents were undecided. A mean of 3.61 suggested that SACCO used loan follow-ups to the borrowers as the most appropriate loan management technique. Further 25.9% of the sampled respondents agreed that follow ups addresses the risks and helps to control breaches at early stages of the loan portfolio and 16.7% strongly agreed on the same.

More so, 44.4% of respondents agreed that follow ups enables the stakeholders to quickly determine activities or conditions that require attention before it becomes a problem, while 16.7% of the respondents agreed on the same. On the other hand, 16.7% and 5.6% disagreed and strongly disagreed respectively on the same. The results also revealed that most of the respondents (55.6%) agreed that the follow ups enables borrowers to use the loans for the purpose intended for hence repayment is prompt and 9.3% strongly agreed on the same. A mean of 3.61 implied that follow ups enables borrowers to use the loans for the purpose intended for hence repayment is prompt.

Lastly, 42.6% of respondents agreed that the appropriate loan follow ups leads to reduced incidences of loan defaulting while 24.1% strongly agreed on the same. A mean of 3.70 postulated that appropriate loan follow ups leads to reduced incidences of loan defaulting. . Loan follow-ups and recovery process may result to an increase in the cost of the loans, hence there is need for an effective policy that ensures effective and economical loan follow up process that will ensure less costs involved and improved loan repayment that will culminate in improved financial performance of DTSS because of loans are defaulted the costs will be passed into the SACCO thus affect its performance (Olagunju and Adeyemo, 2007; Kariuki, 2010; Stiglitz & Weiss, 2007; Fofack, 2005; Fleofel, 2009).

#### **Sharing of customer credit information techniques on Financial performance**

These were descriptive statistics on the influence of sharing of customer credit information techniques on financial performance of Saccos in Bungoma County, Kenya as summarized in table 3.

**Table 3: Descriptive statistics: Sharing of customer credit information techniques**

Statement	5	4	3	2	1	Mean	Std. Dev
My SACCO uses sharing of credit information of borrowers as the most appropriate loan management technique	3 (5.6)	24 (44.4)	17 (31.5)	7 (13)	3 (5.6)	3.31	0.97
Listing of your clients who have defaulted loans has improved the loan repayment which in turn leads to improved firm performance	15 (27.8)	14 (25.9)	20 (37)	4 (7.4)	1 (1.9)	3.70	1.02
My Sacco is registered with Credit Reference Bureau (CRB) with an aim of reducing loan defaulting	1 (1.9)	22 (40.7)	20 (37)	10 (18.5)	1 (1.9)	3.22	0.84
Sharing of credit information of the borrower helps in tracking of the borrower's credit records hence enhancing credit repayment	11 (20.4)	26 (48.1)	13 (24.1)	4 (7.4)	(0)	3.81	0.85
Sharing of credit information of the borrower reduced the borrowers' over-indebtedness	8 (14.8)	23 (42.6)	16 (29.6)	7 (13)	(0)	3.59	0.90
<b>Valid listwise 54</b>							
<b>Grand mean =3.53</b>							

From table 3, majority of the respondents strongly agreed (5.6%) and agreed (4.4%) that SACCO uses sharing of credit information of borrowers as the most appropriate loan management technique. On the other hand, 13.0% of the respondents strongly disagreed on the same. A mean of 3.31 revealed to moderate extent, their SACCO uses sharing of credit information of borrowers as the most appropriate loan management technique. The results also revealed that 25.9% of the respondents agreed that listing of your clients who had defaulted loans had improved the loan repayment which in turn leads to improved firm performance while 37.0% were neutral on the same assertion.

Further, slight majority of the respondents (40.7%) of respondents agreed that their Sacco is registered with Credit Reference Bureau (CRB) with an aim of reducing loan defaulting and additional 1.9% strongly agreed on the same. A mean of 3.22 postulated that Sacco is registered with Credit Reference Bureau (CRB) with an aim of reducing loan defaulting. The results also revealed that 48.1% and 20.4% of the respondents agreed and strongly agreed that sharing of credit information of the borrower helps in tracking of the borrower's credit records hence enhancing credit repayment although 24.1% of the respondents were neutral.

