Effects of Credit Information Sharing on Performance of Savings and Credit Cooperative Societies in Kenya

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Abstract: **The purpose of this study was to analyse the effect of credit information sharing on the performance of Saccos in Kenya. The specific objectives was to determine the effect of loan repayment on performance of Saccos in Kenya. The study was anchored on Information Asymmetry Theory, Credit Rationing Theory and Transaction Cost Theory. The research adopted a descriptive survey research design. Descriptive survey was appropriate for this study as it describes things and events as they are. The population for this study will be the 20 Sacco's in Kisumu County. The study targeted the credit managers as the respondents of the study. This study adopted a census survey with the population which consisted of all the credit managers of the 20 Saccos in Kisumu County. The study used both primary and secondary data. The primary data was collected through a questionnaire from the credit managers of the 20 Saccos while secondary data was retrieved from the SASRA'S Sacco supervision annual reports for the respective years. The quantitative data was analysed using inferential statistics and descriptive statistics. The findings revealed that loan repayment do have a significant effect on performance of Saccos in Kenya. Findings of this study was to aid in sound decision making process by Sacco managers and top level management of financial institutions on effective credit risk management. The government was also to benefit as this research proposed ways of addressing challenges facing Saccos in Kenya. The findings was to form the basis for further research in this field.**

Keywords: **Credit Information sharing, Loan Repayment and Performance.**

1. INTRODUCTION

Credit Information Sharing is a very important element in managing of Sacco performance and to the overall economic growth as well. (Ochieng 2018). It is the exchange of information on client financial history, the information contained is on borrowers' characteristics which include the credit history, credit worthiness and current debt level of the borrower (Jappelli & Pagano, 2010). Sharing of credit information can make an important contribution to the development of the financial system which is an important determinant of economic growth (Furletti, 2012). Credit scores have immense benefits to both lenders and borrowers. Borrowers are able to negotiate with lenders on better terms. Highly rated borrowers with good credit history can convincingly negotiate for lower interest rates or even waiver of collateral. Credit reference bureaus are agencies that researches and collects individual credit information and sells it for a fee to creditors so that they can make a decision on granting loans. Typical clients include banks, mortgage lenders, credit card companies and other financing companies (Sacerdoti, 2010). Credit information sharing began in the USA before being used in Europe in the early 1960s. In those days, credit bureaus were in most cases privately owned, independent companies, whose shareholders were banks and financial firms. In the United States the Fair Credit Reporting Act of 1970, amended in 1996, stated that credit reporting agencies may distribute individual credit reports either with the consumer's authority

or for a legitimate business need in connection with a business transaction that is initiated by the consumer, or to review an account to determine whether the consumer continues to meet the terms of the account. The act also prohibited dissemination of adverse information (such as bankruptcy) that is more than seven years old. Today in the USA and many other countries financial institutions are allowed to share credit information concerning their customers freely unlike in the past in order to reduce credit risk (Klein, 2012).

Across the globe, as is evident mainly in developed countries such as United Kingdom, Germany, Japan, Australia and the Netherlands, effective Credit Information Sharing can only be fully achieved by compulsory sharing within the confines of a legal framework that respects the confidentiality of the information shared among market participants and levels the playing field for different financial institutions (IMF, 2009). In a number of countries, lenders (banks, finance companies, credit card companies, retailers, suppliers extending trade credit) routinely share information on the creditworthiness of their borrowers through credit bureaus. The bureaus collate information with data from sources like courts, public registers and tax authorities and compiles files on borrowers. Lenders then obtain a consolidated data about a credit applicant by requesting a credit report from the bureaus (Jappelli & Pagano, 2010). In the nineteen thirties the Association of Mexican Bankers (AMB), worried about the credit history of its banks' clients, created an office that received information from the banks, consolidated the data of specific clients and provided information on the debtors back to the banks. This office did not function effectively, so, given the need that Banco de Mexico had to generate statistics, the ABM transfer it to Banco de Mexico in 1933. This is the antecedent of Senicreb, the formal PRCI that was founded in 1964, which still operates today. As it occurs with many public registries (Miller, 2000) Senicreb's main job is the generation of statistics for the regulation of the financial system. The provision of credit history reports has always been a secondary function

