

Credit Risk Management during the Pandemic: Insights on Credit Risk Management Strategies Employed by Microfinance Institutions to Combat Credit Risk during Corona Virus Disease 2019 (Covid 19) Pandemic in Zimbabwe

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Abstract

The aim of the study was to analyse the credit risk management employed by Microfinance Institutions in combating credit risk during Corona virus (Covid 19) pandemic in Zimbabwe. This was done by looking at the challenges faced by MFIs in credit risk management during the Covid 19 pandemic and the impact of credit risk management strategies on credit risk in MFIs with operations in Zimbabwe during Covid 19 pandemic. Sequential explanatory research design was adopted. The study also adopted a stratified sampling technique. A total of 270 questionnaires were distributed to employees of regulated MFIs who consisted of credit risk analysts, loan officers and general managers. A total of 40 interviews were administered to the clients of regulated MFIs. The study revealed that MFIs in Zimbabwe mainly lend to self-employed people. The study revealed that the main challenges experienced by MFIs in using credit risk management strategies during Covid 19 pandemic were the loss of income by MFIs clients and Covid 19 induced lockdown which resulted in restrictions in movement and hindered debt collection by MFIs. The study found that MFIs used visits to clients, phone calls, loan restructuring, penalties and threats as methods of enforcing loan repayments during Covid 19 induced lockdown. The multiple regression analysis found that the independent variables namely design of the loan product, screening of clients or expert systems, credit committee, credit policy and management of delinquency were statistically significant at 5% and had a negative impact on credit risk in MFIs during the Covid 19 pandemic. The study recommended that in light of Covid 19, MFIs should integrate technology in their lending activities and they should restructure loans so as to improve repayments from the clients.

Keywords: *Microfinance, Microfinance Institutions (MFIs), Credit Risk, Credit Risk Management Strategies, Delinquency Management and Covid 19.*

1. Introduction

People with low income are shunned by formal financial institutions such as banks (Asian Development Bank, 2020). According to ADB (2020), one of the reasons why the poor and low income people are avoided by formal financial institutions are high cost associated with administering small amount of loans. ADB (2020), Makoni (2014), Mago and Hofisi (2020) and Makina (2009) stated that low income people lack collateral, credit history and have inconsistent cash flows which makes banks

unwilling to lend to them. Mago and Hofisi (2016), Makoni (2014) and Makina (2009) noted that microfinance has come as a solution to solve the financing challenge faced by the poor and low income people. This implies that microfinance has become a means of bridging the gap between banks and low income people through provision of financial services such as credit, savings, and insurance and remittance services. According to Dasgupta (2001), microfinance is the provision of services such as credit, reserves, payment, and protection to the poor people. Ledgerwood (2000) stated that microfinance is the provision of savings, credit, insurance and remittance services to the poor. However, the authors viewed microfinance from the minimalist perspective which states that the poor should be provided with financial services alone. The integrated approach to microfinance states that the poor should be provided with complimentary non-financial services such as education and training so that they can productively use low and reduce loan defaults.

The past two decades has seen a rapid growth (at an average rate of 10% per year) of Microfinance industry in Sub Saharan Africa (Chikalipah, 2017a). Allen, Otchere and Senbet (2011) are of the view that rapid growth of microfinance industry can be explained by failure of people to access financial services from formal financial institutions such as banks. This indicates that microfinance industry is now important in promoting financial inclusion in Sub Saharan Africa. When providing financial services, Microfinance Institutions (MFIs) face risks and one of the risk is credit risk. Therefore, MFIs should come up with ways of combating credit risk. According to Tony and Bart (2009), credit risk is the loss that a lender suffers when a borrower fails to settle debt or when a borrower defaults.

MFIs should guard against credit risk from their loans portfolio. According to Muhammand (2010) , In Pakistan , MFIs are faced with factors such as inappropriate guidelines which compromise credit risk management .Baruah (2018) was of the view that improvement in performance of MFIs in India has been as a result of effective credit risk management practices such as screening of clients , improved ability of MFIs to oversee credit hazards and proper credit risk reporting .Alliance for Financial Inclusion (2021) and ADB (2020) were in agreement that pandemics such as Covid 19 have devastating effects on credit risk management in the microfinance sector . However, Chakma, Coppel, Diallo and Whisson (2017) were in disagreement with AFI (2021) and ADB (2020) by contending that pandemics such as Ebola outbreak did not have devastating effects on the credit risk management in Sierra Leone and Liberian microfinance sectors as the repayment rates were very high (Sierra Leone repayment rates were 70% and Liberia 90% in 2014 during Ebola outbreak). The following table shows the pre Covid 19 Portfolio at Risk (>30) and Portfolio at Risk (>30) during Covid 19 in the Zimbabwe microfinance sector.

