



Credit Risk Management Practices and Loan Performance of Commercial Banks in Uganda

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Research Article

Abstract

Purpose: The study examined the relationship between Credit Risk Management Practices and Loan Performance of Commercial Banks in Mbarara City. The study covered 19 commercial banks.

Method: A correlational design was used to establish the relationship between different credit risk management practices and Loan Performance in selected commercial banks in the city. The study used a structured questionnaire to collect numerical data from the credit staff and management of 19 commercial banks. Correlation and regression tests to analyze the relationships and effects of Credit risk management and Loan Performance of commercial banks in Mbarara city

Findings: The study found a significant relationship between credit risk identification and loan performance; credit risk assessment and loan performance; credit risk monitoring and loan performance; and credit risk control and loan performance. The study also found that some commercial banks did not have experts to accurately predict credit risks nor evaluate the consequences of the decisions taken by loan officers.

Implication: Banks should source experts who can analyze and predict risks and evaluate their consequences on the bank. The bank should adopt the tool of 5cs of credit management, with this it will develop a good loan book that shall lead to good loan performance.

Limitations: We still don't know clients' perceptions of the different credit risk management practices. Therefore, a qualitative study to assess clients' perception of the credit management practices in commercial banks should be conducted.

Keywords: Credit risk management, loan performance, credit risk assessment, credit risk control, Uganda

1. Introduction

Financial institutions have played a very important role in financing an economy and some studies have appreciated the role of commercial Banks in any economy as conduits of financial resources through savings mobilization (Franklin & Elena, 2012). Due to asymmetric information amongst all parties involved in banking transactions, however, most commercial banks engage in transactions that put banks at the risk of incurring bad debts, which if incurred reduce Loan Performance (Selene, 2017). The losses incurred on loans directly affect Loan Performance (Ssekiziyivu, Mwesigwa, Joseph, & Nabeta, 2017). Commercial banks should devise mechanisms that handle exposures of credit risks that are within the acceptable

standards to increase Loan Performance (Serwadda, 2018). Besides poor credit risk management, most commercial banks today are characterized by increasing loan defaults over time which are expected to have increased further during the Covid-19 pandemic of 2020/2021. In the fate of the Covid-19 pandemic that hit Uganda in 2020, most banks have experienced a whooping in Non-Performing Loans (NPLs) most of which have not been recovered up to now. According to the assessment of credit risk during the Post-COVID era, the Bank of Uganda report 2019/2020 revealed that Loan Performance deteriorated over the financial year ended June 2020 partly driven by the economic shocks brought by the COVID-19 pandemic which resulted in an increase in the ratio of non-performing loans and advances to gross loans from 3.8% in 2019 to 6.0% in 2020 (BoU, 2020). In Uganda, many banks have collapsed due to weaknesses in managing credit risk, which has resulted in the closing of some of them. For example, the Greenland bank that collapsed in 1998 failed to observe its lending policy. Around the time, the bank's loan portfolio was classified as non-performing (Bank of Uganda Report, 1999). Since its fall, several other banks in Uganda have failed due to rising levels of loan defaults. For example, in 2012, the National Bank of Commerce lost its assets to Crane Bank and Bank of Uganda. Notwithstanding her performance in 2012, Crane Bank collapsed in 2016 due to high NPLs that shot from Shs19.36 bn in 2014 to Shs142.3bn (122.9%) in 2015 (Senyonyi, 2018).