CRBs thrive in a good legal environment where there is data protection law, a fair credit reporting law, a data retention law, consumer protection and admissibility of electronic evidence and certification of electronic signatures, without which credit reporting become a shenanigan (Sacerdoti, 2010). CRBs were introduced to assess the credit worthiness of the loan applicants. They complement the central role played by banks and other financial institutions in extending financial services within an economy. They help lenders make faster and more accurate credit decisions. They collect, manage and disseminate customer information to lenders within a provided regulatory framework. Credit histories not only provide necessary input for credit underwriting, but also allow borrowers to take their credit history from one financial institution to another, thereby making lending markets more competitive and, in the end, more affordable. Credit bureaus assist in making credit accessible to more people, and enabling lenders and businesses reduce risk and fraud.It has been found out that in order to minimize loan losses thus credit risk, it is essential for commercial banks to have effective credit risk management systems in place (Jappelli & Pagano, 2010). Given the asymmetric information that exists between lenders and borrowers, financial institutions must have a mechanism that ensures that they not only evaluate default risk that is unknown to them in order to avoid adverse selection, but also that can evolve in order to avoid moral hazards (Stiglitz & Weiss, 2008).

CRBs are institutional solutions to these two ubiquitous problems in lending, adverse selection and moral hazard. CRBs are meant to provide to the credit industry and the market, organized information on the performance of borrowers (Donge, 2012). An effective system that ensures repayment of loans by borrowers is critical in dealing with asymmetric information problems and in reducing the level of loan losses, thus the long term success of any banking organization. Credit risk management is essential in optimizing the performance of financial institutions (Brown & Zehnder, 2016).Regionally credit sharing information is an important aspect in building the trust and confidence of the Saccos stakeholders. Information sharing institutions, whether they are PRCIs or private credit bureaus, provide information on the past payment behavior of individual borrowers. They also collect, organize and consolidate information from many lenders, who associate with the bureau by providing access to their databases. Such information is updated frequently, usually every month. Then at the request of a user, bureaus provide credit reports that contain particular individuals' credit history. The databases of bureaus are the sum of all the associates' databases. Consequently, access to such an aggregated database mitigates the adverse selection problem. Also, as borrowers realize that there is an institution that monitors their behavior, they have an incentive to pay back loans, thus reducing moral hazard (Pilla 2016). Essentially, the information sharing mechanisms allow the formation of borrowers' reputation.

Evidently, according to reviews conducted in Egypt, Nigeria and South Africa on performance of lenders, it was acknowledged that information sharing creates incentives for borrowers to perform in line with banks' interests and that information sharing can drive borrowers to repay loans when the legal environment makes it difficult for banks to enforce credit contracts (Brown, Jappelli & Pagano, 2017). As such, by exchanging information about their customers, banks can improve their knowledge of applicants' characteristics, past behavior and current debt exposure. In a review focusing on the critical factors of effective lending in Zambia, it was held that information sharing reduces informational asymmetries, which in turn reduces adverse selection obstacles in lending, as well as change borrowers' motives to repay, both directly and by adjusting the competitiveness of the credit market (Brown et al., 2017). Gietzen (2016) in a study done in Cote D'voire posited that information sharing efficiently mitigates adverse selection problems since information sharing facilitates tracing borrowers who switch banks. Financial sectors especially Saccos play crucial role in economic growth and industrialization via channeling funds from surplus units- the depositors, to the deficit units, the borrowers, in the process gaining from the spread of the different interest charged. Their intermediation role can be said to be a catalyst for economic growth (Funso, Kolade and Ojo, 2012). The role and importance of Saccos of modern economy is enormous (Bikker, 2010; Rashid, 2010; Altan , Beduk and Yusufazari, 2014) and its products/services which it provides growing in terms of depth, the number of institutions and the amount of money that managed by such institutions. The roles of such financial institutions are paramount in developing countries like Ethiopia where the financial market is underdeveloped and none existed. The sector is the backbone of economy in the country (Jain and Jaiswal, 2016). As the banks are interconnected with each other for the payment and other functions, the a failure of a single bank not only affects its shareholders and depositors rather it affects all over the bank (Kumbirai and Webb, 2010) and it creates an economic turmoil situation which is regarded as a disaster for the economy that was viewed in recent global recession that occurred as the result of bank failure at the inception (Al Karim and Alam, 2013).