Table 1: Zimbabwe Microfinance Sector Portfolio at Risk (>30) ratio (PaR>30 ratio) from December 2015 to December 2020

Year	PaR >30	International Benchmark
31 December 2015	10.72%	5%
31 December 2016	12.06%	5%
31 December 2017	7.34%	5%
31 December 2018	10.51	5%
31 December 2019	10.96	5%
31 December 2020	7.76%	5%

Source: Reserve Bank of Zimbabwe (2020)

From the table above it can be seen that the asset quality of the microfinance sector in Zimbabwe improved from 10.72% in December 2015 (during pre Covid 19 period) to 7.76% in December 2020 (during the Covid 19 pandemic). This implies that the microfinance sector was less affected by credit risk during Covid 19 pandemic as compared to the pre Covid 19 period from December 2015 to December 2019. This might mean that the microfinance sector in Zimbabwe might have improved on their credit risk management strategies during the Covid 19 period. Despite the improvement in asset quality of the microfinance industry in December 2020, PaR > 30 ratio is still above the international benchmark of PaR > 30 ratio of 5%. This shows that credit risk management in the microfinance sector of Zimbabwe still falls short of the international standards.

According to Reserve Bank of Zimbabwe (2020), microfinance sector in Zimbabwe is one of the sectors that was heavily affected by Covid 19 pandemic. The pandemic resulted in job losses and also in the collapse and closure of Micro, Small and Medium Enterprises (MSMEs) (RBZ, 2020). MSMEs are the major clients for MFIs and their closure coupled with loss of people's income through job losses is a heavy blow to credit risk management by MFIs. MFIs in Zimbabwe in response to Covid 19 pandemic have come up with various credit risk management techniques. To the best knowledge of the authors, there is scant evidence on how credit risk management strategies employed by MFIs in Zimbabwe were effective in combating credit risk during Covid 19. Therefore, this study seeks to exploit this knowledge gap by making an analysis on the credit risk strategies employed by MFIs in combating credit risk during Covid 19 pandemic in Zimbabwe. This will be done by looking at the challenges which were faced by MFIs in credit risk management during Covid 19 pandemic and the impact of credit risk management strategies on credit risk.

2. Literature review

2.1 Market for lemons theory

Market for lemon theory was developed by George Akerlof in 1970. The theory states that information asymmetry is a cause of poor quality offering. One party has more information than the other which leads to poor quality offering (lemon). Markets with unequal access to information leads to a lemon (poor quality product offering). This implies that information asymmetry between MFIs, who are lenders and their clients who are borrowers lead to poor quality loan product offering (lemon). MFIs come up with interest to put value to the loan and at the same time clients know whether they are able or not able to repay loans. Unequal distribution of information between the

lender (MFI) and Client (the borrower) may create a poor quality loan product which can result in MFIs suffering from credit risk.

2.2 Credit risk management

Nikolaïdou and Vogiazas (2014) defined credit risk management as coordinated activities to guide and control risks by an institution through the incorporation of important risk management practices and processes in relation to the objective of the institution. Mokosi (2003) views credit risk management as procedures, systems and controls which are put in place by the organization to promote efficient customer payments and hence reducing risk of nonpayment. This implies that an organization should come up with mechanisms which ensure efficient collection of repayment from customers and thus reducing customers' defaults.