Mbarara city is home to regional branches of at least 19 major commercial banks in Uganda including Centenary, Stanbic, ABSA, Guaranty Trust Bank, Diamond Trust Bank, Finance Trust Bank, Equity Bank, DFCU Bank, Opportunity bank, Orient, UBA, Cairo bank, BRAC Uganda Bank, Housing Finance Bank, Bank of Africa Uganda, Bank of Baroda, Tropical Bank, KCB bank and Post bank. While these act as regional branches, they serve a wider market share with diverse clients from the rural, urban, and peri-urban areas of South Western Uganda. With such a wider and diverse market share, most banks are liable to huge credit risk if not well managed, which can result in loan defaults and non-performing loans hence affecting Loan Performance. Though there is no current report by the bank of Uganda to verify this, media reports have consistently reported an outcry from banks on the increasing level of bad debts written off and non-performing loans most of which had been restructured which have resulted in poor Loan Performance (Kasemiire, 2021; URN, 2020). Commercial banks in Uganda have established various credit risk management practices which include credit risk identification, credit assessment, credit monitoring, and credit risk control hoping that this would improve Loan Performance (BoU, 2020). However, with all these practices in place, Uganda's banking sector has experienced poor Loan Performance over the years, where both portfolios at risk and bad debts written off have scaled upwards due to non-performing loans (Bank of Uganda Annual Supervision Reports, 2014-2020). A critical analysis of the Bank of Uganda Annual Supervision Reports (2014-2020) indicates that the asset quality of commercial banks which is measured by Loan Portfolio at Risk (PAT) also referred to as the NPL ratio increased from 4.2% in December 2012 to 5.6% in December 2013, reduced marginally to 4.1% in December 2014 and again rose to 5.3% in December 2015. The NPL ratio further increased greatly to 10.7% in December 2016 and reduced to 5.6% in December 2017 and 3.4% in December 2018. NPL ratio then increased to 4.7 percent in December 2019 and further to 6.0% in 2020 (Bank of Uganda Annual Supervision Reports, 2014-2020). The above deteriorating trend has resulted in several bank failures of once leading banks such as Crane Bank in 2016 after incurring a sharp increase in NPLs of 122.9% from Shs19.36bn in 2014 to Shs142.3bn in 2015 (Senyonyi, 2017). This resulted in a significant loss of about Shs53.7bn in 2014 to Shs3.1bn in 2015 down from a net profit of Shs50.6bn in 2014 (Aine, 2018). Besides reports from the Bank of Uganda, literature is scarce on credit risk management in Uganda and Mbarara city in particular. To contribute to the research gap, this study set the major objective to examine the relationship between Credit Risk Management Practices and Loan Performance of Commercial Banks in Mbarara City. The investigation was guided by

the question: What is the relationship between credit management practices and loan performance of commercial banks in Mbarara city?

2.0 Literature Review

2.1 Credit Risk Management

Bofondi and Gobbi (2003) define risk as the probability that a loss due to a decrease in the credit quality of borrowers would occur. The loss might as well occur when potential customers turn into loan defaulters over time. The bank must respond to a few questions: What is the risk? How heavy is the risk? And can the risk be controlled? Putting the practices of risk management together, Bashabe, Kalu, and Amu (2017) define credit risk management as the possibility that borrowers would default from a loan repayment is minimized and controlled. The approach to managing and mitigating risk using managerial resources constitutes credit risk management. The control and mitigation measures might include rolling in a second party, minimizing the impact of the risk, and taking insurance credit covers a particular risk (Regassa, 2015). For effective and efficient credit risk management, credit institutions ought to consider the nexus between risk and return on investments, to allocate resources appropriately (Ogbol & Okallo, 2013; Clark, 2019; Tanui, Wanyoike, & Ngahu, 2015). Credit risk management is an approach structured to manage uncertainties through identification, assessment, monitoring, and control of credit risk arising from any possibility of default from repayment of a loan (Bashabe, Kalu, & Amu, 2017; Regassa, 2015). Credit Risk identification reveals or determines the probable risks organizations may face as well as conditions under which these risks may arise (Maliisa, 2013). The concept relates to getting in-depth information about the client through in-depth interviews, credit reference bureaus (CRBs), stress testing, simulation, and expert judgment (Kattel, 2015). The identification of any risks needs a holistic approach to help identify the risk classifications and the origins of such credit risk (Buhman, Kekre, & Singhal, 2005). The credit risk management process starts with identifying risks (Kleindorfer & Saad, 2005). Credit Risk assessment is the analysis conducted on prospective credit customer information to ascertain whether the customer can meet his obligations according to the terms of trade (Cole, Glenn, & Brent, 2005; Masheta, 2018). The concept also relates to assessment by branch managers on the inspection of financial statements, establishing assessment standards, scoring credits, risk rating, and analyzing the clients' (5cs) capital, condition, capacity, character, and collateral (Gakure, Ngugi, Ndwiga, & Waithaka, 2012). Credit analysis revolves around the 5cs. This involves factors such as the income of the applicants, repayment capacity, employment history, monthly expenditure, the years on have taken in service, and other factors that affect the rating credit of the borrowers (Kithinji, 2010).