Financial institutions equally are exposed to many types of risk that has caused in different situations which result in different level of risks. Such risks include liquidity risk related to inability to meet current demand; credit risk is a default occurs when a borrower does not make the obligated interest and principal payments in a timely manner, interest rate risk (the possibility that the Saccos will become unprofitable, if rising interest rates force it to pay relatively more on its deposits than it receives on its loans). Zawadi (2013), Mohiuddin (2014) stated that Sound financial health of a Sacco is the guarantee not only to its depositors but is equally important for the shareholders, employees and whole economy as well. The subject of financial performance and research into its measurement is well advanced within finance and management fields (Alkhatib, 2012). As Searle (2008) stated the government of all nations should have maximum concern on performance of all saccos which are operating in the territory of the country. In consideration of such outcome and concern , the financial health of each Sacco should have been measured from time to time and managed efficiently and effectively taking into account the credit rating, credit information accuracy and credit information sharing(Sangmi & Nazir, 2010).In a study carried out in Tunisia on information sharing and information acquisition in the country's credit markets by Karapetyan and Stacescu (2010), it was established that information sharing provide more accurate lending decisions, provide higher welfare, which leads to an increased locus on relationship banking, and favor informationally opaque borrowers. In a related review in Libya, McIntosh and Wydick (2014) observed that credit information systems first create a screening effect that advances risk evaluation of loan applicants, thereby raising portfolio quality, which, in turn, reduces rates of arrears. Similarly, Jappelli and Pagano (2010) in a study on information sharing, lending and defaults in South Africa revealed that bank lending had gone up and credit risk lowered following introduction of credit information sharing among both private or public lending agencies.

However, in Sudan it was that there was a negative effect on credit information sharing on non-performing loans given that the level of non-performing loans tends to reduce with increase in credit information sharing (Ismael, 2015). However in Tanzania, Mburuti (2017) while analyzing how systems integrity in credit information sharing practices affected the administration of credit risk in commercial banks revealed that the system integrity in credit information sharing significantly affected the management of credit risk in turn affecting access to credit among loan consumers. Similarly, Kiragama (2016) in Rwanda found evidence to the effect that sharing of credit information influenced the level of non-performing loans among the financial institutions as it helped the institutions to decline lending to chronic defaulters. Credit information sharing is a relatively new concept in Kenya: Banking (credit reference bureau) regulations 2008 that govern licensing, operation and supervision of credit bureaus by Central Bank of Kenya were gazetted and operationalized in 2009 (Oludhe, 2011). The Central Bank of Kenya has licensed two Credit Reference Bureaus i.e. Credit Reference Bureau Africa Limited and Metropol Credit Reference Bureau Limited (Kabiru, 2014).

Credit markets present asymmetric information problems. Lenders know neither the past behavior and the characteristics, nor the intentions of credit applicants. This creates a moral hazard problem that causes lenders to make credit decisions based on the average characteristics of borrowers rather than on individual characteristics (Chen, 2010). Moral hazard implies a lower average probability of payment, making credit more expensive. Higher interest rates exacerbate another informational problem, adverse selection, because only higher risk borrowers are willing to accept loans at high interest rates (Kipyegon, 2011). For many years, Kenyan banks have had to contend with having incomplete information about borrowers that in turn translated to higher risk premiums on interest rates. Bank industry players also say lack of credit reference information leads to a risk of overpricing low risk borrowers and under-pricing high risk borrowers. The Central Bank of Kenya (CBK) is processing licences for new credit reference bureaus to step up sharing of borrowers' information among banks. Perennial defaulters had been the cause of high lending rates (Rukwaro, 2011). Credit information sharing is a mechanism introduced by Central Bank requiring all banks to share data on the credit history of their customers. This information is shared by banks through credit reference bureaus when they want to establish the credit worthiness of a customer seeking a loan.

Banks and other credit providers use credit reports obtained from credit bureaus as part of the lending decision process. Walsh (2003) warns that having only one half of the picture (negative information) runs the risk of it becoming the only deciding factor - a blacklist with the potential of restricting access to credit. In the past, credit scoring focused on measuring the risk that a customer would not fulfil his/her financial obligations and run into payment arrears. More recently, credit scoring evolved to loss and exposure risk as well (Glennon *et al.*, 2008). Scoring techniques are nowadays used throughout the whole life cycle of a credit as a decision support tool or automated decision algorithm for large customer bases. With increasing competition, electronic sale channels and recent saving, credit and cooperative regulations have been important catalysts for the application of semi- automated scoring systems.