2.3 Challenges faced by Microfinance Institutions in combating credit risk during Covid 19 pandemic

According to AFI (2021), microfinance institutions serve people who are at the bottom of the pyramid. The MFIs clients consist of low income people and Micro, Small and Medium Enterprises (MSMEs) (AFI, 2021). AFI (2021) noted that Covid 19 resulted in jobs and income losses. MSMEs saw their revenues and customer base declining. This reduced the capacity of the MFIs borrowers to repay loans. This implies that Covid 19 pandemic resulted in the reduction in the capacity of the MFIs clients to repay loans, leading to an increase in credit risk. RBZ (2020) supported AFI (2021) by stating that the microfinance industry has been heavily affected by Covid 19 pandemic. RBZ (2020) contended that Covid 19 pandemic resulted in the collapse of MSMEs and job losses, resulting in clients of MFIs failing to repay loans. This is because MSMEs and low income people are the clients for MFIs and their financial shocks affect the performance of the MFIs. World Bank Group (2020) was of the view that Covid 19 pandemic has reduced the income of people in fragile and conflict-torn countries such as Iraq and this has increased bad debts and the failure of MFI clients to repay loans. This implies that Covid 19 causes economic crises which dampen the capacity of the MFIs clients to repay the loans.

Chakma et al (2017) were in disagreement with AFI (2021), World Bank Group (2020) and RBZ (2020) by stating that MFIs tend to thrive in an environment with a pandemic. Chakma et al (2017) contended that Ebola outbreak in 2014 in Liberia and Sierra Leone did not have a devastating impact on MFIs such as BRAC. The authors stated that MFIs were resilient to the effects of Ebola outbreak as MFIs such as in Sierra Leone experienced 70% loan repayments and 90% loan repayments in Liberia. This implies that MFIs clients repaid loans in Liberia and Sierra Leone despite the pandemic and this reflects that the pandemic did not have a devastating impact on loan repayment.

According to Grameen Credit Agricole Foundation (2021), in Sub-Saharan Africa, about 63% of MFIs failed to physically meet their clients as a result of Covid 19 pandemic. Covid 19 pandemic resulted in lockdown and regulations which made it difficult for MFIs and their clients to meet (Grameen Credit Agricole Foundation, 2021). Lack of physical contact between MFIs and their clients resulted in MFIs failing to collect repayments and this contributed to credit risk (Grameen Credit Agricole Foundation, 2021). This implies that Covid 19 induced lockdown reduces mobility of both MFI employees and clients, this makes it difficult for the clients to

repay loans. This was supported by a report written by Asian Development Bank (2020) on supporting microfinance and lending partner financial institutions in their Covid 19 and post pandemic , which stated that MFIs found it difficult to collect loan repayment from clients as a results of Covid 19 induced restrictions which limited physical contacts between MFIs and clients .RBZ (2020) also stated that Covid 19 had a negative impact on microfinance industry , as business for MFI clients such as MSMEs were closed and restriction in movements during Covid 19 induced lockdown made it difficult for MFIs to adequately collect repayments from clients .

Shrestha (2020) in Nepal Rastra Bank (2020) working paper no.51 on the impact of Covid 19 on microfinance institutions of Nepal reported that despite Covid 19 induced lockdowns in Nepal, MFIs were resilient to shocks caused by Covid 19 pandemic. Shrestha (2020) stated that the resilience of MFIs in Nepal to shocks as a results of Covid 19 was owing to the relaxation of regulations in the microfinance sector by Nepal Rastra Bank. This implies that there was policy intervention which enabled the MFIs to be resilient to shocks such as credit risk and poor financial performance as a results of Covid 19 pandemic. Chakma et al (2017) was in agreement with Shrestha (2020) that MFIs were resilient to pandemics by stating that despite the outbreak of Ebola in Liberia and Sierra Leone in 2014, the MFIs such as BRAC in both countries posted high loan repayment rates (90% repayment rate in Liberia and 70% repayment rates in Sierra Leone). Chakma et al (2017) and Shrestha (2020) were in disagreement with Nepal Microfinance Bankers' Association (2020) which stated that Covid 19 induced lockdowns decreased loan portfolio quality leading to an increase in the non-performing loans in the microfinance sector of Nepal.

Boateng (2015) was of the view that record keeping in MFIs clients is a problem. The author further stated that poor record keeping by MFIs clients in a major challenge in MFIs client screening process. Ledgerwood (1999) stated that some of the MFIs use manual systems and they relied on physical interaction with clients. This was supported by RBZ (2020) which stated that one of the weakness of MFIs in Zimbabwe during Covid 19 pandemic was lack of technology integration. RBZ (2020) reported that MFIs in Zimbabwe mainly depend on physical visits and meeting with the clients and this posed serious challenges on credit risk management during Covid 19 induced lockdown.