Lastly, 42.6% of the respondents agreed that sharing of credit information of the borrower had reduced the borrowers' over-indebtedness and further 14.8% strongly agreed on the same. A mean of 3.59 indicated that sharing of credit information of the borrower has reduced the borrowers' over-indebtedness. With reduced loan default, there is increased financial performance of deposit taking SACCOs. To reduce loan default and enhance financial performance, SACCOs need to comply with the credit reference bureau on sharing customer credit information. These findings also concurred with findings by Munyiri and Wekesa (2017) that revealed that loan default information had a significant influence on growth of SACCOs. The study concluded that registering SACCOs with the Credit Reference Bureau enhances loan repayment therefore resulting in improved financial performance.

#### **Loan appraisal techniques on financial performance**

There were descriptive statistics on the influence of Loan appraisal techniques on financial performance of Saccos in Bungoma County, Kenya as summarized in table 4.

**Table 4: Descriptive statistics: Loan appraisal techniques**

Statement	1	2	3	4	5	Mean	Std.dev
My SACCO uses capacity as a parameter of borrower appraisal	10 (18.5)	33 (61.1)	6 (11.1)	3 (5.6)	2 (3.7)	3.85	0.92
My SACCO uses cash as a parameter of borrower appraisal	7 (13)	18 (33.3)	23 (42.6)	3 (5.6)	3 (5.6)	3.43	0.98
My SACCO uses collateral as a parameter of borrower appraisal	6 (11.1)	28 (51.9)	18 (33.3)	2 (3.7)	(0)	3.67	0.82
My SACCO uses conditions as a parameter of borrower appraisal	7 (13)	31 (57.4)	7 (13)	7 (13)	(0)	3.63	1.00
My SACCO uses control as a parameter of borrower appraisal	10 (18.5)	22 (40.7)	17 (31.5)	3 (5.6)	(0)	3.65	0.97
<b>Valid listwise 54</b>							
<b>Grand mean =3.64</b>							

From table 4, majority respondents strongly agreed (61.1%) that SACCO uses capacity as a parameter of borrower appraisal and 18.5% of the respondents agreed. A mean of 3.85 implied that SACCO uses capacity as a parameter of borrower appraisal. Further, 33.3% and 13% agreed and strongly agreed respectively that SACCO uses cash as a parameter of borrower appraisal. A mean of 3.43 indicted that SACCO uses cash as a parameter of borrower appraisal at moderate extent.

The results also revealed that most of the respondents agreed (51.9%) that their SACCO uses collateral as a parameter of borrower appraisal while 18.4% strongly agreed on the same. However, 33.3% were undecided on the same. The results further revealed that 57.4% of the respondents agreed that their SACCO uses conditions as a parameter of borrower appraisal. A mean of 3.63 indicated that SACCO uses conditions as a

parameter of borrower appraisal. Lastly, slight majority of the respondents agreed that SACCO uses control as a parameter of borrower appraisal as shown by 40.7% and further 18.5% strongly agreed on the same. A mean of 3.65 indicated that SACCO uses control as a parameter of borrower appraisal.

This finding further concurred with findings by Kalu, Shieler and Amu (2018) which revealed that credit risk appraisal had a positive relationship on financial performance of MFIs and with findings by Kibui and Moronge (2014) that reported a positive correlation between client appraisal strategies and financial performance of Harambee SACCO. However, Ratton (2013) argues that the adoption of informal and inconsistency procedures in loan appraisal always leads to high incidences of loan default risk therefore leading to poor financial performance of DTSSs.

### Inferential Statistics

**Table 5: Correlations**

		IR	LFUP	SCCI	LAT	FP
IR: Interest Rate	Pearson Correlation	1	.340*	.494**	.255	.479**
	Sig. (2-tailed)		.012	.000	.063	.000
	N	54	54	54	54	54
LFUP: loan follow-ups techniques	Pearson Correlation	.340*	1	.525**	.492**	.624**
	Sig. (2-tailed)	.012		.000	.000	.000
	N	54	54	54	54	54
SCCI: sharing of customer	Pearson Correlation	.494**	.525**	1	.657**	.616**

credit information	Sig. (2-tailed)	.000	.000		.000	.000
	N	54	54	54	54	54
LST: loan appraisal techniques	Pearson Correlation	.255	.492**	.657**	1	.551**
	Sig. (2-tailed)	.063	.000	.000		.000
FP: Financial performance	N	54	54	54	54	54
	Pearson Correlation	.479**	.624**	.616**	.551**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	54	54	54	54	54

\*. Correlation is significant at the 0.05 level (2-tailed).

