IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 20, Issue 5. Ver. IV (May. 2018), PP 19-37
www.iosrjournals.org

Effects of Financial Literacy on loan Repayment among Small and Medium Entrepreneurs of Microfinance Institutions Case Study of Inozamihigo Umurenge Sacco in Nyaruguru District

Musabwasoni Gaudence[*], Mulyungi Patrick[*] Muganamfura Denys[**]
[*]*Jomo Kenyatta University of Agriculture and Technology,* [**]*Kibogora Polytechnic Rwanda*
Corresponding Author: Musabwasoni Gaudence

Abstract: *Microfinance Institutions in Rwanda majorly SACCOs play a significant role in the financial sector and to the economy at large since they empower members through offering loans for business startup. However the performance of these SACCOs in terms of loan repayment has been alarming overtime. Therefore the study sought to analyze the influence of financial literacy on loan repayment among SMEs of Microfinance Institutions a Case of INOZAMIHIGO Umurenge SACCO in Nyaruguru District. Specific objectiveswere to determine how book keeping literacy influence loan repayment among SMEs in Rwanda, to examine how budgeting literacy affect loan repayment among SMEs in Rwanda and to assess how debt management literacy affect loan repayment among SMEs in Rwanda. The study adopted descriptive quantitative research design. A sample of 178 from a population of 320 which comprised of SMEs from INOZAMIHIGO SACCO in Nyaruguru District was calculated using Yamane's formula. Purposive and simple random sampling techniques were used in choosing population and issuing questionnaires respectively. Data was analyzed using SPSS software Version 20 and presented in form of tables and graphs. Correlation and regression analysis techniques were used to study the relationship and the effects of financial literacy factors on loan repayment among SMEs of Umurenge SACCOs. The findings revealed a high positive correlation between book keeping, budgeting and debt management literacy and loan repayment. Moreover R-squared was 77.2% meaning that the financial literacy factors accounted for greater percentage of loan repayment variations. The study recommended that SACCOs should initiate more financial training to reach all members and encourage all members to attend such trainings. The SACCOs should also employ high qualified trainers to offer quality training to the members. The study recommendations are resourceful to both private and public sectors especially local governments and Umurenge SACCOs to come up with strategic policies that will encourage loan repayment among SMEs. Moreover the study is useful in the field of academia as it adds knowledge on existing literature.*

Keywords*: Financial Literacy, Loan Repayment, SMEs, Umurenge SACCOS*

Date of Submission: 26-04-2018 Date of acceptance: 16-05-2018

I. Introduction

1.1 Background

Rwanda's development policy is guided by Vision 2020. This vision statement issued by the Ministry of Finance and Economic Planning in 2000 describes the Government's aim to transform Rwanda into a middle income country and an economic trade and communications hub by the year 2020. It also sets the stage for the financial sector reform process that led to the development of the Financial Sector Development Programme (FSDP) which was launched in 2006. The aim of the FSDP is to develop a stable and sound financial sector for Rwanda. Its objectives include enhancing access to and affordability of financial services and the development of financial institutions and market incentives that would facilitate the entrenchment of a savings and long term investment culture among Rwandans.

This would improve the welfare of Rwandans and hence improve their social economic status. The development of microfinance programs gained a worldwide acceptance and popularity since 1980s in providing financial services to the poor. It is one way of the antipoverty instrument of the development programs. Reasons why, the National Dialogue Meeting held in December 2008 recommended the creation of at least one SACCO at the level of each Administrative Sector, thus 416 SACCOs were created in line of Umurenge SACCO program. Briefly Umurenge SACCOs is a Government initiative aimed at increasing the accessibility of financial services to Rwandan citizens.

The concept of Umurenge Savings and Credit Cooperatives (Umurenge SACCOs) was based on an understanding that banks and other financial institutions were more concentrated in urban areas whilst the majority of the Rwandan population lives in rural areas. Banks and other financial institutions were also not able to provide financial services that were ideal to serve the poor. Establishing a SACCO in every Umurenge was aimed at bridging this gap. The objective was to encourage local citizens to use financial institutions products and this would therefore enable them to save and access loans. This would, in turn, help them get out of chronic poverty and better their wellbeing.

The government has been encouraging the MFIs to encourage the customers to get access to loan so that it helps them improve their wellbeing and of course boost Rwandan 'economy. However, some of the customers have been unable to manage well the loan they got and this turned in high default rate for some MFI. This therefore has led to some MFIs to close down. For example, in 2008, over 28 MFIs closed down due to poor loan and asset management. Umurenge SACCOs were not the exception. In other word, they face the big challenge, that is none other than loan repayment. For example, regarding compliance with prudential norms, as of June, 2015 USACCOs were well capitalized at 29.4% above 15% required and sufficiently liquid at 99.2% above the minimum of 30% required. The NPLs (Non-Performing Loan) ratio for UMURENGE SACCOs however deteriorated to 8.2% in June 2015 from 7% end June 2014 mainly due to low skills in loan portfolio management on the side of SACCOs' staff and elected organs and of course on the side of customer lack of financial skills.

The average ratio of NPLs to total gross loans in the EAC (East African Community) region was 7.8% at end of June 2014, Burundi and Tanzania recorded the highest NPL ratio in the EAC region with 12.7% and 8.2%. In Rwanda, Non-Performing Loans for banks was 6.6% by end June 2014. For microfinance, the NPL ratio was 7.6%3 (MINECOFIN, 2010).

This non-performance loan which is not only evident in Rwandan context is sometimes attributed to lack of financial knowledge of customers. For example, a number of studies indicate that roughly one-third of American adults possess low financial literacy skills, meaning they are not able to access or understand the information they need to sufficiently manage their personal finances or to make good decisions about saving, spending, investing, borrowing, and more. More than half (56 percent) of American adults admit they do not have a budget, and more than one in five (22 percent) say they don't have a good idea of how much they spend on housing, food, and entertainment every year (Jan, 2010).

The FinCap survey (2012) suggests that Rwandans lack a complete set of knowledge, skills, and self-efficacy to be fully financially capable. Furthermore, Data from the 2012 Financial Capabilities Survey (Fin Cap Survey) suggests the following key findings with respect to Rwandan financial capability around cash flow management, planning for the future, and experience with financial services. First, less than half of Rwandans do not have budget. In addition to this, running short of money is common, mostly due to poverty or employment status. Rwandans tend to rely on mutual support and informal credit when short of money. Moreover, most of Rwandans understand the importance of planning for the future and feel a sense of personal responsibility for doing so, but more than half do not know enough about how to develop a plan. Finally, about half Rwandan feel out of control with their borrowing and debt. All of these might impact negatively on the loan repayment among customers of banks and more specifically of MFI (Umurenge SACCOs in this study).

Lack of financial literacy can act as a barrier to saving: if people do not manage their money well they may not have enough left to save after day-to-day expenses, or may accumulate debt they cannot repay. Lack of financial skills also means people do not plan ahead, or understand how financial products can help meet savings goals. A number of studies have been conducted to investigate whether financial literacy could business men repay their loan on schedule.

Agarwal (2007) carried out a study on the effect of a mandatory financial literacy program on loan repayment performance for urban female microfinance customers in Indian and they found a significance connection.

FinScope data, assert there is no robust relationship, but Cole, Sampson and Zia (2011) indicate an impact of a two-hour financial literacy training session in India and Indonesia. The Indonesian study, which featured a randomized field experiment, has constituted the only published experimental evaluation in a developing country thus far. Although they find no impact of the training for the entire population, they suggest that the likelihood of opening a bank account increased among the subsample of uneducated, less financially literate households.

Tustin (2010) evaluated the role of a financial literacy program on savings in Limpopo province (South Africa), using three survey questions, and found self-reported effects of financial literacy training on saving behaviour. Landerretche and Martínez (2012) similarly found that financial literacy increases savings in private pension plans in Chile. Among the studies that examine the role of financial literacy on bank account ownership.

Empirical studies in Kenya include that done by Wanjohi (2011) cites lack of financial skills as a major challenge on loan administration among the DTMFI (Deposit Taking Microfinance Institution) in Kenya. This is attributed to low level of education. CMA (2010) has also identified that MFI in Kenya suffer from constraints that lower their resilience to risk and prevent them from developing an efficient credit policy. This therefore demonstrates the influence of financial literacy on loan performance.Wanjohicites lack of financial skills as a major challenge on loan administration among the DTMFI in Kenya.