2.4 Credit risk management strategies and credit risk in MFIs

A study which was conducted in Meru County in Kenya by Justus, Diskson and Harrison (2016) using a multi linear regression analysis revealed that there was a strong link between credit risk management practices and credit risk in Savings and Credit Cooperative Societies (SACCOS). The authors further stated that in order to reduce credit risk, SACCOS should come up with strict and efficient credit policies. This implies that strict credit policy is a vehicle for improvement in debt recovery. Lagat, Mugo and Otuya (2013) conducted a study in Nakuru County in Kenya on the analysis of the effects of credit risk management on lending portfolio among savings and credit cooperatives. Regression analysis models were employed and the study revealed that risk analysis, identification, monitoring and mitigation had statistically significant impact on lending portfolios in savings and credit cooperatives. Lagat et al (2013) found that risk evaluation had no statistical significant impact on lending portfolios in savings and credit cooperatives. The authors further contended that respondents who were the members of savings and credit cooperatives stated that

credit monitoring was the most important credit management techniques as it affected lending portfolios by a larger extent.

According to the study by Mulondo (2011) in Uganda, loan appraisal has a positive impact on loan performance in MFIs. This implies that loan appraisal results in the improvement in the loan performance of MFIs. Simba (2017) was of the view that screening of clients reduces loan defaults. Simba (2017) further stated that the use of information on applicant 5Cs namely character, capital, capacity, collateral and conditions is very crucial in reducing credit risk. This means that prospective borrowers should be screened so as to avoid giving loans to the clients who are not deserving. Legderwood (2000) highlighted that loan product design was very important in reducing credit risk in MFIs. The author noted that loan products should be in line with the needs of the clients and should also conform to the financial patterns of the borrowers. Baziba (2005) noted that the loan size should be in line with the repayment capacity of the client in order to reduce credit risk. According to Van Gestel and Baesens (2009), credit committees make decision which put important controls to credit risk. This implies that credit committees are very important for credit risk reduction. Gestel and Baesens (2009) contended that credit committees are very important in putting in place credit controls which reduces exposure of an MFI to credit risk. On the other hand, Gneuning and Batanovic (2000) highlighted the importance of monitoring how a loan is performing in order to reduce credit risk.

3. Data collection and methods

The authors adopted a sequential explanatory research design. A sequential explanatory research design was used because it allowed this study to use a mixed research approach. Stratified sampling technique was adopted. In order to come up with a representative sample of registered and regulated MFIs, the study split 217 regulated MFIs with operations in Zimbabwe into 207 credit only and 8 deposit taking MFIs. Random sampling was used to select clients and MFI employees (credit analyst, loans officers and general managers) from each stratum consisting of credit only and depositing taking MFIs. Data was collected using questionnaires and interviews. A total of 270 questionnaires was distributed to employees of MFIs consisting of credit analysts, loan officers and general managers. A total of 224 questionnaires were returned from the employees of MFIs. A total of 40 interviews were administered to the clients of regulated MFIs (deposit taking and credit only) with operations in Zimbabwe.

Regression Analysis Model: Impact of credit risk management strategies on credit risk

The study used regression analysis to find the impact of credit risk management strategies on credit risk in MFIs in Zimbabwe. The following a multiple regression analysis model was used in the study:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon$$

Y is the dependent variable and it represented credit risk as measured by defaults from customers. β_1 , β_2 , β_3 , β_4 and β_5 are the slopes of the regression analysis model which shows how a percentage change in the independent variable affect the dependent variable. X_1 , X_2 to X_5 are the independent variables, which affects credit risk. X_1 represented design of the loan product, X_2 represented screening of clients or expert systems, X_3 represented credit committee, X_4 represented credit policy and X_5

represented management of delinquency. The error term, ε indicated the factors which affect credit risk which were not included in the regression analysis model.

Multicollinearity test and normality test through Shapiro Wilk Test were conducted in order to avoid spurious regression analysis results. The following table shows the results of the multicollinearity test.

Table 2: Multicollnearity test

Variable	Tolerance	VIF
Design of the loan product	0.356	2.292
Screening of clients or expert system	0.04	2.165
Credit committee	0.032	2.465
Credit polices	0.609	1.511
Management of delinquency	0.500	1.897

Source: Survey Data (2021)

The Variance Inflation Factors (VIFs) for all the explanatory variables namely design of the loan product, screening of clients or expert system, credit committees, credit policies and management of delinquency are less than 10, this implies that there was no problem of multicollinearity.

