

Effect of Credit Risk Management on Loan Performance among Microfinance Institutions. A Case of Réseau Interdiocésain De Microfinance (RIM Ltd) Kibuye Branch.

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ABSTRACT

This research assessed the effect of credit risk management on loan performance among microfinance institutions using a case of RIM Ltd Kibuye Branch during past five years (2015- 2019). A sample of 97 respondents was calculated using Yamane formula and randomly selected from a total population of 4334 clients of RIM Ltd including 2777 men and 1557 women, and 9 staffs. Quantitative approach was applied using a questionnaire designed in form of five levels Likert scale and analyzed using IBM SPSS Statistics 23; Qualitative approach was applied through open questions, interview and participant observation. The main findings of the research are: (i) Client appraisal exercise high effect on loan performance of RIM Ltd (overall $\mu = 4.87$; $\sigma = 0.325$); (ii) Credit risk control exercise high effect on loan performance of RIM Ltd (overall $\mu = 4.74$; $\sigma = 0.381$); (iii) Collection policy exercise high effect on loan performance of RIM Ltd (overall $\mu = 5.00$; $\sigma = 0.000$); (iv) Terms of credit exercise high effect on loan performance of RIM Ltd (overall $\mu = 4.65$; $\sigma = 0.407$). The main challenges to effective credit risk management outlined by the research include: Deviation of the projects where the loan is used for a project that it was not requested for; Fluctuation of business climate; Some clients do not want working in solidarity; Clients having loans in SACCOs and RIM Ltd at the same time; and Poor entrepreneurship skills. Overall $\mu = 5.00$; $\sigma = 0.000$). The research recommended: (i) establishing special penalties for client who deviate the project; (ii) requesting guarantee for agricultural loans; (iii) improving RIM policy imposing solidary groups for accessing the loan; (iv) provision of clearance for loan applicants; (v) developing a culture of customer care whereby planning trainings for members; but also using trainings on entrepreneurship as a marketing strategy.

Keywords: Credit risk management, financial institutions, loan performance, RIM Ltd.

BACKGROUND OF THE STUDY

The World Bank (2006) summarized the history of Financial services for the poor known as Microfinance Institutions as the following: since the beginning of time, informal savings and credit groups have operated for centuries across the developing world. During Middle Ages, in Europe, an Italian monk created the first official pawn shop in 1462 to counter usury practices. In 1515 Pope Leon X authorized pawn shops to charge interest to cover their operating costs. In 1700s, Jonathan Swift initiates the Irish Loan Fund System, which provides small loans to poor farmers who have no collateral. At its peak, it is lending to 20 percent of all Irish households annually. In 1800s, the concept of the financial cooperative is developed by Friedrich Wilhelm Raiffeisen and his supporters in Germany. From 1865, the cooperative movement expands rapidly within Germany and other countries in Europe, North America, and eventually developing countries. Early 1900s, adaptations of these models begin to appear in parts of rural Latin America. During 1950–1970, efforts to expand access to agricultural credit use state-owned development finance institutions, or farmers' cooperatives, to channel concessional loans and on-lend to customers at below-market interest rates. These development banks lose most or all of their capital because their subsidized lending rates cannot cover their costs, including the cost of massive default. Early 1970s, experimental programs extend tiny loans to groups

of poor women to invest in microbusinesses, and microcredit is born. Early pioneers include Grameen Bank in Bangladesh; ACCION International, which started out in Latin America; and the Self-Employed Women's Association Bank in India. During 1980s Microcredit programs throughout the world improve on original methodologies. Microlenders, such as Bank Rakyat Indonesia, defy conventional wisdom about financing the poor. Cost-recovery interest rates and high repayment permit them to achieve long-term sustainability and reach large numbers of clients. Early 1990s, the term "microcredit" begins to be replaced by "microfinance," which includes not only credit, but also savings and other services, such as insurance and money transfers. Today, Microfinance has achieved astonishing accomplishments over the past 30 years. It has demonstrated that poor people are viable customers, created a number of strong institutions focusing on poor people's finance, and begun to attract the interest of private investors. But despite these achievements, there is still a long way to go to extend access to all who need financial services. Specifically, three major challenges define the frontier of financial services for the poor: (i) Scaling up quality financial services to serve large numbers of people (scale); (ii) Reaching increasingly poorer and more remote people (depth); and (iii) Lowering costs to both clients and financial service providers (cost) (World Bank, 2006). The situation of MFIs in Rwanda is outlined by the report of Noel Verrinder, Timothy Hobden and Emmanuel Hafashimana (2018) where the authors give a brief history of MFIs, their current situation and challenges. The report affirms that the Rwandan Microfinance sector began to develop in 1975, and experienced rapid growth from the late 1990s. This growth has been attributed to a large inflow of donor funds directed towards relief oriented microfinance initiatives (following the Genocide against Tutsi in 1994), as well as the provision by the Government of Rwanda of credit lines and grants to the microfinance sector to fast-track reconstruction. This rapid growth occurred in an unregulated system and ultimately led to instability within the sector, prompting the Government to launch a financial sector reform programme in 1995. However, in 2006 the limited success of these reforms was made apparent by the collapse of 9 MFIs that lead to 195 000 depositors losing their savings. This caused the Government to adopt a formal National Microfinance Policy, accompanied by an implementation strategy, in September 2006 (Verrinder, Hobden & Hafashimana, 2018). Concerning the current situation of MFIs in Rwanda, the report affirms that for strengthening the microfinance sector and better protect public deposits, a specific microfinance law (Law No. 40/2008) was adopted by the Rwandan parliament in August 2008 (MINIJUST, 2008); followed by the publication of a new BNR Instruction for MFIs (No. 02/2009) (BNR, 2009).

The law defined the National Bank of Rwanda (BNR) as the main regulatory body overseeing the microfinance sector. According to the BNR, the total number of MFIs declined in December 2016 to 472, from 494 in December 2015. This decline is due to the restructuring of networks of SACCOs that changed their legal status to two limited liability companies. Ten SACCOs were also liquidated and their depositors refunded by the Government in December 2016. Of the 472 MFIs operating in Rwanda, 17 have limited liability company status; 455 are SACCOs: these include 416 Umurenge SACCOs and 39 non-Umurenge SACCOs. The MFI sector balance sheet continued to expand in 2016, with total assets of the sector increasing by 6.6% in December 2016 to FRW 223 billion. This is significantly lower growth than the 31% increase in assets in 2015. The slowdown of growth of microfinance assets was partly explained by Rwanda Social Security Board's (RSSB) decision to transfer "Mutuelle de santé" funds from Umurenge SACCOs to accounts in its banking division for better management of these funds with automated operating systems. A total of FRW 13 billion was transferred. The share of loans over total assets of the sector increased from 53% in December 2015 to 57% in December 2016. The reduced pace of lending from MFIs is due to an increased vigilance surrounding prudential lending caused by credit risk concerns arising from poor agricultural performance in 2016. However, agriculture remains a key lending sector for MFIs and accounts for 30% of Umurenge SACCO loans and 15% of total MFI loans (Verrinder, Hobden & Hafashimana, 2018). The report outlines the following key challenges to MFIs in Rwanda: On the supply side (MFIs), the key challenges include: (i) Weak risk management; (ii) Lack of skills; (iii) Poor product design; (iv) Short savings cycle; and (v) Low transparency levels. On the side of demand (clients), the report outlines the following challenges: (i) Lack of collateral; (ii) Low financial literacy; (iii) Low incomes; (iv) Poor savings;

and (v) Geographical isolation (Verrinder, Hobden & Hafashimana, 2018).