Credit Reference Bureaus (CRBs) gather information on the payment history and accounts of borrowers. CRBs collect and distribute two major types of data i.e. 'white' and 'black' information. 'Black' information usually refers to negative consumer data, (information about defaults on payments, delays, delinquencies, bankruptcies etc) that is, information with a negative connotation on the payment history and the financial behavior of the data subject. White information on the other hand is positive consumer data on payment history and the financial behavior of the data subject, credit report depends on the amount of detail of the information (La Porta, Florencio, Andrei & Robert, 2007).

Credit Information Sharing (CIS) Kenya launched its 2015-2019 Strategic Plans in late October 2014. The Plan firmly shares in this belief, and is reflective of recent debates and conversations around financial inclusion and access to affordable credit. This strategy is thus designed to place CIS Kenya at the centre of transforming Africa's credit market and to improve its quality. Motivated by the desire to realize the full benefits of CIS in the next five years, the Strategy seeks to entrench the use of credit reports part of routine credit management by both lenders and borrowers. Moreover, this Strategy takes cognizance of the need to bring regulators, financial service providers and credit reporting providers together around a model that works for all (CRB, 2016). Credit systems can be improved to enhance access to credit in Kenya. Upcoming innovations that sought to accomplish this phenomenon inspired the 3rd Regional CIS Conference, whose theme was "CIS for Innovation and Financial Inclusion, Mikopo Kisasa!" Translated from Swahili, "Mikopo Kisasa" means "Contemporary Lending Approaches". The conference was held on February 2016 in Nairobi, Kenya. CIS Kenya played host to 300 executive delegates representing various segments of credit markets from the EAC Region and beyond. The event was followed by the Nairobi Business Community Summit, providing half day sensitization on CIS to 400 bank staff and credit consumers respectively on each day. The events had an interesting and informative agenda that was facilitated by renowned global experts who shared insights on fundamental aspects of CIS that stand vital in managing credit risk (CRB, 2016).

Cooperatives began with a group of people who lived in a village in England known as Rochdale, popularly referred to as Rochdale pioneers. They formed the first successful cooperative society in 1884. This society which was a consumer cooperative society was formed in 1844 when Britain was undergoing industrial revolution. As a result of the revolution, a lot of people lost their jobs in the factories as machines were introduced to replace them. In addition to this there was general lack of credit and supply of essential commodities like salt, sugar, flour and cooking fat. Businessmen also took advantage of this situation and started offering impure products at high prices. It is against this background that Rochdale Pioneers decided to draw up some sort of principles which would guide their operation as co-operative society. These

principles were intended for the regulation of co-operative societies as indicated by the great stress on the sale of pure products and the sale of goods for cash only. It was therefore found necessary to formulate the principles for adoption by other types of cooperatives, (MOCD, 2011).

In the continent, African Confederation of Cooperative Savings and Credit Association (ACCOSCA) is the body hat is in charge of Saccos. It is registered under the Societies Act, Chapter 108 of the laws of Kenya, and in other African countries (KUSSCO, 2015). This body brings together all the Saccos in Africa and aids them in matters regulation and also offers them a platform for comparing the continents' best practices in the governance of Saccos. In Kenya, the banking sector was saddled with a momentous non-performing loans (NPLs) portfolio before the advent of credit information sharing mechanisms. This invariably led to the collapse of some banks (Degryse & Ongena, 2010). Kenya National Federation of Cooperatives (KNFC) is the link between co-operatives in Kenya and the International Co-operative Alliance (ICA). The KNFC is the only apex society in the movement. It was formed with an objective of promoting, developing, guiding, assisting and upholding ideas of the cooperative and SACCO principles. The first Savings and Credit Cooperatives in Kenya were started in the sixties and they have grown tremendously. The Government annual economic survey shows that as at December 2015 there were more than 2,400 active SACCOs with a membership in excess of 2.5 million people in Kenya. Share capital stood at Kshs. 75 billion while outstanding loans were Kshs. 65 billion. The structure of the co-operative movement in Kenya, generally, comprises of four tiers. These include the primary societies, secondary cooperatives, tertiary cooperatives and nationwide cooperatives.