Tuyisenge, Mugambi, and Kemirembe (2015) carriedout the study on the effect of financial literacy on loan repayment among small and medium enterprises in Rwanda and they concluded that 81% of the clients agreed that planning skills contributed greatly on loan repayment.Moreover, a study carried out on business management and book keeping showed similar results (Nieman&Bennet, 2006). Indeed, the study showed that entrepreneurs whodid not delay to repay loan 85.7% had book keeping literacy while only 14.3% of the respondents, who did not have book keeping literacy delayed to repay their loans. In much the same way, a study on the impact of microfinance on small and medium enterprises also showed that debt management literacy had a great impact on loan repayment (Idowu, 2010).

On the other hand, researchers like Kariuki and Wanjiku (2015) conducted study on financial literacy and loan repayment and concluded that that there is a negative relationship between all the constructs of financial literacy and loan repayment of ECLOF (Ecumenical Loan Fund) Kenya clients. Moreover, Kariuki and Wanjiku conducted study on financial literacy and loan repayment and they concluded that that there is a negative relationship between all the constructs of financial literacy and loan repayment of ECLOF Kenya clients. Furthermore, Barua and Sane (2014) found no relationship between financial literacy and loan repayment. Bay, Catasús and Johed (2014) found no relationship between financial literacy and loan repayment. They found that the people who received financial literacy training exhibited no difference with those who did not receive them. In short there is mixed evidence about the role of financial literacy on loan repayment. Indeed, there is a need to conduct further studies on this. This study will try to investigate the effects of financial literacy on loan repayment for small and medium entrepreneurs in Umurenge SACCO. Could financial literacy help Rwandan small and medium entrepreneurs-some of them are financial illiterate-to repay the loan received from SACCOs? In Rwanda, most of the Rwandan customers of Umurenge SACCOs are not assumed to be financially literate. Specifically, for customers of Umurenge SACCOs in Nyaruguru District like in many other Districts, there is often lack of information about how to get loan, how to manage it, how to save and what to save and lack the necessary collateral to obtain one or face discriminatory law or practices related to finance and credit. Or Lack of financial literacy can act as a barrier to saving: if people donot manage their money well they may not have enough left to save after day-to-day expenses, or mayaccumulate debt they cannot repay.

Put another words, lack of financial skills also means people do not plan ahead, orunderstand how financial products can help meet savings goals. In fact, women customers of MFIs may plan to use loans efficiently, but their attempts may be limited by their lack of or narrow knowledge. In this regard, it is not surprising that without sufficient financial knowledge; customers of Umurenge SACCOs even might earn a negative return on their capital and of course unable to repay their loan.

As pointed out by Calcagno and Monticone (2015),financially literate people are able to plan or budget, they at least have a trace of their financial activities because of their book keeping literacy, they are able to manage debts to avoid bad debts and prevent non repayment of loans and also have the courage to go for financial negotiation when they feel that they need better terms from the financial providers.

Financial literacy can build the knowledge, skills and self-efficacy of Rwandan, customers of Umurenge SACCOs so that they are better prepared to: (1) Set and meet financial goals, (2) Plan ahead and make careful decisions about future spending and saving, particularly in anticipation of periods of low or irregular income, (3) Develop strategies to protect against and manage risks, (4) Manage debt responsibly and effectively and this could therefore increase the loan repayment possibility. Greenspan (2002) argues thatfinancial literacy helps to inculcateindividuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps investors to meettheir financial obligations through wiseplanning, and resource allocation so as to derivemaximum utility.

1.2 Statement of the problem

In Rwanda, at the end of 2007, in the banking sector, there wereabout 92billion RWF of deposits and more 82 billion of credits. 7 billion RWF of the creditswere non-performing credits and gives the average rate of 8%.At that time, according to the regulation in force, there was a problem with credit risk definitions and other risk associatedlike the risk of loss and portfolio risks (*BNR, 2008*). In 2014, the rate of non-performing loan (NPL)reduced to 5.82 % (BNR, 2015). The NPL affect the financial performance of banks as well as MFIs. Some of the factors, which are as a result of this NPL are among other things, poor savings culture and individualism, little education/sensitization of the population, financial illiteracy and bad reputation ofSACCOs and MFIs.

Despite the efforts made by MFIs to increase the loan, have the loans repaid as scheduled without default there is a steady increase in the default rate and a slowdown in the loan repayment by borrowers (*BNR,* *2013*). This trend may cause MFIs to lack funds to issue to their clients and ultimately close down. Financial literacy is one of the ways which may assist these people minimize the default rate. This would be done through seminars and training. Financial literacy means the ability to make informed judgment without fear (*Bumcrot et al., 2011*).

Several researches such as those done byMungai (2012), Giné, Menand, Townsend & Vickery (2012), Cohen & Young (2007) found that financial literacy is an important determinant of loan repayment contrary to those ofBarua and Sane (2014) who found no relationship. In fact, there is mixedevidence as far as financial literacy and loan repayment is concerned. In Rwanda, studies on financial literacy and loan repayment are scanty with only Tuyisengeet all. (2015) who conducted study on the role of financial literacy on loan repayment in Rwanda focusing on banks not Umurenge SACCOs.The researcher's main purpose is therefore to provide a systematic analysis of the effects of financial literacy on the performance of MFIs in line with loan repayment.

1.3 Objectives of the study

1.3.1 General objective

The main purpose of this study was to examine the role of financial literacy on Loan repayment among SMEsof Microfinance Institutions in Rwanda, the case study of INOZAMIHIGO SACCO in Nyaruguru District.

1.3.2 Specific objectives

The study was based on three specific objectives.

I. To determine how book keeping literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda
II. To examine how budgeting literacyaffect loan repayment among SMEs of Umurenge SACCOs in Rwanda.
III. To assess how debt management literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda.

1.4 Research Questions

The study was guided by the following research questions:

i. How does book keeping literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda?
ii. To what extent does budgeting literacy affect loan repayment among SMEs of Umurenge SACCOs in Rwanda?
iii. How do debt management literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda?

1.5 Justification of the study

The justification of this study is underscored by two audiences: those who find the research of value, and those who benefit from the research. The study sheds light on how microfinance, financial literacy programs can be integrated and utilized together to cater for Umurenge SACCOs' loan repayment. The study is important to the academicians and researchers who can use it as a springboard for other researches/studies. The information can also be used in the information and resource centers of higher institutions of learning like universities that have microfinance as a course for their students as well as the resource centers in the microfinance institutions and their umbrella organizations. More importantly, it is an additional reference for the data banks in the microfinance industry. Last but not least, the findings are useful to the policy makers especially the district, and the Ministry responsible for microfinance. In fact, they can utilize them to promote policies and bye laws that enable more women to access microfinance and non-financial services and benefit from them as much as possible. Findings also serve as a reference and basis for further research.

1.6 The scope of the study

This research was carried out to investigate if financial literacy could be more successful in helping customers-beneficiaries of MFIs (Umurenge SACCOs) manage well their finances and be able to repay the loan they take from MFIs. Thus, it sought to see if the loan provision, together with financial literacy trainings could result into loan repayment. Geographically, the study was conducted in Rwanda, specifically in INOZAMIHIGO SACCOin Nyaruguru District (covering the years ranging between 2014 and 2016). The target population was320and the sample size was178.

II. Literature Review

2.1 Theoretical review

Social Learning Theory

Bandura and Ross (1961) posit that social learning theory illustrates how social factors such as sources of information & financial advice shape a person's behaviour. The financial attitudes and values people have about money come from their environment. The effects of social interactions on individual behaviour have been modeled, tested and applied to a wide variety of situations (Bandura, 1977).

Social interaction may affect financial decisions as people receive and process information through interacting with others. In a US 401(k) pension plan participation study, Greenspan (2002) found that peer effects influenced retirement savings decisions because many people had not carefully thought through the advantages and disadvantages of particular plans for themselves. Many employees used information from peers when deciding on participation as they may lack their own reasoned information for making sound retirement investment decisions. Moreover, beliefs about social norms will additionally influence employee decisions due to a desire to behave similarly to those in their social group (Gravetter&Forzano, 2003).

According to this theory, investors are likely to make investment decisions based on the information available in the market, if investors have information about an investment which is likely to generate higher returns in future, investors are more likely to invest in such an investment to accrue higher returns in future (Goel& Dolan, 2003).The proponents of this theory, the behavioral theorists believed that learning led to a permanent change in behaviour, observational learning demonstrates that people can learn new information without demonstrating new behaviours especially when considering making financial decisions (Glaeser&Scheinkman, 2003). In this study the investors are the members of INOZAMIHIGO SACCO who took loan from the Sacco. These members need to learn on how to manage finances of the business in order to be successful. After getting financial literacy training their thoughts and behaviours will change for the betterment of their lives. Therefore this theory is relevant to this study.

