

**DETERMINANTS OF LOAN DEFAULT BY SAVINGS AND CREDIT CO-  
OPERATIVE SOCIETIES' MEMBERS IN BARINGO COUNTY, KENYA**

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**A Thesis submitted to Graduate School in Partial Fulfillment of the Requirement  
for the Award of Degree in Master of Business Administration of Egerton  
University**

**Egerton University**

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## DECLARATION AND RECOMMENDATION

### Declaration

I the undersigned declare that this thesis is my original work and has not been submitted to any institution higher learning for the Award of a degree or diploma other than Egerton University.

Signature.....

Date.....

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### Recommendation and Approval

This thesis has been submitted to with my approval as the University Supervisor.

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## **DEDICATION**

I dedicate this proposal to my lovely wife Mrs. Becky Jebichii Cheptoo for her tireless help both financially and emotionally, my son Victor kigen Lagat and My daughter Lynne Jerono Lagat. In addition, I dedicate to Dr. Symon Kipchumba and his family for their strong inspiration and believe that they have in education.

## **ABSTRACT**

Loan delinquency in SACCOs is a major threat in the sustainability of granting loan to the loan applicants and the growth of the business. Gradual increase in delinquency rate implies that SACCOs are unable to recover what they have lent out to loan beneficiaries. This affects the SACCOs' financial obligations. SACCOs' financial growth is a critical issue and failure to maintain cash in circulation affects their core business. SACCOs in Baringo County has realized increasing loan default since the year 2010, which was ksh.76, 987,450 and rose gradually to Ksh. 225,464,348 in the year 2013. Management in SACCOs impress on proper loan appraisals, timely reminders on repayments by loan beneficiaries and escalating on timely follow-up on loan defaulters. Delinquency continues to increase despite the measures taken to mitigate the problem by SACCOs. The study sought to establish the social factors that affect loan repayment by the borrowers, to determine economic factors that affect loan repayment by the borrowers, and to establish terms of loan factors that affects both SACCOs and borrowers regarding loan repayment. The study employed descriptive survey design targeting the 39 SACCOs in Baringo County. A sample of 39 credit officers and 196 loan beneficiaries 'respondents obtained. The primary data collected using a questionnaire, and analyzed using both descriptive statistics and inferential statistics that is correlation and regression analysis. The result of the study indicated that economic factors, and terms of the loan factors significantly affect loan default however social factors does not significantly affect the loan default. The study recommends that a credit policy should be maintained that is in built in Sacco software. Also more training programs sponsored by Sacco's aiming at enhancing the members on economic and social factors.

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## **LIST OF ABBREVIATIONS**

**FOSA-** Front Office SACCOs

**SACCOs-** Savings and Credit Co-operative Societies

SACCO Societies Regulatory Authority

## CHAPTER ONE

### INTRODUCTION

#### 1.1 Background of the Study

Savings and Credit Co-operative Societies (SACCOs) are started locally and have solid bases of small saving accounts constituting a stable and relatively low-cost source of funding and low administrative costs. Sacco Societies constitute not only the fastest growing sub sector of the Cooperative Movement in Kenya, but also the most significant in impacting on the livelihoods of their member (Olando 2013). They are currently regulated through the Cooperative Act under SACCO Societies Regulatory Authority (SASRA) which is prudentially regulating FOSA operating SACCOs . The target market that SACCO's deals with is mostly the poor and neglected segment thus innovate products that suits their needs. It is of importance to understand the steep competition in the financial institutions that limit the stretch of one player to cover extra new market. The cost associated with such move may not be beneficial to such SACCOs thus renders their performance lower than expected. According to a report by Fin Access (2009) , SACCOs lost their market share in spite of their geographical spread in the country compared to other financial providers. This could be attributed to challenges that SACCOs faces due to the characteristics of the market segment it serves.

SACCOs advances loans at interest rates lower than those charged by other financial providers. In addition, SACCOs have the ability and opportunity to reach clients in areas that are unattractive to banks, such as rural or poor areas SACCO's loan delinquency is measured because it indicates an increased risk of loss, warnings of operational problems, and may help predicting how much of the portfolio will eventually be lost because it never gets repaid. Majority of the SACCOs are facing rising rate of loans default. Though SACCOs take necessary action to appraise loan and use methods like credit rationing, rate of default is still growing. SACCOs incur huge funds to monitor and make loan recovery that in turn will affect its efficiency providing finance (Olando 2013).

Loan default is defined as the failure to pay back a loan when due which may occur if the debtor is either unwilling or unable to pay its debt. Sacco's societies

grant loans based on member's savings and guarantee from other members. The loan may be more or less than the savings of the borrower. Loans less than the member savings are secure and assure the repayment. Other members must guarantee loans in excess of the member's savings. Unrecovered loans were considered delinquent and hence defaulted. Most SACCOs either have no loan policy and procedures or what exists is not very clear and comprehensive. There are cases where loan-aging analysis is hardly practiced, there are no provision for loan write offs and losses. No guidelines exist as to what to do in cases where a member defaults in loan repayment. Where they exist, they are inadequate to serve the purpose as intended. Practice like the one risk analysis management is therefore made impossible. Failure to prevent loans default risk has implication with sustainability and performance for rural SACCOS. If the SACCOS have large number of overdue loans implies that borrowers hold the capital of the SACCOS, hence this affect their operations. Those SACCOs that faces rising rate of default fails to issue new loans (Magali 2013).

The primary objective of credit unions is to satisfy the depository and borrowing needs of the members and failure to meet solvency, result in inability to finance even its operations. Magali (2013) argues that the large size loan has higher risk of default than the small one. Hence, the SACCOS should offer large size of loan to their members after deep analysis of credit risks mitigation techniques. Some of the SACCOS have installed technology in their operation systems. Effective management of the loan portfolio and the credit function is fundamental to a financial institution liquidity safety and financial soundness. However, lending technology, risk management, and MIS faces underutilization in most SACCOs. This is a significant challenge for the sector, given that large SACCOs have several thousand clients and a wide variety of products.

Microfinance loans require staff that can assess creditworthiness of loan applicants and monitor closely repayment of loans issued. They also require loan management systems that allow staff and managers to generate the necessary types of reports for proper loan monitoring and recovery management. Lack of good computerized systems is a major constraint in efficient operations. In its absence, it is very difficult to track loan-delinquencies, aging and provisioning and loan write offs, and ensure

that accountants and financial managers apply business rules consistently. Most SACCOs have manual or simple spreadsheet-based accounting and MIS systems (Owen 2007). Loan defaults attributed to both individual member and the SACCOs themselves since failure on the institution to thoroughly screen the potential of the member to repay the loan could lead to providing loan to unworthy member. The chances of such a loan to be recovered is slim and on the other hand, if the member qualifies on the set criteria for the loan but intentionally or unintentionally fails to service the loan when it falls due, then delinquency will be experienced.

According to Chege (2006), SACCOs grant loan subject to some key variables. These variables can be new products, interest rate and client's ability to repay. New products such as microfinance loans and withdrawal savings products require sophisticated cash flow and maturity management (Owen 2007). Kairu (2009) argues that loans be distributed according to the established credit policy and procedures. The two diverging perspective put the management in conflicting situation on what actually yield in minimizing credit default. However, as a rule of the thumb, the loan policy gives the management specific guidelines in making individual loan decision and in shaping the institution's overall loan portfolio, Kenya Societies Act (2008).

In addition, Act 2008 stipulates that SACCOs should advance loans to members who have ability to pay. Collection policies and procedures will apply equally to all members regardless of their professional or social standing. It is an object of the SACCOs to comply with applicable national and regional regulations, to follow Board approved procedures and guidelines, to train adequately staff to perform their duties, and to properly document loan files (Raaiji et al., 2005). Act 2008 provides for the establishment of a risk reserve out of the SACCOs profits to safeguard loss of capital. Some SACCOs in their own accord have established risk funds in which members pay monthly contributions. This is to cushion SACCOs from loan loss due to the death of a member. This approach ensures that guarantors do not suffer from deductions and the deceased family is spared from the burden of repaying the loan. (Tayari, Kimanzi, & Mwiti, 2014).

Seyfried (2001), contend that we should assess the credit risk by checking at the borrower's economic and financial situation as well as the relevant environment

(industry, economic growth). Prudent risk selection is vital to maintaining favorable loan quality. SACCOS strive to offer cheap loans compared to other financial institutions. This poses a challenge for SACCOS to cushion unforeseen eventuality in case of high default rate. Other commercial institutions factor in risk in their interest charges over loan portfolios. This is not the case with SACCOS since they target low-income market that is constrained to qualify for commercial loan. However, variables such as prices of farm produce, and environmental factors are beyond the control of both the SACCOS and borrowers. Changes in prices of produce due to environmental and market forces leads to misleading appraisal results. In addition, government legislation for example increasing taxation on farm inputs and exports had the final consequence of reduced profitability of farmers that may lead to non-performance of loans. In general, the macroeconomic environment has an impact on the assessment borrowers and their ability to have a loan. An economy in growth is favorable to an increase in revenues and a decrease in financial distress. As a result, real GDP growth and employment are negatively associated with the loan default.

According to Fofack (2005), economic growth and the real interest rate are important determinants for bad loans in the sub-Saharan African countries. Unlike commercial banks, SACCOS fails to charge higher interest rate however, high default rate persist. Commercial banks can improve revenue by either increasing interest rates and commissions or portfolio volume. Okpugie (2009) also indicated that, high interest charged by the microfinance banks has been discovered to be the reason behind the alarming default. Similarly, Vandel (1993), concur that high interest rates charged by banks tend to facilitate default by borrowers. Olomola (1999), argue that loan disbursement lag and high interest rate can significantly increase borrowing transaction cost and can adversely affect repayment performance. These factors are within the domain of the institution providing the loan.

Despite the above mention factors, other scholars like Akinwumi & Ajayi (1990) cite farm size, family size, and scale of operation, family living expenses and exposure to sound management techniques as some of the factors that can influence the repayment capacity of farmers. On the other hand, Berger and De Young (1995) assert that the main causes of default of loans from industrial sector as improper selection of an



entrepreneur, deficient analysis of project viability, inadequacy of collateral security/equitable mortgage against loans, unrealistic terms and schedule of repayment, lack of follow up measures and default due to natural calamities.