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

### Multiple regression analysis

Multiple regression analysis was computed to assess the multivariate influence of the study's independent variables (Interest rate, Loan follow-ups techniques, Sharing of customer credit information techniques, and Loan appraisal

techniques) on the dependent variable (financial performance). This was after the compulsory assumptions of multiple regression analyses were checked and met. The multiple regression results were shown in table 6.

**Table 6: Multiple regression results**

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.742 <sup>a</sup>	.550	.514	.525524	.550	14.990	4	49	.000

ANOVA <sup>b</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.560	4	4.140	14.990	.000 <sup>b</sup>
	Residual	13.533	49	.276		
	Total	30.093	53			

a. Predictors: (Constant), Loan appraisal techniques, Sharing of customer credit information techniques, Loan follow-ups techniques, Interest rate

b. Dependent Variable: Financial performance

Multiple regression analysis in table 6 showed the multiple regression results of the combined influence of the study's independent variables (Interest rate, Loan follow-ups techniques, and Sharing of customer credit information techniques and Loan appraisal techniques). The model's R squared ( $R^2$ ) was 0.550 which showed that the study explained 55.0% of variation in financial performance of Saccos in Bungoma County, Kenya, while other factors not in the conceptualized study model accounts for 45.0%, hence, it is a good study model.

Furthermore, Analysis of Variance (ANOVA) shows the mean squares and F statistics significant ( $F=14.990$ ; significant at  $p<.001$ ), thus confirming the fitness of the model and also implies that the study's independent variables (Interest rate, Loan follow-ups techniques, Sharing of customer credit information techniques, Loan appraisal techniques) have significant variations in their contributions to financial performance of Saccos in Bungoma County, Kenya.

Finally, the values of unstandardized regression coefficients with standard errors in parenthesis in

table 7 indicated that all the study's independent variables (Interest rate ;  $\beta = 0.227$  (0.142) at  $p < 0.05$ , Loan follow-ups techniques;  $\beta_2 = 0.429$  (0.142) at  $p < 0.01$ ; Sharing of customer credit information techniques;  $\beta_3 = 0.249$  (0.182) at  $p < 0.05$ , Loan appraisal techniques;  $\beta = 0.201$  (0.138) at  $p < 0.05$  significantly influenced financial performance of Saccos in Bungoma County, Kenya (dependent variable).

In this regard, the study's final multiple regression equation was;

$$Y = -0.530 + 0.227X_1 + 0.429X_2 + 0.249X_3 + 0.201X_4$$

Where;

$y$  = financial performance of Saccos in Bungoma County, Kenya.

$X_1$  = Interest rate

$X_2$  = Loan follow-ups techniques

$X_3$  = Sharing of customer credit information techniques

$X_4$  = Loan appraisal techniques

$\epsilon$  is error term

**Table 7: Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.530	.513		-1.033	.307
Interest rate	.227	.120	.212	1.895	.044
1 Loan follow-ups techniques	.429	.142	.352	3.017	.004
Sharing of customer credit information techniques	.249	.182	.200	1.368	.017
Loan appraisal techniques	.201	.138	.192	1.458	.015

a. Dependent Variable: financial performance

### Hypothesis testing

First, study hypothesis one ( $H_{01}$ ) stated that Interest rate has no significant influence on financial performance of DTSs in Bungoma County. Multiple regression results indicated that Interest rate had significant influence on financial performance of Saccos in Bungoma County, Kenya ( $\beta = 0.227$  at  $p < 0.05$ ). Hypothesis one was therefore rejected. The results indicated that a single increase in interest rate in regard to loan management will lead to 0.227 unit improvement in financial performance of Saccos in Bungoma County, Kenya.