Credit risk monitoring involves a comprehensive analysis of the entire loan portfolio performance regularly and the entire detailed loan portfolio analysis that identifies cases of the possibility of impaired loans (Onaolapo, 2012). Credit risk monitoring provides relevant data for management to make an informed judgment regarding the quality of the portfolio of the loan (Prakash & Poudel, 2012). Monitoring tasks are performed primarily by the credit risk unit division in close collaboration with the business that acts as the first line of defense, rating analysis units, and the department of portfolio management (Deutsche Bank, 2011). Credit risk control hedges and neutralizes the financial risks that may result from one or various transactions (Holton, 2003). The concept relates to the collateralization of loans, taking insurance against loans, and diversification of loan portfolios since these are the most widely used practices by banks to control credit risks (Rukundo, 2018). Credit control is a financial control system used by businesses especially those in the manufacturing sector to ensure that sales are made in liquid resources or cash (Dasah, 2012). Taking into account the complexity and extensive nature of work in the banking sector, a well-disciplined and very strong credit control system would represent a good foundation for credit risk management as it guides any credit decisions (Ndyagyenda, 2020).

2.2 Loan performance

Loan performance relates to the performance in terms of whether customers pay in time or default and more generally in terms of meeting their obligations in terms of principle or interest payment or any other obligations defined in the Loan Contract (agreement) (Taylor, 2019). Worldwide, poor loan performance is at the heart of many commercial banks' failures around the globe. These include Northern Rock Bank in the United Kingdom (O'Connell, 2017; Congdon, Eisenbeis, Kaufman, & Llewellyn, 2009), Anglo Irish Bank in Ireland which had NPLs worth €87 million (Carswell, 2013; Chu, 2014), Pioneer Mutual Bank in Scotland (Williams, 2021), Twiga Bancorp in Tanzania (Tanzania Invest, 2018; Kajubi, 2019), Imperial and Chase Banks in Kenya (Masinde, 2016; Guguyu, 2020), and Crane Bank Ltd in Uganda (Business Focus Report, 2017; Aine, 2018) to mention but a few. Consequently, many banks employ mechanisms that minimize loan losses associated with credit risk but also improve loan performance (Kinyuai, 2017). Around the 1960s, the search for competitive advantage across the globe explains the genesis of credit risk management (Brindley, 2004). Back in the 1980s, banking institutions had no risk management departments and only the bank managers had the experience and authority in ruling on risky transactions (Hull, Nelken, & White, 2005). In the 1990s, banks started setting up departments that would manage risks and were responsible for risk measurement other than risk management. In a scenario where all the authority of decision-making has been left to the bank head, it makes credit risk powerless (Economic Intelligence Unit Report, 2009). Credit risk management became a booming industry in the late 1990s, which resulted in the volatility of financial markets and derivatives, financial losses in banks that lacked credit risk management systems (Bofondi & Gobbi, 2003). In Africa, rising credit risks in commercial banks which began in the early 20th century have threatened the performance of loans in banks across the Sub-Saharan Region (Jean-Philippe, 2016). Likewise, credit risk management became prominent in recent years, particularly after the traumatic events and bank failures caused by rising non-performing loans (Bodo, 2018). A related study shows that 23% of outstanding loans in Nigeria, Angola, and Ghana's banking sector were classified as non-performing by 2017 compared to 17% in 2015 (Nsobilla, 2015). In Kenya, NPLs have been cited as the primary cause of bank failures since 2009 (Nasieku, 2014). Recently, the portfolio at Risk (PAR) of banks in Kenya increased from 12.7 percent in 2019 to 13.1 % in 2020 due to poor credit risk management practices during the COVID-19 era (Central Bank of Kenya, 2020). When loans become non-performing, banks' portfolios at risk increase which reduces Loan Performance (Bodo, 2018). Various studies related to credit risk management and portfolio performance in the banking sector in Nepal (Kattel, 2015), Nigeria (Ogbol & Okallo, 2013), Kenya (Kinyuai, 2017; Mbiti, Lugogo, & Koech, 2018; Kariuki, 2017; Mutua R. K., 2016) and Uganda (Serwadda, 2018).