### **1.2 Statement of the Problem**

SACCOs plays a critical role in economic development by facilitating funds to segment of low-income earners who cannot meet the required standards of commercial banks. Since commercial banks targets mostly salaried and performing businesses. However, there are escalating challenges of loan default by SACCO members. Karikari (2011) points out that low recovery rate of loans has been a great challenge, and the beneficiaries criticize lenders on loan terms. As in the case of Baringo County, there is escalating rate of loan default despite the improved measures taken like proper loan appraisals, timely reminders on repayments by loan beneficiaries and escalating on timely follow-up on loan defaulters has been taken by SACCOs to solve the problem (Baringo County Annual Report2013). Accordingly, the report provided the amount of default in the year 2010, 2011, and 2012 were Ksh. 76,987,450, Ksh.94,653,828 and Ksh. 106,075,413 respectively. In 2013, it rose by more than two times to Ksh. 225,464,348 in 2013.This is an indication that there was underlying causes of loan default that needed to be identified. This study therefore sought to determine the factors contributing to loan default in Baringo County.

### **1.3 Purpose of the Study**

The purpose of this study was to determine the determinants of loan default in SACCOs in Baringo County.

### **1.4 Objective of the Study**

- i. To establish the effect of social factors on loan repayment.
- ii. To determine the effect of economic factors loan repayment.
- iii. To establish the effect of terms of loan factors on loan repayment.

### **1.5 Research Hypothesis**

H<sub>01</sub>. Social factors do not have a significant effect on loan repayment.

H<sub>02</sub>. Economic factors do not have a significant effect on loan repayment.

H<sub>03</sub>. Terms of loan factors do not have a significant effect on loan repayment.

### **1.6 Significant of the Study**

There was a growing level on Sacco's loan default irrespective of the measures taken by these institutions to reduce the problem. The finding of the study guides Sacco's on loan management in their decision making. The members who are elite can also benefit from the study since recommendations were given based on the findings. Further, the scholars who wish to deeply research on the same area will be guided by the finding because this is a grey area for further studies. Policy makers can use the same in their decision as well as the Apex body of SACCOs for their regulatory framework.

### **1.7 Scope of the Study**

This study was done in Baringo County in Kenya. A survey of 39 SACCOs located within the County was selected for the study. The 39 Sacco's are evenly distributed within the County. Each Sacco is located where the core business activity is situated. Some Sacco's have branches even outside the County. For the purpose of the study, those branches were included in the study. Information relating to members and Sacco was included. The study targeted loan officers and members of the Sacco.

### **1.8 Limitation of the Study**

The researcher wished to carry out the census study but due to time and financial challenges, it was not possible to do and therefore a survey was done. Secondly, members were unable vividly to disclose the actual loan default and the researcher asked them to give their opinion on loan default. Members for these SACCOs do not keep loans records thus impede them from disclosing in quantitative terms the amount of default. Thirdly, SACCOS do have quantitative records of loan default from time to time however, disclosing such information to third parties abort its mandate of confidentiality. The researcher mitigate this short fall by requesting opinion from the respondents.

### **1.9 Definitions of the Terms**

**Delinquency-** is the failure to pay back a loan which may occur if the debtor is either unwilling or unable to pay its debt when it becomes due.

**Socio-Economic Factors-** Refers to factors that an individual borrower portrays in terms of economic level, education level, marital status

**Loan and Business Factors** –Refers to factors that business and the loan characteristics that influences repayment. Such factors consist of loan amount, loan usage and repayment period as well as training.

**Loans-** Money which is given to members of financial institutions and they repay on periodic terms interest.

**Group Lending-**This is a scheme where members are given loan in groups and not individual member. Each member stands in for another instead of collateral being given out.

**Social Factors-**These refer to demographic of an individual such as age, gender, education level, and marital status.

**Economic Factors-** Refers to the status of an individual in monetary terms. The wealth of an individual indicated by the level of salary, wages, and other incomes.

**Terms of the loan Factors-**Refers to the policies and measures that Saccos take to gather for granting loans and repayment. It includes loan terms and practices accompanying them.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Theories underpinning the study**

The theory that guide on the management of working capital is discussed below with the relevance to the study. Since lending and borrowing requires balancing, with the help of framework, Sacco's can be in a position to do so.

##### **2.1.1 Liquidity Theory of Working Capital**

A firm need to keep certain portion of its assets in a form that can easily be converted into cash immediately when need arises. Rhein (2012) argues that many firms have good prospects on cash flows and fails to consider financing of working capital. Cash conversion cycle can be used to manage cash and it affects profitability of a firm. Account receivables accounts for a larger percentage of working capital in lending institutions and a system in place that guide on tracking would be desirable. This should include balance forwards, listing of all open invoices and generation of monthly statements to customers. An aging of receivables should be used to collect overdue accounts. Many lending institutions are faced with the challenge of accumulated amounts that are sometimes fails to be collected and written off. Sacco is not left out since they experience increasing rate of default loans.

##### **2.1.2 The Miller-Orr Cash Management Model**

Miller-Orr Model does not require the firm to make a forecast of cash demand but it only requires that the firm be able to associate a variance with uncertainty regarding cash demand or balances. The model further assumes that the firm is able to obtain cash from revenues, but this source of cash may not be sufficient to cover the firm's needs for cash. Sacco's maintain some substantial amount of money to guard themselves on routine obligations. Failure to meet certain obligations may render their services flawed.

##### **2.2.2 Group Lending**

Yunus (1976) developed a model of banking in 1976 as an experiment in a research project called Grameen model. It is believed at the GB that the main problem of the poor is a lack of access to credit lines despite their productive capacity. While most

conventional banks grant credit based on collateral assets, GB give loans without any kind of collateral. GB has been successful in overcoming the problems of informational asymmetry often found in rural financial markets. This bank replaces collateral by peer pressure and social sanctions. The extremely poor can get small loans at GB if they form groups of five people. Each member of the group receives an individual loan; however, they are mutually responsible for all five credits. The bulk of GB's borrowers are women who constitute the weakest social group among the rural poor. Lending money to women has largely enhanced recoverability for GB's loans (Hassan, 1997).

In order to grant credit without any collateral, GB has designed a successful method of peer monitoring. This bank uses an innovative incentive scheme to "internalize" borrower selection and monitoring costs. "Peer monitoring is a system in which loans are given to a group of borrowers who are mutually responsible for repayment and agree to guarantee others in the group" as quoted by (Hassan, 1997). The key feature of group lending is the joint liability involved. Every group member receives an individual loan, but everyone is responsible for the other peer members. Collective responsibility substitutes secured assets. The bank explicitly requires that borrowers form a group of five people, who then simultaneously apply for a loan. The bank either approves or rejects the loan for the entire group. Anyone interested in obtaining credit at GB has to constitute a group of five parties with similar needs and from the same village. In order to avoid family bias in-group control, only one member of a household may join a group and relatives are not admitted in the same group. At GB, male and female members form separate groups.

One essential feature of group lending schemes is that members provide one another with mutual insurance against default. Members of a group are self-selected; thus, fellow members of a group single out a potential defaulter at the very beginning. That is, the bank is able to exploit the local knowledge of the members in a group to make the corresponding credit granting decisions. In addition, lending to groups has achieved a remarkable success in reaching the target group (the poor), as the associated members certify the social conditions of other peers. At GB, delivery of credit packages to the poor groups is direct, with no broker or intermediaries

involved. Owing to the stake that everyone has in the group, members assist one another in time of need. Likewise, they put pressure on others to make them fulfill due obligations. Partners not only share market information, but also transfer resources among themselves to facilitate scheduled repayments. Like moneylenders, GB closely supervises its debtors.

Loan Default is a threat to the operation of SACCOs and the causes of loan default has a substantial importance to both individual and the institution at large. Scholars have identified causes from different perspectives. A threat runs across individual and institutional factors and according to Deban et al. (2005), they grouped loan default causes into three perspectives namely; borrower's attributes and their business nature, the institutional characteristics and market risk from external sources. Similarly, Silwal, (2003), concur with them but add loan characteristics as another factor that has an influence on loan default.

### **2.3 Social Factors**

Social characteristic of individual borrowers refers to the attributes of the borrowers, which can influence the ability of the repayment of the loan. These attributes have an impact on the loan repayment directly or indirectly and they include age, and education marital status as discussed below.

#### **2.3.1 Marital status**

Saleem et al. (2010) posit that marital status has a significant influence on repayment of loan. They suggested that the farming business of the borrowers demands a lot of credit that instill credit worthiness for consideration by the supplier of credit. They depend largely on the farming income for their daily family expenses. Wongnaa and Victor (2013) contradict to the above by suggesting that married people are huge incurring expenses than single and are likely to default though they failed to empirically proof. Magali, (2013) empirically tested across the married, single and divorced and found out that married couple were more risky to lend loan to. This indicated that married people have more commitment than the single and the divorced.

According to Dinh and Kleimeir (2007), marital status affects the borrower's level of responsibility, reliability, or maturity. The probability of default is higher for married

than single borrowers. They discover that the marital status is typically related to number of dependents that in turn reflects financial pressure on the borrower and borrower's ability to repay a loan. In addition, Dodson & Koenig (2014) examined the consumer and residential finance and found that individuals undergoing a change in their marital status tend to be more likely to default.

Etukumoh and Akpaeti (2015) found that marital status of the loan beneficiaries has a negative coefficient and it is statistically significant. They argued that married beneficiaries were more prone to default in loan repayment than singles associating with high domestic expenditures in maintaining the family. Similarly, Angaine, & Waari (2014) argued that marital status is a useful parameter in predicting loan default. However, Ojiako & Ogbukwa (2012) and Mekonnen (2015) reported positive and significant associations between marital status and loan default.

### **2.3.2 Education**

According to Abreham (2002), and Mekonnen (2015), education level is significantly associated with loan repayment performance. An increase in education level, could lead loan repayment rate to be improved. Nimoh et al. (2012) classified education level of farmers into literate and illiterate and concluded that the relationship between the education and loan default is negative. It meant that the higher the level of education, the lower the default rate. Saleem et al. (2010) concur with the above argument that education has a significant influence and noted that educated farmers learn easily ways of improving their farm input through application of modern methods.