Psychosocial Theory

Psychosocial theory focuses on developmental conflicts that are also relevant to financial behaviour: trust, will power, and self-regulation. Financial security requires one to trust banks and other financial authorities in being responsible with one's money. Allon (2012) found that mistrusting individuals were less likely to buy stocks, and, if they did, they bought less.

As evidenced by the recent financial crisis, the ability to ascertain who to trust is critical to making appropriate financial decisions (Idowu, 2010).

Psychosocial theory supports financial literacy education for preadolescents, the stage at which will power and self-regulation is hypothesized to develop. According to this theory, the engagement in positive financial decisions is dependent on the positive identity, selfconfidence and independence that develops during adolescence and continues into adulthood (Lusardi, & Mitchell, 2011). Here the role of primary caregivers is critical, but the social and cultural norms of the family and community are also important. Falicov (2001) concluded that the social context of family life, individual boundaries, and human interactions play a significant role in how money is viewed among Latinos and Anglo-Americans. This is illustrated by research showing that the percentage of stockownership in a community makes an individual more likely to participate themselves (Atkinson & Messy, 2005). The theory touches on financial literacy and development. This study is focused on financial literacy and loan repayment. The members of the cooperative must develop some level of trust with the financial assistance and the savings that they have in the cooperatives hence this theory is relevant for this study.

Social constructivism and open system

This study was supported by two theories; social re-constructivism and open systems theory. Social constructivism is embedded with the assertion that society needs to be reconstructed through the complete control of education(Ozmon& Craver, 1999).The theory of open systems on the other hand assists us to understand schools as organizations and the demands placed upon educational leaders (Bernheim, 1998).Financial literacy among members of the cooperative society is a form of societal re-constructivism through educational empowerment of cooperative members hence this theory is relevant to this study.

Microfinance sector in Rwanda

Despite the existence for decades of informal finance grassroots organizations such as the tontines, microfinance started with the creation of the Union de Banques Populaires [UBPR] in 1975. Since then, the microfinance market has followed different phases in its evolution (Association of Microfinance Institutions in Rwanda [AMIR], 2010). The first phase, which was before the 1994 genocide, was featured by slow growth and expansion of a few financial institutions, which mainly offered services in Kigali and other growing cities. After the 1994 genocide, many international NGOs came in massively and indeed became involved in the financial sector by implementing relief oriented microfinance initiatives. In addition, the government granted a significant amount of financial assistance to the population through heavily subsidized credit lines and grants by means of a series of development projects. AMIR points out that the different initiatives were not well structured and good practices were not promoted. This generated a contagion of delinquency habits amongst the population including commercial bank clients, where 45% of the loans were non-performing.

The microfinance sector has received more emphasis with the development of PRSP (Poverty Reduction strategy paper) in 2008. Microfinance was among the priorities that would help the government to encourage the people to start small businesses by giving them skills and loans, and also encourages Banks and institutions that lend money to reach many people in all parts of Rwanda. Rwanda completed its PRSP in June 2002. The strategy is geared toward bringing pro-poor economic growth through six broad areas: (i) Rural development and agricultural transformation; (ii) Human development; (iii) Economic infrastructure; (iv) Governance; (v) Private sector development; and (vi) Institutional capacity-building. Rwanda's long-term vision as inspired by its vision 2020 is to reduce the proportion of Rwandans living below the poverty line from 60% to 25% and to raise per capita incomes from $250 to above $1000 (Ministry of Finance and Economic Planning [MINECOFIN], 2010). In this connection, the Rwandan government has become very interested in microfinance and recognizes that a strong sector is crucial to meet their PRSP development goals.

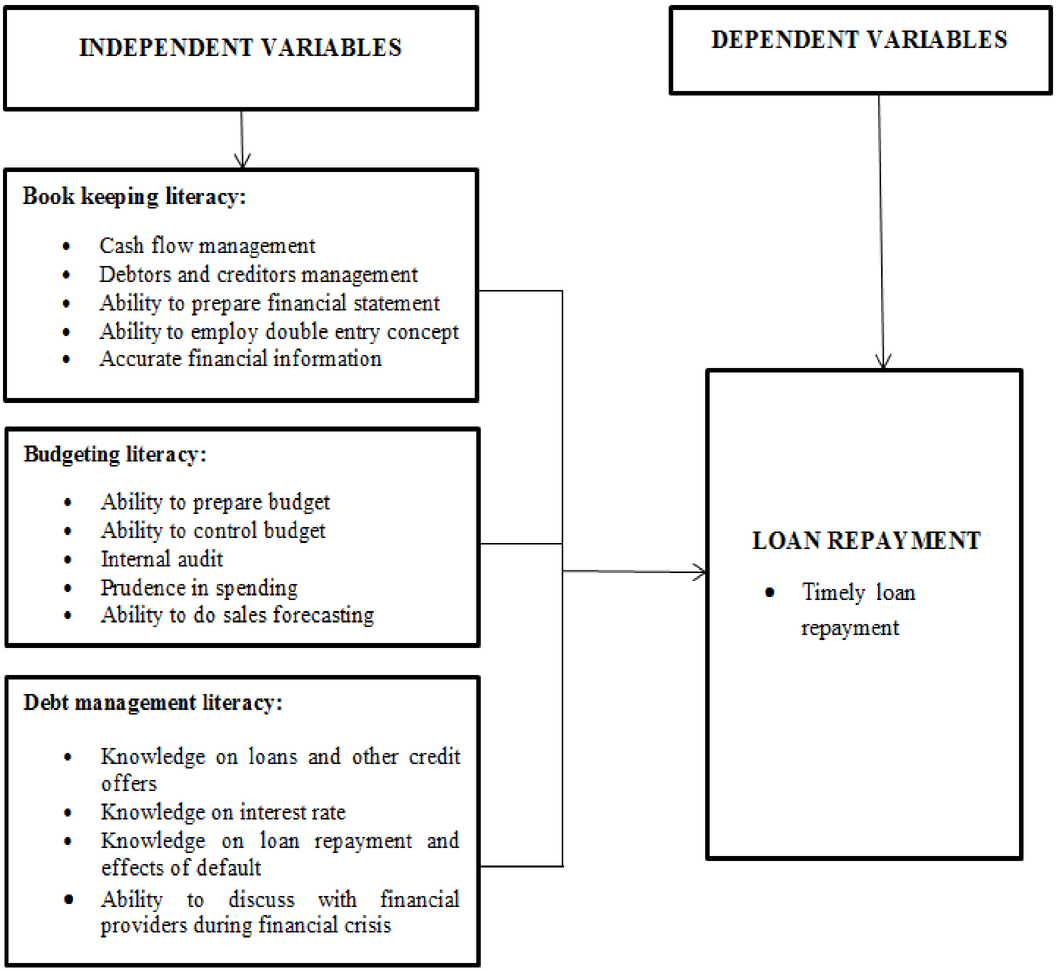
As mentioned earlier, the role of microfinance before the war was mostly informal finance such as tontines except for the semi-formal Union des Banques Populaires au Rwanda. There was hardly any neither government nor donor involvement. The sector grew extensively and rather chaotically after the war, during the initial reconstruction stage, where there was a significant influx of foreign funds. This resulted in the insurgence of many different types, both legitimate and illegitimate, of organizations and associations which sought to provide financial services to the poor. The missions and services offered by these institutions varied considerably.

Given this growth, the Ministry of Finance, through the BanqueNationale du Rwanda (BNR), became actively involved in formalizing the sector and a regulatory framework has been under development since 2002 with a view to consolidating the sector. Law n040/2008 of 26/08/2018 establishing the organization of microfinance activities in Rwanda came out and posited four main categories of MFIs. The first category consists of informal microfinance institutions (such as tontines). These institutions are not subject to licensing by the BNR. The second category includes savings and credit cooperatives with a value of deposits below 20 million Rwandese Francs. These institutions have to comply with simplified prudential norms defined by the BNR. The third category of institutions refers to limited corporations with a total value of deposits equal or higher than 20 million Rwandese Francs. These institutions are required to operate under the rules and prudential norms defined by BNR. The fourth category consists of all microfinance institutions that are non-deposit-taking and operating as a limited company or limited liability company. As the second category, they have to comply with simplified prudential norms. To further professionalize microfinance sector, Association of Microfinance Institutions in Rwanda was established in June 2007. Since its establishment, the Association has organized for its members several training sessions dealing with such issues as the drafting of financial statements, the conduct of financial analysis, and the product development (AMIR, 2010).