Scholars produced huge literature on the effect of Credit Risk Management on loan Performance of Commercial Banks as well as Microfinance Institutions in Rwanda including a study of Antoine Nduwayo (2015) on effect of loan management on the loan performance of commercial Bank using the case of Bank of Kigali (BK). The research focused on Professional training in loan management for staffs of credit department of BK; Existence of specific lending procedures and guidelines for loan view process in credit department; Factors considered in loan review process; Categorization of credit approval in credit analysis; Trend of loan performance been realized by B.K from 2010 to 2013; Role played by loan management on the performance achieved by B.K; and Loan management and better performance of B.K (Nduwayo, 2015). A study of Alice Kagoyire and Dr. Jaya Shukla (2016) assessed the effect of credit management on performance of commercial banks in Rwanda using a case study of Equity Bank Rwanda Ltd. The study assessed the extent at which Equity Bank uses credit appraisal in credit management; the extent at which Equity Bank uses credit risk control in credit management; and the extent at which Equity Bank uses collection policy in credit management (Kagoyire & Shukla, 2016).

Concerning the microfinance institutions, Twagirimana (2013) assessed Credit risk and microfinance institutions in Rwanda using a case of Inkingi Ltd. The main objectives of the research were to find out the real causes of nonperforming loans (NPLs) of the Rwanda microfinance system, to analyze how credit risks are managed in microfinance institutions (MFIs) and to assess the impact of NPLs on the loan portfolio growth, quality and its profitability Twagirimana (2013).

The present research would assess the effect of credit risk management on loan performance of microfinance institutions in Rwanda using a case of RIM Ltd Kibuye Branch. The variables of the research are taken from the research of Kipkirui Edwin and Job Omagwa (2018) on Credit management practices and loan performance of microfinance institutions in Nairobi Central Business District, Kenya which assessed the effect of four variables: Client appraisal; Credit risk control; Collection policy and Terms of credit on loan performance of microfinance institutions.

RESEARCH PROBLEM

The Consultative Group to Assist the Poor (CGAP), a global resource center for microfinance standards, operational tools, training, and advisory committed to building more inclusive financial systems for the poor reported that worldwide more than 3 billion poor people seek access to basic financial services essential to managing their precarious lives. Rwandan considers financial inclusion as an integral enabler for achieving its development and poverty reduction objectives. Rwanda targets achieving 80 percent financial inclusion by 2017 and 90 percent by 2020, as stated in Vision 2020. Towards this Vision, Rwanda made notable improvements on financial inclusion. Access to formal financial services increased from 21% to 68% of the adult population between 2008 and 2016, and access to formal credit from 5% to 17% over the same period (FinScope, 2012, 2016). According to statistics across 26 countries where FinScope surveys are conducted to measure financial access and use of financial products, Rwanda is ranked second in terms of the share of adult population with access to formal financial services. Rwanda also fares well compared to its regional peers in terms raising financial inclusion. The share of adult population with access to formal financial services (68% in 2016) places Rwanda above its East African peers such as Kenya (67% in 2013), Tanzania (57% in 2013), Uganda (54% in 2013) and Mozambique (24% in 2014) (Agarwal et al., 2018). Despite such achievements, Microfinance Institutions in Rwanda are still challenged by (i) Weak risk management; (ii) Lack of skills; (iii) Poor product design; (iv) Short savings cycle; and (v) Low transparency levels. On the side of demand (clients), the report outlines the following challenges: (i) Lack of collateral; (ii) Low financial literacy; (iii) Low incomes; (iv) Poor savings; and (v) Geographical isolation as outlined by the research of (Verrinder, Hobden & Hafashimana, 2018). This research focuses on the first key challenging

issue “Weak risk management”. Using Réseau Inter- diocésains de Microfinance (RIM Ltd) Kibuye Branch, the research would assess the effect of Credit Risk Management on loan Performance of Microfinance Institutions in Rwanda.

RESEARCH OBJECTIVE

Overall objective

The overall objective of the research is to assess the effect of credit risk management practices on loan performance of RIMA Ltd.

Specific objectives

Specific objectives of the research are:

- To determine the effect of client appraisal on loan performance of RIM Ltd.
- To establish the effect of credit risk control on loan performance of RIM Ltd.
- To analyze the effect of collection policy on loan performance of RIM Ltd.
- To assess the effect of terms of credit on loan performance of RIM Ltd.
- To outline challenges to effective credit risk management practices in RIM Ltd.

RESEARCH QUESTIONS

General question

To what extent does the application of credit risk management practices affect the loan performance of RIM Ltd?

Specific questions

- What is the effect of client appraisal on loan performance of RIM Ltd?
- What is the effect of credit risk control on loan performance of RIM Ltd?
- What is the effect of collection policy on loan performance of RIM Ltd?
- What is the effect of terms of credit on loan performance of RIM Ltd?
- What are challenges to effective credit risk management practices in RIM Ltd?

CONCEPTUAL REVIEW

Credit risk

Credit risk can also be defined as the risk that one party of a financial instrument will cause as a financial loss for the other party by failing to discharge an obligation. It can also be defined as a possible loss if the issuer of an investment defaults. In relation to loans, it refers to the probability that a borrower may not repay a loan. Credit risk is a significant concern for financial institutions. Decisions to issue loans are based on information about a borrower’s ability and willingness to repay a loan at the time a loan is made. Thus, credit risk can be controlled to some extent by the establishment of sound investments and lending policies and procedures. Owango et al. (1998) and Wanyama (2008) defined Credit risk in reference to financial institutions as the following: Credit risk is the current and prospective risk to earnings or capital arising from an obligor’s failure to meet the terms of any contract with the financial institution or otherwise to perform as agreed. Credit risk is found in all activities in which the success depends on the counterparty,

issuer or borrower's performance. It arises any time financial institution funds are extended, committed, invested or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet (Wanyama, 2008).

Credit risk is most simply defined as the potential that a financial institution borrower or counterparty will fail to meet his obligations in accordance to agreed terms. The goal of credit risk management is to maximize a financial institution's risk-adjusted rate of return by maintaining credit risk exposure within acceptable parameters. Financial institutions need to manage the credit risk inherent in the entire portfolio as well as the risk in individual credits or transactions (Owango et al., 1998).

Loans performance

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

Credit Risk Management

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

5 C's of Credit Analysis or client appraisal

Karekezi and Butera (2018) define Client appraisal as an assessment or estimation of the worth, value, or quality of a person or thing (Karekezi & Butera, 2018). According to Peprah et al. (2017), Client appraisal process can be summarized by the following "5 C's of Credit Analysis". Regardless of where the client seek funding – from a bank, a local development corporation or a relative – a prospective lender will review his/her credit worthiness.

A complete and thoroughly documented loan request (including a business plan) will help the lender understand the client and his/ her business. The "Five C's" are the basic components of credit analysis. They are: (i) **Capacity to repay** is the most critical of the five factors, it is the primary source of repayment – cash. The prospective lender will want to know exactly how the client intend to repay the loan. The lender

will consider the cash flow from the business, the timing of the repayment, and the probability of successful repayment of the loan. Payment history on existing credit relationships – personal or commercial- is considered an indicator of future payment performance. Potential lenders also will want to know about other possible sources of repayment. (ii) **Capital** is the money the client personally has invested in the business and is an indication of how much the client has at risk should the business fail. Interested lenders and investors will expect the client to have contributed from his/ her own assets and to have undertaken personal financial risk to establish the business before asking them to commit any funding. (iii) **Collateral, or guarantees**, are additional forms of security the client can provide the lender. Giving a lender collateral means that the client pledges an asset he/ she owns, such as his/ her home, to the lender with the agreement that it will be the repayment source in case the client can't repay the loan. A guarantee, on the other hand, is just that someone else signs a guarantee document promising to repay the loan if the client can't. Some lenders may require such a guarantee in addition to collateral as security for a loan. (iv) **Conditions** describe the intended purpose of the loan. Will the money be used for working capital, additional equipment or inventory? The lender will also consider local economic conditions and the overall climate, both within your industry and in other industries that could affect your business. (v) **Character** is the general impression the client makes on the prospective lender or investor. The lender will form a subjective opinion as to whether or not the client is sufficiently trustworthy to repay the loan or generate a return on funds invested in the client's company. The client's educational background and experience in business and in his/ her industry will be considered. The quality of clients' references and the background and experience levels of clients' employees will also be reviewed.