In addition, they considered prompt payment as an easy way of eradicating nonpayment of loan. Their findings confirm what Oladeebe et al (2008), Olagunju et al (2007); Ezw et al (2007); and Koopahi et al (2002) researchers found. Pasha and Negese (2014), notes that educated farmers can probably repay their loan four more times than uneducated ones. They claimed that educated ones could get access to business information that can benefit them. The literacy level is again observed in the ability to have appropriate book keeping skills. The banks often demand cash flows and other financial records as a prerequisite for approving of credit.

Chaudhary and Ishafq (2003) examined the credit worthiness of rural borrowers in Pakistan. Using logistic regression, they found that borrowers with higher educational levels, involved in a non-farm business activity, who were using the loans for investment and were female, had a higher probability of repaying their loan. Eze and Ibekwe (2007) examined the determinants of loan repayment under the indigenous financial system in Southeast Nigeria and discovered that years of formal education and occupation were some of the significant predictors of loan repayment under the system. Similarly, Oladeebo and Oladeebo (2008) in their study examined the determinants of loan repayment among smallholder farmers in Ogbomoso Agricultural zone; Nigeria indicated that level of education significantly influenced loan repayment. Kashuliza (1993) also analyzed the determinants of loan repayment in smallholder agriculture in Tanzania and found out that level of education positively had an influence on loan repayment.

Muruku (2015) examined factors influencing default in servicing agricultural loans and identified education as among the variables that predict loan repayment. The study noted that repayment performance increases with an increase in education levels. In addition, Bhatt (2002) believes that training and education affects the business performing ability of borrowers. Gebrehiwot (2006) examined loan repayment performance and reported that educational status among other variables has a positive significant effect on the loan repayment performance. However, Retta (2000), Oni, Oladele and Oyewole (2005) found that farmer's level of education had a significant negative influence.

### **2.3.3 Age**

Pasha and Negese (2014) argue that the aged individuals tend to have business experience and rarely default their loan as opposed to the young people who are main defaulters in loan. Age individual tend to have accumulated a lot of wealth overtime, which enable them to be cautious in their investment. On contrary, Saleem and Jan (2010) categorize borrowers into different age set and found no significant impact on repayment despite of the mode of payment similar to Oladeebe et al (2008), Kohansal et al (2008), and Ezw et al (2007). Ojiako et al. (2014) on contrary suggest that young farmers are likely to repay loan than older farmers.



Nimoh et al. (2012) conclude that the older people have experience and the default rate decreases with the age of an individual. They consider the business experiences as a key factor in loan use as compared to the inexperienced. Young people tend to experiment their investment since they lack the information about such ventures. Afrane and Adusei (2014) argue that older people are risk averse and they choose those investments with less risk. Young people are generally risk takers and the probability of repaying the loan is minimal. The riskiness of their investments implies that the return from such investments is high and the risk associated is also high.

Age was also considered as one of the factors used in default risk modeling. Thomas (2000) and Boyle et al. (1992) confirm that older borrowers are more risk adverse, and therefore less likely to default. Arene (1992) outlines the main factors that determine loan repayment performance as loan size, enterprise size, income, age, number of years of business experience, distance between home and source of loan, education, household size, adoption of innovations, and credit needs. Udoh (2008) tested explanatory variables such as age, education level, visit by supervisors and found that they were significant.

#### **2.3.4 Gender**

Onoja and Emondi (2012) who analyzed gender and poverty effects on loan default rate among arable crop farmers in Rivers State, Nigeria. Arminger et al., (1997) noted that gender in addition to age is one of the most used socio-demographical variables to differentiate the predictive power of gender. Their findings suggest clear evidence that women default less frequently on loans possibly because they are more risk averse. According to Coval et al., (2000) gender is a fair discriminatory base on the statistical default rates of men versus women. Region means the area of the country that borrower lives. As people of similar wealth tend to live in the same location, the geographic criterion can indicate a borrower's level of financial wealth.

Godquin (2004) examined the microfinance repayment performance in Bangladesh. His result shows as the correlation between gender and repayment is positive but not significant after controlling for a number of MFI-specific effects. Goetz and Gupta (1996) suggest that women may have a higher incentive than men for loan repayment since it allows them to retain access to village groups, whereas men have

many more opportunities for social contact. Bassem (2008) examined the factors that affect the repayment performance of group lending in Tunisia. Results showed that the repayment is influenced positively by the internal rules of conduct, the same business, and the knowledge of the other members of the group before its formation, peer pressure, self-selection, gender, education and non-financial services.

Todd (1996) attested to better loan repayment performance in Bangladesh, arguing that women were more conservative or cautious in their investment strategies. In support, Rahman (2001) and Goetz and Gupta (1996) argued that women are more easily influenced by peer-pressure and the involvement of the lender. Concerning reputation and honour, women are more sensitive to verbal hostility on the part of the lender, while men are able to default with a sense of impunity. In addition, Goetz and Gupta (1996) argued that women have more motivation for loan repayment in order to continue remaining in village groups and to be allowed to borrow more next time, whereas men have many more opportunities for social contact that can lend them money.

Due to their tendency to stay closer to their homes rather than going out to work, women are easy to monitor and follow by the lender (Aghion and Morduch, 2005; Goetz and Gupta, 1996). As opposed to men, Aghion and Morduch (2005) posited that women have more at stake when enrolling in a credit programs because of the limited access to credit from other formal or informal channels. Therefore, women repay their loans to ensure continued access to credit. Ameen (2004) argues that women have more contact with the lender and group members. This is due to lower opportunity cost of time, which makes their time less valuable.

Muruku (2015) argues that gender plays a critical role in loan repayment. This is because it defines the role played in the household, the seriousness in implementing the project and the protection functions. Studies conducted worldwide have shown that gender influences the success of loan servicing and that female borrowers outperform male borrowers in a consistent manner as far as loan repayment performance is concerned. Gibbons and Kasim (1991), on the other hand, reported that the number of women who had no debt repayment problems was more than men.

## **2.4 Economic Factors**

According to Gorter and Bloem (2002), an inevitable number of wrong economic decisions by individuals mainly cause non-performing loans and plain bad luck (bad weather, unexpected price changes for certain products, etc.). Under such circumstances, the holders of loans can make an allowance for a normal share of non-performance in the form of bad loan provisions, or they may spread the risk by taking out insurance.

### **2.4.1 Income**

Tundui et al. (2013) examined how household income affects loan repayment and concluded that the higher the income, the lower the default rate. They attributed to the increase ability of earning more by venturing into diverse business opportunities which eventually enable the borrower to repay the loan when fall due. A low-income household with above-average wealth is better off than a low-income household without wealth. The existence of wealth is also one reason why income and consumption are not necessarily equal: for a given income, consumption can be raised by running down assets or by increasing debts and consumption can be reduced by saving and adding to assets. Further, the more dependent the borrower (owner) is on income from the enterprise supported by the loan fund the greater the commitment to business operations, and hence the greater the enterprise growth and repayment rate.

According to Mekonnen(2015) argues that if the business plan of the creditor is profitable, it will contribute to timely repayment of the loan. Hence, this variable is expected to have a positive sign. Gerald and Deogratus (2013) examined the credit rationing and loan repayment performance victoria savings and credit cooperative society in Tanzania. The study found that business management skills, alternative source of income, unfavorable weather conditions, house hold size, late loan delivery, distance between the SACCOS and the member's project, number of years of project runs, experience, age, credit rationing and loan diversion influenced loan repayment performance. Retta (2000) found the association between other income sources, which were not financed by the loan finance, and loan repayment was positive and significant.

Muruku (2015) argues that many researchers have established that off farm income relates positively with debt repayment performance. Mashatola and Darroch (2003) established that access to a substantive amount of off farm income increases the probability of farmers being compliant on loan repayment. They attributed this outcome to the fact that farmers with off farm income rely less on drawings from the farm to finance family expenditure and/or to supplement their limited farm income in low-income periods. Introduction of off farm income into the farm business or family expenditure when there are liquidity problems also can assist farmers in staying current on loan repayments. Access to off farm income is often considered criteria for selecting potential farmers for such loan schemes, as it helps to provide additional liquidity to fund future operations and debt repayments.

#### **2.4. Terms of loan Factors**

The study conducted by Okorie (1986) in Ondo state in Nigeria revealed that the nature, time of disbursement, supervision and profitability of enterprises, contributed to these payment ability and consequently high default rates. Other critical factors associated with loan delinquencies are: type of the loan; term of the loan; interest rate on the loan; poor credit history; borrowers' income and transaction cost of the loans..

SACCOs in this county are diverse in terms of membership depending on the common activities of the members. The County has five sub-counties; Koibatek, Marigat, Mogotio, Baringo North and Baringo Central sub-Counties, and in every county, SACCOs are drawn from agriculture, Jua kali, transport and other sectors. We have both rural and urban SACCOs and a multi-sector composition that is an indication of the nature of competition in the county. They all provide loan to their members and other saving facilities. The County has 149 registered SACCOs but only 39 are active. The total share capital for the entire SACCOs in this County is worth Ksh. 2, 476, 125,040 and a turnover of Ksh. 789,947,369. The total Loan portfolios held by members amounts to Ksh 2,344,400,699 (Fin. Report 2013).

##### **2.4.1 Loan Grace Period**

Mekonnen(2015) argues that timeliness of loan release has a significant influence on loan repayment performance of the respondents. The time between loan application and disbursement has an impact on the loan repayment. This factor has a positive

impact on the borrower's loan repayment performance. Timely disbursement of loan increases significantly the loan repayment performance (Pasha and Negese, 2014). The chances that the loan would be used for intended purpose is increased when loan is disbursed at the right time. Borrowers may become impatient if the loan is delayed; opportunity will be lost and therefore leads to misallocation of loan. This will eventually affect the borrower's repayment performance. The procedures followed to process loan determine the period when the loan would be released to the borrowers. When the procedures are long, it will extend the time taken to release the loan.