Secondly, study hypothesis two ( $H_{02}$ ) stated that loan follow-ups techniques has no significant influence on financial performance of DTSs in Bungoma County. Multiple regression results indicated that Loan follow-ups techniques practice had significant influence on financial performance of Saccos in Bungoma County, Kenya ( $\beta = 0.429$  at  $p < 0.01$ ). Hypothesis two was therefore rejected. The results indicated that a single improvement in Loan follow-ups techniques practice will lead to

0.429 unit improvement in financial performance of Saccos in Bungoma County, Kenya.

Thirdly, study hypothesis three ( $H_{03}$ ) stated that sharing of customer credit information techniques has no significant influence on financial performance of DTSs in Bungoma County. Multiple regression results indicated that Sharing of customer credit information techniques had significant influence on financial performance of Saccos in Bungoma County, Kenya ( $\beta = 0.249$  at  $p < 0.05$ ). Hypothesis three was therefore rejected. The results indicated that a single improvement in Sharing of customer credit information techniques will lead to 0.249 unit improvement in financial performance of Saccos in Bungoma County, Kenya.

Fourthly, study hypothesis four ( $H_{04}$ ) stated that loan appraisal techniques has no significant effect on financial performance of DTSs in Bungoma County. Multiple regression results indicated that Loan appraisal techniques had significant influence on financial performance of Saccos in Bungoma

County, Kenya ( $\beta = 0.201$  at  $p < 0.05$ ). Hypothesis four was therefore rejected. The results indicated that a single improvement in Loan appraisal techniques will lead to 0.201 unit improvement in financial performance of SACCOs in Bungoma County, Kenya.

### CONCLUSIONS AND RECOMMENDATIONS

Based on the literature review, findings and discussions, the study concluded that loan management techniques have a positive influence on financial performance of DTSSs in Bungoma County. Therefore, loan management techniques such as interest rates, loan follow-ups, sharing customer credit information, and loan appraisal are likely to improve the financial performance of DTSSs in Bungoma County.

The first objective sought to determine the effect of interest rates on financial performance of DTSSs, in which it was revealed that interest rates had a positive effect on financial performance of DTSSs, however, the effect was significant. Interest rates can be good because the interest charged during repayment can enhance DTSSs profitability. DTSSs compete among themselves and with other financial institutions like commercial banks, therefore they choose and use interest rates as a screening tool to determine good and bad risks. The expectation theory posits that DTSSs can use interest rate as an incentive to encourage more borrowing or as a tool to discourage borrowing by raising the interest rates. In this case therefore, DTSSs need to effectively adopt the use of interest rates if they are going to be competitive and if they are going to significantly improve their financial performance.

The second objective sought to determine the effect of loan follow ups on financial performance of DTSSs, findings revealed that loan follow ups had a positive effect on financial performance of DTSSs, however, the effect was significant. Thus confirming the importance of loan monitoring in reducing NPLs. It can be concluded therefore that DTSSs may not be laying strong emphasis on loan follow-ups thus the minimal impact of loan follow

ups on financial performance of the DTSSs. There is need to strengthen the department incharge of loan follow-up to ensure all borrowers are reached regarding their loan repayment. This would likely contribute to increased loan repayment thus enhanced financial performance.

The third objective sought to determine the effect of sharing customer credit information on financial performance of DTSSs, findings revealed a positive effect that was significant. This can be alluded to the fact that the DTSSs are utilising customer credit information to determine which customers are likely to default thus rejecting their loan applications. There is need for the DTSSs to strengthen and continue sharing their customer credit information with CRB if they are to gain a competitive edge in the market, and reduce the rate of non-performing loans thus enhanced financial performance. Since there is a cost associated with developing a list of loan defaulters and subscribing to CRB, some DTSSs may be hesitant in adopting this strategy.

The fourth objective sought to determine the effect of loan appraisal on financial performance of DTSSs. Findings revealed a positive and significant effect on financial performance of DTSSs in Bungoma County. It can be concluded therefore, that DTSSs in Bungoma County adopted strict loan appraisal strategies that ensured only reliable clients who had a good repayment history were given loans. This assertion is supported by the expectation theory, the liquidity preference theory and the modern portfolio theory. Due to expected low loan default because of strict loan appraisal process, the DTSSs are able to reduce their losses and increase their profits by issuing loans to clients who have been rated well in loan repayment. The modern portfolio theory can be utilised to calculate the benefit expected to accrue from a strict loan appraisal process whereas the liquidity preference theory can be utilised in determining whether the loans will be short or long-term.

