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EFFECT OF CREDIT RISK MANAGEMENT PRACTICES ON NON-PERFORMING LOAN IN DEPOSIT TAKING SACCOS IN UPPER EASTERN REGION KENYA

Njagi Dickson Muriungi[1], Dr. Kimani E. Maina[2]

[1] MBA Scholar, School of Business, Jomo Kenyatta University of Agriculture and Technology
[2] Lecturer, Department of Economics, Accounting and Finance, School of Business, Jomo Kenyatta University of Agriculture and Technology

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Abstract

The SACCO's subsector remains a significant player in the provision of financial services to the Kenya household and small business segment. SACCOs have been making tremendous efforts to grow to a vibrant financial actor. Nevertheless, the challenge associated with nonperforming loans, which have remained relatively unchanged for the last few years, have continued to weigh them down. Generally, this study sought to examine effect of credit risk management practices on nonperforming loan in deposit-taking SACCOs in Upper Eastern Region Kenya. The specific objectives were to determine the effect of credit information sharing, collateralization, credit appraisal guidelines and loan monitoring on nonperforming loan in deposit taking SACCOs in Upper Eastern. The study adopted a descriptive survey research design. The target population was all deposit-taking SACCOs in Kenya with the accessible population being 22 deposit-taking SACCOs in Upper Eastern Region. The study adopted a census survey since the accessible population was small. Primary data was collected through questionnaires. Pilot test was conducted to assess validity and reliability of the research instrument. The data collected was analyzed using descriptive and inferential statistics. The results of the study were presented in figures and tables. Pearson correlation analysis was used in this study to determine the relationship between the dependent and the independent variable. The results indicated that credit information sharing, collateralization, credit appraisal guidelines and loan monitoring affected nonperforming loans in deposit-taking SACCOs in Upper Eastern Region Kenya. The study recommended that the government enact regulations to facilitate credit information share among the SACCOs while the SACCOs should encourage their loan officers to issue more loans under collateral and the SACCOs formulate and adhere to loan appraisal guidelines and monitor the repayment of loans advanced to customers.

Keywords: *Credit Information Sharing; Collateralization; Credit Appraisal; Loan Monitoring; Non-Performing Loan; Deposit Taking*

Introduction

The ultimate goal of every financial institution is to boost its financial performance. Performance determines how competitive an organization is, how best it addresses customer needs and finances its operations. The primary method in which financial institutions enhance performance is therefore through risk mitigation, especially credit risk, which is the single largest factor affecting the soundness of financial institutions and the financial system as a whole (CBK, 2019). High non-performing loans (NPL) levels ultimately have a negative impact on institutions' lending to the economy, as a result of the balance sheet, profitability, and capital constraints faced by banks with high NPL levels (European Central Bank, 2017). Nonperforming loans negatively affect a bank's lending capacity due to diminished core capital and reduce profits through increased provisions (Nyasaka 2017).

Management of credit risk requires special attention not only within the banking industry but also among SACCOs, (Sasra Report, 2019). It is estimated that co-operatives have employed 250 million people all over the world, co-operatives have an estimated global turnover of 2.2 trillion US Dollars, Co-operative generate 2.2 trillion US$ in turnover (Kenya Financial Stability Report, 2019). Nevertheless, their existence is threatened by high exposure to credit risk as well as operational risks (the risk of direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events, which affect their performance (Alfred 2011). Credit risk undermines SACCOs' ability to provide loans to help members better their living standards (Olamide et al., 2015).

In Kenya, about 19.35% of the total adult population are members of DTSs (SASRA Report, 2019), depicting the level of popularity of SACCOs as alternative financial service providers to many Kenyans. To enhance their survival, SACCOs have continued to scale up and maintain strong capital adequacy levels with abundant liquidity and earning capacity to weather shocks and vulnerabilities. Nevertheless, they have continued to grapple with high levels of nonperforming loans which undermine their financial performance and survival.