Table 3: Normality Test (Shapiro Wilk Test)

	Shapiro-Wilk		
	Statistic	Df	Sig.
Credit Risk	.978	223	.095

Source: Survey Data (2021)

The sig value for Shapiro Wilk test is 0.095 and is greater than 0.05. This implies that the data is normally distributed.

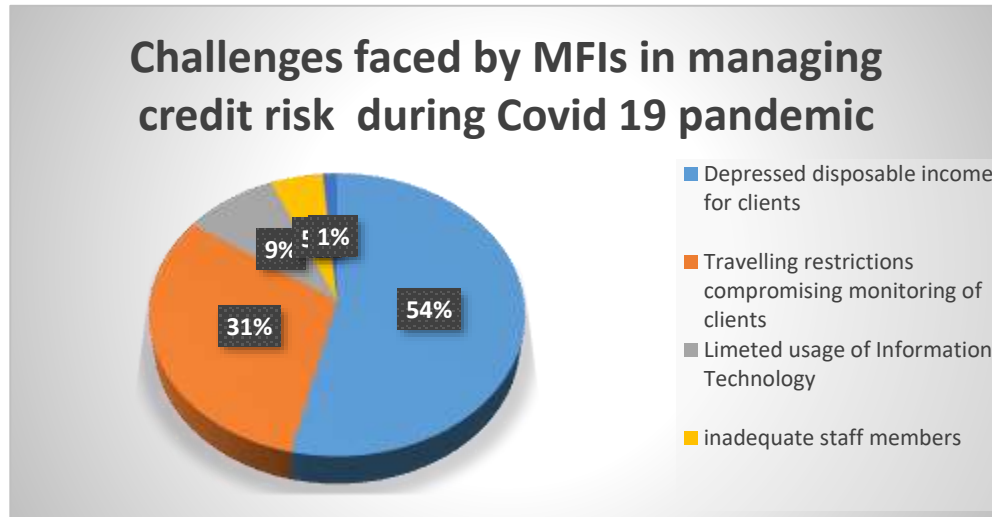
4. Results and discussion

4.1 Occupation of MFI clients

The interviewees who were MFIs clients were asked about their occupation. A total of 33 out of 40 interviewees stated that they were self-employed and running small businesses such as vegetable vending, poultry business, tuck shops, selling of second hand clothes and operating hair salons. A total of 5 interviewees (clients) of MFIs stated that they were formally employed and two interviewees stated that they were not employed. This implies that the clients of MFIs is dominated by people who run small business. This is in agreement with AFI (2021) which stated that MFIs clients consist of low income people and Micro, Small and Medium Enterprises (MSMEs). Most of the clients regardless of their operations stated that Covid 19 resulted in the contraction of the income which affected their loan repayment abilities. This was supported by RBZ (2020) which contended that Covid 19 pandemic resulted in the collapse of MSMEs and job losses. This results in clients of MFIs failing to repay loans.

4.2 Challenges faced by MFIs in combating credit risk during Covid 19 pandemic

The following pie chart shows the views of the MFIs employees on the challenges which were faced by MFIs in combating credit risk during Covid 19 pandemic in Zimbabwe. The following pie chart shows the challenges faced by MFIs in managing credit risk during Covid 19 pandemic.



Source: Survey Data (2021)

Figure 1: Challenges faced by MFIs in combating credit risk during Covid 19 Pandemic

Fifty-four percent (54%) of the respondents who were employees of MFIs stated that the challenge in credit risk management in MFIs during Covid 19 pandemic is depressed incomes of people (clients). Thirty-one percent (31%) of the respondents stated that the challenge in credit risk management during Covid 19 pandemic are travelling restrictions which compromises credit monitoring by MFIs. Nine percent of the respondents stated that limited use of Information and Communication Technology (ICT) by both MFIs and their clients and 5% of the respondents stated that it was the inadequate MFIs staff members which were the major challenges in managing credit risk during Covid 19 pandemic. One percent of the respondents stated that inadequacy of funds during the Covid 19 pandemic made it difficult for the MFIs to implement credit risk management strategies. This implies that Covid 19 pandemic resulted in loss of income for clients of MFIs and harsh lockdown resulted in travelling restrictions which made it difficult for the borrowers to access MFIs branches. This led to increase in loan defaults. This concurs with AFI (2021) who was of the view that Covid 19 resulted in jobs and income losses. MSMEs saw their revenues and customer base declining. This reduced the capacity of the MFIs borrowers to repay loans.