The study recommended that DTSSs should set their interest rates within the rates that are set by



commercial banks and Central bank of Kenya to ensure competitiveness and encourage more borrowing.. This will lead to adequate control of the loan borrowing and repayment of loans thus enhancing financial performance of DTSSs.

The study also recommended DTSSs should develop policies that guide the loan follow up strategy, using modern information technology the DTSSs can locate defaulters. This Technology will ensure defaulters are located with ease and their guarantors are not victimized by the Saccos .

The study recommended that SASRA in its regulatory duties should make it mandatory for DTSSs to be registered with CRB and embrace credit information sharing system. The information provided by CRB should have a clear and detailed history of the client whether positive or negative. DTSSs should be encouraged to frequently utilize CRB data to reduce the number of defaulters and improve financial performance of DTSSs.

## REFERENCES

- Al- Mamun, A., Sazali, A.W., Malarvizhi, C.A., Mariapun, S. (2011). Examining the Critical Factors Affecting the Repayment of Microcredit Provided by Amanah Ikhtiar Malaysia. *International Business Research*, 4(2), 93-102.
- Appiah, W. B. (2011). Factors Influencing Loan Delinquency in Small and Medium Enterprises in Ghana Commercial Bank Ltd. (Unpublished Masters Theses, Kwame Nkrumah University of Science and Technology).
- Armendáriz, B., Morduch, J. (2000). Microfinance beyond group lending. *Economics of Transition*, 8, 401–420.
- Armendariz, B., & Morduch, J. (2007). *The Economics of Microfinance*. MIT Press, Cambridge, MA.
- Asiedu, M. (2011). Mobilizing Domestic Resources for Capital Formation in Ghana: The Role of Informal Financial Markets. AERO Research Paper 3.
- Benjamin, F., Erica, F. & Rohini P. (2013). *The Economic Returns to Social Interaction: Experimental Evidence from Microfinance*. Oxford University Press.
- Blumberg, B., Cooper, D.R., & Schidler, P.S. (2005). *Business Research Methods*. London: McGraw-Hill.
- Brink, P. (2011). *The expectation theory of interest rates and the European money market*. Erasmus University Rotterdam.
- Fleifel, B. A. (2009). Risk management in savings and credit co-operative society savings and Finance: The Arab finance house example. (Unpublished Masters' Thesis, University of North Carolina

Lastly, the study on loan appraisal techniques recommended that DTSSs should develop clear policies that ensure loan appraisal procedures are detailed to avoid lending clients with a negative history on loan repayment. The process of loan appraisal should be thorough involving a multi-level approval process with the aim of reducing nonperforming loans and improving performance DTSSs.

## Areas for further research

Based on the discussions and the findings of the study, the following suggestions for further studies were made.

- This study should be replicated in micro finance institutions in Kenya
- A study on the challenges affecting implementation of CRB regulations on sharing of customer credit information should be conducted.

Wilmington, USA).