NPLs among DTS increasing from 5.2 percent in 2016 to 9.1 percent in June 2020. Relatedly, SACCOs restructured loans totaling Ksh 4.7 billion in 3 months to June 2020 (Financial Stability Report, 2019), reflecting the difficulties members were facing in loan repayment. Failure to contain NPLs among the SACCOs could lead to reduced profitability, erode shareholders' wealth, loss in tax revenue to the government and at worst, the collapse of the entire sub-sector. The persistent relatively high levels of NPLs among SACCOs necessitate reassessment on the effect of credit risk management practices adopted by the SACCOs in managing credit risk. It is against this background that this study sought to evaluate the effect of credit risk management practices on nonperforming loans in deposit taking SACCOs in Upper Eastern Region Kenya.

Credit Information Sharing and Nonperforming Loan

Various studies have been done to analyze the relationship between credit information sharing and financial performance and by extension nonperforming loans. Kioko (2014) studied credit information sharing influence on the performance of licensed deposit taking SACCO businesses in Kenya. The findings of the study were that capital adequacy, asset quality, management

quality, earnings and liquidity; all credit information sharing performance variables are key to good performing financial institutions. Kimondo et al., (2015) examined SACCO credit information sharing capacity in Kenya. The methodology used encompassed the selection of the SACCOs for the survey. The study revealed that despite the CIS's intention to enhance credit appraisal and deepen credit inclusion in the economy, some SACCOs are apprehensive about the possible unintended consequence of a backlash by some members who may feel uncomfortable with disclosure of their information to third parties.

Dierkes et al., (2012) studied business credit information sharing and default risk of private firms in Germany. The findings of the study were that business credit information sharing substantially improves the accuracy of aggregate and firm-specific default predictions. The value of soft business credit information sharing is higher for smaller and less distant firms and that the higher the value of credit business information the lower the realized default rates.

Kerage (2015) examined credit information sharing and the performance of commercial banks in Kenya. The findings indicated a positive relationship between credit information sharing and the performance of the banking sector. The relationship was that as the banks share credit information about the borrowers, their respective performance improved. This study covered commercial banks, licensed under the Banking Act where the law governing credit information sharing is different from that of SACCOs. Mwangi (2015) studied the effect of credit information sharing on loan performance among savings and credit cooperative societies in Nairobi County. The findings of the study showed that CIS greatly affected the loan performance by reducing loan defaults. SACCOs that used CRB for a long-time experienced case of less loan default. The study found out that credit information sharing reduces cases of loan default and hence improved loan performance.

Collateralization and Nonperforming Loan

Imeraj (2014) investigated the role of collateral in bank lending in Albanian. The researcher derived some numerical data regarding the problem loans for which the banks had sequestrated the collaterals and had put them on sale, the type of collateral mostly accepted and the more problematic collaterals. The findings indicated that when banks repossess collaterals, they are not interested in keeping these collaterals. Therefore, a very important step is the auctioning of these collaterals. The study concluded that collateral provides little benefit to banks even in good times, because of the difficulty in valuing and realizing collateral. The conclusion presumes that a bank will always recover the loan through the pledged collateral. In many cases, borrowers who pledge some security strive to repay the loan for fear of losing the pledged assets. This in itself serves to mitigate credit risk exposure and thus improving financial performance, a position the researcher seems to have missed.

Karanja (2015) assessed the influence of collateral requirements on SACCOs credit accessibility in Imenti north Sub-County, Kenya. The study findings revealed that there is a positive significant relationship between collateral requirements and credit accessibility in SACCOs. The researcher's recommendation that collateral, in relation to credit accessibility is importation while also noting that collateral requirement limit the ability of clients' credit accessibility is a

contradiction. The study exclusively focused on influence of collateral on credit accessibility but did not determine the resultant impact on loan performance or non-performance, what this study seeks to establish.

Bagaka (2015) evaluated the influence of collaterals used by small and medium microenterprises on loan performance of commercial banks in Kisii County, Kenya. From the findings it was observed above 33.85% of client who use inventories as collaterals are more likely to default, and at a distant 6% of clients who used inventories were able to repay their loans to completion without default. He noted that clients who use inventories highly default because no serious personal attachments given to such securities unlike motor vehicles, land and buildings. The study was conducted on SMEs, the findings for which may not apply to SACCOs.