Credit information sharing has been very important aspect to the economic growth globally. The stability of the economy has greatly been obstructed by the high level of non-performing loans in the banks. In March 31st 2014, there was an increase of 7.8% which was KShs.73 billion in NPLs stock compared to 68.3 billion in 2013 as indicated by the CBK (2015). At the end of 2001, Kenya's NPLs stood at KShs 107 billion. As noted by (Kusi & Okoth, 2013) that figure represented 38% of the total loan which was 281.7 billion shillings in the banking sector. A total of Sh228 billion loan books and deposits of Sh205 billion are held by the 184 licensed SACCOs in Kenya. SACCOs also hold upto KShs15 billion of the total non-performing loans (CBK, 2017). This shows that the borrowers have good credit records hence their access to these credit facilities. Due to bad loans, it has been observed that most of the defaulters have been shifting to the SACCOs. Instead of blacklisting defaulters using CRB reports, sharing of positive information by SACCOS would be helpful in putting pressure on the lending organizations and rewarding of borrowers who repay in good time. When a Sacco's liquidity is affected, then the loans are termed as non-performing (CBK Annual Banks Supervision Report, 2016).

This incidence of bad loans was worrying and put to question the credit models and quality of information employed by credit analysts. Net loans at the level of Ksh. 315 billion as at December 31, 2009 accounted for 51% of total net assets of Kenya's banking sector. At the same time the proportion of non-performing loans to total loans in Kenya was at a high of 30% as at 31st December 2014.NPLs amounted to Shs.94 billion (Oloo, 2015). Comparing, the ratio of non-performing loans to total loans (NPLs/TL) in Kenya of 33% to similar African economies at the end of 2008, central banks of those countries (by then) reported that, this ratio (NPLs/TL) was much lower in Zimbabwe (24%), Nigeria (11%), and South Africa (3%) (CBK, 2008). It's against this backdrop that the Banking (Credit Reference Bureau) Regulations 2008, that govern licensing, operation and supervision of CRBs by the CBK were gazetted and operationalized in 2009 (Waweru & Kalani, 2009). A number of studies have been done on credit information sharing in Kenya however, their focus has been on the link that exists between credit information sharing and performance in the commercial banks of Kenya. A study by Aduda (2011) showed that the performance of banks greatly improved due to the licensing of the CRBs on the connection between credit information sharing and profitability. It was also found out by Oludhe (2011) that credit risk management affected the financial performance of banks in Kenya and therefore concluded that there exists a positive relationship between the two. None of the above studies has focused on Saccos in Kenya. Again these studies were done more than 5 years ago and given that the financial sector is very dynamic, there is need for studies to be done on an ongoing basis. This study therefore aimed to fill the gap by evaluate the effect of repayment on performance of Saccos in Kenya.

2.   EFFECT OF LOAN REPAYMENT AND PERFORMANCE OF SACCOS

Financial institutions play a vital role in supporting the business sector as well as in national development. Through financial institutions, businesses deposit, transfer money and acquire business loans. The process of issuing loans by the financial institutions goes hand in hand with risks such as loan repayment risks, liquidity risks, interest rate risks, foreign exchange risks, operating risks, technological risks, fraud risks, regulatory risks, off-balance sheet risks and capital

adequacy risks (Santomero, 1997). In order for the financial institutions to reduce risks, they should establish appropriate and effective loan repayment environments. This could include operating under sound loan provision processes, maintaining an appropriate loan repayment administration, having clear procedures and criteria for evaluating a loan application, organized documentations and release of credits, efficient internal controlsystems and demanding adequate and easily realizable collaterals (Bank of Tanzania Report, 2000).Despite the efforts made to collect loans, available data indicates that many financial institutions still face a problem of an increase in an outstanding balance withheld by defaulters due to the fact that not all loans disbursed are repaid on the due date. For example, for the period of 2008, National Bank of Commerce loan provision was reduced by 27 percent (National Bank of Commerce Report, 2008), NationalMicrofinance Bank Report by 26 percent (NMB, 2008) and Trust Fund by 29 percent (Trust Fund, 2008) due to the failure of borrowers to repay loans on time. With this borrowers' failure to repay the loans, the financial institutions are rendered unable to provide loans to new loan applicants (Chijoriga, 1997). It is also fundamentally known that poor loan repayment behaviour by the borrowers negatively affects the financial institutions' operations in a number of ways. These include the inability of the financial institutions to fully disburse the loans at the expected maximum levels.