Credit Risk Control

According to Brown and Moles (2016), Credit Risk Management Credit risk is most simply defined as the potential that a bank borrower or counterparty will fail to meet its obligations in accordance with agreed terms. The goal of credit risk management is to maximize a bank's risk adjusted rate of return by maintaining credit risk exposure within acceptable parameters. The primary purpose of any (for-profit) business is to deliver "realized" profit for its shareholders. The objective of Credit Risk management for any enterprise (or even a small business) is to ensure that

"credit losses" are minimal even as business grows. This in turn requires that the business is able to confidently deal with customers (especially credit customers) and collect its dues on time. Towards this objective, various teams at business need to work collaboratively, so that receivables (i.e. sales dues) are collected in time, and such cash flows are further available for investing (Brown & Moles, 2016).

Collection Policy

Karekezi and Butera (2018) define Collection policy as steps that a company follows in ensuring timely payment of its accounts receivable. Collection policies vary by company.

An example of the steps a company can take involves a friendly phone call to make sure payment is made on time, followed by a firm phone call when a payment is late, followed by a threatening letter, and finally turning the client over to a collection agency (Karekezi & Butera, 2018). According to Agola (2012), a credit collection policy is a document that includes clear, written guidelines that set the terms and conditions for supplying goods on credit, customer qualification criteria, procedure for making collections, and steps to be taken in case of customer delinquency. For the case of microfinance institutions, the collection policy is concerned with the loan. Collection policy involves the steps that a company follows in ensuring timely payment of its accounts receivable. Collection policies vary by company. An example of the steps a company can take involves a friendly phone call to make sure payment is made on time, followed by a firm phone call when a payment is late, followed by a threatening letter, and finally turning the client over to a collection agency. Companies may deviate from their collection policy for long-standing or otherwise

trusted customer (Tele, 2018).

Terms of Credit

According to Karekezi and Butera (2018), Credit terms are defined as specific time period, rate of interest and penalties imposed to borrowers for late payment under which credit is advanced by financial institutions. In Accounting, the terms of credit means the standard or negotiated terms (offered by a seller to a buyer) that control (1) the monthly and total credit amount, (2) maximum time allowed for repayment, (3) discount for cash or early payment, and (4) the amount or rate of late payment penalty. The terms which indicate when payment is due for sales made on account (or credit). For example, the credit terms might be 2/10, net 30. This means the amount is due in 30 days; however, if the amount is paid in 10 days a discount of 2% will be permitted. Other terms might be net 10 days, due upon receipt, net 60 days, etc (Karekezi & Butera, 2018).

EMPIRICAL REVIEW

This section gives the findings from the research on effect of credit risk management practices on loan performance conducted on financial institutions in three selected countries namely Kenya, Uganda and Rwanda. These countries are all members of East African Community. In Kenya, Edwin and Omagwa (2018) assessed credit management practices and loan performance of microfinance institutions in Nairobi Central Business District, Kenya. The study sought to determine the effect of client appraisal, credit risk, collection policy, and credit terms on loan performance of MFIs in Nairobi Central Business District, Kenya. A descriptive survey design was adopted for the study; the target population comprised of 165 members of staff of the MFIs studied. Primary data was collected using questionnaires. Purposive sampling was used to pick 165 respondents. Of the 165 questionnaires dispatched, 158 were filled and returned. The questionnaire was designed in form of five levels Likert scale. Descriptive analysis was used to analyze data. The research outlined the following results: (i) On the effect of Client Appraisal on loan Performance, the research found that the respondents agreed that appraisal of client is a useful strategy for credit management; personnel of Microfinance Institutions are competent for performing appraisal of clients; client appraisal puts into consideration the personality of the customers looking for facilities to offer credit; collateral aspects are put into consideration while carrying out client appraisal; loan defaults can emerge in the instances when customer's capacity is not assessed and appraisal of client examines on customer's ability to fulfil his financial obligations. Client Appraisal as useful strategy of financial performance is justified by the mean values ranged from 3.5 to 4.4. (ii) On the effect of Credit Risk Control on loan Performance, the research found that credit checks on regular basis enhances organization performance, interest rates charged on loans affect performance of MFI, the use of customer credit application forms improves monitoring and credit management as well, imposing loan size limits is a viable strategy in improving organization performance, penalty for late payment enhances customers commitment to loan repayment, flexible repayment periods improve loan repayment and credit committees involvement in making decisions regarding credit risk controls are essential in reducing default/credit risk. Essential credit controls used include loan product design, delinquency management and credit committees. The mean values for all those variables were ranged from 3.66 to 4.00. (iii) Concerning the effect Collection Policy on loan Performance, the research found that regular reviews have been done on collection policies to improve state of credit management, a stringent policy is more effective in debt recovery than a lenient policy, formulation of collection policies have been a challenge to the microfinance institutions, enforcement of guarantee policies provides chances for loan recovery in case of loan defaults, available collection policies have assisted towards effective credit management practices and staff incentives are effective in improving recovery of delinquent loans. Such effectiveness is justified by the mean values ranging from 3.58 to 3.91. (iv) Concerning the effect Terms of Credit on loan Performance, the research found that credit terms are evaluated by the looking at capital position, credit terms include the length of time to approve loans, credit

terms specify the interest rates charged on the loans advanced to customers, credit terms are important in ensuring that customers do not default their loan repayment, credit terms are evaluated by the trends in cash flow, credit terms specifies the credit period given to customers and credit terms are evaluated by the position of the client as indicated by the ratio analysis. These findings are justified by the mean values ranging from 3.89 to 4.06.

In Uganda, Kalu et al. (2018) assessed the Credit Risk Management and loan Performance of Microfinance Institutions in Kampala, Uganda. The objective of this study was to evaluate whether relationship exist between credit risk management techniques and loan performance of microfinance institutions in Kampala, Uganda. Specifically, the study examined whether there is a relationship between credit risk identification, credit risk appraisal, credit risk monitoring, credit risk mitigation and loan performance of microfinance institutions in Kampala using sample of 60 members of staff in finance and credit departments of three licensed microfinance institutions in Kampala, Uganda namely Finca Uganda Ltd, Pride Microfinance Ltd, UGAFODE Microfinance Ltd. Primary data was collected using questionnaires and it comprised of closed ended questions. Secondary data was collected from the microfinance institutions (MFI's) annual reports (2011 – 2015). Frequencies and descriptive statistics were used to analyze the data. The findings indicate that credit risk identification and credit risk appraisal has a strong positive relationship on loan performance of MFIs, while credit risk monitoring and credit risk mitigation have moderate significant positive relationship on loan performance of MFIs. The study recommends, among others, that the credit risk appraisal process should identify and analyze all loss exposures, and measure such loss exposures. This should guide in selection of technique or combination of techniques to handle each exposure. The study concludes that MFIs should continually emphasize on effective credit risk identification, credit risk appraisal, credit risk monitoring, and credit risk mitigation techniques to enhance maximum loan performance.