#### **2.4.2 Loan Size**

Duy (2013) concluded that loan size affects the repayment of the loan. Smaller loan are likely to be repaid on time on group-based scheme while large loan are repaid on time by individual borrower. This could be because of the individual socio-economic position of the borrower in different schemes. Individual borrowers are relatively better endowed and have higher income levels. They assumed that individual borrower invest in expensive projects which boost their incomes. Aruppillai et al. (2014) argues that larger loans are unlikely to be repaid than smaller loans. Larger loans may encourage unwise spending than small loans where the spender observes caution. Most of the farmers are unused to handling of large funds and once given such funds could easily be misapplied. Similarly, Tundui and Tundui (2013) suggest that loans size increases with the default rate. As the loan size increases, more problems of default reported. This implies that the burden of repayment increases when one borrows large loans.

Chacha, (2006) found that beneficiaries lack of knowledge in business management, the loan size, short loan repayment period and lending policies lead to poor repayment rate of SACCOS. Olomola, (2000) found that, loan size and loan use imply that affect the loan repayment. Arene (1992) outline the main factors that determine loan repayment performance as loan size, enterprise size, income, age, number of years of business experience, distance between home and source of loan, education, house old size, adoption of innovations and credit need. Bekele et al. (2005), Chirwa (1997), and Mekonnen(2015) argues that providing borrowers with the required

amount of finance can significantly reduce the possible repayment problems that may encountered due to under or over financing of the women.

#### **2.4.3 Loan Use**

Pasha and Negese (2014) argues that the loan usage on the intended purpose determine its repayment. When the loan is used for the intended purpose, it is likely to be repaid while misallocation could lead to repayment problems. The purpose of the loan is very vital to the borrower and the supplier of the loan and diversion of the intended fund to risky business opportunities may result to huge losses. The supplier of the funds make assessment of the loan based on stated business and award loan limit depending on the risk associated with that business. Previous studies have noted loan misapplications and their consequence that is attributed to several factors like those that delay in release of funds is seen as a critical factor in loan default (Karikari, 2011).

#### **2.4.4 Repayment period**

The time given to borrower to pay back the entire loan significantly affects the loan repayment. The suitable period arranged with the supplier of funds reduces the loan default. When the period is adjusted to suit the borrower, then it minimizes the default but empirical evidence shows that there is a negative relationship between repayment and period of repayment (Pasha and Negese, 2014). Wongnaa and Awunyo-Vitor (2012) explains that the longer the period of repayment, the lower the rate of default. It prepares the borrower to earn substantial amount that can service the loan. But when the period of repayment is shorter, borrower may not get as much to repay the loan.

#### **2.4.5 Interest Rate**

Oni et al (2005) determined the effect of interest rate on the loan borrowed. They found out that it affect loan repayment but not significantly. Wongnaa and Awunyo-Vito (2013) posit that high repayment leads institutions to lower their interest rate and the cost of processing loan. Magali (2012) suggest that interest rate affect credit risk and profitability of micro-finance. Ayogyam et al. (2013) contend that interest rate affect repayment of agricultural loans. Addisu (2006) points out that lack of collateral and smaller size of loan demanded has lowered interest rate in some formal financial

intermediaries. The higher interest rate charged by some informal moneylenders made the financial problem more unreachable. According to Olomola (1999), loan disbursement lag and high interest rate can significantly increase borrowing transaction cost and can adversely affect repayment performance. Okpugie (2009) also indicated that, high interest charged by the microfinance banks has been discovered to be the reason behind the alarming default.

## **2.5 Loan Delinquency**

Delinquency refers to loan repayment rate while a loan is delinquent when a payment is late or refers to loan arrears that have become 'past due'. Warue (2012) posit that delinquency is measured because it indicates an increased risk of loss, warnings of operational problems, and may help predicting how much of the portfolio will eventually be lost because it never gets repaid. CGAP, (1999) argues that delinquency tends to be more volatile in MFIs than in commercial banks. Tangible assets that can be seized or sold easily in case of default do not secure most microloans. The clients' main motivation to repay is their expectation that the MFI will continue providing them with valued services in the future if they pay promptly today. This motivation may be reinforced by peer pressure, especially in-group lending programs. In these circumstances, any serious outbreak of loan delinquency can quickly spin out of control. As clients watch, their peers default, they lose confidence in the MFI's ability to serve them in the future, and the peer pressure to repay can dissipate quickly.

According to Sheila, (2011) argue that proper and adequate appraisal is key to controlling or minimizing default. This is the basic stage in the lending process. Similarly, Anjichi (1994), contend that the appraisal stage is the heart of a high quality portfolio. This includes diagnosing of the business as well as the borrower. Before beginning the process of collecting information on the client for determining credit limits, the loan officer should have specific information available that will guarantee that the data and figures provided by the client will have a pro-margin error (Sheila, 2011).

Further, Korankye (2014), explain “majority of the information is obtained by the loan officer through direct interaction with the client in such away that each loan analysis provides valuable insights for evaluating the application for the future client. However, most clients withhold a great deal of information making the evaluation a difficult and unreliable exercise. Furthermore, the loan officer should visit the home or the work place of the client with the main objective of determining whether the client needs the loan programmers’ or not”.

There are three broad types of delinquency indicators: Collection rates which measures amounts actually paid against amounts that have fallen due; arrears rates measures overdue amounts against total loan amounts; and portfolio at risk rates which measures the outstanding balance of loans that are not being paid on time against the outstanding balance of total loans (CGAP, 1999). The above rates are useful to loan officers since they can predict the loan default in advance and takes the necessary action before it affects their operations. Portfolio at risk rate serves as an indicator of loan falling overdue. It will show how the borrowers of loan adhere to their respective time or not when the loan is due for payment.

## **2.6 Empirical studies**

Kinya, Shavulimo, Chepkoech, Langat (2015) investigated the effects of loan terms and conditions on loan volume granted by SACCOs. They used descriptive survey design targeting a population of all SACCO employees of the five licensed deposit taking SACCOs in Nyeri County. They used stratified random sampling technique resulting to a sample 100 respondents. They collected primary data using questionnaires and analyzed data using use of inferential statistics. The study revealed that, loan terms and conditions have significant influence on the loan volume granted by deposit taking SACCOs in Nyeri County. They recommended that SACCOs should review their credit policy regularly in order for them to remain competitive against the changing lending environment and that the credit policy should be flexible and responsive enough to the lending environment.

Bhatt and Tang (2002) conducted a study to investigate the determinants of loan repayments in microcredit programs that applied the group lending approach, but took a different approach. Bhatt and Tang looked at the borrower’s socio economic



variables instead of the elements of group lending for their influence on loan repayment behavior. The borrower's socio-economic variables included gender, educational level, household income and characteristics of the business (type of business, years in business, etc.). In their study, they found that a higher education level was significant and positively related to better repayment performance. Conversely, female borrowers, level of household income, type of business and borrower's experience had no significant effect on repayment behavior.

Mugambi, Njeru, Member, and Tirimba (2015) explored the effect of Loan Repayment on financial performance of deposit taking SACCOs in Mount Kenya Region. They adopted a descriptive survey in soliciting information on effects of Loan Repayment on financial performance of deposit taking SACCOs in Mount Kenya region. They targeted population of thirty-licensed deposit taking SACCOs in Mount Kenya Region, and used simple random sampling and the sample 92 respondents. They collected primary quantitative data using structured questionnaires. They analyzed collected data using both descriptive and inferential statistics. They found out that the level of gross loan portfolio was average; the rate of loan default was on an increase, accessing guarantees was not a big issue, and the level of outstanding loans in the deposit taking SACCOs was very high. They concluded that there is need for the regulator to introduce credit policy for the sector, this will help in controlling credit risks among the SACCOs in the sector and reduce credit exposure on guarantors.

Nkuru (2015) found out the factors affecting growth of Sacco's within the Agricultural sector in Kenya. She used a descriptive research design and targeted a population of 2100 Sacco's members. She sampled 210 Sacco's members employing proportionate stratified random sampling method. She collected data through questionnaires and analyzed using both quantitative and qualitative analysis. Income levels, competition from other financial institution, management skills of Sacco's official were the most significant factors that predicted growth of Sacco's.

Magali (2013) examined the influence of rural savings and credits cooperatives societies (SACCOs') variables on loans default risks. He employed a descriptive survey of 37 SACCOs from Dodoma, Morogoro and Kilimanjaro regions in Tanzania.

The study used purposive sampling where the primary and secondary data were collected by using the structured questionnaire and SACCOS' financial reports. He used the multivariate regression model to examine the influence of SACCOS' variables on loans default risks measured by Non-Performing Loans (NPL). The results from the multivariate regression model revealed that savings and deposits reduce the rural SACCOS loans default risks. While the total assets, education of the manager and the number of borrowers increases the loans default risks. However, variables of age of the SACCOS, age of chairperson of the board, manager, chairperson loans committee and their education does not influence the loans default risks for the rural SACCOS.

Ojiako et al. (2014) investigated the determinants of loan repayment behaviour of Smallholder cooperative farmers in Yewa North Local Government Area of Ogun State, Nigeria. They used a descriptive research design and multistage random sampling technique guided the selection of 110 respondents on whom data were collected using structured questionnaire. They analyzed data using descriptive statistics, correlation, and multivariate regression analytical techniques. The results of the study showed that age had a negative association with repayment performance, suggesting that younger farmers were better performers. Further, repayment performance has a positively influenced by non-farm income but negatively affected by loan size.

Ayogyam et al. (2013) investigate the effects of cooperative farming system on farmers' loan repayment among farmers in Techiman, Ghana. They employed a descriptive research design and purposively selected 40 groups for the study. They collected both primary and secondary data using interview and data collection sheet. They used a binary choice model in the analysis of the data. The result of their analysis indicated that, polarization of religious background, number of married personalities in a group, size of a group, gender balance of a group and the variety of crops cultivated by the group were some group characteristics that affects the loan repayment performance of the groups.

Kohansalet al. (2009) studied the factors influencing on repayment performance of farmers in Khorasan-Razavi province of Iran during 2008. The logit model

was used to explain the probability of loan on time repayment because of any of the identified independent variables. The signs of the coefficient of independent variables and significance of the variables were used determining largely the impact of each variable on probability of dependent variable. Results showed that farmer's experience, income, received loan size and collateral value have positive effect while loan interest rate, and total application costs and number of installment implies a negative effect on repayment performance of recipients. Comparison of the elasticity of significant variables indicated that loan interest rate is the most important factor in our model. Farming experience and total application costs are the next factors respectively.