Cowan and Cowan (2016) conducted a survey in Canada by on the financial institutions attempt to reduce the rate of default for small business lending. The study employed descriptive research design to target 24 financial institutions. Data was collected using questionnaires and analyzed using descriptive statistics. The study established a positive relationship between repayment and financial performance. Further, the study found that an effectively developed and managed credit scoring helped check default rate of the borrowers thereby improving the financial performance of those financial institutions. The study also noted that repayment meant availability of more funds for onward lending to other customers, which in turn increased the profitability of these institutions. The study further argued that low default among the borrowers also helped the lending institutions to relax some of the lending regulations thereby enhancing access to credit. This study was nevertheless carried out in a developed country with an advanced economy. It also focused on small businesses rather than Saccos. The current study focuses on the Saccos in Nairobi. Bhardwaj and Sengupta (2011) studied the effect of repayment on the performance of banks in India. The study surveyed 26 commercial banks with their headquarters in New Delhi. The study used primary data which was collected from the lenders evaluating the borrowers' applications using their past default history as a benchmark for lending. This information was acquired from credit agencies or bureaus. Such information primarily included the prior credit history of the borrower. The study discovered a significant positive correlation between repayment and financial performance. This study was however carried out in India which has a long history of Saccos and micro-finance institutions, which are highly developed unlike the Saccos in Kenya.

In a study on credit information sharing and default risk reduction in Kenya commercial banks, Nasieku and Ngugi (2016), used descriptive research design to target the 43 commercial banks in Kenya. The study used secondary data gathered from the banks' annual reports and the Central Bank of Kenya supervision reports. Data was analysed using descriptive statistics. The study discovered a positive relationship between repayment and the performance of the banks. The study recommended to the CBK to put into place policies to ensure that it is mandatory to use credit reports for every borrower. Commercial banks and other financial institutions should also use the information provided by CRB already licensed in Kenya to effectively lend to potential borrowers. This study however focused on commercial banks which are well established institutions compared to Saccos.

Gitahi (2013) studied the effect of repayment on the performance of commercial banks in Kenya. Descriptive survey research design was employed while the population of interest consisted of 43 financial banks operating in Nairobi, Kenya. Primary data was collected by administering open and close-ended questionnaires to the respondents, which were administered through drop and pick later method. The study established a significant positive relationship between access to loans and the performance of the banks. The above empirical studies done in the area of credit information sharing regarding its effect on performance of Saccos have not been conclusive. The idea underlying credit information sharing is that "the best predictor of future behavior is past behavior" (Miller, 2003). In spite of these propositions there have been mixed findings from these studies e.g. Turner and Varghese (2008) found a positive link between credit information sharing and banks financial performance, Nasieku and Ngugi (2016) found a positive relationship between repayment and the performance of the banks while Giannetti, Jentzsch, and Spagnolo (2010) found no relationship between credit information sharing and banks' performance.

3. METHOD

The study adopted a descriptive research design a target population of 20 Saccos registered with the Credit Reference Bureau and with their head offices in Kisumu Kenya, the target population being the credit managers as the respondents. The study population being small, census was applied. The data collection instrument was questionnaire. The study's procedure of data collection was drop and pick method. Piloting was done for testing the validity and reliability of the study. Data was coded, edited and organized to bring a meaning to it and analyzed using descriptive and inferential statistics, which included a regression model and correlation analysis. Secondary data analysis showed the trend of performance of the Saccos for the years 2015 to 2017. Multiple regression analysis was used to establish the relationship between the independent variables and the dependent variable and the strength upon which the independent variables affected the dependent variable

4. DISCUSSION

Cowan and Cowan (2016) states that effectively developed and managed credit scoring helped check default rate of the borrowers thereby improving the financial performance of those financial institutions. The study also noted that repayment meant availability of more funds for onward lending to other customers, which in turn increased the profitability of these institutions. The study further argued that low default among the borrowers also helped the lending institutions to relax some of the lending regulations thereby enhancing access to credit.

The study sought to evaluate the effect of repayment on performance of Saccos in Kisumu County. The findings are presented in a five point Likert scale where SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree and T=total. From table 4.1 below, the respondents were asked whether the Saccos takes into account the repayment history of the applicant when advancing a loan. The distribution of findings showed that 35.0 percent of the respondents strongly agreed, 36.0 percent of them agreed, 3.0 percent of the respondents were neutral, 17.0 percent disagreed while 9.0 percent of them strongly disagreed. These findings implied that the Saccos takes into account the repayment history of the applicant when advancing a loan.