2.3 Credit Risk Identification and Loan Performance of Commercial Banks

The examination of credit risk management practices used in microfinance organizations in Kenya found that most of the organizations investigated identified risks, monitored risks, and assessed risks in their practices (Kalui & Kiawa, 2015). This study however was based on rural microfinance institutions and not commercial banks. A study on the impact of credit risk identification on the performance of finances in commercial Banks in Burundi by (Remy & Njeru, 2020) established that the influence of credit risk identification has shown success in banks. The effectiveness of risk identification greatly helps to benefit the bank and the presence of the effectiveness of the risk tracking system measurements comes to ensure efficient performances of finances in the bank. The findings by Remy are consistent with (Mutua D. M., 2014) who posits that banks which apply modern approaches, especially credit that easily discover the mistakes in the early stages. However, Gakure, Ngugi, Ndwiga, & Waithaka, (2012) does not find any inferential tests conducted to verify the relationship between risk identification and performance, and the study was based on only descriptive analysis. Hence, there is a need for a more correlational study to verify

this claim. Kimotho & Gekara (2016) revealed a positive association between credit risk identification and financial performance. However, their study looked at financial performance in Kenya yet in this study, Loan Performance is the center of the study.

2.4 Credit Risk Assessment and Loan Performance of Commercial Banks

Tanui, Wanyoike, and Ngahu (2015) found that SACCOs that have improved credit administration are likely to register improvements in their financial performance. This study however was conducted in SACCOs in Kenya and may not apply to the commercial banks in Uganda. Firms with robust processes to assess risk are more likely to lose a sale than sell to a customer who is likely to default easily (Paul & Boden, 2008). This suggests that the knowledge and expertise in credit management facilitate the practicality of making decisions on who should take the loan. Studying MFIs in Vietnam, Ayayi (2011) shows that sound credit risk assessment is a precursor to high return on assets. The author noted that MFIs which implemented sound credit assessment were likely to have low credit risk, decreased loans write-off ratio, and increased portfolio quality. However, this study focused on Vietnamese microfinance institutions which create a contextual gap in Uganda. Maliisa (2013) confirmed a positive link between Risk assessment and the performance of the Housing Finance Bank in Uganda. The study suggested that assessing data and classifying credit risks are likely to determine financial performance. The study revealed that Housing Finance Bank had undertaken substantial efforts to estimate credit risk by the bank's credit risk analysis and had used a reliable information system that provided a rich credit risk database with the ability to assess risk concentration. However, this study concentrated on only one bank; Housing Finance bank which may not be justified for other banks.

2.5 Credit Monitoring and Loan Performance of Commercial Banks

Mazumder and Ahmad (2010) posit that financial institutions are faced with similar challenges of credit monitoring because after the approval of the loan and drawing down is allowed, the watching over the loan should therefore be continuous. Kariuki (2017) stresses that a more stringent credit monitoring procedure would lead to ensuring that only creditworthy customers access loans. The author recommends that banks should be stringent enough to ensure that their loans do not go to persons who cannot repay. Instead of keeping financial performance to a minimum, the bank aim at outstanding performance. As observed by (Karugu & Ntoiti, 2015), credit monitoring accounts for 47.8 percent of the changes in profitability. This would help the bank management to suggest possible strategies for reducing such a high risk which prevents non-performing loans and bad debts thereby reducing profitability. Drawing examples from Uganda, (Kalu, Shieler, & Amu, 2018) report that frequent, timely, accurate, and informative reports can enhance monitoring actions, especially when they are distributed to appropriate individuals. Suggestively, effective risk monitoring systems should ensure that reporting and review structures allow for effective identification and assessment controls.