- Flowler, J. F. (2009). *Survey Research Design methods* (4th edition). SAGE publications. Sagepub.com/book/Survey-Research.
- George, O.K. (2008). The Role of Micro Finance in Fostering Women Entrepreneurship in Kenya. *ICSB World Conference Proceedings: 1-14. Washington.*
- Giné, X., Jakiela, P., Karlan, D., & Morduch J. (2010). Microfinance games. *American Economic Journal of Applied Economics*, 2, 60-95.
- Government of Kenya (GOK) (2014). *By Laws of Kenya Bankers Savings and Credit Co-Operative Society Limited Revised 2014.* Available at: [www.kenyabankers.coop/wp-content/uploads/2016/07/kbsacco-amended-by-laws.pdf](http://www.kenyabankers.coop/wp-content/uploads/2016/07/kbsacco-amended-by-laws.pdf) [Retrieved on 6 June 2017].
- Gruening, H.V., & Bratanovic, S.B. (2000). *Analyzing Banking risk: A framework for assessing corporate Government and financial Risk management.* Washington, DC: The World Bank.
- Gudmundsson, G. (2012). *A statistical survey of inflation in Iceland.* In *Fjármálatíðindi*, 37, 43-53.
- Kimari, F. N. (2013). *Effect of credit risk management on financial performance of deposit taking savings and credit cooperative societies in Kenya.* (Unpublished MBA project, University of Nairobi).
- Kimotho, D. N., & Gekara, M. (2016). Effects of Credit Risk Management Practices on financial performance of Commercial banks in Kenya. *International journal of economics & finance*, 2(3), 116-189.
- Kioko, S. (2008). *A survey of credit risk management techniques of unsecured bank loans of commercial banks in Kenya.* (Unpublished MBA project, University of Nairobi).
- National Council for Law Reporting (2010). *Constitution of Kenya 2010.* Available at: [www.kenyalaw.org](http://www.kenyalaw.org) [Retrieved on 10 January 2018].
- Sacco Societies Regulatory Authority (SASRA). (2014). *Sacco supervision annual report- 2014, deposit taking Sacco societies.* SASRA.
- Sacco Societies Regulatory Authority (SASRA). (2015). *An annual report on the operations and performance of Deposit-Taking Sacco Societies (DT-SACCOs) in Kenya.* SASRA.
- Sacco Societies Regulatory Authority (SASRA) (2015). *Guideline on Risk Management Practices for Deposit-Taking Sacco Societies.* SASRA.
- Sacco Societies Regulatory Authority (SASRA). (2016). *Deposit taking SACCO Societies Licensed by the Sacco Regulatory Authority.* SASRA.
- Sacco Societies Regulatory Authority (SASRA). (2017), *schedule of SACCOs licensed to operate in Kenya.* Available at: <http://www.sasra.go.ke/index.php/resources/sacco-supervision-reports/category/15-licensed-saccos#.W3AUd7hRXIU> [Retrieved on 10 January 2018].
- Santos, R. A. (2014). Inflation and Financial Sector Performance. *Timisoara Journal of Economics and Business*, 7(1), 55-69.
- Score Organization (2013). *The 6 C's of Business Credit.* Available at: [www.score.org/resource/6-cs-business-credit](http://www.score.org/resource/6-cs-business-credit). [Retrieved on 10 June 2017].

- Shuttleworth, M. (2008). *Qualitative Research Design*. Available at: Explorable.com: <https://explorable.com/qualitative-research-design>. [Retrieved on 6 June 2017].
- Stiglitz, J & Weiss, A. (2007). *Credit Rationing in Markets with Imperfect Information*. *American Economic Review*, 71(3), 393 – 410.
- Sutherland, A. (2015). *The Economic Consequences of Borrower Information Sharing: Relationship Dynamics and Investment*. JEL Classification: D82; G21; G23; G30; G32; G33; H42; M41.
- Tundui, C., & Tundui, H. (2013). Microcredit, Micro Enterprising and Repayment Myth: the Case of Micro and Small Women Business Entrepreneurs in Tanzania. *American Journal of Business and Management*, 2(1), 20-30.
- Tushar, S. (2016). *Liquidity Preference Theory: Motives and Criticism* (With Diagram)[Economics Discussion]. Retrieved from <http://www.economicdiscussion.net/theories/liquidity-preference-theory-motives-and-criticism-with-diagram/1805>[Retrieved on 10 June 2017].
- Udoh, E.J. (2008). Estimation of Loan Default among Beneficiaries of State Government Owned Agricultural Loan Scheme, Nigeria. *Journal of Central European Agriculture*, 9(2), 343-352.
- Ugirase J. (2013). *The effect of credit risk management on the financial performance of commercial banks in Rwanda*. (Masters Theses, University of Nairobi).
- Usman, M.A. (2002). *An Appraisal of Bank Lending and Credit Administration in Nigeria Case Study of Inland Bank of Nigeria PLC*. (Unpublished Masters Theses, Ahmadu Bello University).
- Zimba, M. J. (2013). *An Assessment of Effectiveness of Loan Appraisal Procedures And To Identify The Levels of Loans Approvals And Repayment By The Commercial Banks on Socio Economic Status of The Population In Tanzania*