The respondents were also asked whether the Saccos liaise with the credit reference bureaus to get information on borrowers in order to reduce default risk. The distribution of the responses indicated that 46.0 percent strongly agreed to the statement, 47.0 percent of them agreed, and 1.0 percent of them were neutral, 3.0 percent of them disagreed while 3.0 percent of them strongly disagreed to the statement. These findings implied that the Saccos liaise with the credit reference bureaus to get information on borrowers in order to reduce default risk. The respondents were also asked whether the past history of a borrower's debt repayments helps the Sacco to decide on access. The distribution of the responses indicated that 39.0 percent strongly agreed to the statement, 45.0 percent of them agreed, 5.0 percent of them were neutral, 8.0 percent of them disagreed while 3.0 percent of them strongly disagreed to the statement. These findings implied the past history of a borrower's debt repayments helps the Sacco to decide on access.

The respondents were further asked whether the Saccos consider the timing of the repayment when advancing a loan. The distribution of the responses indicated that 30.0 percent strongly agreed to the statement, 53.0 percent of them agreed, 8.0 percent of them were neutral while 7.0 percent and 2.0 percent of them disagreed strongly and disagreed to the statement respectively. These findings implied that the Saccos consider the timing of the repayment when advancing a loan. Finally, the respondents were asked whether consumer's record of meeting financial obligations, can be used to make decisions about his or her ability and willingness to repay debt.The distribution of the responses indicated that 29.0 percent strongly agreed to the statement, 46.0 percent of them agreed, 4.0 percent of them were neutral, 14.0 percent of them disagreed while 7.0 percent of them strongly disagreed to the statement respectively. These findings implied that consumer's record of meeting financial obligations can be used to make decisions about his or her ability and willingness to repay debt.

The respondents were further asked whether the Saccos consider the successful repayment of the loan through cash flow analysis when advancing a loan. The distribution of the responses indicated that 30.0 percent strongly agreed to the statement, 52.0 percent of them agreed, 9.0 percent of them were neutral while 7.0 percent and 2.0 percent of them disagreed strongly and disagreed to the statement respectively. These findings implied that the Saccos consider the successful repayment of the loan through cash flow analysis when advancing a loan. The respondents were further asked whether Saccos should monitor borrowers and select the clean borrowers from defaulters and monitor them to make sure

that funds are utilized for the intended reason. The distribution of the responses indicated that 29.0.0 percent strongly agreed to the statement, 51.0 percent of them agreed, 11.0 percent of them were neutral while 6.0 percent and 3.0 percent of them disagreed strongly and disagreed to the statement respectively. These findings implied that Saccos should monitor borrowers and select the clean borrowers from defaulters and monitor them to make sure that funds are utilized for the intended reason.

Table 4.1: Effect Of Repayment On Performance Of Saccos In Kisumu County

Statements		SA	A	N	D	SD
The Saccos takes into account the repayment history of the applicant when advancing a loan	%	35.0	36.0	3.0	17.0	9.0
The Saccos liaises with the credit reference bureaus to get information on borrowers in order to reduce default risk	%	46.0	47.0	1.0	3.0	3.0
The past history of a borrower's debt repayments helps the sacco to decide on access	%	39.0	45.0	4.0	8.0	3.0
The Saccos considers the timing of the repayment when advancing a loan	%	30.0	53.0	8.0	7.0	2.0
Consumer's record of meeting financial obligations, can be used to make decisions about his or her ability and willingness to repay debt	%	29.0	46.0	4.0	14.0	7.0
The Saccos considers the successful repayment of the loan through cash flow analysis when advancing a loan		30	52.0	9.0	7.0	2.0
Saccos should monitor borrowers and select the clean borrowers from defaulters and monitor them to make sure that funds are utilized for the intended reason		29.0	51.0	11.0	6.0	3.0

4.1 Inferential Statistics

4.1.1 Pearson Correlation

The study sought to establish the strength of the relationship between independent and dependent variables of the study. Pearson correlation coefficient was computed at 95 percent confidence interval (error margin of 0.05). Table 4.2 illustrates the findings of the study.