For the case of Rwanda, two studies attracted this research: A study of Karekezi and Butera (2018) and a study of Kagoyire and Shukla (2016). Both studies used the same variables namely: Credit terms, Collection Policy, and Client Appraisal. Karekezi and Butera (2018) assessed those variables in SACCOs performance while Kagoyire and Shukla (2016) assessed those variables in commercial bank.

Karekezi and Butera (2018) assessed Credit Risk Management and Loan Performance using a case of Umurenge SACCOs in Kigali City, Rwanda. The research analyzed three variables: Credit terms, Collection Policy, and Client Appraisal. The research interpreted the mean and standard deviation (SD) on 5 levels Likert scale where: Strongly agree = 5 (very high mean) with mean range of 4.20-5.00, agree = 4 (high mean) with mean range of 3.40-4.19, Not sure = 3 (average mean) with mean range of 2.60-3.39, disagree = 2 (low mean) with mean range of 1.80-2.59 and strongly disagree = 1 (very low mean); the standard deviation less than 0.5 is homogeneous and standard deviation of greater than 0.5 is heterogeneous. The findings from the research are the following: (1) About Credit Terms, the results of the research indicate that the level of credit terms was highly practiced (average mean = 3.90 and standard deviation of 0.76). The findings imply that SACCOs practice the credit terms, they offer loan at fixed interest, and interest is paid at regularly intervals. From the interview with beneficiaries, most of the respondents said: "Here we should comply with the credit terms because if you don't do that then they can sell the security (Beneficiaries of SACCOs in Kigali City, 2017). (2) About Collection policy, the research found that the level of collection policies is highly implemented (average mean = 4.15 and SD 0.69). The findings imply that the SACCOs call borrowers as a mean of follow up; and the SACCOs sell collateral when customers fail to pay, the SACCOs oblige Deposit of borrowers' payments to be done at the SACCO's location and when payment is late, the SACCOs send a letter to the customers to remind them regarding their loan payments. From the interview with beneficiaries, they said that: "The SACCOs call their customers reminding them when to pay and this is done before the day of payment" (Beneficiaries of SACCOs in Kigali City, 2017) (3) About Client Appraisal, the research found that the level of client appraisal reveals that client appraisal using 5Cs

are highly practiced (average Mean = 4.19 and SD = 0.54). From the findings, the SACCOs reveal that they apply the 5Cs to customers to get potential borrowers. From interview with beneficiaries when asked what do you think helped to get a loan in this SACCO? They said: “The SACCOs do not grant loans to customers when they are not offered a collateral, they visit and ask you whether you have the documents of that security” (Beneficiaries of SACCOs in Kigali City, 2017).

Kagoyire and Shukla (2016) assessed the effect of credit management on performance of commercial banks in Rwanda using a case study of Equity Bank Rwanda Ltd. The research variables were: credit appraisal; credit risk control; and collection policy. The study adopted a descriptive survey design. The target population of study consisted of 57 employees of Equity bank in credit department. Entire population was used as the sample giving a sample size of size of 57 employees. Purposive sampling technique was used in sampling where the entire population was included in the study. Primary data was collected using questionnaires which were administered to the respondents by the researcher. Descriptive and inferential statistics were used to analyze data. The findings from the research are the following: (1) Firstly, the study sought to determine the extent to which Equity Bank used client appraisal in Credit Management.

From the findings 36% of the respondents indicated to a great extent, 45% of the respondents indicated to a moderate extent whereas 19 % of the respondents indicated to a low extent, this implies that Equity bank used client appraisal in Credit Management to a moderate extent. (2) Secondly, the study sought to determine the extent to which Equity Bank used credit risk control in Credit Management. From the findings 57 % of the respondents indicated to a great extent, 28 % of the respondents indicated to a moderate extent whereas 15 % of the respondents indicated to a low extent, this implies that Equity Bank used credit risk control in Credit Management to a moderate extent. (3) Thirdly, the study sought to determine the extent to which Equity Bank use collection policy in Credit Management. From the findings 60% of the respondents indicated to a great extent, 34% of the respondents indicated to a moderate extent whereas 6% of the respondents indicated to a low extent, this implies that Equity bank use collection policy in Credit Management to a great extent. In overall, the study found that client appraisal, credit risk control and collection policy had effect on loan performance of Equity bank. The study established that there was strong relationship between financial performance of Equity bank and client appraisal, credit risk control and collection policy. The study established that client appraisal, credit risk control and collection policy significantly influence loan performance of Equity bank. Collection policy was found to have a higher effect on loan performance and that a stringent policy is more effective in debt recovery than a lenient policy.

RESEARCH METHODOLOGY

Research design

The research on the effect of Credit Risk Management on loan Performance of Microfinance Institutions in Rwanda using a case of RIM Ltd Kibuye Branch used descriptive design; and the approaches used combine quantitative and qualitative approaches. Quantitative research methods are those methods in which numbers are used to explain findings (Kowalczyk, 2016). Contrary to quantitative research methods, qualitative research methods have been in existence only for a few decades. Rather than use numbers, qualitative research methods use descriptive procedures to generate meaning and understanding of the phenomenon being studied (Creswell, 2003). A mixed method combines quantitative and qualitative methods in the same study in order to get a full understanding of the phenomenon under study. A mixed method combines both qualitative and quantitative elements to produce a better research quality by eliminating the biases inherent to either quantitative or qualitative methods alone (Techo, 2016). By using quantitative approach, this research designed a questionnaire that was administrated to a sample of respondents. This questionnaire was in form of Five levels Likert scale where 1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agreed; 5 = Strongly Agree. Qualitative approach was used through open questions and structured interview with the

staffs of RIM Ltd Kibuye Branch.

Study Variables

According to Kaplan (2015), a variable is defined as anything that has a quantity or quality that varies. The dependent variable is the variable a researcher is interested in. An independent variable is a variable believed to affect the dependent variable. Confounding variables are defined as interference caused by another variable. For the research on the effect of Credit Risk Management on loan Performance of Microfinance Institutions in Rwanda, the variables of the research are the following: Independent variable is “Credit Risk Management Practices”. Credit risk management practices affect the loan performance of microfinance in two ways: If the microfinance institution apply correctly the practices of credit risk management, there will be positive impact (effect) on the performance of financial management. If the Microfinance does not apply techniques of credit risk management and give loan randomly without care, the results will be the failure of the Microfinance institution. Under “Credit Risk Management Practices”, the research analyzed four sub independents variables namely: Client appraisal, Credit risk control, Collection control, and Terms of credit. Those variables affect loan performance of microfinance and they are so called independent variables. The dependent variable which is affected by the independent variables is “loan performance”. In fact, this will be positive or negative depending upon careful applications of client appraisal, Credit risk control, Collection control, and Terms of credit.

Population and Sample size determination

Martin Murphy (2016) defines research population as the totality of items (persons or objects) which attract the study. Target population or study population is a complete set of people with a specialized set of characteristics, and a sample is a subset of the population (Murphy, 2016). For the case of this study, the total population of the research is composed of 4334 clients of RIM Ltd as described in the following table 1.

Table 1: Research population and sample

RIM Ltd Branches	Total Population			Sample Population		
	M	F	Total	M	F	Total
Kibuye Sub Branch	1619	840	2459	37	19	56
Nyange Sub Branch	1158	717	1875	26	16	42
Total	2777	1557	4334	63	35	98

Source: RIM Ltd (2019).