2.6 Credit Risk Control and Loan Performance of Commercial Banks

The use of management control systems to reduce firm loss, especially when the likelihood of the event occurring has small financial impacts (Sheehan, 2010). Otherwise, firms should better avoid those activities which involve a likelihood of losses and a large magnitude of occurring. On the other hand, activities that are least likely to occur, yet bear significant impacts on the firm's finances should be managed by transferring part of the risk to a third party. However, evidence from the Housing finance Bank in Uganda shows that the use of collateral, credit limits, credit risk in the determination of interest and the credit review committees in the bank's in the practices of controlling credit risk is efficient in the mitigation of credit risks (Maliisa, 2013). Related literature reveals that commercial banks with collateral and credit protection policies increase their profitability while controlling credit losses would register improvements in their profitability (Mbiti, Lugogo, & Koech, 2018). The authors revealed that Credit Risk Management Practices

strategies like collateral and credit protection had significantly affected financial stability compared to credit rationing and contract evaluation. Credit protection, in particular, remains the best technique for handling risks of clients who operate in diverse client risk scenarios. Kalu, Shieler, & Amu (2018) show that diversification is primary in controlling credit risk and improving financial performance. The technique is most appropriate in situations where the loan portfolio could be diversified to various sectors in the economy, which have many benefits compared to others.

3.0 Methodology

A correlational design was used to establish the relationship between different credit risk management practices and Loan Performance in selected commercial banks in Mbarara city. The study used a quantitative approach to collect numeric and categorical data using structured questionnaires to generate inferential statistics (correlations and regressions). The quantitative method had been used because it produces results that are easy to summarize, compare, generalize and confirm whether the hypotheses hold or are false. The unit of analysis comprised 19 commercial banks in Mbarara Town while the unit of inquiry included the credit staff and management in each selected bank. This was because they are the ones who have basic knowledge of credit risk management and Loan Performance in the bank. In each of the 19 banks in Mbarara, the researcher used purposive sampling to select 1 branch manager and 1 credit manager while loans officers/credit officers were randomly selected after being subjected to sampling. The population size was 153 people comprising 19 branch managers, 19 branches credit A sample size of 110 respondents was chosen and was determined using Yamane (1967)'s sample size determination formula. In the sampling procedure, purposive sampling was used to select managers (branch manager, credit manager) from each cluster/bank.

A questionnaire method was used in data collection from all credit staff and managers of the selected commercial banks. The researcher measured Credit risk management and Loan Performance using an ordinal scale based on the 5-point Likert scale. This was a structured questionnaire, based on close-ended questions. The questions were designed on a 5-point Likert scale. Both credit risk management practices and Loan Performance were measured as follows: Strongly Agree = 5, Agree = 4, Not sure = 3, disagree = 2, and strongly disagree = 1. These forms of questions are standardized and easy to analyze. The questionnaire was tested for validity and reliability. Data from questionnaires were validated before entering into Statistical Package for Social Scientists (SPSS) to produce quantitative information which conducted the correlation and regression tests to analyze the relationships and effects of Credit risk management and Loan Performance of commercial banks in Mbarara city.

4.0 Results

Findings on participants' Biodata indicate that men were the majority of the participants (54.4%) compared to women (45.6%). Most of the participants indicated a bachelors' degree as their highest level of education (56.7%). In terms of the position held in the bank, 34.4% indicated any other and were the majority. When asked about the years participants worked with the current bank, 34.4% of the participants had worked with their banks for more than 10 years.