Moreover, the Government of Rwanda established Umurenge Saving and Credit Cooperative (SACCO) at each administrative Sector and of course the microfinance was at the forefront of their agenda. The main objective of Umurenge SACCO was to enable the poor people in the rural areas to access financial services and more particularly microfinance services and to fight against exclusion from banking activities. Although Rwanda has made tremendous step in microfinance, it cannot escape from challenges. The growth of Rwanda's microfinance industry is impeded by thousands of borrowers who have failed to service their loans, contributing to the high percentages of non-performing loan portfolios seen in Rwanda's MFIs (MINECOFIN, 2010). Research has shown that the poor levels of loan repayment are due to the clients diverting loan funds to meet their personal needs instead of using them for the proposed investment, hampering the ability of MFIs to perform well. Next section discusses the various credit lending models that have existed across the world.

2.2 Conceptual framework

Figure 1: Conceptual framework



Source: Researcher, 2018

2.3 Empirical review

Kariuki and Muturi (2017) conducted a study on effect of financial literacy on loan repayment a case of Ecumenical churches loan fund. They found that 72.8% of the respondents who had debt management literacy did not delay in repayment while only 40 (27.2%) of the respondents who had not debt management literacy delayed in repayments. This implies that respondents who don't have debt management literacy are more likely to delay in loan repayment while respondents who have debt management literacy are less likely to delay loan repayments. These results confirm those of a study on financial literacy on loan repayment where respondents agreed that credit management skills assisted them in making wise decisions which would in turn assist them in repaying their loans (Tuyisenge et al., 2015). A study on the impact of microfinance on small and medium enterprises also showed that debt management literacy had a great impact on loan repayment (Idowu, 2010).

Moreover, Kariuki and Muturi found that 54.9% of the respondents who delayed in loan repayment had book keeping literacy while only 45.1% of the respondents who did not have book keeping literacy did not delay in loan repayment. These results contradict a result carried out by Tuyisenge, Mugambi and Kimeringe which showed that the respondents in their study confirmed that book keeping literacy assisted them to repay their loans in time without difficulties.Nieman and Bennet (2006) carried out study on financial literacy and loan repayment and they found positive relationship between two variables.

Oladebo and Oladeebo (2008) examined the determinants loan repayment among smallholder's farmers in ogbomoso Agricultural zone in Nigeria. His results from multiple regression analysis showed that amount of loan obtained by farmers, years of farmer's experience with credit farmers and farmer's level of education positively influenced loan repayment.

Gatakaa (2010) conducted a census survey to investigate the relationship between financial literacy and personal financial management practices, the research involved 43 Commercial Banks in Kenya registered and licensed under the banking act as at 31st December 2009 as per the Central Bank of Kenya. The study noted that, personal financial literacy does influence the lending decision by increasing the chances of approval of the loan facility; client understanding of the decisions and consequences is key and demonstrating serviceability. Customers therefore have little or no access to personal financial information from banks beyond the scope of the products. Most banks also have a variety of products and services tailored towards the key personal finance areas: Financial Position (Net worth), Protection, Tax planning, Investment and accumulation goals, Retirement, planning and Estate planning.

Agarwal et al (2007) carried out a study on the effect of a mandatory financial literacy program on loan repayment performance for urban female microfinance customers in India. they found out that microfinance groups that received loan literacy training had higher repayment performance, confirming the positive effect of financial literacy and loan repayment. Participants in voluntary financial education program are likely to fall behind on their mortgage payments indicating that increased financial literacy leads to lower delinquency rates.

Nyamute and Maina (2011) examined the personal financial practices that encompasses savings practices, expenditure practices, debt management, investment, cash management, retirement and unexpected practices of both employees who are financially educated verses those who are not. The results show that there is a significant difference between the personal financial management practices of the finance and the non-finance literate respondents. It can be concluded that entrepreneurs' financial literacy influences personal financial management practices.

Amisi (2012) examined the relationship between financial literacy and the influence of the factors that affect the investment decision. A modified likert scale questionnaire was used and the results of the study indicated that the financial literacy was far from the needed level. The financial literacy level was found to have a significant effect on investment decision making by the DTMFIs. Since these decisions are ongoing, requiring members to periodically monitor and evaluate the performance of their chosen fund and investment option, and decide whether to switch to another fund or investment option.

Existing empirical evidence shows that adults in both developed and emerging economies who have been exposed to financial education are subsequently more likely than others to save and plan for retirement (Bernheim, Garrett, & Maki, 2011). This evidence suggests a direct causal link between financial education and outcomes; it indicates that improved levels of financial literacy can lead to positive behaviour change.

Other research, stemming largely from developed countries, and the United States in particular, indicates a number of potential benefits of being financially literate. There is mounting evidence that those with higher financial literacy are better able to manage their money, participate in the stock market and perform better on their portfolio choice, and that they are more likely to choose mutual funds with lower fees (Hastings &Tejeda-Ashton, 2008). Moreover, those who have greater financial knowledge are more likely to accumulate higher amounts of wealth.

Higher levels of financial literacy have been found to be related not only to asset building but also to debt and debt management, with more financially literate individuals opting for less costly mortgages and avoiding high interest payments and additionalfees (Gerardi, , Adam, &Willen, 2010)

FinScope data, assert there is no robust relationship, but Cole, Sampson and Zia (2011) indicate an impact of a two-hour financial literacy training session in India and Indonesia. The Indonesian study, which featured a randomized field experiment, has constituted the only published experimental evaluation in a developing country thus far. Although they find no impact of the training for the entire population, they suggest that the likelihood of opening a bank account increased among the subsample of uneducated, less financially literate households.

Olima (2013) investigated on the effect of financial literacy on saving practices and social security planning of Kenya Revenue Authority employees. The study findings indicated that financial literacy impacts to a great extent on the financial management because financial education programs guide program development and refinement. The study findings indicate that generally financial literacy to a great extent affects personal financial management among the respondents. However, most participants considered retirement planning less important, were less aware of the effects of estate planning, insurance planning and tax planning.

Barua and sane (2014) evaluated the impact of mandatory financial education program on female micro entrepreneurs of urban microfinance institution (MFI) headquartered in Mumbai, India. They exploited the variation in timing of financial literacy program across the branches to identify if there was an improvement in the loan payment performance. They found out that financial literacy led to decline in the total number of days taken to make loan repayments as well as the number of months in which the repayment was late.

Lusardi and Mitchell (2011) indicated that financial literacy influenced saving behaviours and also educated participants on alternative sources of credit. This is more so important in for individuals who are intended to be in self-employment. Greenspan (2002) argues that financial literacy helps to inculcate individuals with the financial knowledge necessary to create household budgets, initiate savings plans, and make strategic investment decisions. Proper application of that knowledge helps investors to meet their financial obligations through wise planning, and resource allocation so as to derive maximum utility.

According to Siekei (2013) credit management skills obtained through financial literacy programme enhance performance through acquisition of credit financing and management of loan portfolios to ensure that loan liability is minimized and interest expenses minimized. Budgeting skills are very significant in growing sales, profits and ensuring smooth running of the business. Financial literacy argues that the behaviour of people with a high level of financial literacy might depend on the prevalence of the dual process theories which are; intuition and cognitive theories (Evans, 2008).

Kariuki and Wanjiku (2015) conducted study on financial literacy and loan repayment and they concluded that that there is a negative relationship between all the constructs of financial literacy and loan repayment of ECLOF Kenya clients. This position was clearly shown through the inference statistics which confirmed the existence of a significance level or the p values which were less than 5%.

The study by Ongesa et al(2014) on assessment of Financial Literacy on Loan Repayment by Small and Medium Entrepreneurs in Ngara, Nairobi County concluded that book keeping, credit management and budgeting skills significantly influenced the ability of SMEs to repay loans. They recommended SMEs to join financial related programs to enhance their capacities and they also emphasized the need to initiate more training programs to reach more SMEs.

2.4Research Gaps

The issue of the direction of causality between financial literacy and loan repayment is far from being resolved. So far has not emerged a“mainstream” instrument that could be included in financial literacy surveys around the world. From the studies conducted, there is mixed evidence about the effects of financial literacy on loan repayment. It is therefore, important for bankers, bank regulators, supervisors, investors and researchers to understand how financial literacy affects the loan repayment. The researcher’s main purpose in this study was to fill this significant gap by providing systematic analysis of the role of financial literacy on loan repayment.