Arito (2008) studied the effect of collateral on SME performance in Japan. The study indicated the increase in profitability and reduction in riskiness of borrowers that provide collateral to lenders are more sizeable than of borrowers that do not. The study concluded that collateralized borrowers improve their performance by their own managerial effort or by refraining from asset substitution. The study was conducted in a developed country where economic environment is different from Kenya's. Rahman et al., (2016) studied collateral and SME financing in Bangladesh and found a significant difference between banks fixed assets collateral. The survey result suggests that SMEs are unstable and difficult to evaluate their future business prospects. The research noted that a strong management board may reduce the collateral requirements for SMEs while increasing the stability of SMEs through better performance may lessen the collateral burden from the small banks. The study was conducted on SMEs the findings for which do not address the question the effect of collateralization on NPL.

Credit Appraisal Guidelines and Nonperforming Loan

Chepkorir (2011) evaluated credit appraisal techniques adopted by Kenyan commercial banks in lending to small and medium-sized enterprises in Kenya. The research findings indicated that strength of income statements and the balance sheet, long histories, quality of accounts receivable and inventory and history of the principal owner were of great importance when making lending decision. The study was an evaluation of credit appraisal techniques, which does not address the question of effects of techniques on NPL levels. Osei (2015) examined credit appraisal process and repayment of loan at GN bank, a case study of upper and lower Denkyira. The findings reveal that the adjustment of loan amounts contribute greatly to loan default. Customers are not able to undertake the intended project when the loan amount is adjusted.

Njeru (2016) analyzed the effectiveness of credit appraisal on loan performance of commercial banks in Kenya. The study found that banks used different appraisal methods which include CRB (91%) and 5 Cs (character, collateral, condition, capital and capacity). Credit appraisal was found to influence performance of commercial banks as it helped to distinguish between good and poor payers, given their credit history and credit score. The study can be replicated with SACCOs to establish the relationship. Aliija (2015) studied the effect of loan appraisal process management on credit performance in microfinance institutions (MFIs) in Uganda. The study was carried out on MFIs in Fort portal municipality in Kabarole. Research findings revealed that

majority of respondents used 5C's followed by credit scoring model and credit reference bureaus. The identified client appraisal factors result revealed that poor test of accuracy and credit worthiness of a client had greatest contribution to non-loan repayment.

Loan Monitoring and Nonperforming Loan

Instefjord et al., (2014) studied loan monitoring and bank risk in Tokyo. The paper was done for Research Institute of Economy, Trade and Industry in Japan. The study found the banks may fail to invest in dynamic monitoring systems it may increase bank risk, for which the bank is penalized through regulation. Banks had increased incentives to hold risky loans when they can monitor the loans dynamically in real-time. The researchers concluded that the profitability of improved monitoring must be balanced against the increase in the cost of regulation, and showed that the trade-off was always negative.

Fatta et al., (2017) did a comparative study on credit monitoring practices in selected banks of Nepal. The researcher observed that monitoring was an integral part of credit risk management practices and that it was the responsibility of each credit officer to undertake ongoing credit monitoring for their allocated portfolio of the clients. The sample size used in this study was however considered too small for empirical study. Nguyen, (2016) studied credit risk control for loan products in commercial banks a case of Bank for Investment and Development of Vietnam. The researcher noted that some methods used by the bank to control risk include regularly contact with customers to update customers' loan profile, follow the payment schedule of borrowers and remind customers before maturity, monitor and supervise customers from their portfolio.

Migwi (2013) analyzed credit monitoring and recovery strategies adopted by commercial banks in Kenya. The study had established that all the banks monitor loans to ensure proper payment. The study further established that the banks strictly monitor the account operation of their customers for early corrective measures in case of default. The study covered heads of department at head office, ignoring management at other levels (branches) where implementation of the decisions takes place. Makori (2017) assessed the effect of credit appraisal practices and credit monitoring on profitability of deposit taking SACCOs in Nairobi County. The research findings indicated that credit appraisal practices, credit monitoring, debt collection practices and credit risk governance practices have a positive effect on the financial profitability of the SACCOs. The study can be replicated in another region and specifically analyze effect of loan monitoring on NPLs.