4.1 Correlation tests

This study used the correlation coefficient to establish the degree of the relationship between credit risk management and loan performance. The correlation coefficient which ranges from zero to one shows the nature and strength of the relationship. Strong correlation coefficients tend toward one while weak correlation coefficients tend toward zero. Table 1 shows the correlation output.

Table 1: Correlations

		Credit Risk Identification	Credit Risk Assessment	Credit Risk Monitoring	Credit Risk Control	Loan Performance
Credit Risk Identification	Pearson Correlation	1				
	Sig. (2-tailed)					
Credit Risk Assessment	Pearson Correlation	.568(**)	1			
	Sig. (2-tailed)	.000				
Credit Risk Monitoring	Pearson Correlation	.604(**)	.382(**)	1		
	Sig. (2-tailed)	.000	.000			
Credit Risk Control	Pearson Correlation	.536(**)	.532(**)	.624(**)	1	
	Sig. (2-tailed)	.000	.000	.000		
Loan Performance	Pearson Correlation	.601(**)	.635(**)	.673(**)	.684(**)	1
	Sig. (2-tailed)	.000	.000	.000	.000	

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

Table 1 above shows is a positive strong relationship between credit risk identification and loan performance ($r = .601$; sig. $<.05$). The significant value which is less than 0.05 further suggests that credit risk identification and loan performance are linearly related. This means that the more banking institutions identify potential risks the higher they are likely to register performing loans. The relationship between credit risk assessment and loan performance ($r = .635$; sig. $<.05$) was strong and positive. The significant value which was less than 0.005 suggests that the credit risk assessment and loan performance are linearly related. The statistics imply that banking institutions that carry out credit risk assessments are likely to register performing loans. The relationship between credit risk monitoring and loan performance ($r = .673$; sig. $<.05$) is strong and positive. The significant value which is less than 0.05 suggests that credit risk monitoring and loan performance are linearly related. The statistics imply that the more banking institutions vary their credit risk monitoring practices, the higher the chances of registering performing loans. The relationship between credit risk control and loan performance ($r = .684$; sig. $<.05$) is strong and positive. A variation in credit risk control is associated with a strong and positive variation in loan performance. The significant value which is less than 0.05 suggests that credit risk control and loan performance are linearly related. The statistics imply that banking institutions that pay attention to their credit risk controls are likely to register superior loan performance than those that do not.

4.2 Regression tests

Regression analysis gives a mathematical relationship between the variable which are independent and dependent. Credit risk management was set as the independent variable whereas the dependent variable was loan performance. The beta coefficients show the proportion of the dependent variable explained by each of the predictor variables. Given the current study, credit risk identification, credit risk assessment, credit risk monitoring, and credit risk controls were used as the predictor variables. The collinearity statistics show the extent to which the independent predictors are interconnected. Table 2 shows the regression output.

Table 2: Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.570	.303		1.881	.063		
	Credit Risk Identification	.072	.094	.070	.774	.441	.499	2.006
	Credit Risk Assessment	.312	.078	.326	3.971	.000	.598	1.671
	Credit Risk Monitoring	.287	.074	.346	3.868	.000	.504	1.985
	Credit Risk Control	.245	.085	.257	2.883	.005	.506	1.976
R = .811; R Square = .657; Error = .33421								