A study by Mungai (2012) revealed that financial literacy among the customers’ influences loan repayment of the finances obtained. MFIs owners with financial education have the motivation to go for loans and have them repaid as scheduled. However, the study was done in Kenya not in Rwanda. In addition to this, the study concerned the customers in general not small and medium entrepreneurs as it is the case for this study. Several researches such as those done by Giné, Townsend & Vickery (2012), Cohen & Young (2007) offer some evidence that financial literacy is an important determinant of loan repayment. However, some other studies such as Barua and Sane (2014) found no relationship between financial literacy and loan repayment. In fact, there is mixed evidence as far as financial literacy and loan repayment is concerned. This is the gap this study tries fill. More, the research has been conducted in the context other than Rwandan context.

Tuyisengeet all. (2015) conducted study on the role of financial literacy on loan repayment in Rwanda. However, the case study was Urwego Opportunity Bank, not Umurenge SACCO. This is also a gap that this study will fill.In fact, few researches have been conducted on financial literacy and loan repayment among small and medium entrepreneurs in the Rwandan context.However, the integrated micro financing in the Rwandan context has been scantily written about.

III. Research Methodology

3.1 Research design and philosophy

According to Baron and Kenny (1986), a research design is a plan or blue-print which specifies how data relating to a given problem should be collected and analyzed. The study adopted descriptive quantitative research design since it involves description of the effects of financial literacy on loan repayment among SMEs in Rwanda. Data was collected and coding done on various questions hence the researcher came up with quantitative data which was analyzed after. The researcher used the sample to do inference after analyzing and discussing the data collected.

3.2Population of the study

The population is the target of the study. The study is aimed at investigating some pertinent characteristics of the population relevant to the study. The study targets SACCO members who took loan for business purposes.According to Nyaruguru District report 2016,INOZAMIHIGO SACCO RUSENGE has 1500 registered members. Out of this, 320 members took loan from the SACCO.Therefore the study targets these 320 members who took loan from the SACCO for business purposes.

3.3Sampling Procedure
Sample size determination

Target population is used to construct sample size which is appropriate and convenience for study (Cooper & Schindler, 2006). A sample of 178 members of INOZAMIHIGO SACCO RUSENGE who took loan from the SACCO will be selected from atotal population of 320 members of the SACCO who took loan. This sample is selected by the use of Yamane's formula. A margin of error of 5% will be allowed in the study. n = $\frac{N}{\left(1+Ne^{2}\right)}$

Whereas:
n=samplesize
N= population
e = error margin / margin of error
N=320,
e=0.05
Therefore, n= $320/(1+320*0.0025)$
=178 respondents

Sampling Technique

Purposive sampling and simple random sampling was used in the study. The purpose of the study was to assess influence of financial literacy on loan repayment among SMEs, a Case study of INOZAMIHIGO SACCO in Nyaruguru District. Purposive sampling was used because in fulfillingthe study objective, the researcher targeted only those SACCO members who took loan to form the population. They were the right people to give the researcher the right information regarding financial literacy and loan repayment. After getting the sample size of 178 members, the researcher employed simple random sampling technique to collect data from the respondents.

3.4Data collection procedures
Data collection Instruments

The instruments used to collect data depended on source of data both primary and secondary data. This study utilized questionnaires to collect primary data.

Questionnaires

Questionnaire is one of instruments to use for collecting primary data. Researcher elaborated complex questions (both open and closed) in order to make it easy for respondents to provide responses necessary to test relation between book keeping literacy, budgeting literacy, debt management literacy and loan repayment.The Questionnaire was structured in accordance with the objectives of the study that is to determine how book keeping literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda, to examine how budgeting literacy affect loan repayment among SMEs of Umurenge SACCOs in Rwanda and lastly to assess how debt management literacy influence loan repayment among SMEs of Umurenge SACCOs in Rwanda.

Pilot study

The data from pilot research was tested using Cronbach's Alpha (Coefficient). When alpha is ≥0.7 the question is constant reliable (Cronbach's Alpha). These respondents as well as their answers were not to be part of the actual study process and were only used for testing purposes. Pilot study was performed for the targeted population. The results of this pilot study were to help the researcher to review the instruments to use in final research.

Reliability

Reliability is the extent to which an experiment, test, or any measuring procedure yields the same result on repeated trials (Mugenda & Mugenda, 2003). Reliability is concerned with the accuracy of the actual measuring instrument or procedure. Pilot study carried out above was to help test for the reliability of the questionnaire.

Validity

Validity refers to the degree to which a measuring instrument accurately reflects or assesses the specific concept that the researcher is attempting to measure(Mugenda & Mugenda, 2003). Validity is concerned with the study's success at measuring what the researcher set out to measure in order to test the validity of the research instrument. The researcher sought experts' opinion in testing the validity of the questionnaire.

3.5 Data processing and analysis

Information collected from the field will be classified into nominal ordinal and scale if applicable to form common data. The instrument will be then scrutinized to determine the extent to which they are filled up and whether they have errors, inadequate responses or irrelevancies. If any irrelevance is found, this will be recorded on a sheet of paper to ensure that the information may not be compromised. Data coding was done whereby categories of responses were identified, classified and then recorded on a prepared sheet as per research questions or objectives of study. Then, descriptive and inferential statistics of data set was computed using the Statistical Package for Social Sciences (SPSS) where confidence level of 95% was required, and a p-value 0f $\leq$ 0.05 to show evidence of accepting the proposed research question. Pearson correlation and multiple regression techniques were employed to ascertain the relationship between the independent and the dependent variables. The model used was the multiple linear regression:$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \varepsilon_i$,

Where,
Y represents loan repayment;
X_1 represents variable "book keeping";
X_2 represents variable"budgeting literacy";
X_3 replaces variable"debt management literacy"
β_j is coefficient (j = 0, 1, 2, 3, etc.),
i is Umurenge SACCOs
ε_iRepresents error term to replace other variables that can influence firm loan repayment but not captured by the model.
Presentation of data was done using appreciation of table and graphs with appropriate descriptions.

IV. Research Findings and Discussion

4.1 Demographic results
Gender of respondents

From the table below, majority of small entrepreneurs who took loan from SACCOs are female with 57.7%. Male entrepreneurs are 42.3%.

Table1: Gender of respondents

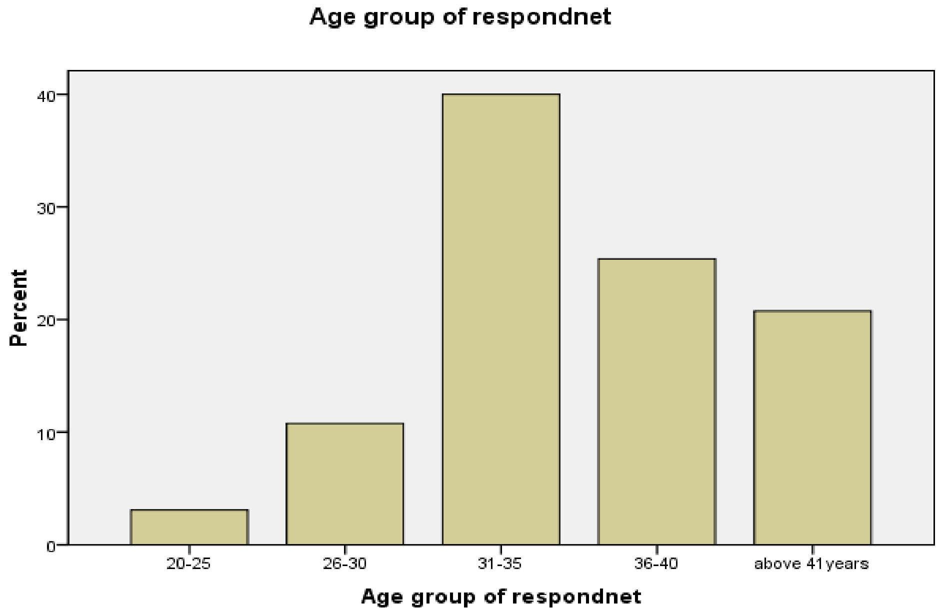
		Frequency	Valid Percent	Cumulative Percent
Valid	Male	55	42.3	42.3
	Female	75	57.7	100.0
	Total	130	100.0	

Researcher, 2018

Age group of respondents

Most of small entrepreneurs who took loan are aged between 31-35 at 40% followed by 36-40 at 25%, above 40 at 21%, 26-30 at 11% and lastly 20-25 at 3%.

Figure 2: Age group of respondents



Source: researcher, 2018

Level of education

Small entrepreneurs with diploma and bachelors take the greatest portion with 43.8% and 30% respectively. Certificate holders account for 22.3% while Master holders account for 3.8%. There was no PhD holder among the respondents.