The table 1 above shows that RIM Ltd Kibuye comprises two sub branches: Kibuye Sub Branch comprising 2459 clients including 1619 men and 840 women; and Nyange Sub Branch comprising 1875 members including 1158 men and 717 women. These statistics show that women occupy 36% of clients of RIM Ltd Kibuye. Kibuye sub branch occupies 57% of total clients and Nyange sub branch occupies 41%. At those 4334 clients of RIM Ltd Kibuye branch, the research involved 8 staffs of RIM Ltd Kibuye Branch. The total population of the research became 4343. To determine the sample, the research applied the following Slovin’s formula only to clients of RIM Ltd (4334 clients). The 9 staffs of RIM Ltd were not sampled:

$$n = \frac{N}{1 + Ne^2} \quad (\text{Yamane, 1967, p.388}).$$

Where: n=sample population; N= total population; e= the standard margin of error at 90% confidence interval, which is equal to 10% or 0.1.

The sample population is then calculated as the following:

$$n = \frac{N}{1 + Ne^2} = \frac{4334}{1 + 4334 \cdot (0.1)^2} = \frac{4334}{1 + 4334 \cdot 0.01} = \frac{4334}{1 + 43.34} = \frac{4334}{44.34} = 97.74 \approx 98$$

The sample from Kibuye sub branch is $98 \times 57/100 = 56$ respondents. Women in Kibuye sub branch occupy 34%: women respondents are $56 \times 34/100 = 19$ respondents. Men respondents are $56 - 19 = 37$ respondents. The sample from Nyange sub branch is $98 \times 43/100 = 42$ respondents. Women in Nyange sub branch occupy 38%: Women respondents are $42 \times 38/100 = 16$ respondents. Men respondents are $42 - 16 = 27$ respondents.

Sampling techniques

This is concerned with techniques used by the research in selecting those 98 respondents selected from clients of RIM Ltd Kibuye branch. The 9 staffs of RIM Ltd involved in this research were selected as whole whereas for 98 respondents the research applied the following techniques: (i) Probability sampling: The research used probability sampling by considering all clients of RIM Ltd as having equal probability to be selected as respondents to the research. All 4334 clients of RIM Ltd had equal probability to be selected for getting 98 respondents. (ii) Stratified sampling: Stratified sampling requires to divide the population into two groups excluding one another. The research divided all clients of RIM Ltd into two groups based on gender. Each group is named a stratum (in plural strata). Considering both Kibuye and Nyange sub branch, the stratum of men was composed of 2777 and the stratum of women was composed of 1557 women. (iii) Simple random sampling. Inside the stratum the respondents were selected randomly where the researcher picked respondents without imposing any condition. Inside the stratum of men, the researcher selected randomly 63 and inside the stratum of women the researcher selected randomly 35 women.

Data collection techniques

Oluwatosin (2017) defines primary data as data that is collected by a researcher from first-hand sources, using methods like surveys, interviews, or experiments. It is collected with the research project in mind, directly from primary sources. The term is used in contrast with the term secondary data. The techniques used by the research to collect primary data are: Questionnaire, Structured interview, and personnel observations (Oluwatosin, 2017). For this research, primary data was collected using a questionnaire designed in form of Five levels Likert scale where respondents expressed their opinions in form of statistical data in the following order: 1 = Strongly Disagree; 2 = Disagree; 3 = Uncertain; 4 = Agree; and 5 = Strongly Agree. The questionnaire was composed of close and open questions and it was administrated to the sample of 98 respondents from clients of RIM Ltd; and by 9 staffs of RIM Ltd Kibuye Branch. A structured interview is applied where the researcher prepares in advance the questionnaire and respected its order while interviewing. The researcher prepared an interview guide in the same order as the questionnaire and he administrated it to the interviewees including the Manager of RIM Ltd Kibuye Branch and the Credit Manager at RIM Ltd Kibuye Branch. The questionnaire was administrated three days before and the interview was conducted upon the availability of the interviewees. Participant observation was also applied.

By observation, the researcher intends to use his daily experience of Credit Risk Management in RIM Ltd as ordinal employee who witnesses the mode of operating at RIM Ltd Kibuye Branch.

Validity and Reliability tests

Surbhi (2017) states that the term validity implies utility. The validity of the measuring instrument represents the degree to which the tool measures what it is expected to measure. Reliability is used to mean the extent to which the measurement tool provides consistent outcomes if the measurement is repeatedly performed. Validity focuses on accuracy, i.e. it checks whether the scale produces expected results or not. Conversely, reliability concentrates on precision, which measures the extent to which scale produces consistent outcomes.

To test for reliability and validity, this research calculated the coefficient of Cronbach's Alpha using IBM

SPSS Statistics 23. The coefficient varies between 0 and 1. The value between 0.8 (or 80%) and 1 (or 100%) means excellent reliability; the value between 0.7 (or 70%) and 0.79 (or 79%) means good reliability; while the value between 0.6 (or 60%) and 0.69 or (69%) means acceptable reliability. For this research, the result showed that the questionnaire was reliable at 96%.

RESULTS OF THE STUDY

The effect of client appraisal on loan performance of RIM Ltd

The first objective of this research was to assess the effect of client appraisal on loan performance of RIM Ltd. This section assesses the extent at which RIM Ltd uses client appraisal before assigning the loan where clients themselves expressed the terms and conditions of eligibility for loan. The questions were asked in form of five levels Likert scale (where 5 = very great extent; 4 = great extent; 3 = moderate extent; 2 = low extent; 1 = very low); and the results are presented in the following tables 7 and 8. For interpretation, $\mu > 3$ indicates high effect; $\mu = 3$ indicates low effect; and $\mu < 3$ indicates no effect or very low effect. The standard deviation $\sigma > 0.5$ is interpreted as indicating heterogeneity; while $\sigma < 0.5$ indicates homogeneity.

Conditions to deliver the loan to RIM Ltd clients

Table 2: Elements of clients' appraisal

Element of appraisal	N	Min.	Max.	Mean	Std. Dev.
Customers' capacity to repay before offering the credit.	98	3	5	4.04	.429
Customers' capital before offering the credit.	98	3	5	4.03	.418
Customers' collaterals before offering the credit.	98	5	5	5.00	.000
Consideration the local economic conditions of customers and overall climate before offering the credit.	98	2	3	2.53	.502
Personal characters of customers before offering the credit.	98	4	5	4.78	.419
Average	98	3.4	4.6	4.08	.354

Source: Author's computation of primary data (2019) using IBM SPSS Statistics 23.

The table 2 above shows that client appraisal at RIM Ltd consider: customer's capacity to repay ($\mu = 4.04$; $\sigma = 0.429$); customers' capital ($\mu = 4.03$; $\sigma = 0.418$); customers' collaterals ($\mu = 5.00$; $\sigma = 0.000$); and personal characters of customers of clients ($\mu = 4.78$; $\sigma = 0.419$). However, respondents affirm that RIM Ltd does not consider the local economic conditions of customers and overall climate before offering the credit ($\mu = 2.53$; $\sigma = 0.502$). For those five variables, the results indicate that the overall $\mu = 4.08$ close to 4 which means great extent; and the overall $\sigma = 0.354$ less than 0.5 which indicates homogeneity of responses.