Afolabi (2010) examined an analysis of loan repayment among small-scale farmers in Oyo State, Nigeria. The study used a descriptive design and used a multi stage sampling technique to select 286 respondents in the study area. The study also used a structured questionnaire administered on them to collect data. Descriptive statistics was used to analyze the socio-economic characteristics of the respondents while multiple regression using Ordinary least square (OLS) to determine quantitatively the socio-economic characteristics that influence the level of loan repayment among small-scale farmers.

Musah et al. (2014) effects of borrower characteristics on loan repayment in the credit with education program in the tamale metropolis of Ghana. They used a descriptive research design and selected a sample of 375 borrowers using a multistage sampling technique. They collected cross sectional data using interview schedules. They employed logistic regression model to analyze collected data. Results of the estimation indicate that repayment was positively influenced by age, access to market and number of loans received but negatively influenced by household size of borrowers.

Addisu (2006) examined the main factors that influence microfinance level of loan repayment performance of the informal sector. The study used a descriptive survey design with a multi stage sampling technique to select six micro financial institutions and randomly selected 255 clients. The study used a logit model. Data for the study was collected through a structured interview, questionnaire and informal discussion in

the ten sub-cities of Addis Ababa. Results of the study indicate that better repayment performance is strongly and directly associated with educational level of the borrower. Insufficiency of the loan granted and unplanned engagements in the business activity do reduce repayment performance.

Acquah and Addo (2011) investigated factors influencing loan repayment performance of fishermen. A survey of 67 randomly sampled fishermen was conducted using a standard questionnaire. An interview schedule was the main tool of data collection while descriptive statistics and multiple regression analysis were the main analytical techniques. The model estimation result reveals a positive relationship between amount of loan repaid and years of education, fishing income, years of fishing experience and amount of loan whilst a negative relationship exist between the amount of loan repaid and the age and investment made. Further, the regression analysis finds the fishing income, amount of loan and amount of investment as significant predictors of the amount of loan repaid.

Wongnaa and Vitor (2013) analyzed the factors that are critical in improving loan repayment by yam farmers in the Sene district of Ghana. Random sampling technique was used to select 100 respondents in the district and structured questionnaire was administered to collect data. Descriptive statistics and the probit model were employed. The results show that 42% of yam farmers in Sene district are illiterates. More males (93%) are involved in yam farming than females (7%) and most of the farmers are married (91%). Furthermore, most of the yam farmers in the district have a family size of 6-10 households (66%) and 54% of them have 1-10 years of yam farming experience. In addition, the results show that education, experience, profit, age, supervision and off-farm income have positive effects on loan repayment performance. Conversely, gender and marriage have negative effects on loan repayment while the effect of household size was found to be ambiguous.

Nimoh et al (2012) assessed the factors causing the default of credit repayment among maize farmers in the Asante Akim North District of Ashanti Region. They used a descriptive design guided by the nature of the study. The target population was all 400 maize farmers. A total sample size of 60 maize farmers was selected using the systematic sampling for every fifth person from the sampling frame. Frequencies,

percentages and the probit model were used to analyze the data. Results of the probit model revealed that age, household size, rent, status of farmer and output significantly influence credit default.

Chong (2010) assessed the credit management of micro-enterprises in East Malaysia using a descriptive design. The study employed a combination of simple random and snow balling technique to arrive at a sample size of 120 SMEs. The study used a regression model and the results showed that about 59 percent of the respondents did not pay their loans on time. Level of education attained by respondents reported a significant predictive power over their credit management practices. A higher level of education level attained implies better credit management. Besides, it was also found that there was a significant gap between genders in terms of credit management. Meanwhile, higher total liability per month was found to be significantly associated with a higher level of loan defaults. Finally, respondents' financial capability, represented by household income, was proved as not having any significant impact on the credit management of micro- enterprises.

Magali (2014) examined the influence of leadership, corporate governance and regulations on credit risk management. The study used a descriptive design and surveyed 37 rural SACCOS in Morogoro, Dodoma and Kilimanjaro regions in Tanzania. The study sought on the influence of leadership, corporate governance and regulations on credit risk management in rural SACCOS. This study found that good leadership, corporate governance and regulations are essential for effective credit risk management in rural SACCOS. The study further revealed that 65%, 54%, 46%, 38% and 98% of rural SACCOS affirmed the presence of good re-elected leaders, effectiveness in loans collection, presence of creativity and innovating among leaders, annually audited reports and the presence but not printed and distributed to members of their by-laws respectively. This paper recommends that the rural SACCOS should practice the good leadership, governance and should abide by their by-laws in order to have the effective credit risks management. In addition, the government should regulate the rural SACCOS very stringent and the political interference should be avoided.

Idoge (2013) examined the repayment capacity of small holder cooperative farmers in South-south region of Nigeria. The study used a sample of ninety-six respondents randomly selected from sixteen cooperatives from eight local governments in Bayelsa and Delta states. Questionnaires were used to collect the primary data and both descriptive statistics and multiple regression analysis were used to achieve the study objectives. The results indicated that age, education level, loan size, repayment period, net farm income, loan supervision, engagement in other jobs as well as farm size has positive influence on loan repayment capacity. In addition, gender, marital status, household size and the amount expended on hiring equipment have negative influence on loan repayment capacity.

Akpan et al (2014) analyzed factors influencing defaults in loan repayments among agricultural credit guarantee scheme (ACGS) loan beneficiaries in AkwaIbom State. The study used a descriptive research design and a sample of 109 loan beneficiaries selected using a multisampling technique. They collected primary data using a questionnaire and employed a Tobit Model to analyze the data. They found that twelve explanatory variables such as age of the beneficiaries, family dependency level, total farm cost, farm income, time interval between loan application and disbursement, other loan schemes, visits by credit officers, loan duration, government policies, years of experience, loan size and average interest rate charged were significant variables influencing default in loan repayment among the beneficiaries in the study area.

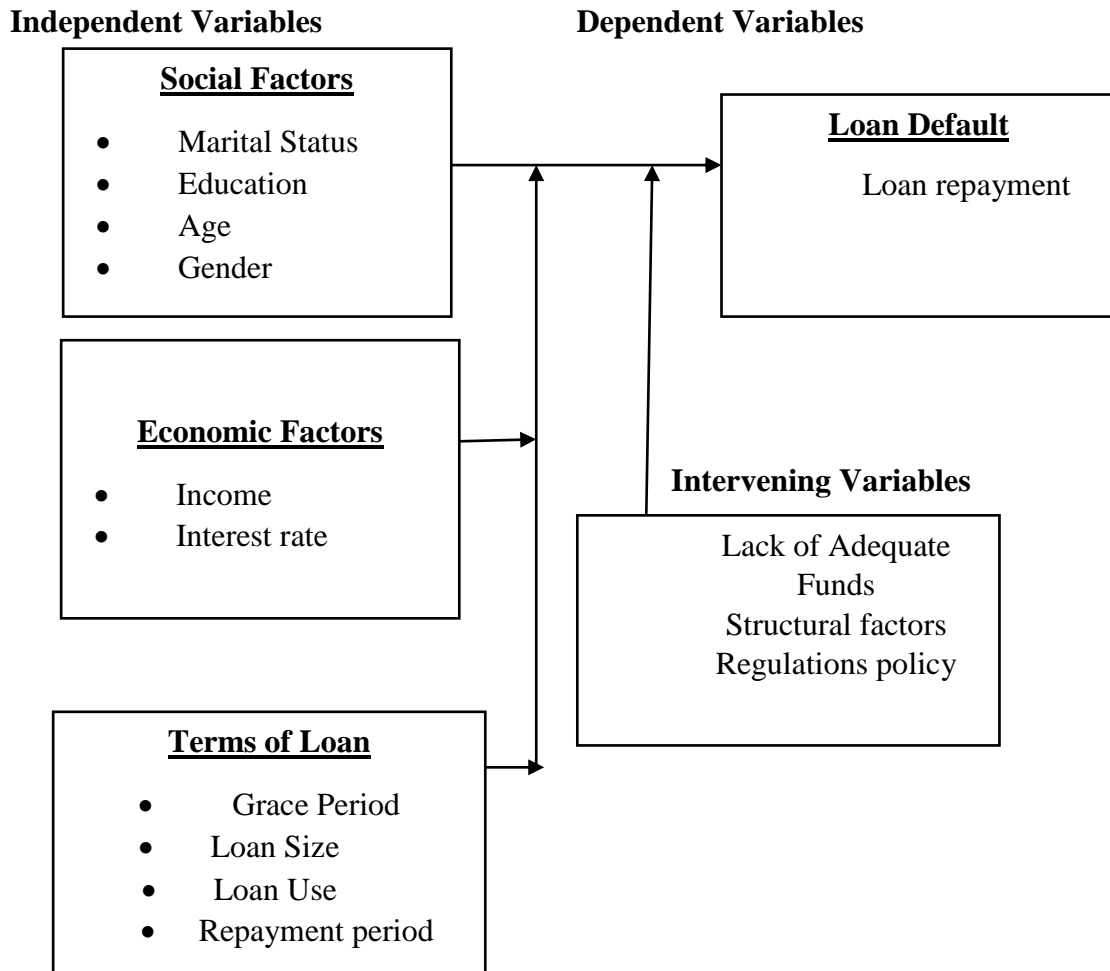
Musah et al. (2014) examined the effects of borrower characteristics on loan repayment of participants in the Credit with Education Program implemented in the Tamale Metropolis. Primary data were collected using interview schedules that were administered on the borrowers. Cross sectional data collected from 375 borrowers were analyzed using a logistic regression model. Results of the estimation indicate that repayment is positively influenced by age, access to market and number of loans received but negatively influenced by household size of borrowers.

The above studies determine factors that influence loan repayment. A number of factors mentioned by the studies affect the loan repayment and they use different methods and samples which is inconclusive. Further, the studies targeted different

subjects of interest like farmers, micro enterprises and management of rural SACCOs, which lack uniformity in their exposures. Though the studies are closer in their objectives, the conditions of the subjects are far much different from those located in Kenya. No uniformity in terms of standards that can guide on generalization due to the nature of occupations. Therefore, this study seeks to add to the literature by conducting a study to establish the determinants of loan default by involving loan beneficiaries from farming, businesses, and employment.