Table 4.2: Correlation Matrix

		Performance of Saccos
Repayment	Pearson Correlation	.746[**]
	Sig. (2-tailed)	.000
	N	76

As shown on Table 4.2 above, the p-value for repayment was found to be 0.000 which is less than the significant level of 0.05, (p<0.05). The result indicated that Pearson Correlation coefficient (r-value) of 0.746, which represented a strong, positive relationship between repayment and o performance of Saccos.

4.1.2 Multiple Linear Regression

Multiple linear regressions were computed at 95 percent confidence interval (0.05 margin error) to show the multiple linear relationships between the independent and dependent variables of the study.

4.1.2.1 Coefficient of Determination (R^2)

Table 4.3 shows that the coefficient of correlation (R) is positive 0.539. This means that there is a positive correlation between credit information sharing and performance of Saccos in Kisumu County. The coefficient of determination (R Square) indicates that 28.5% of performance of Saccos in Kisumu County is influenced by credit information sharing. The adjusted R^2 however, indicates that 25.3% of performance of Saccos in Kisumu County is influenced by credit information sharing leaving 74.7% to be influenced by other factors that were not captured in this study.

Table 4.3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.539[a]	.285	.253	5.0162

a. Predictors: (Constant), loan Repayment

4.1.2.2 Analysis of Variance

Table 4.4 shows the Analysis of Variance (ANOVA). The p-value is 0.000 which is < 0.05 indicates that the model is statistically significant in predicting how credit information sharing affects performance of Saccos in Kisumu County. The results also indicate that the independent variables are predictors of the dependent variable.

Table 4.4: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	672.833	1	103.605	45.102	.000[b]
	Residual	1658.131	75	17.661		
	Total	2330.964	76			

4.1.2.3 Regression Coefficients

From the Coefficients table (Table 4.4) the regression model can be derived as follows:

$$Y = 32.432 + 2.119X_3$$

The results in table 4.5 indicate that all the independent variables have a significant positive effect on performance of Saccos. The most influential variable is repayment with a regression coefficient of 2.119 (p-value = 0.000). According to this model when all the independent variables values are zero, performance of Saccos Kisumu County will have a score of 53.423.

Table 4.5: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficientst		Sig.
	B	Std. Error	Beta		
(Constant)	32.432	3.264		53.423	.000
Loan Repayment	2.119	.141	.722	5.710	.000

4.1.2.4 Hypothesis Testing

4.1.2.5 Hypothesis one

Ho$_1$: Repayment does not have a significant effect on the performance of Saccos in Kisumu County.

From Table 4.5 above, repayment (β = 2.119) was found to be positively related to performance of Saccos in Kisumu County. From t-test analysis, the t -value was found to be 5.710 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because $\rho<0.05$. Thus, the study accepted the alternative hypothesis and it concluded that Repayment affects the performance of Saccos in Kisumu County.

5. CONCLUSION AND RECOMMENDATIONS

The study sought to evaluate the effect of repayment on performance of Saccos in Kisumu County. The study revealed that the Saccos takes into account the repayment history of the applicant when advancing a loan and that the Saccos liaise with the credit reference bureaus to get information on borrowers in order to reduce default risk. Further the respondents revealed that the past history of a borrower's debt repayments helps the Sacco to decide on access and that the Saccos consider the timing of the repayment when advancing a loan. Finally, the majority of the respondents indicated that consumer's record of meeting financial obligations can be used to make decisions about his or her ability and willingness to repay debt and that the Saccos consider the successful repayment of the loan through cash flow analysis when advancing a loan. Also the study findings revealed that Saccos should monitor borrowers and select the clean borrowers from defaulters and monitor them to make sure that funds are utilized for the intended reason.

Based on the findings the study concluded that loan repayment (β = 2.119) was found to be positively related to performance of Saccos in Kisumu County. From t-test analysis, the t -value was found to be 5.710 and the ρ -value 0.000. Statistically, this null hypothesis was rejected because $\rho<0.05$. Thus, the study accepted the alternative hypothesis and it concluded that Repayment affects the performance of Saccos in Kisumu County.

Based on the findings, the study recommended that the management of Saccos should forward lists of credit defaults, overall loan exposure, guarantees and data from past credit history to Credit Reference Bureau for reference. The management of Saccos should manage their records and files to avoid inaccuracies by having regular cross check the credit information held to ensure it reflects the correct current status of the affected individuals. The Saccos should monitor borrowers and liaises with the credit reference bureaus to get information on borrowers in order to reduce default risk taking into account the repayment history of the applicant when advancing a loan.

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