Table 3: Education level of respondent

		Frequency	Valid Percent	Cumulative Percent
Valid	Certificate	29	22.3	22.3
	Diploma	57	43.8	66.2
	Bachelor's degree	39	30.0	96.2
	Master's degree	5	3.8	100.0
	Total	130	100.0	

Source: researcher, 2018

Duration of being customer of Umurenge SACCO

From table 4 below, it's evident that most of entrepreneurs who took loan have been customers of Umurenge SACCOs for between 3-4 years. These customers form 50% of the total respondents. 20.8% of the respondents have been in the SACCOs for 1-2 years, 17.7% have been customers for less than a year while 11.5% have spent less than a year in the SACCOs.

Table 4: Duration of being customer of Umurenge SACCO

		Frequency	Valid Percent	Cumulative Percent
Valid	less than 1 year	23	17.7	17.7
	1-2 years	27	20.8	38.5
	3-4 years	65	50.0	88.5
	5 years and above	15	11.5	100.0
	Total	130	100.0	

Source: researcher, 2018

4.2 Financial Literacy training

The researcher asked the respondents whether the SACCO has organized any form of financial literacy training. The findings indicate that 90% of the respondents agreed that the SACCOs have organized financial literacy training while 10% did not agree.

Table 5: Financial literacy training

SACCO organized financial literacy training

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	117	90.0	90.0	90.0
	No	13	10.0	10.0	100.0
	Total	130	100.0	100.0	

Source: researcher, 2018

4.3 Financial Literacy and Loan repayment

The researcher assessed the respondents on the financial literacy skills which included book keeping skills, budgeting skills and debt management skills and how it has affected his/her loan repayment. The results are broken down for each variable based on descriptive statistics and correlation analysis.

4.3.1 Book keeping literacy and loan repayment

The respondents were asked the extent to which they possess various book keeping skills. The scale of measurement was 1. Very great extent 2.Great extent 3.Moderate 4. Low extent 5.Very low extent.
The table 4.6 in the next page shows that most respondents possess to a moderate extent and to low extent the book keeping skills since the two have relatively higher percentages for all the book keeping skills tested. Most respondents possess to moderate extent knowledge on creditors and debtors management skills (45.8%) while knowledge on preparation of financial statements (32%) is possessed to a moderate extent by the least respondents. Very few respondents possess to a very great extent book keeping skills.

Table 6: possession of book keeping skills

Statement	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
1. Knowledge on cash flow management	6(5%)	17(12.5%)	56(43%)	31(24%)	20(15.5%)
2. Knowledge on debtors and creditors management	11(8.5%)	23(18%)	60(45.8%)	29(22.5%)	7(5.2%)
3. Knowledge on preparation of financial statements		15(11.4%)	42(32%)	54(41.8%)	19(14.8%)
4. Knowledge on application of double entry concept	5(4%)	20(15.6%)	51(38.9%)	46(35%)	8(6.5%)
5. Knowledge on ability to get accurate financial information	4(3%)	24(18.5%)	57(43.5%)	18(13.5%)	27(21.5%)

Source: researcher, 2018

Extent to which book keeping skills has affected loan repayment behaviour

From the table 4.7 below, most respondents agreed to a moderate extent that book keeping skills has affected their loan repayment behaviour accounting for 54.6%. 15.4% agreed to a great extent, 26.9% to a low extent and 3.1% to a very great extent.

Table 7: Extent to which book keeping skills affected loan repayment.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very great extent	4	3.1	3.1	3.1
	great extent	20	15.4	15.4	18.5
	moderate extent	71	54.6	54.6	73.1
	low extent	35	26.9	26.9	100.0
	Total	130	100.0	100.0	

Source: researcher, 2018

Correlation between Book keeping Skills and Loan repayment

The correlation coefficient between book keeping literacy and loan repayment is 0.742 at 0.01 significancelevel as shown in the below table. This implies that there is high positive association between book keeping literacy and loan repayment. Book keeping literacy is therefore a high predictor of loan repayment backed by the 0.000 significance level.

Table 4.8: Correlation between book keeping skills and loan repayment

Correlations

		book keeping literacy	loan repayment
book keeping literacy	Pearson Correlation	1	.742**
	Sig. (2-tailed)		.000
	N	130	130
loan repayment	Pearson Correlation	.742**	1
	Sig. (2-tailed)	.000	
	N	130	130

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

Source: researcher, 2018

4.3.2 Budgeting literacy and loan repayment

The respondents were asked the extent to which they possess various budgeting skills. The scale of measurement was 1. Very great extent 2.Great extent 3.Moderate 4. Low extent 5.Very low extent.

The results in table 9 in the next page show that most respondents agreed to a low extent that they poses knowledge on internal audit and forecasting accounting for 43% and 49.5% respectively. However most respondents agreed to a moderate extent that they poses skills in prudence spending, budget control and budget preparation accounting for 45.5%, 31% and 35% respectively. Averagely most respondents agreed to a moderate extent on budgeting skills while least respondents agreed to a very great extent.

Table 9: possession of budgeting skills

Statement	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
1.Knowledge on budget preparation	11(8.2%)	29(22.4%)	46(35%)	42(32.5%)	2(1.9%)
2.Knowledge on budget control	7(5%)	21(15.7%)	40(31%)	35(28%)	27(20.3%)
3.Prudence in spending	7(5%)	26(20%)	59(45.5%)	33(25.5%)	5(4%)
4.Knowledge on ability to do forecasting	3(2%)	16(12%)	38(29%)	64(49.5%)	9(7.5%)
5.Knowledge on conducting internal audit	7(5%)	20(15%)	33(25%)	55(43%)	15(12%)

Source: researcher, 2018

Extent to which budgeting skills has affected loan repayment behaviour

From table4.10 below, 2.3% agreed to a very great extent that budgeting skills has affected their loan repayment behaviour, 18.5%agreed to a great extent, 40% to moderate extent, 33.1% to a low extent and lastly 6.2% to a very low extent.

Table10: Extent to which budgeting skills affected loan repayment.

Extent to which budgeting has affected loan repayment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very great extent	3	2.3	2.3	2.3
	great extent	24	18.5	18.5	20.8
	moderate extent	52	40.0	40.0	60.8
	low extent	43	33.1	33.1	93.8
	very low extent	8	6.2	6.2	100.0
	Total	130	100.0	100.0	

Source: researcher, 2018

Correlation analysis between budgeting literacy and loan repayment

The correlation coefficient between loan repayment and budgeting literacy is 0.644 at a significant level of 0.01. This implies that there is strong positive association between budgeting literacy and loan repayment.

Table 11: Correlation between budgeting literacy and loan repayment

Correlations

		loan repayment	budgeting literacy
loan repayment	Pearson Correlation	1	.644**
	Sig. (2-tailed)		.000
	N	130	130
budgeting literacy	Pearson Correlation	.644**	1
	Sig. (2-tailed)	.000	
	N	130	130

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

Source: Researcher, 2018

4.3.3 Debt management literacy and loan repayment

Lastly the researcher assessed the respondents on various debt management skills on a scale of 1 to 5 where1. Very great extent 2.Great extent 3.Moderate 4. Low extent 5. Very low extent.

The findings indicate that most respondents agreed to moderate extent and great extent possession of debt management skills while very few agreed to a very low extent.

Table 12: possession of debt management skills

Statement	Very great extent	Great extent	Moderate extent	Low extent	Very low extent
1. Knowledge on loans and other credit offers	11(8.6%)	30(23%)	60(45.8%)	29(22.6%)	
2. Knowledge on interest rates	13(10.4%)	33(25%)	62(47.5%)	22(17.1%)	
3. Knowledge on loan repayment and effects of default	6(5.5%)	22(16.4%)	57(43.5%)	44(33.5%)	1(1.1%)
4.Discussion with financial providers during financial crisis	15(11%)	40(31%)	64(48.8%)	11(9.2%)	

Source: researcher, 2018

Extent to which debt management skills affect loan repayment behaviour

Table13 below shows that 7.7% of respondents support to a very great extent that debt management skill affects loan repayment, 23.1% to a great extent, 50% to a moderate extent, 15.4% to a low extent and finally 3.8% to a very low extent.

Table 13: extent to which debt management skills affect loan repayment

extent to which debt management skills affect loan repayment behaviour

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	very great extent	10	7.7	7.7	7.7
	great extent	30	23.1	23.1	30.8
	moderate extent	65	50.0	50.0	80.8
	low extent	20	15.4	15.4	96.2
	very low extent	5	3.8	3.8	100.0
	Total	130	100.0	100.0	

Source: researcher, 2018

Correlation between debt management literacy and loan repayment.