## 2.7 Conceptual Framework

Figure 1. Conceptual framework linking independent variables and the dependent variable.



Source: Modified from the theoretical literature: Own Conceptualization.

The independent variables consist of social factors, economic and SACCO related factors. The dependent variable is loan delinquency, which is affected by the above independent variables. The social factors refer to the individual characteristics an individual that differ from one person to another and affect loan repayment. The following are the measure of social factors; age, marital status and education level. The economic factors consist of interest rate and income level of an individual. The third independent variable is the SACCO related factors were measured by the grace period, loan size, loan use, and repayment period. The dependent variable is the loan that is past due.



## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Research Design

The study employed descriptive survey in which the evidence was pinpointed on how the factors influence the loan repayment of SACCOs. Descriptive survey design was used, because it does not allow an attempt to control or manipulate the variables. This method determines and reports the way things are. It attempts to gain insight about the subject as possible behavior, attitudes, values and characteristics, Mugenda (2008). The characteristics related to the borrower and the Sacco based factors was obtained.

#### 3.2 Target Population

The study targeted 39 SACCOs in Baringo County with 63,924 members (Baringo County Report 2013). The SACCOs are evenly distributed across the County and outside the County. They serve their members within and outside the County. Majority of the SACCOs serves informal sector while others serves members from formal sectors. Two of these SACCOs have many branches within and outside the County. They have expanded their operations to accommodate even banking services in line with their core functions. They provide loan and saving facilities to farmers in beekeeping, cotton, coffee, fishing, livestock and transport sector.

#### 3.3 Sample Size and Sample Procedure

In this study, multistage sampling procedure was used to select a sample of 235 respondents. A purposive sampling was used to pick 39 loan officers in all the SACCOs (One officer in every SACCO). A simple random sampling technique was used to select five members in every SACCO. To arrive at the five members in every SACCO, a formula developed by Kothari (2004), was used as shown below.

$$n = \frac{z^2 \cdot p \cdot q}{e^2}$$

Where; n= sample

Z= standard 1.96(as per table of area under normal curve for the given confidence level of 95%).

P= Proportion of the target loanees

$q$ =proportion of the population not included in the study( $1-q$ )

$e$ = Standard error of 5% .

Consequently the sample size that was 15% of the population was chosen, and substituting in the formula above, 196 members will be sampled as shown below.

$$n = \frac{1.96^2 * 0.15 * (1 - 0.15)}{0.05^2} = 195.9216$$

To arrive at 235 respondents, loan officer in every Sacco participated in the study and five loan borrowers from every Sacco were selected randomly. Loan officers provided the list of loan beneficiaries and from the list; a sample of five members were picked and contacted to participate in the study.

### **3.4 Data Collection Instrument.**

Primary data was collected using questionnaires. The tool is appropriate for the study since it gives time respondent to respond adequately to the questions. The drop and pick method was used to administer questionnaires. The questionnaire was structured in a manner that it first collects the general information about the respondent followed by sections, which addresses social, economic, Sacco based, and loan default factor respectively. The questions posed to the respondent were simple and easy to understand and respond.

### **3.5 Data Collection Procedure**

In this study, the primary data was collected using a questionnaire and a drop and pick method by the researcher. This enabled the respondents to fill the questions at their own free time without interfering with their occupations. This ensured that the data were not be interfered with work constrains. The researcher allowed one week period for the respondent to fill the questions.

### **3.6 Validity and Reliability of the Instrument**

Data validity refers to the degree to which the result of study represents the phenomenon under study and therefore resulting to accurate, meaningful and free from interference if data is valid. Reliability on the other hand refers to the credibility of the research instruments in bringing positive and trustworthy data. In data validity, the study relied on the data collection method that enhanced forth-valid data for

conclusive analysis and recommendation on the determinants of loan default. Content validity is the extent to which measuring instruments provides adequate coverage of the topic under the study. If the instruments contain a representative sample of the universe, the content validity is good. Criterion related validity relates to how ability to predict some outcome or estimate the existence of some current conditions. This form of validity reflected the success of measures used for some empirical purpose. The concern criterion must possess the following qualities; relevance and freedom from bias Kothari, (2004). Instrument reliability is the measure of the degree to which a research instrument yields constant results from subsequent trials (Mugenda, 2008). Reliability was ensured through computation of Cronbach’s Alpha coefficient as shown in the table 3.1.

**Table 3.1 Reliability Statistics**

<b>Cronbach's Alpha</b>	<b>N of Items</b>
0.882	52

Results showed a Cronbach’s Alpha coefficient of 0.882 which is greater than 0.7 therefore the instrument was adopted.

### **3.7 Data Analysis and Presentation**

The collected primary data was processed into meaningful information. The data was sorted, grouped and coded to allow analysis of the data with the help of Statistical Package for Social Science (SPSS). The data was analyzed using descriptive statistics such as mean, mode and median. In addition, Pearson correlation was used to test the study hypotheses. The objective mean for each variable was obtained then regressed with dependent variable mean. With the guidance of a multiple regression model, coefficients indicating the relationship between the variable was computed. The multiple regression model indicates the association between the variables.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon.$$

Where; Y = Loan delinquency

$\beta_0$ = y-intercept or constant-this is autonomous default

$\beta_1$ -  $\beta_3$ =Coefficients beta for each variable.

$X_1$ = Social factors, captured as Age, Marital status and Education level

$X_2$ = Economic factors, captured as income and interest rate

$X_3$ =SACCO related factor, captured as Grace Period, Loan Size, Loan Use and Repayment period

$\varepsilon$  = is the error term or residual that cannot be explained by the model.

## CHAPTER FOUR

### RESULTS AND DISCUSSION

#### 4.1 Introduction

The chapter presents data analysis on social, economic, Sacco based, and loan default. Results, presentation, and discussion on these factors are tabulated. Both descriptive analysis of demographic characteristics and inferential statistics were used to analyze the collected data. First, correlation statistics was conducted to test the study hypotheses. Secondly, regression analysis was conducted to determine the effect of social, economic and Sacco based factors on loan default.

#### 4.2 Demographic of the Respondents

The study targeted 235 respondents but only 191 respondents participated in the study. These comprised of 30 loan officers and 161 Sacco members. The responses rate account for 81.3 percent. The respondent characteristics included their ages, gender, marital status, and education level. Respondents were asked to respond to question concerning their ages, their marital status and highest level of education attained.

**Table 4.2. Demography of the Respondents**

		Frequency	Percent
Gender	Male	126	66.0
	Female	65	34
Marital status	Married	159	83.2
	Single	30	15.7
	Divorced	2	1.0
Age	20 years and below	6	3.1
	21-30 years	55	28.8
	31-40 years	81	42.4
	41-50 years	42	22
	50 years	7	3.7
Education level	Primary	10	5.2
	KCSE	28	14.7
	Certificate	70	36.6
	Degree/Higher	77	40.3
	Diploma		
	Masters	6	3.1
	Total	191	100.0

Source: Data Analysis (2016).

From the above Table 4.2, male respondent constitute 66 percent while female consist of only 34 percent. Also 83.2 percent of the respondents are married, 15.7 percent are single and 1.0 percent is divorced. In addition, results indicate that 3.1 percent of the respondents are below 20 years of age, 28.8 percent are aged between 21 to 30 years, and 42.4 percent are aged between 31 to 40 years. Also, 22 percent are aged between 41 to 50 years while 3.7 percent are above 50 years of age. On the level of education, 5.2 percent of the respondent hold primary certificate of education, 14.7 percent hold secondary certificate, 36.6 percent hold certificate level. Also 40.3 percent of the respondent holds degree and higher diploma while 3.1 percent hold masters level.

It shows that for every one female respondent, there were two male respondents. Males responded more than females in this study. On marital status, majority of the respondents are married and for every 10 respondents sampled, 8 of them are married. This implies that majority of Sacco members are either a spouse or both of them. In addition, majority of the respondents are aged between twenty years and fifty years. This is a productive age where majority of them earn some income either through self-employment or through being employed. Few of them are below twenty years and above fifty years. Concerning education level, majority of Sacco members attended formal educations and holds certificate, degree and higher diploma. Few holds primary and masters level of education.

#### **4.3 Loan officers' Responses**

The study sought information on loan's repayment from the loan officers. The information relating to amount fallen due, amount actually paid and amount outstanding. Only 30 loan officers responded to the study and their responses tabulated as shown below.

**Table 4.3 Loan officers' Responses**

	Minimum	Maximum	Mean	Std. Deviation
Amount of loan which has fallen due	1.00	5.00	4.65761	1.56014
Amount paid	1.00	5.00	3.51091	1.55057
Amount outstanding	1.00	5.00	3.80981	1.54415

Source: Data analysis (2016)

The results in table 4.6 indicates that the amount which has fallen due per month is above sh. 5,000,000 (mean=5) with less variability from the mean. The amount paid on average per month range between sh. 3,000,000 and sh.4, 000,000 with less variability from the mean. The amount outstanding on monthly average is between sh. 3,000,000 and sh. 4,000,000.

The results indicate that amount actually paid by the borrowers is approximated to the outstanding balance per month. The amount that has fallen due is more than what the Sacco receives.

#### **4.4 Social Factors and Loan Repayment**

These factors consist of education, marriage and age of the respondents and how these variables influence the loan repayment. The Table 4.4 shows the responses on how each of them influences the repayment.

**Table 4.4: Social Factors**

	Minimum	Maximum	Mean	Std. Deviation
Marital status influence loan repayment	1.00	5.00	3.1925	1.35792
Married people incur huge expenses than single	1.00	5.00	3.4658	1.19390
Education level influence loan default	1.00	5.00	3.1304	1.18917
Educated members get access to business information	1.00	5.00	4.2484	.96197
Age of individual influence loan default	1.00	5.00	3.2360	1.20164
Younger members are likely to repay loan than older members	1.00	5.00	3.0683	1.23047

Source: Data Analysis (2016).