Clients Appraisal's ability to reduce the default

Table 3: Effect of client appraisal on financial performance of RIM Ltd

	N	Min.	Max.	Mean	Std. Dev.
Appraisal of client is a useful strategy for credit management.	9	4	5	4.76	.432
Loan defaults can emerge in the instances when customer's capacity is not assessed.	9	4	5	4.86	.352
Appraisal of client examines the customer's ability to fulfil his/her financial obligations.	9	4	5	4.92	.275

Appraisal of client minimize the risk of loan default.	9	4	5	4.94	.241
Average	9	4	5	4.87	.325

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The staffs of RIM Ltd were asked to outline the effect of client appraisal on the financial performance of RIM Ltd. The table shows that client appraisal is an effective tool for credit management as affirmed by $\mu = 4.76$ and $\sigma = 0.432$. Client appraisal reduce loan default ($\mu = 4.86$; $\sigma = 0.352$). Client appraisal allow examination of customer’s ability to fulfil financial obligations ($\mu = 4.92$; $\sigma = 0.275$). Finally, client appraisal minimizes the risk of loan default ($\mu = 4.94$; $\sigma = 0.241$). All four variables have an overall $\mu = 4.87$ indicating high effect; and overall $\sigma = .0325$ indicating homogeneity of answers. Client appraisal as effective tool for credit risk management used by RIM Ltd was supported by the response from interview. Interviewee 1 said: “Many people go for Business Development Advisories and develop excellent projects. However, when RIM Ltd assess the behaviors of those people and their capacity to repay the loan, in some cases, the investigation found the opposite. Some lend collaterals and lie that they are their; others affirm that their businesses will prosper ... and yet investigation found that those persons are even not experienced in businesses. For not discouraging such kind of clients, RIM Ltd apply a small amount of loan in order to train and encourage those people for loan without heavy loss on the side of RIM Ltd” (RIM_Int1).

The effect of Credit Risk Control on loan performance of RIM Ltd

The second objective of this research was to assess the effect of Credit Risk Control on financial performance of RIM Ltd. To achieve this objective, this section assesses the extent at which RIM Ltd uses Credit Risk Control and the clients themselves expressed how RIM Ltd controls the risks of loan default among its clients; and the section assesses whether such application of Credit Risk Control has an effect on the financial performance of RIM Ltd.

How RIM Ltd controls the risks of loan default

Table 4: Extent at which RIM Ltd practices credit risk control

	N	Min.	Max.	Mean	Std. Dev.
RIM Ltd imposes limits on loan size.	98	4	5	4.46	.401
RIM Ltd uses credit checks on regular basis.	98	4	5	4.34	.475
RIM Ltd implements Flexible repayment periods.	98	4	5	4.20	.405
RIM Ltd imposes penalties for late payment is introduced.	98	4	5	4.05	.221
RIM Ltd uses customer credit application forms to improve monitoring and management of credit as well.	98	4	5	4.30	.459
RIM Ltd involves credit committees in making decisions concerning controls of credit risk.	98	4	5	4.05	.221
RIM Ltd adjust interest rates charged on loans affect.	98	5	5	5.00	.000
Average	98	4	5	4.34	0.326

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 4 shows that credit control mechanisms applied by RIM Ltd are: Imposing limit on loan size ($\mu = 4.46$; $\sigma = 0.401$); use of credit check on regular basis ($\mu = 4.34$; $\sigma = 0.475$); Flexible repayment periods ($\mu = 4.20$; $\sigma = 0.405$); penalties for late repayments ($\mu = 4.05$; $\sigma = 0.221$); customer credit application form ($\mu = 4.30$; $\sigma = 0.459$); use of credit committees ($\mu = 4.05$; $\sigma = 0.221$); and adjustment of interest rate charged on loan ($\mu = 5.00$; $\sigma = 0.000$). All these 7 variables have an overall $\mu = 4.34$ close to 4 which mean great extent; and an overall $\sigma = 0.326$ less than 0.5 which indicates homogeneity of answers.

Use of different measures of credit risk control to minimize the loan default

Table 5: Effect of credit risk control on financial performance of RIM Ltd

	N	Min.	Max.	Mean	Std. Dev.
A useful strategy in improving organization performance is to impose limits on loan size.	9	4	5	4.41	.494
Enhancing performance of an organization can be achieved by use of credit checks on regular basis.	9	4	5	4.57	.497
Loan repayment can be improved through Flexible repayment periods.	9	4	5	4.68	.467
Customers get committed when Penalty for late payment is introduced.	9	4	5	4.73	.444
By using customer credit application forms there is improvement in monitoring and management of credit as well.	9	4	5	4.90	.304
Involvement of credit committees in making decisions concerning controls of credit risk are important in minimizing default.	9	4	5	4.94	.241
Performance of MFI is affected by interest rates charged on loans.	9	4	5	4.95	.221
Average	9	4	5	4.74	.381

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 5 analyses the effect of credit risk control on financial performance of RIM Ltd. The results show that imposing limits on loan size is useful strategy to improve financial performance; regular credit checks enhance financial performance; flexible repayment periods improve loan repayment; penalties increase commitments on the side of customers; customer credit form increase monitoring and management of credit; involvement of credit committees in making decisions concerning credit controls minimizes loan default; and interest rate affects the performance of loan. The overall mean of those variables is 4.74 which is above 3 and means high effect; and the overall standard deviation of 0.381 means homogeneity of answers. The positive effect of credit risk control as a mechanism for credit risk management technique applied in RIM Ltd was affirmed by the responses from interview. The interviewee 2 affirmed: “People are happy to take loan; even a big loan...and some time they have no enough skills to run it in effective way. By imposing the size, RIM Ltd allow borrowers to access the loan that is proportional to their capacity and collaterals... RIM Ltd adjust interest rates and for Financial Solidarity Associations, the interest rate is 2% per month; for individual loan repayable within one year, the interest rate is 16%; whereas for long term loan the interest rate is 18%...RIM Ltd applies also penalties: these penalties towards borrowers who do not respect the terms of credit play the role of educator. People have fear of punishments and they do their best to be regular in loan repayment. Also such penalties allow RIM Ltd to recover the loss that could result in such delay in loan repayment” (RIM_Int2).

The effect of collection policy on loan performance of RIM Ltd

The third objective of this research was to assess the effect of Collection policy on financial performance of RIM Ltd. To achieve this objective, this section assesses the extent at which RIM Ltd uses Collection policy and the clients themselves expressed how RIM Ltd applies Collection policy to improve monitoring of loan among its clients; and the section assesses whether such application of Collection policy has an effect on the financial performance of RIM Ltd.

How RIM Ltd applies collection policy to improve loan monitoring

Table 6: Extent at which RIM Ltd practices collection policy

	N	Min.	Max.	Mean	Std. Dev.
RIM Ltd uses telephone calls as a follow up means for its clients	98	5	5	5.00	.000
RIM Ltd send threatening letter to any client delaying to repay	98	4	4	4.00	.000
RIM Ltd uses recovery agencies to pursuit clients delaying to repay	98	1	1	1.00	.000
RIM Ltd sells in auction the collaterals and guarantees in case of loan default	98	5	5	5.00	.000
RIM Ltd use a strict collection policy to face loan defaults	98	4	4	4.00	.000
RIM Ltd increase incentives to staffs as collection policy	98	3	3	3.00	.000
Average	98	4	4	3.67	0.000

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 6 shows that major collection policies applied by RIM Ltd include: telephone calls (with mean value of 5.00 and standard deviation of 0.000); selling in auctions the collateral and guarantees (with mean value of 5.00 and standard deviation of 0.000); strengthening letters (with mean value of 4.00 and standard deviation of 0.000); strict collection policy to face loan default (with mean value of 4.00 and standard deviation of 0.000). Respondents were not sure of application of incentives to staffs by RIM Ltd as collection policy (the mean value is 3.00 which mean not sure); and RIM Ltd does not use recovery agencies to pursuit clients delaying to repay (the mean value is 1 which means strongly disagree). The overall mean for all these variables is 3.67 which is close to 4 and this means great extent; and the overall standard deviation is 0.000 which indicates unanimity of answers.