The majority of the interviewees who were the clients (borrowers) from the MFIs stated that the failed to repay loans from the MFIs as a results of harsh lockdown which caused travelling restrictions. They also stated that Covid 19 pandemic resulted in most of them losing jobs and also facing pay cuts which resulted in the decrease in their income levels. This resulted in them failing to repay loans. This is in line with the views of RBZ (2020) which stated that the MFIs clients namely MSMEs and low

income people suffered loss of income as a results of Covid 19 pandemic and this compromised their loan repayment capacity resulting in increase in credit risk.

The interviewees who were clients of MFIs also stated that MFIs could not do anything to assist them in having exemption letters or travelling letters during the lock down. This resulted in borrowers failing to access the MFIs branches and failing to repay loans.

4.3 Methods used by MFIs to recover their outstanding amount from clients during Covid 19

Thirty-four (34) out of forty interviewees (40) who were the clients of the MFIs stated that they were contacted by MFIs through telephones to settle their loan installments and to have loans restructured. The clients further stated that the MFIs visited their places of residents to collect the amount due. One client said that;

During the heavy lockdown in May 2020, I was phoned by the lender (MFI), they asked me whether I have a travelling exemption letter and I informed them that I did not have one. They then told me that the following day they will come to collect loan installment in place of residence.

Another interviewee who was a client of the MFI said the following statement;

Loan officers from the MFIs came to my place of residents to collect instalments, I was able to negotiate a new payment plan. My friends who were not reachable by the lenders during the lockdown were charged with heavy penalties and were threatened with loss of their household property or being sued.

This implies that MFIs used phone calls, visits to clients, penalties and restructuring of loans so as to ensure that clients were able to pay during Covid 19 induced lockdown. These visits to the clients' places of residence might have presented heavy costs to MFIs as the clients were dispersed throughout the country and MFIs incurred heavy costs on fuel and other related travelling expenses.

4.4 Impact of credit risk management strategies employed by MFIs on credit risk during Covid 19 in Zimbabwe

The following sections shows regression analysis on the impact of credit risk management strategies employed on credit risk during Covid 19 pandemic in Zimbabwe.

Table 4: Results Summary: Credit risk management strategies and credit risk in Zimbabwean Microfinance industry

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.852 ^a	.726	.719	.55230

Source: Survey Data (2021)

The R Square, which is the coefficient of determination is 0.726. This imply that credit risk management strategies employed by MFIs in Zimbabwe explain 72.6% of credit risk. This also implies that about 27% of credit risk in Zimbabwean microfinance industry is explained by factors which are outside the regression model.

Table 5: Regression analysis results for Credit risk management strategies and credit risk

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.432	.111		3.913	.000
Design of the loan product	-.033	.042	.042	-.791	.020
Screening of clients	-.254	.133	-.324	-1.912	.037
Availability of Credit committees	-.491	.140	-.613	-3.518	.002
Credit policies	-.169	.037	-.195	-4.620	.005
Management of Delinquency	-.403	.043	-.477	-9.487	.001

Source: Survey Data (2021)

At 5% significance level, all the independent variables namely design of loan products (sig value =0.020), screening of clients (sig value =0.037), availability of credit committees (sig value = 0.002), credit policies (sig value = 0.005) and management of delinquency (sig value = 0.001) are statistically significant. This is because the sig values of all the independent variables are less than 0.05.

Holding other independent variables constant, a percentage improvement in designing of loan products, results in 3.3% decrease in credit risk in Zimbabwean microfinance industry. This is because when the loan product is improved, this results in reduction in bad loans and loan defaults. This is in agreement with Ledgerwood (2000) who stated that loan product design was very important in reducing credit risk in MFIs. The author noted that loan products should be in line with the needs of the clients and should also conform to the financial patterns of the borrowers.