a Dependent Variable: Loan Performance

From the table above, collinearity statistics suggest the absence of multicollinearity issues given that (Tolerance >.000) and the Variance Inflation Factor (VIF < 2.000) for almost all the variables. The absence of multicollinearity supports the relevancy of the model. The researcher found a strong and positive relationship between credit risk management and loan performance ($r = .811$; $\text{sig.} < .05$). This means that any changes in credit risk management as employed by banking institutions would be associated with positive and strong changes in loan performance. According to ($R \text{ Square} = .657$), credit risk management accounts for 65.7% of the variations in loan performance. There is a very strong contribution of credit risk management to loan performance, though some factors external to the current study are likely to account for 34.3% of the variations in loan performance. This suggests that banks in Uganda that conduct credit risk management are more likely to register good loan performance than those which do not. From the specific predictors of loan performance, the researcher found out that a unit-change in credit risk identification (Beta = .070; $\text{sig.} > .05$) accounts for about 7% of the variations in loan performance. However, the effect is not significant. A unit change in credit risk assessment (Beta = .326; $\text{sig.} < .05$) accounts for 32.6% of the variations in loan performance. Moreover, the effect is significant. Banks that ensure credit risk assessment would most likely register superior loan performance. This study found that the banks take time to A unit change in credit risk monitoring (Beta = .346; $\text{sig.} < .05$) accounts for 34.6% of the variations in loan performance, this effect is significant. Banking institutions that ensure credit risk monitoring are likely to register superior loan performance. Banks that have taken a stride in credit risk monitoring examine the ways how their clients would use the loans, not outside the agreed purpose would therefore recover their loans more than those that do it but with laxity. Secondly, banks that reexamine their clients' profiles from time to time and ensure that changes in clients' credit quality change from time to time would always stand out from others in terms of performance. A unit change in credit risk controls (Beta = .257; $\text{sig.} < .05$) accounts for 25.7% of the variations in loan performance and this effect is significant. These statistics generally suggest that banking institutions that adhere to credit risk assessments, credit risk monitoring, and credit risk controls are likely to register superior loan performance than those which do not. Banking institutions that have stringent credit risk controls are likely to register superior loan performance than those banks whose credit risk controls are not stringent. Stringent credit controls take the form of pledging collateral securities that are equivalent to the loans granted, limiting the ceiling of the loan an individual client can take, and ensuring borrowers can pay their loans.

5.0 Discussion

The study established a strong but non-significant relationship between credit risk identification and loan performance. Banking institutions that ensure proper credit identification are least likely to register superior loan performance. The findings disagree with those (Kimotho & Gekara, 2016) who found a positive association between credit risk identification and financial performance in Kenya. Similarly, the findings disagree with (Remy & Njeru, 2020) established that effective risk identification greatly helps to benefit the bank and the presence of an effective risk tracking system of the risk measurement ensures efficient financial performance in the bank. These studies that provide evidence from the East African region are empirical support of credit risk identification. The aspect of credit risk identification among banks in Uganda takes the form of analyzing scenarios that might reduce the chances of recovering loans and written standard procedures that loan officers follow to identify risks. While many banks consider collateral security as a major form of credit risk control, most of the collateral loses value with inflation and economic changes. In addition, banks have performed at the expense of their clients' collateral. The essence of the collateral is not to freeze the clients' collateral but to safeguard the loan. However, most banks in Uganda have seized the securities of their clients for failure to pay their loans. Additionally, most of the collateral requirements set by the banks in Uganda are too high for the clients to manage. This hinders many would-be clients from applying for loans to boost their businesses. The study found a significant effect of credit risk assessment on loan performance. Banks take time to analyze clients' cash flow statements and other financial records and make a thorough assessment of the key risks that clients face and the strategies they have put in place to mitigate the risks. The findings agree with (Ayayi, 2012) who shows that sound credit risk assessment is a precursor to high return on assets in MFIs in Vietnam. The significant relationship between credit risk assessment and loan performance agrees with (Maliisa, 2013) who confirmed a positive link between risk assessment and performance of Housing Finance Banka in Uganda. The study suggested that assessing data and classifying credit risks are likely to financial performance. The study found that credit risk monitoring significantly affects loan performance. Banking institutions that ensure credit risk monitoring are likely to register superior loan performance. Banks that have taken a stride in credit risk monitoring examine the ways how their clients would use the loans, not outside the agreed purpose would therefore recover their loans more than those that do it but with laxity. Secondly, banks that reexamine their clients' profiles from time to time and ensure that changes in clients' credit quality change from time to time would always stand out from others in terms of performance. The findings support (Mazumder & Ahmad, 2010) who shows that after approving loans most financial institutions fail to observe the loans due to a lack of adequate resources infrastructures. The success of loan performance rests on-field operations. Loan officers ought to move to the field to check on the persons to whom loans were dispersed. This helps the bank to ensure that loans are used for none other than the purposes for which they were secured. In Uganda, it has been observed severally, even among large borrowers for one to use loan money for luxurious purchases other than boosting their businesses. This increases the chances of defaulting and low recovery. The study found a significant effect of credit controls on loan performance. Banking institutions that have stringent credit risk controls are likely to register superior loan performance than those banks whose credit risk controls are not stringent. Stringent credit controls take the form of pledging collateral securities that are equivalent to the loans granted, limiting the ceiling of the loan an individual client can take, and ensuring borrowers can pay their loans. The findings agree with those (Sheehan, 2010) who recommends the use of management control systems to reduce firm loss, especially when the likelihood of the event occurring has small financial impacts. Firms should better avoid those activities, which involve a likelihood of losses and a large magnitude of occurring. Similarly, (Mbiti, Lugogo, & Koech, 2018) found that commercial banks that ask for collateral and credit protection increase their profitability by controlling credit losses. Credit risk management practices strategies like collateral and credit protection have significant effects on financial stability.