Collection policy of RIM Ltd impacts positively on its financial performance

Table 7: Effect of collection policy on financial performance of RIM Ltd

	N	Min.	Max.	Mean	Std. Dev.
Collection policies available have helped in effective management of credit practices	9	5	5	5.00	.000
Implementation of guarantee policies gives a chances to recover loan in case in the instance of defaulters	9	5	5	5.00	.000
In the process of improving recovery of delinquent loans, an effective way is staff incentives.	9	5	5	5.00	.000
Reviews concerning collection policies done on a regular basis result in better state of management of credit.	9	5	5	5.00	.000
A strict policy is effectual in recovery of debt compared to a moderate policy	9	5	5	5.00	.000
Average	9	5	5	5.00	.000

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 7 above shows that collection policy has high effect on financial performance of RIM Ltd. This is justified by the mean value of 5.00 at each variable and the standard deviation of 0.000. Collection policies available have helped in effective management of credit practices; implementation of guarantee policies gives a chances to recover loan in case in the instance of defaulters; in the process of improving recovery of delinquent loans, an effective way is staff incentives; reviews concerning collection policies done on a regular basis result in better state of management of credit; a strict policy is effectual in recovery of debt compared to a moderate policy. The effectiveness of collection policy as a mechanism of credit risk

management applied by RIM Ltd is affirmed by the responses from interviews. The both interviewees affirmed:

“Borrowers are good when they ask for loan; however, once they get it, the heavy work is the follow up and the reinforcement for repayment. Telephone calls recall the borrower by motivating them repaying friendly; when they do not react, RIM Ltd uses enforcement letters. This is because RIM Ltd promotes education to financial use. Finally, when the borrower does not pay the loan, RIM Ltd becomes obliged to sell the collateral or guarantee. The people know that and they fear to lose their collaterals and most of the case they arrange repayment without losing their collaterals” (RIM_Int1 & RIM_Int2).

The effect of Terms of credit on loan performance of RIM Ltd

The fourth objective of this research was to assess the effect of Terms of credit on financial performance of RIM Ltd. The questions were asked in form of five levels Likert scale (where 5 = very great extent; 4 = great extent; 3 = moderate extent; 2 = low extent; 1 = very low extent); and the results are presented in the following tables 13 and 14. Concerning the effect of Terms of credit, the questionnaire designed in form of five levels Likert scale is interpreted as the following: the mean value greater than 3 means high effect; the mean value equal or close to 3 means low effect; and the mean value less than 3 means very low effect.

How RIM Ltd applies terms of credit to improve loan monitoring

Table 8: Extent at which RIM Ltd practices Terms of credit

	N	Min.	Max.	Mean	Std. Dev.
Credit terms at RIM Ltd specify the credit period given to customers	98	4	5	4.59	.494
Credit terms at RIM Ltd specify the interest rates charged on the loans advanced to customers	98	4	5	4.79	.412
Terms of credit at RIM Ltd include the period of time for loans approval	98	4	5	4.90	.304
Terms of credit at RIM Ltd include the period of time for loans approval penalties in case of delaying repayment.	98	4	5	4.92	.275
Average	98	4	5	4.80	.371

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 8 above shows that Credit terms at RIM Ltd specify the credit period given to customers; the interest rates charged on the loans advanced to customers; the period of time for loans approval; and the period of time for loans approval penalties in case of delaying repayment. Each of these variable has a mean value above 4 and close to 5; and the standard deviation is less than 0.5. In overall, the mean value of all those variables is 4.80 which is close to 5 which means very great extent; and the overall standard deviation is 0.371 less than 5 which indicates homogeneity of answers.

Terms of credit impact positively on financial performance of RIM Ltd

Table 9: Effect of Terms of credit on financial performance of RIM Ltd

	N	Min.	Max.	Mean	St.D.
The credit period specified in credit terms at RIM Ltd and given to customers impose pressure on clients for respecting the time to repay.	9	4	5	4.23	.426

The interest rates charged on the loans and specified in credit terms at RIM Ltd overcomes confusion among customers about the amount to repay greater than the amount of the loan received.	9	4	5	4.56	.499
Terms of credit at RIM Ltd include the period of time for loans approval and this retain customers while waiting for approval.	9	4	5	4.74	.438
Terms of credit at RIM Ltd include penalties in case of delaying repayment and this put pressure on customers to repay; as increasing the revenue to RIM Ltd.	9	4	5	4.79	.412
Credit terms are important in ensuring that customers do not default their loan repayment	9	4	5	4.93	.259
Average	9	4	5	4.65	.407

Source: Author’s computation of primary data (2019) using IBM SPSS Statistics 23.

The table 9 above describes effect of terms of credit on the financial performance of RIM Ltd. According to the table, the credit period specified in credit terms at RIM Ltd and given to customers impose pressure on clients for respecting the time to repay; the interest rates charged on the loans and specified in credit terms at RIM Ltd overcome confusion among customers about the amount to repay greater than the amount of the loan received; Terms of credit at RIM Ltd include the period of time for loans approval and this retain customers while waiting for approval; Terms of credit at RIM Ltd include penalties in case of delaying repayment and this put pressure on customers to repay; as increasing the revenue to RIM Ltd; and Credit terms are important in ensuring that customers do not default their loan repayment. All these variables have mean value greater than 4 and the standard deviation less than 0.5. In overall, the mean value for all those variables is 4.65 which is above 4 and means high effect; and the overall standard deviation is 0.407 which is less than 0.5 indicates homogeneity of answers. Terms of credit as an effective tool for credit risk management applied by RIM Ltd was affirmed by the responses from both interviews. They said: “Each loan delivered goes with repay back conditions including the terms of repayment. Interest rates are adjusted for borrowers who repay back before the term ended; for those who repay back exactly in respecting the terms; and for those who repay back late. This encourage borrowers to work having in mind the date for repayment back and the punishments associated to the lack of respect to the defined terms” (RIM_Int2 & RIM_Int1).

The challenges to effective credit risk management practices in RIM Ltd

The fifth objective of this research was to assess the challenges to effective credit risk management practices in RIM Ltd. The management staff of RIM Ltd was asked to outline the challenges they experience in credit risk management. The questions were in form of five levels Likert scale (where 5 = Strongly agree; 4 = Agree; 3 = Uncertain; 2 = Disagree; 1 = Strongly Disagree); and the results are presented in the following tables 16.

Table 10: Challenges of RIM Ltd in practicing Credit Risk Management

	N	Min	Max	Mean	Std. Dev.
Deviation of the projects: The loan is used for a project that it was not requested for	9	5	5	5.00	.000
Fluctuation of business climate such as climate change that affect agricultural businesses	9	5	5	5.00	.000
Some clients do not want working in solidarity and yet RIM Ltd is conceived upon the principle of solidarity	9	5	5	5.00	.000

Clients having also loans in SACCOs and RIM Ltd and concerned SACCO share the same collaterals	9	5	5	5.00	.000
Poor entrepreneurship skills among clients of RIM Ltd	9	5	5	5.00	.000
Valid N (listwise)	9	5	5	5.00	0.000

Source: Author's computation of primary data (2019) using IBM SPSS Statistics 23.

The table 10 above lists five main challenging issues in credit risk management at RIM Ltd. All of them have a mean value of 5.00 which indicate strong agreement; and the standard deviation is 0.000 which mean unanimous responses.

The main challenging issues are: Deviation of the projects where the loan is used for a project that it was not requested for; Fluctuation of business climate such as climate change that affect agricultural businesses; Some clients do not want working in solidarity and yet RIM Ltd is conceived upon the principle of solidarity; Clients having also loans in SACCOs and RIM Ltd and concerned SACCO shares the same collaterals; and Poor entrepreneurship skills among clients RIM Ltd.