The correlation coefficient between debt management literacy and loan repayment is 0.761 showing a strong association between the two variables.at 0.01 significance level.

Table 14: correlation between debt management literacy and loan repayment

Correlations

		loan repayment	debt management literacy
loan repayment	Pearson Correlation	1	.761**
	Sig. (2-tailed)		.000
	N	130	130
debt management literacy	Pearson Correlation	.761**	1

	Sig. (2-tailed)	.000	
	N	130	130

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

Source: researcher, 2018

4.4 Regression analysis

The correlation analysis tells us the degree and direction of association between two variables but it does not give the magnitude of change of dependent variable due to a change in an independent variable. Regression analysis therefore tells us the direction and magnitude of change of dependent variable due to a unit change in independent variable. The dependent variable in this study is Loan repayment while independent variables are book keeping literacy, budgeting literacy and debt management literacy. The researcher employed regression analysis approach to study the magnitude of change of loan repayment due to a unit change in book keeping literacy, budgeting literacy and debt management literacy. The model summary results in table 4.15 indicate that the value of R squared is 0.772 which is equivalent to 77.2%. The significance value of 0.000 in the ANOVA table 16 indicates that the model fit is a good predictor of the variables under study. The coefficients of the independent variables are shown in table 4.17 which shows that β_0, β_1, β_2 and $\beta_3$are 0.016, 0.599, 0.092 and 0.245 respectively. Hence the model adopted for this study can be fitted as,$Y_i = 0.016 + 0.599X_{1i} + 0.092X_{2i} + 0.245X_{3i}$

Table15: model summary

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.879[a]	.772	.767	.38093

a. Predictors: (Constant), debt management literacy, budgeting literacy, book keeping literacy

Table16: ANOVA

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.993	3	20.664	142.403	.000[a]
	Residual	18.284	126	.145		
	Total	80.277	129			

a. Predictors: (Constant), debt management literacy, budgeting literacy, book keeping literacy

b. Dependent Variable: loan repayment

Table 17: Model Coefficients

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.016	.145		.109	.003
	book keeping literacy	.599	.080	.562	7.510	.000
	budgeting literacy	.092	.050	.110	1.865	.045
	debt management literacy	.245	.052	.293	4.669	.000

a. Dependent Variable: loan repayment

4.5 Discussions

The study sought to assess the influence of financial literacy factors on loan repayment among small and medium entrepreneurs of MFIs case of INOZAMIHIGO Umurenge SACCO. The study focused on book keeping literacy, budgeting literacy and debt management literacy as the main categories of financial literacy.

4.5.1: Influence of book keeping literacy on loan repayment

The study found a positive significant effect of book keeping literacy on loan repayment among small and medium entrepreneurs in MFIs. Most respondents agreed to a moderate extent that book keeping skills has influenced their loan repayment behaviour. The correlation analysis results shows that the correlation coefficient between book keeping skills and loan repayment is 0.742 with sig value of 0.000. This suggests that book keeping literacy has a strong positive association with loan repayment. The regression coefficients results further indicate that the coefficient of book keeping literacy is 0.599 which implies that if book keeping literacy increase by one unit, the performance of SACCOs in terms of loan repayment will increase by 0.599 units and vice versa. Therefore there is a strong positive significant relationship betweenbook keeping literacy and loan repayment. These findings are similar to the ones of Tuyisenge (2015) who found a positive significant effect of book keeping literacy on loan repayment in Rwanda but are against the findings of Kariuki and Wanjiku (2015) who found that all the facets of financial literacy does not have any significant influence on loan repayment.

4.5.2: Influence of Budgeting literacy in loan repayment

The second specific objective of this study was to determine the influence of budgeting literacy on loan repayment among small medium entrepreneurs. Most of the respondents agreed to a moderate extent that the budgeting literacy skills have influenced their loan repayment pattern. The correlation coefficient of 0.644 between budgeting literacy and loan repayment with sig value of 0.000 indicates a strong significant positive association between budgeting literacy and loan repayment among small medium entrepreneurs. This further suggests that when small medium entrepreneurs gain budgeting skills their loan repayment pattern improves. The coefficient of regression for budgeting literacy was found to be 0.092 with a significance of 0.045 which is less than 0.05.this implies that a one unit change in budgeting skills brings a 0.092 change in loan repayment in the same direction. These results are similar to those of Ongesa et al.(2014) who found positive significant relationship between budgeting skills and loan repayment among small medium entrepreneurs in Ngara, Nairobi County. However the study findings go against the findings of Kariuki and Wanjiku(2015).

4.5.3: Influence of debt management literacy on loan repayment among SMEs

The last specific objective of this study was to determine the influence of Debt management literacy on loan repayment among SMEs. The findings indicated a strong positive relationship between the two. The correlation coefficient between debt management and loan repayment was found to be 0.761 at a signicance level of 0.000.this indicates a strong positive association between debt management literacy and loan repayment among SMEs. The regression analysis results further indicates that the coefficient of debt management is 0.245 with a significance of 0.000.this means that keeping other factors constant, a unit increase in debt management literacy leads to a 24.5% increase in loan repayment and viceversa. These results are similar to the ones of Tuyisenge (2015) and Siekei (2013) who both found significant effect of debt management on loan repayment studies being conducted in Rwanda and Nigeria respectively.

V.Conclusion and Recommendations

5.1 Conclusions

From the above findings, the researcher came up with the following conclusions;

First, there is a strong positive association between book keeping literacy and loan repayment among SMEs in the SACCOs. When SMEs possess book keeping skills there is likelihood that their loan repayment pattern will change for the better, in other words they will be able to repay their loan on time without default.

Secondly there is close relationship between budgeting literacy and loan repayment among SMEs in SACCOs.Budgeting literacy improves the ability of SMEs to pay loan on time without default since they are able to do forecasting and internal audit to identify errors in their books of account hence enabling them to make necessary changes in good time.

Last but not least, debt management literacy is the most crucial factor in enhancing SMEs ability to repay loans from SACCOs. There is a strong positive relationship between the two. When SMEs have debt management literacy, they are able to assess the interest rates charged on various loans, they are able to be aware of the results of default in paying loans and also able to discuss with financial providers in case he/she undergo financial difficulty hence not able to service loan on time. These skills enable the entrepreneur to take caution and try all the best not to fall in to trapof defaulting in payment.

Lastly the study generally found significant relationship between financial literacy and loan repayment among SMEs. Financial literacy is very important for any entrepreneur who wants to grow the business through loan financing since he/she will be able to have easy time in servicing the loan.

5.2 Recommendations

Based on the results of this study, the researcher came up with the following recommendations to the SACCOS's management and members.First, the SACCOs should initiate more financial training platforms to the members to enable them possess relevant financial management skills to grow their business and other income generating activities hence able to repay their loan on time. Much focus should be shifted to debt management skills since it's the most fundamental factor influencing loan repayment. The members should be made aware of costs of borrowing, penalties of defaulting in payment and need for consultation with the advisors during financial crisis not forgetting book keeping and budgeting skills. Secondly,members should be on the forefront in attending the financial training in order for them to benefit more on how to manage their finances efficiently, generate profits from their activities and hence able to pay loan on time. Lastly the government should focus on expanding and empowering SACCOs since they also form the key integral part of financial sector development and hence economic growth. The government should carry out periodic auditing of these SACCOs in order to ascertain their performance and offer a helping hand both financially and human resource provision to enhance their growth through problem solving.

5.3 Areas for further research

This study focused on financial literacy as a determinant of loan repayment among SMEs. Several other factors affecting loan repayment exists such as technological factors, social factors among others. Therefore further research can be done on these factors that are not included in this research.