Table 4.4 shows that respondents neither agree nor disagree that marital status influences loan repayment (mean=3) with less variability (standard deviation=1.3). Also on the question of whether married people incur huge expenses than single, they neither agree nor disagree with less variability. Further, they neither disagree nor agreed that education level influence loan default. They agreed that educated members get access to business information (mean=4). Concerning the age of individual whether it influences loan default, respondent neither agreed nor disagreed similar to whether young members are likely to repay loan than older members.

The result indicates that education level is a factor that determines business information sourcing. Respondent were neutral on whether married people incur huge expenses than single people. Pasha and Negese (2014) concur with the study findings that educated members can probably repay their loan four more times than uneducated



ones. However, Magali (2013) differ with the study results that married people are more risky to lend than unmarried.

#### **4.5 Economic Factors**

This variable consists of household incomes and interest rate charged on borrowed money. The responses on how each of these factors influences loan repayment as shown in Table 4.5 below.

**Table 4.5: Economic Factors**

	Minimum	Maximum	Mean	Std. Deviation
Low household income earners fails to repay loan	1.00	5.00	4.31061	1.27591
Members with numerous investments earn more which enables them to repay loan	1.00	5.00	4.0497	0.99876
Interest rate affects loan repayments	1.00	5.00	3.71431	1.16420
Interest rate affects credit risk and profitability of Sacco	1.00	5.00	3.57141	1.23346

Source: Data Analysis (2016).

The results from Table 4.5, indicates that respondents agree that low household earners fails to repay the loan (mean=4) with less variability (standard deviation=1.2). They agreed with less variation from the mean that members with numerous investments earn more and enables them to repay the loan (mean=4). In addition, they agreed that interest charged on loan affects repayment (mean=4) with a less variation in responses. In addition, they agree that interest rate influences level of risk thus affecting the profitability.

The results indicate that respondent agree that low income earners are likely to default. Tundui et al. (2013) confirms the study results that individuals with numerous investments have the ability to offset the loan. Ayogyam et al. (2013) confirm the study results that interest rate charged on the loan influence the repayment.

#### **4.6 Terms of loan Factors**

These factors consist of grace period, loan size, and loan use and repayment period. Their responses are shown below.

**Table 4.6: Terms of loan Factors**

	Minimum	Maximum	Mean	Std. Deviation
The time between loan application and disbursement affect loan repayment	1.00	5.00	3.3168	1.29626
Chances that loan would be used for intended purpose is increased by timely loan disbursement	1.00	5.00	3.9565	1.03288
Loan size increases with default rate	1.00	5.00	3.7516	1.05494
Loan use determine loan repayments	1.00	5.00	4.0373	1.10617
Misallocation of loan delays its repayments	1.00	5.00	4.0186	1.11508
Time given to a borrower to repay back in full affect loan repayment	1.00	5.00	3.6087	1.11901
Longer time given to repay the loan result in lower the rate of default	1.00	5.00	3.6273	1.18754

Source: Data Analysis (2016).

Results from Table 4.9, indicates that respondent neither agrees nor disagree that time taken to apply the loan and disbursement affect the loan repayment (mean=3). They agree that timely releasing the loan increases possibility of using the loan for intended purpose. Similarly, respondent agree that loan size increases with the default rate with minimal variability. (Std. deviation=1.05). Respondents agree that loan use determine its repayment (mean=4) with minimal variations in responses (Std. deviation=1.1). Further, they agree that misallocation of loans delays its repayment (mean=4) and with a standard deviation of 1.1. In addition, the time given to loan beneficiaries affect the repayment (mean=4) similar to longer time given to repay the loan.

The results indicate that loan grace period has no impact on loan repayment. Timely releasing the loan assists borrowers to use the loan according to the intended purpose.

Pasha and Negese (2014) confirm the study result that timely disbursement of loan increases significantly the loan repayment performance. Further, misallocation of loan is possible due to foregone opportunities and increases possibilities of non-repayment of loans.

#### **4.7 Hypothesis Testing**

The study was guided by three hypotheses. The hypotheses state that social factors, economic and terms of loan do not have a significant effect on loan default. The social factors consist of; gender of the respondent, age, marital status and education level of the respondent and the mean response consisting of these factors were obtained. Similarly, economic factor of the members as indicated by the level of household income was obtained. The mean of the observed responses was estimated and correlated with the loan default mean. Further, Terms of loan factors contain these variables namely; Grace Period, interest rate, Loan Size, Loan Use, and Repayment period. The mean of the five variables represented by terms of loan factors was computed and correlated against loan repayment mean. The correlation coefficients between social, economic and terms of loan factors were obtained to help determine whether to accept or reject the hypotheses as shown in the Table 4.7.

**Table 4.7 Shows the association between the Determinants and loan default.**

**Correlations**

		Social factors	Economic factors	Terms of loan	of Loan repayment
Social factors	Pearson Correlation	1	-.129	-.003	-.118
	Sig. (2-tailed)		.104	.969	.135
	N	191	191	191	191
Economic factors	Pearson Correlation	-.129	1	.359**	.427**
	Sig. (2-tailed)	.104		.000	.000
	N	191	191	191	191
Terms of loan	Pearson Correlation	-.003	.359**	1	.515**
	Sig. (2-tailed)	.969	.000		.000
	N	191	191	191	191
Loan repayment	Pearson Correlation	-.118	.427**	.515**	1
	Sig. (2-tailed)	.135	.000	.000	
	N	191	191	191	191

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

Source: Field Data Analysis (2016)

**H<sub>01</sub>. Social factors do not have a significant effect on loan default.**

According to the result in Table 4.10, the correlation coefficient of -0.118 (R=-0.118, P>0.05) exist between social factors and loan repayment. This implies that a unit increase on social factor leads to 0.118 unit decrease in loan repayment. Therefore, accept the null hypothesis since the relationship is negative but not significant. Nimoh et al. (2012) confirm the study results that a factor like education has a negative relationship with loan default. Age of individual being one of the social factors has

negative association with loan default since members who are aged have experience thus default rate decreases with age (Pasha and Negese, 2014). Nimoh et.(2012) and Saleem et al (2010) concluded that the higher the level of education, the lower the default rate. Negese (2014) also argues that aged individuals tend to have business experience and rarely default their loan as opposed to the young who are main defaulters in loan.

### **H<sub>02</sub>. Economic factors do not have a significant effect on loan Default.**

According to the results in Table 4.7, correlation coefficient of 0.427( $R=0.427$ ,  $P<0.05$ ) exists between economic factors and loan repayment. This implies that a unit increase in economic factor leads to 0.427 unit increase in loan repayment. Therefore, we reject the null hypothesis and accept the alternate hypothesis that economic factors have a significant effect on loan default. Tundui et al. (2013) confirm the study results that increase in household income leads to low default rate.

When the loan beneficiary earns additional income, Sacco's increases their loan eligibilities. According to Nkuru, (2015), household income has a significant effect on loan default. Income levels, competition from other financial institution significantly determine the growth of Sacco's. The prior indicates that if Saccos were lending to its members a certain amount based on their current income, any further increase prompt Saccos to adjust loan qualification upwards. Tundui et al. (2013) examined how household income affects loan repayment and concluded that the higher the income, the lower the default rate.

### **H<sub>03</sub>. Term of loan factors does not have a significant effect on loan default.**

The results in table 4.10 show that a correlation coefficient of 0.515( $R=0.515$ ,  $P<0.05$ ) exists between terms of loan factors and loan repayment. This implies that a unit increase in terms of loan leads to an increase in loan repayment. Therefore, we reject the null hypothesis and accept the alternate hypothesis that terms of the loan have a significant effect on loan default. Duy (2013), and Aruppillaiet al. (2014) confirm the study results that smaller loans are likely to be repaid than large loans. Similarly, Wongnaa and Vitor (2012) confirm the study results longer period of repayment lowers default rate. The results indicate that loan grace period has a

significant effect on loan repayment. The loan grace period do predict the likelihood of loan default. The shorter the time taken necessitates the reduction of risk of default (Pasha and Negese, 2014). The higher the interest rate charged on the loan, the more the amount to be paid by the member thus increases chances of loan default. According to Ayogyam et al. (2013), interest rate affects repayment of agricultural loans.

#### 4.8 The effects of Determinants on Loan Default

The study determined the combine effect of social, economic and terms of the loan factors on loan default. For the regression purposes, mean representing each of the factors (social, economic, and terms of loan factors) was obtained and regressed against loan default mean as shown below.

**Table 4.11 The effect of determinants on Loan default.**

##### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.582 <sup>a</sup>	.339	.327	2.17184

a. Predictors: (Constant), terms of the loan, social factors, economic factors

##### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	380.290	3	126.763	26.874	.000 <sup>b</sup>
	Residual	740.555	157	4.717		
	Total	1120.845	160			

a. Dependent Variable: Loan default

b. Predictors: (Constant), social factors, economic factors, terms of the loan

### Coefficients<sup>a</sup>

Model	Unstandardized		Standardized	T	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
(Constant)	4.085	1.314		3.110	.002
Social factors	-.107	.085	-.083	-1.265	.208
1 Economic factors	.219	.058	.266	3.790	.000
Terms of the loan	.221	.037	.419	6.028	.000

a. Dependent Variable: Loan repayment

$$Y = \beta_0 - 0.083X_1 + 0.266X_2 + 0.419X_3 + \epsilon.$$

Table 4.11 shows that multiple correlation coefficient of 0.582 ( $R=0.582$ ) exist between the observed loan default and those predicted by the model. In terms of variability in observed loan default, the model account for 0.327 (Adjusted  $R^2=0.327$ ) or 32.7% of the total variability in loan default. The estimated absolute deviation mean is 2.17 that is lower than the observed loan default that range from 1 to 5.

The multiple regression coefficient of -0.083 ( $\beta_1=-0.083$ ,  $P>0.05$ ) exist between social factors and loan repayment. This implies that increase in social factors leads to reduction in loan repayment. The relationship is negative but not significant. According to Absanto and Aikaruwa (2013) concur with the findings and reveals that the probability of loan repayment depends on the borrowers' social factors however not significant.

The second factor is the economic factor that have standardized beta coefficient of -0.266 ( $\beta_2=-0.266$ ,  $P<0.05$ ). It suggests that a unit increase in economic factors leads to 0.266 units increase in loan repayment. The effect is significant and implies that economic factors determine loan default. Both household income and interest rate



charged on loan determine the loan repayment. Nkuru (2015) suggest that income level affects loan repayment.