CONCLUSION

This research assessed the effect of Credit Risk Management on Financial Performance of Microfinance Institutions using a case of RIM Ltd Kibuye Branch during (2015- 2019). Specifically, the research analyzed the effect of Client appraisal, Credit risk control, Collection policy, and Terms of credit. The research assessed also the challenges to effective Credit Risk Management. The data was collected directly from a sample of 98 clients and 9 staffs of RIM Ltd. A questionnaire designed in form of five levels Likert scale (where the scale of measurement was 5 = very great extent; 4 = great extent; 3 = moderate extent; 2 = low extent; 1 = very low extent) was applied. Qualitative data was collected through open question and structured interview with the Manager of RIM Ltd/ Kibuye Branch and Credit manager. The main findings are the following: (i) Client appraisal exercises high effect on loan acquisition at RIM Ltd ($\mu = 4.87$; $\sigma = 0.0325$); (ii) Credit risk control exercises high effect of on financial performance of RIM Ltd ($\mu = 4.74$; $\sigma = 0.381$). (iii) High effect of collection policy on financial performance of RIM Ltd ($\mu = 5.00$; $\sigma = 0.000$). (iv) Terms of credit exercises high effect on financial performance of RIM Ltd ($\mu = 4.80$; $\sigma = 0.371$). (v) The main challenges outlined by the research include: Deviation of the projects; Fluctuation of business climate; Some clients do not want working in solidarity; Clients having also loans in SACCOs and RIM Ltd; and Poor entrepreneurship skills ($\mu = 5.00$; $\sigma = 0.000$).

Based on findings, the research concludes that RIM Ltd is well positioned in terms of financial management considering four variables analyzed by this research namely: Client appraisal, Credit risk control, collection policy, and Terms of credit. However, RIM Ltd is facing a challenge of poor entrepreneurship skills among its clients which is a negative indicator of performance for RIM Ltd. In fact, having good clients in term of behavior and applying all mechanisms to control the loan offered and yet having unskilled entrepreneurs, this affect the performance of the financial institution. People default due to poor business performance.

The findings from this research are related to the findings of Edwin and Omagwa (2018) on assessment of credit management practices and financial performance of microfinance institutions in Nairobi Central Business District, Kenya. The research found that (i) Appraisal of client is a useful strategy for credit management $4.4 < \mu > 3.5$. (ii) Credit checks on regular basis, interest rates charged, the use of customer credit application forms, imposing loan size limits, penalty for late payment, flexible repayment periods, and credit committees involvement in making decisions regarding credit risk controls are essential in reducing default/credit risk with $4.00 < \mu > 3.66$. (iii) Regular reviews done on collection policies, enforcement of guarantee policies, and staff incentives are effective in improving recovery of delinquent loans $3.91 < \mu > 3.58$.

(iv) Credit terms include the length of time to approve loans, credit terms specify the interest rates charged on the loans advanced to customers, credit terms specify the credit period given to customers and credit terms are evaluated by the position of the client as indicated by the ratio analysis $4.06 < \mu > 3.89$ (Edwin & Omagwa, 2018; Kalu et al., 2018; Karekezi & Butera, 2018).

RECOMMENDATIONS

For facing challenges affecting the loan performance, RIM Ltd is recommended the following:

- Face the deviation of the projects: RIM Ltd should integrate into its policy a set of conditions on list of loan requirements establishing special penalties for any client who deviate the project and fails to repay back.
- Face the challenge of fluctuation of business climate such as climate change that affect agricultural businesses: RIM Ltd should be careful about the agricultural loans. Borrowers of agricultural loan should provide other sources of income in case of agricultural crisis.
- Face some clients who do not want working in solidarity and yet RIM Ltd is conceived upon the principle of solidarity: RIM Ltd should improve its policy and promote individual loans. Nowadays people develop misfit behavior when it is about money. Imposing people covering loss of their members leads to discouraging members and RIM Ltd has several competitors.
- Face clients having also loans in SACCOs: RIM Ltd should integrate in its policy the provision for clearance for loan applicants. Such clearance should be from surrounding SACCOs and other financial institutions.
- Poor entrepreneurship skills among clients RIM Ltd: RIM Ltd should develop a culture of customer care whereby planning trainings for members but also using trainings on entrepreneurship as a marketing strategy.

REFERENCES

1. Agarwal, S., Kigabo, T., Minoiu, C., Presbitero, A., & Silva, A. (2018). Financial Inclusion Under the Microscope, IMF Working Paper, WP/18/208, International Monetary Fund.
2. Agola, T. (2014). Credit Policy and Financial Performance of Microfinance Institutions in Kenya, University of Nairobi.
3. BNR. (2009). Requirements for licensing MFIs/SACCOs and for opening a branch, Kigali.
4. Brown, K., & Moles, P. (2016). Credit Risk Management, Edinburgh Business School Heriot-Watt University, Edinburgh, United Kingdom.
5. Creswell, J. W. (2003). Research design: Qualitative, quantitative, and mixed method approaches. London: Sage Publications, Inc.
6. Edwin, K & Omagwa, J. (2018). Credit Management Practices and Financial Performance of Microfinance Institutions in Nairobi Central Business District, Kenya, International Journal of Scientific and Education Research, Vol. 2, No. 04; 2018.
7. FinScope (2016). Financial Inclusion in Rwanda 2016.
8. Greuning H. & Iqbal Z. (2008). Risk analysis for Islamic banks.
9. Kagoyire, A. & Shukla, J. (2016). Effect of credit management on performance of commercial banks in Rwanda: A Case study of Equity Bank Rwanda Ltd, International Journal of Business and Management Review, Vol.4, No.4, pp.1-12, May 2016.
10. Kalu, E. O., Shieler, B., & Amu, C. U. (2018). Credit Risk Management and Financial Performance of Microfinance Institutions in Kampala, Uganda, DOI: 10.14807/ijmp.v9i1.658.
11. Kaplan, S. (2015). Mixing quantitative and qualitative research, University of Toronto.
12. Karekezi, J. C. & Butera, E. (2018). Credit Risk Management and Loan Performance: A Case of Umurenge Saccos in Kigali City, Rwanda, International Journal of Recent Innovations in Academic Research, Volume-2, Issue-8, December-2018: 131-146.

13. Kowalczyk, D. (2016). Research methodologies: Quantitative, qualitative, and mixed methods. Retrieved from <http://study.com/academy/lesson/research-methodologies-quantitative-qualitative-mixed-method.html>.
14. MINIJUST. (2008). Law n° 40/2008 of 26/08/2008 establishing the organization of Microfinance activities, Kigali.
15. Murphy, M. (2016). Population definitions for comparative surveys in education, Australian Council for Educational Research.
16. Nduwayo, A. (2015). Effect of loan management on the financial performance of commercial bank: The case of Bank of Kigali (B.K), East African Journal of Science and Technology, Vol.5, Issue 1, 2015.
17. Oluwatosin A. V. (2017). Primary Sources of Data and Secondary Sources of Data, Benue State University, Makurdi, DOI: 10.13140/RG.2.2.24292.68481.
18. Owango M., Lukuyu B., Staal S. J., Kenyanjui M., Njubi D. & Thorpe W. (1998). Dairy Cooperatives and Policy Reform in Kenya: Effects of Livestock Service and Milk Market Liberalization, Food Policy, Vol. 23, No. 2, p. 173-185.
19. Peprah, W. K., Agyei, A., & Evans, O. (2017). Ranking the 5C's Of Credit Analysis: Evidence From Ghana Banking Industry, Valley View University.
20. Surbhi, S. (2017). Difference between Validity and Reliability.
21. Techo, V. P. (2016). Research Methods-Quantitative, Qualitative, and Mixed methods, DOI: 10.13140/RG.2.1.1262.4886.
22. The World Bank. (2006). Access for All: Building Inclusive Financial Systems, the International Bank for Reconstruction and Development / the World Bank.
23. Twagirimana, J. M. V. (2013). Credit risk and microfinance institutions in Rwanda: a case study of Inkingi Ltd, Institutional Repository, Mount Kenya University.