6.0 Conclusion and policy implication

The study examined the relationship between credit risk management and loan performance of commercial banks in Mbarara city. Based on 90 respondents, this study has found a significant and strong relationship between credit risk management and loan performance in commercial banks in Mbarara city. In generality, commercial banks in Uganda that adhere to proper credit risk management have better loan performance than those which do not. Findings on credit risk identification, credit risk monitoring, credit risk assessment and credit risk control as credit risk management practices all confirm that loan performance improved with proper implementation of credit risk management. Commercial banks that periodically analyze such situations may reduce the probability of recovering the loans and their interests have performing loans. However, few banks have experts in place that rightly predict the occurrence of credit risks. This might put the bank at credit risk. Commercial banks in Uganda which assess the cash flow statements, financial records, and the mitigation strategies of their clients against risks have performed loans. However, few banks use credit scores to analyze their customers' actions that are likely to prevent loan defaults. Commercial banks, which examine how clients used their loans or spend their credit have performing loans. However, few commercial banks have independent departments to review their clients' profiles. The effectiveness of credit risk controls comes when the banks can look out for collateral securities from clients before extending loans. However, banks tend to bend these controls and extend credit to people that are merely trusted on grounds of their faithfulness over time. This study has established that some commercial banks do not have experts to accurately predict credit risks nor evaluate the consequences of the decisions taken by loan officers. The study found that the loan departments in some banks are not independent enough to review loans and supervise loans as required. Some commercial banks tend to extend credit to clients based on trust and faithfulness, which compromises the credit controls of the bank. We still do not know how different clients respond to the different credit risk management practices. Banks should therefore source experts who can analyze and predict risks and evaluate their consequences on the bank. Banks should empower the loan department by extending training to them so that they are equipped with the capacity of reviewing loans and making the right decisions at the branches. The bank should adopt the tool of 5cs (capacity, collateral, condition, character, and capital) of credit management and with this, it would develop a good loan book that shall lead to good loan performance. Mbarara is one of the newly established cities in Uganda and has attracted many commercial banks to the area. This is the first empirical study to provide empirical-based research on credit management practices in Mbarara city, Uganda.

7.0 Limitations and direction for future research

We still don't know clients' perceptions of the different credit risk management practices. Therefore, a qualitative study to assess clients' perception of the credit management practices in commercial banks should be conducted. We still do not know the extent to which clients' approval of faithfulness and trust compromise the strength of the credit controls. There is also a need for a study on the effectiveness of trust and faithfulness in assessing the creditworthiness of credit clients in commercial banks.

Authors' Contribution: Francis Agaba developed the concept, came up with the draft research paper, and collected the data. Caleb Tamwesigire improved on the concept and developed the methodology. Marus Eton developed the tools, analyzed the data, and wrote the final report. All three authors read and approved the work.

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