References

[1]. Agarwal, S., Driscoll, J., Gabaix, X & Laibson, D. (2007).The Age of Reason.Financial Decisions over the Lifecycle. USA: Harvard University.
[2]. Ajzen, I. (1991). The theory of planned behaviour. Organizational Behaviour and Human Decisions Processes, 50, 170-211.
[3]. Ajzen, I. (2008). The theory of planned behaviour. Organizational Behaviour and Human Decisions Processes, 21, 178-217.
[4]. Allon, R. (2012). One Size Strategy for SMEs Does Not Fit All: Entrepreneur-Magazine.
[5]. Amisi, S. (2012).The effect of financial literacy on investment decision making by pension fund managers in Kenya, Unpublished MBA Project, University of Nairobi.
[6]. Association of Microfinance institutions in Rwanda.(2010). Overview of microfinance industry in Rwanda. Kigali: Author.
[7]. Atkinson, A. & Messy, F. (2005).Assessing financial literacy in 12 countries an OECD Pilot Exercise, Paris: OECD Financial Affairs Division.
[8]. Bandura, A.& Ross, S. A. (1961).Transmission of aggression through the imitation of aggressive models.Journal of Abnormal and Social Psychology, 63,575-582.
[9]. Bandura, A. (1977). Social Learning Theory. Englewood Cliffs, NJ: Prentice Hall.
[10]. Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychology research: Conceptual, strategic, and statistical considerations. Journal of Personality and Social Psychology, 51 (2), 1173- 1182
[11]. Barua, R., & Sane, R. (2014). Repayment in microfinance: The role of financial literacy and caste.
[12]. Bay, C., Catasús, B., & Johed, G. (2014).Situating financial literacy.Critical Perspectives on Accounting, 25(1), 36–45. http://doi.org/10.1016/j.cpa.2012.11.011.
[13]. Bernheim, D. (1998). Financial Illiteracy, Education and Retirement Saving. In O. Mitchell and S. Schieber (eds.), Living with Defined Contribution Pensions. Philadelphia: University of PennsylvaniaPress.
[14]. Bumcrot, C., Lin, J., & Lusardi, A. (2011).The geography of financial literacy.Numeracy, 6(2).http://doi.org/10.5038/1936-4660.6.2.2.
[15]. Calcagno, R., & Monticone, C. (2015).Financial literacy and the demand for financial advice.Journal of Banking and Finance, 50, 363–380.http://doi.org/10.1016/j.jbankfin.2014.03.013.
[16]. Capital Markets Authority (2010) Capital Raising Opportunities for SMES: The Development of Micro- Cap Securities Markets in Kenya. Nairobi: Capital Markets Authority.
[17]. Cole, S., &Sampson, K., Zia, S. (2009). Smart Money: The Effect of Education, Cognitive Ability, and Financial Literacy on Financial Market Participation, Harvard Business School Working Paper 09-071.
[18]. Cole, S., Sampson, T. & Zia, B. (2011).The Demand for Financial Services in Developing Countries.Harvard Business School Working Paper, No. 09-117.
[19]. Cohen, M., & Pamela Y. (2007).Using micro insurance and financial education to protect and accumulate assets, in Caroline O. N. Moser, ed.: Reducing global poverty: The case for assets accumulation (The Brookings Institution, Washington DC).
[20]. Cooper, C.R., & Schindler, P.S. (2006).Business research methods(10 ed.). Boston: McGraw-Hill. Pauline's Publications.
[21]. Emmons(2005). Improving Financial Literacy: analysis of issues and policies. Retrieved from http://www.oecd.org
[22]. Evans, J. St. B. T. (2008). Dual-processing accounts of reasoning, judgment and social cognition. Annual Review of Psychology, 59, 255-278.
[23]. Falicov, C. (2001). The Cultural Meanings of Money: The Case of Latinos and AngloAmericans, American Behavioral Scientist, 45 (2), 313-328.
[24]. Fin Capabilities survey (2012). Kigali, Palotti press.Gatakaa, S. (2010).The relationship between personal financial literacy and lending by commercial banks in Kenya, Unpublished MBA Project, University of Nairobi.
[25]. Glaeser, E. & Scheinkman, J. (2003).Non-Market Interactions.Advances in Economics and Econometrics. Cambridge University Press Paper: Princeton University.
[26]. Giné, X., Townsend.R, & Vickery, J.(2012). "Barriers to Household Risk Management: Evidence From India". American Economic Journal: Applied Economics 5(1): 104-135.
[27]. Gravetter, R. & Forzano, S. (2003). Research Methods for Behavioural Sciences, Belmont: Wardsworth.
[28]. Greenspan, A. (2002) Financial Literacy: A Tool for Economic Progress: The Futurist, Vol. 36, (4).
[29]. Goel, V. & Dolan R. (2003). Explaining Modulation of Reasoning by Belief. Cognition, 87(1),
[30]. 11-22.
[31]. Hastings, Justine, and Lydia Tejeda-Ashton (2008), "Financial Literacy, Information, and Demand Elasticity: Survey and Experimental Evidence from Mexico," NBER Working Paper n. 14538.
[32]. Hogarth J & Hilgert A. (2002), Financial knowledge, experience and learning preferences: Preliminary results from a new survey on financial literacy.Consumer interests annual, 48, 1-7.
[33]. Idowu F. (2010), Impact of microfinance on small and medium-sized enterprises in Nigeria. International journal of commerce. 12 (2) 11-17.

[34]. Jan, S. (2010). Economic evaluation of a combined microfinance and gender training intervention for the prevention of intimate partner violence in rural South Africa."Health Policy and Planning Journal, 23(2),12-19.

[35]. Kariuki, J.W.&Muturi, W. (2015).Effect of financial literacy on loan repayment a case of ecumenical churches loan fund, Kenya.International Journal of Social Science and Information.Vol.3, (2).

[36]. Kombo, D., & Tromp, L. (2009).Proposal and Thesis Writing; An Introduction. Pauline Publications Africa, Nairobi.

[37]. Kothari, C. R. (2000), Research Methodology: Methods and Techniques. New Delhi: Wiley

[38]. Landerretche, T., & Martínez, W. (2012).similarly find that financial literacy increases savings in private pension plans in Chile. Among the studies that examine the role of financial literacy on bank account ownership.

[39]. Lusardi, A., & Mitchell, O. S. (2011).Financial Literacy and Planning.Implications for Retirement Wellbeing (No. 17078).National Bureau of Economic Research.

[40]. Luvavo (2013). Factors Influencing the Repayment of the Youth Enterprise Development fund loan by Youth Groups in Sabatia Constituency. UON Repository.

[41]. Ministry of Finance and Economic Planning. (2007). The Impact of Umurenge SACCOs on the Rwandan Financial Sector. Kigali: Author.

[42]. Mugenda, O.M, &Mugenda, A.G.(1999).Research Methods: Quantitative and Qualitative Approaches, Acts Press: Nairobi.

[43]. Mugenda, O., & Mugenda, A. (2003).Research methods: Quantitative and qualitative approaches. Acts Press: Nairobi.

[44]. Mungai, N. W. (2012). Effect of Financial Literacy Programs on The Survival of Women Entrepreneurs in Kawangware, unpublished MBA thesis, Kenyatta University.

[45]. Nieman, G., & Bennet, A. (2006).Business Management: A Value Chain Approach, Pretoria.

[46]. Nyamute, W., & Maina, JKM. (2011). Effect of financial literacy on personal financial mangement practices: a case study of employees of finance and banking institututions‟, Available from:http://erepository.uonbi.ac.ke/bitstream/handle/11295/9897/aibuma2011-submission224.

[47]. Oladeebo, J.O., &Oladeebo, O.E. (2008) Determinants of loan repayment among smallholder farmers inOgbomoso agricultural zone of Oyo State, Nigeria.Journal of Soc. Science,Vol. 17(1): 59-62.

[48]. Olima, B. (2013). Effect of Financial Literacy On Personal Financial Management On Kenya Revenue Authority Employees In Nairobi, Unpublished MBA Project, University of Nairobi

[49]. Ongesa et al.(2014). An Assessment of Financial Literacy on Loan Repayment in Ngara,Nairobi County. Research Journal of Finance and Accounting, 5(12),181-192.

[50]. Ozmon, H., & Craver, S. (1999). Philosophical foundations of education. Upper Saddle River, Merrill: New Jersey.

[51]. Tustin, D. H. (2010). An impact assessment of a prototype financial literacy flagship programme in a rural south african setting, African Journal of Business Management 4, 1894-1902.

[52]. Tuyisenge, W., Mugambi, F., & Kemirembe, R. (2015). The role of financial literacy on loan repayment.International Journal of Small Business and Entrepreneurship Research, 3(5), 33–66.

[53]. Siekei, J. Juma, W.,& Aquilars, K. (2013).An assessment of the role of financial literacy on performance of small and micro enterprises: Case of Equity Group Foundation Training Program on SMES in Njoro district, Kenya.

[54]. Wanjohi, A (2011) Kenya Vision 2030 and youth agenda.Kenpro Papers Portal. Available http://www.kenpro.org/tag/sme-sector-in-kenya/ retrieved on 30th July 2015.

IOSR Journal of Business and Management (IOSR-JBM) is UGC approved Journal with Sl. No. 4481, Journal no. 46879.

Musabwasoni Gaudence "Effects of Financial Literacy on loan Repayment among Small and Medium Entrepreneurs of Microfinance Institutions Case Study of Inozamihigo Umurenge Sacco in Nyaruguru District." IOSR Journal of Business and Management (IOSR-JBM) 20.5 (2018): 19-37.