In addition, the multiple regression results indicates that terms of loan factors standardized beta coefficient is 0.419( $\beta_3=-0.419$ ,  $P<0.05$ ). This implies that a unit increase in terms of the loan factors leads to 0.419 units increase in loan repayment. The effect is positive and significant. This suggests that an improvement in Sacco based factors significantly lowers rate of default. Kinya et al. (2015) suggest that loan terms significantly affect loan repayment. As stated earlier, increase in these factors like loan use, loan size and repayment period increases the chances of loan default.

## CHAPTER FIVE

### SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Introduction

According to the study results concerning the demographic attributes of the respondents, majority of the respondents are male. The results indicate that majority of them are married, and only a small number of them are single. In addition, majority of the respondents are aged between twenty years and fifty years. Few of them are below twenty years and above fifty years and majority of Sacco members attended formal educations and holds certificate, degree and higher diploma. The response from loan officers shows that the amount actually paid by the borrowers equated to the outstanding balance per month. The study was guided by three objectives to determine the determinants of loan default in SACCOs in Baringo County.

Furthermore, the social determinant such as education level of the respondent contributes to loan repayment. Educated members tend to access information that boosts their business performance. Marital status and age neither influence the loan repayment. The respondent neither agree nor disagree that married individual incur huge expenses than unmarried. In addition, respondent agreed that individual with numerous investments have potential to repay the loan. Interest rate charged on the loan influences the loan repayment. Terms of loan influences the loan repayment as depicted by the results.

The first objective of the study was to determine the effect of social factors on loan default. Social factors consist of gender, education, gender and age of the members. The results indicate that the first hypothesis was accepted since the association between social factors does not have a significant relationship with the loan repayment variable. The relationship is negative but not significant. Further, multiple regression coefficient confirm the study results that social factors does not have a significant effect on loan repayment.

The second objective of the study was to determine the effect of economic factor on loan default. Household income and interest rate were factors under consideration. The association between the loan repayment and the economic factors were positive

significant. Thus, the null hypothesis was rejected and alternate hypothesis was accepted. Further, the regression results indicate that positive significant effect exists between the economic factors and loan repayment. The study established that economic factors determine the loan repayment.

Lastly, the study established the relationship between the term of loan factors and the loan repayment. Both correlation and regression analysis results were obtained. The correlation coefficient results indicate a positive significant association between term of loan and loan default. The null hypothesis was rejected and alternate hypothesis was accepted that terms of loan factors have a significant effect on loan default. The multiple regression results confirm the result that there is a positive strong relationship between the term of loan factors and loan default.

## **5.2. Conclusion**

The study concludes that social factors have a weak relationship with loan default. The relationship between social factors and loan default shows that a social factor does not have a significant effect on loan default. It does not indicate whether someone is likely to default based on age, gender or education level. Secondly, economic factor have moderate positive significant association with loan default. The economic factor influences loan repayment and any additional level leads to increase in loan repayment. Tundui et al. (2013) confirm the study results that economic factors affect the loan repayment. In addition, terms of the loan has a significant positive effect on loan default. Kinya et al. (2015) conclude that loan terms significantly affect loan repayment. Therefore, both economic and terms of the loan have a significant effect on loan default, however, social factors do not have a significant effect.

## **5.3 Recommendations**

The study recommends that Sacco need to improve on policies that strengthen terms of loan in order to reduce credit risk and improve on the growth of Sacco's. Secondly, generate and frequently revise economic policies that will guide loan beneficiaries on improving their levels of incomes. Bad loans can be restricted by ensuring that loans are made to only borrowers who are likely to be able to repay, and

who are unlikely to become insolvent. In addition, Credit analysis of potential borrowers should be carried out in order to judge the credit risk with the borrower and to reach a lending decision.

On academic, the study recommends that more studies need to be conducted on the effect of competition of financial institutions on loan default of Sacco's.

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**APPENDIX I: INTRODUCTION LETTER  
EGERTON UNIVERSITY**

**NAKURUTOWN CAMPUS COLLEGE**

**DEPARTMENT OF FINANCE, ACCOUNTING  
& MANAGEMENT SCIENCE.**

**P.O BOX 13357.**

**Dear Sir/ Madam,**

**RE: DATA COLLECTION FROM SACCOs WITHIN BARINGO COUNTY**

My name is Allan Mitei. I am a student at Egerton University , Nakuru Town Campus Undertaking a Masters Degree in Business Administration. This is an academic research that seeks to find out *Determinants of loan default by SACCO'S members in Baringo County*. The findings will help to understand the key factors that determine the loans repayment. Permission will be sought from the relevant Authorities. Any information provided by you will be used solely for research purposes and will be treated with utmost confidentiality. Thank you for taking your time to participate in this study.

Yoursfaithfully,

.....

Allan Mitei.

## APPENDIXII: QUESTIONNAIRE

### SECTION A: GENERAL INFORMATION

From the following, questions provided, please tick (√) or (X) where appropriate.

Provide the following information

1. Name of the group \_\_\_\_\_

2. Gender: Male [ 1 ] Female [ 0 ]

3. Marital status

Married [ ] Single [ ] Divorced [ ] Widower [ ] Widow [ ]

4. Age in Years;

18-20 [ ] 21-30 [ ] 31-40 [ ] 41-50 [ ] Above 50 [ ]

5. Please indicate the highest level of education you have attained.

Primary [ 1 ] KCSE [ 2 ] Certificate [ 3 ] Degree/ Higher Diploma [ 4 ]  
Master [ 5 ]

6. What is the type of your business? \_\_\_\_\_

8. How long have you carried out your business?

One year [ ] Two years [ ] Three years [ ] Four years [ ] More than three  
years [ ]

<b>SECTION B: SOCIAL FACTORS</b>
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The following social factors determine loan repayment in lending institutions on a scale of 1-5, where; 1=Strongly Disagree, 2=Disagree, 3=Rarely agree, 4=Agree, and 5=Strongly Agree tick (√) how this applies to you.

9. Marital status influences loan repayment	1	2	3	4	5
10. Married people incur huge expenses than single and are likely to default	1	2	3	4	5
11. Education level influence loan default	1	2	3	4	5
12. Educated members get access to business information which can benefit them	1	2	3	4	5
13. Age of an individual influences loan default	1	2	3	4	5
14. Younger members are likely to repay loan than older members	1	2	3	4	5

<b>SECTION C: ECONOMIC FACTORS</b>
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The following economic factors determine loan repayment in lending institutions on a scale of 1-5, where; 1=Strongly Disagree, 2=Disagree, 3= Rarely agree, 4=Agree, and 5=Strongly Agree, tick (√) how this applies to you.

15. Low household income earners fails to repay loan	1	2	3	4	5
16. Members with numerous investment earn more that enables them service the loan	1	2	3	4	5
17. Interest rate affect loan repayment	1	2	3	4	5
18. Interest rate affects credit risk and profitability of Sacco	1	2	3	4	5

### SECTION D: TERM OF LOAN FACTORS

The following Sacco Based factors determine loan repayment in lending institutions on a scale of 1-5, where; 1=Strongly Disagree, 2=Disagree, 3= Rarely agree, 4=Agree, and 5=Strongly Agree, tick(√) how this apply to you.

19. The time between loan application and disbursement affect loan repayment	1	2	5	4	5
20. Chances that loan would be used to for intended purpose is increased by timely loan disbursement	1	2	3	4	5
21. Loan size increases with default rate	1	2	3	4	5
22. Larger loan are unlikely are unlikely to be repaid than smaller loans	1	2	3	4	5
23. Loan use determines loan repayment	1	2	3	4	5
24. Misallocation of loan delays its repayment	1	2	3	4	5
25. Time given to borrower to pay back the entire loan affect the loan repayment	1	2	3	4	5
26. The longer time given to repay the loan the lower the rate of default.	1	2	3	4	5

### SECTION E: LOAN DEFAULT

The following factors determine loan repayment in lending institutions on a scale of 1-5, where; 1=Strongly Disagree, 2=Disagree, 3= Rarely agree, 4=Agree, and 5=Strongly Agree .Tick (√) how this applies to you.

27. You always obtain loan from sacco	1	2	3	4	5
28. You always pay the loan instalments	1	2	3	4	5
29. You pay arrears before the next instalment matures	1	2	3	4	5
30. Your loan instalment matures with your monthly income	1	2	3	4	5

**APPENDIX III: SAMPLE FRAME****SACCO SOCIETY****ACTIVE MEMBERSHIP**

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Baricco Sacco Society Ltd	150
Bartolimo Sec. sch. Sacco	16
Boresha Sacco society	42,439
Ilchamus Sacco	150
Kabarnet Finance Rural Sacco	8600
Kabarnet H. S Sacco	26
KabarnetUtalii. Sacco	19
Kapkawa Boys Sacco	11
Kasewo Sacco Society Ltd.	19
Ketajua kali Sacco	143
Kipsaraman rural Sacco	244
Kiptagich Sacco	19
Kola Sacco	80
Korosi Sacco	200
Lake Bogoria Sacco	57
Majimazuri high school	16
Marigat Sacco	19
Mercy hospital Sacco	20
Mogotio Traveller's SACCO	18
Mogotio High School SACCO	21
Morop Sacco Society Ltd	20
MosopBidii Sacco society	20



Netmoi Sacco Society Ltd	16
New Lowland Travellers Sacco Society Ltd	16
Ng'ambo Sacco	18
Ravine rosses Sacco	661
Ravine rural Sacco	70
Sacho Sacco Society Ltd	54
Safeway Sacco Society Ltd	94
Skyline Sacco society ltd	10,257
Sosalo Sacco	48
Starline Shuttle Sacco Society Ltd	25
Tenges Rural Sacco	268
Tenges Sacco	21
Transkatena Sacco Society Ltd	20
Valley View Sacco Society Ltd	30
SegutonJua Kali Sacco Society Ltd	10
BaringoBodaboda Youth Sacco	27
Baringo Teachers College Sacco Society Ltd	19
<b>Total</b>	<b>63,924</b>

*Source: Baringo County Department of Industrialization, Tourism, Commerce and Enterprise Development Co-operative Division.*