Holding other explanatory variables constant, a percentage increase in the screening of clients' result in 25.4% reduction credit risk in Zimbabwean MFI industry. This is because screening of clients helps in getting rid and elimination of less creditworthy customers. This helps in reducing loan defaults and leads to the decrease in credit risk. This is in line with Simba (2017) who was of the view that screening of clients reduces loan defaults. Simba (2017) further stated that the use of information on applicant 5Cs namely character, capital, capacity, collateral and conditions is very crucial in reducing credit risk. This mean that prospective borrowers should be screened so as to avoid giving loans to the clients who are not deserving. According to the study by Mulondo (2011) in Uganda, loan appraisal has a positive impact on loan performance in MFIs.

An improvement on the availability of credit committees will result in a 49.1% decrease in credit risk in the microfinance industry in Zimbabwe. Credit committees are important in credit risk oversight. This results in improvement in credit policies in MFIs which reduces credit risk. This was supported by Gestel and Baesens (2009) who contended that credit committees are very important in putting in place credit controls which reduce exposure of an MFI to credit risk.

A percentage improvement in credit policies results in a 16.9% decrease in credit risk in microfinance institutions in Zimbabwe. Credit policies help to craft the procedures that should be followed in issuing loans and management of credit. Effective credit policies reduce customers' defaults. This is in agreement with a study which was conducted in Meru County in Kenya by Justus, Diskson and Harrison (2016) using a multi-linear regression analysis revealed that there was a strong link between credit risk management practices and credit risk in Savings and Credit Cooperative Societies (SACCOS). The authors further stated that in order to reduce credit risk, SACCOS should come up with strict and efficient credit policies. This implies that strict credit policy is a vehicle for improvement in debt recovery.

A percentage increase in management of delinquency results in a 40.3% reduction in credit risk in the microfinance industry in Zimbabwe. Management of delinquency ensures that MFIs monitor clients to ensure that they use loans properly and productively. This concurs with Gneuning and Batanovic (2000) who highlighted that the importance of monitoring how a loan is performing in order to reduce credit risk.

5. Conclusion and recommendations

The study indicated that regulated MFIs in Zimbabwe mainly lend to the self-employed people. This implies that MFIs are not serving the core poor in Zimbabwe but the entrepreneur poor. This supports the institutional theory of microfinance which states that MFIs have a goal to maximize profits. The COVID-19 pandemic presented credit management challenges to MFIs in Zimbabwe such as loss of income by clients and travelling restrictions which worked against collection of repayments. MFIs in Zimbabwe used a number of methods to enforce collection of loan repayments such as visits to the places of residence of clients, threats, penalties, and phone calls and loan restructuring. Most of the methods were very costly to MFIs and compromised financial sustainability of the MFIs. The study indicated that at a 5% significance level, credit risk management strategies such as design of loan product, screening of clients, and availability of credit committees, credit policies and management of delinquency had a statistically significant negative impact on credit risk. Based on the research findings and conclusion, the study recommends that:

- 1) Microfinance institutions should embrace the use of technology. MFIs should keep abreast with Information and Communication Technology. ICT is important in MFIs activities especially during these periods of COVID-19, where there are travelling restrictions as a result of COVID-19 induced lockdown.
- 2) Government of Zimbabwe should partner registered and regulated MFIs and subsidise loans. This will enable core poor and marginalized people in Zimbabwe to access loans from MFIs. This will go a long way in supporting one of the pillars of the National Development Strategy one on financial inclusion. This will help Zimbabwe in attaining its vision of an upper middle economy by 2030.

- 3) MFIs should embrace the use on online payments methods such as mobile money services (Ecocash, Onemoney and Telecash) and bank transfers this increases loan repayment collection capacity by MFIs in times when there are travelling restriction.
- 4) MFIs should budget for travelling costs. This is because MFI employees such as loans officers should be able to visit clients in their areas of residents when there is tight Covid 19 induced lockdown. This will enable loan monitoring and collection of outstanding amounts of the clients.
- 5) Reserve Bank of Zimbabwe (RBZ), as the regulator of the microfinance should come up with a financial package to bail out MFIs as they were heavily affected by Covid 19. This will help in stabilizing their capital base and also to make them resilient to further effects of Covid 19 as it seems that Covid 19 pandemic is far from being over.
- 6) MFIs should keep on updating their database of the clients for example changes in contact details and addresses. This helps MFIs in locating their clients whenever there are travelling restrictions as a resulted of the Covid 19 induced lockdown.

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