Theoretical framework

This section reviewed the theoretical basis of the study. This study was based on theory of information asymmetry; secured lending and borrower's riskiness; credit scorecards; and credit risk theory. The concept of asymmetric information was introduced by Akerlof in 1970. The basic argument of the theory is that in many markets the buyer uses some market statistic to measure the value of a class of goods. Thus, the buyer sees the average of the whole market while the seller has more intimate knowledge of a specific item. Akerlof argues that this information asymmetry gives the seller an incentive to sell goods of less than the average market

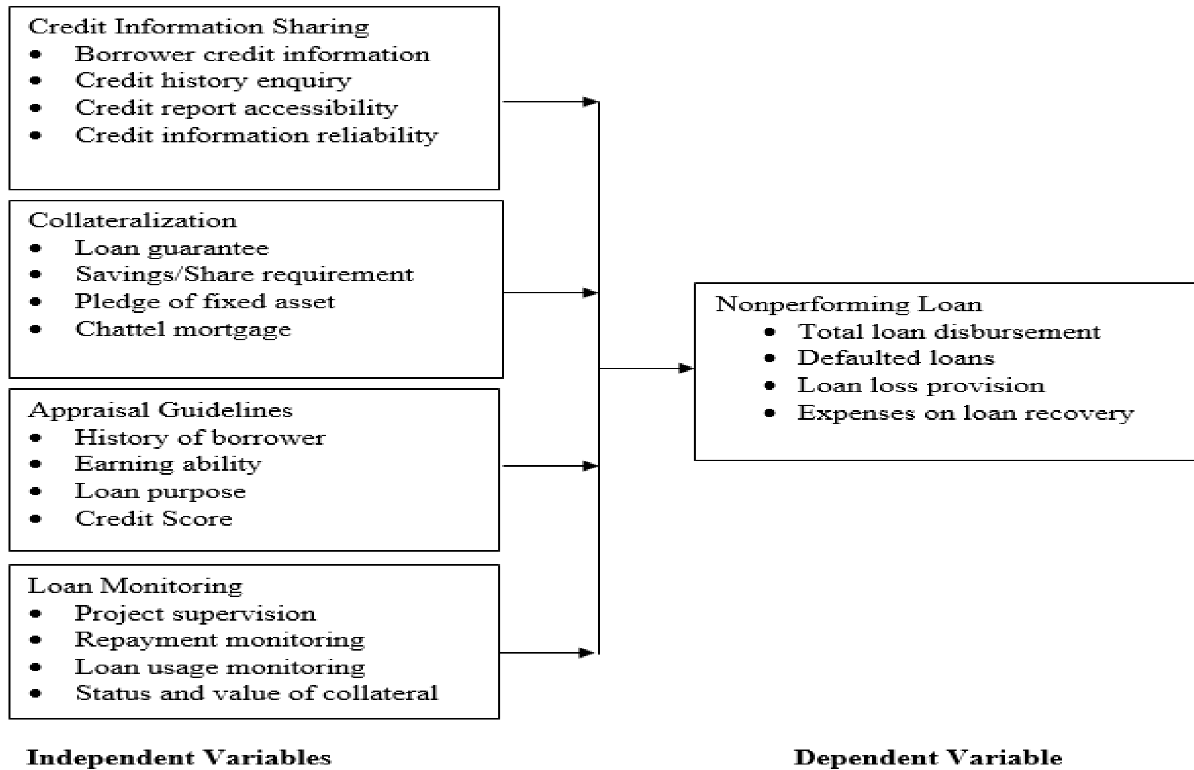
quality (Auronen, 2003). Chelly et al., (2014) consider credit risk as all consecutive losses incurred by a bank as a result of non-compliance with commitments to repay funds received by borrowers.

Theoretical model of secured lending and borrowers' riskiness was developed by Pozzolo in 2003. The theory argues that banks cover higher credit risk loans associated to riskier borrower by simultaneously requiring a guarantee and charging higher interest rates. Bank charge higher interest rates on secured loans than unsecured loans based on assumption that the value of guarantee is lower for the bank than for the entrepreneur that posts it. The theory further holds that banks normally require guarantees on loans that appear riskier because they are larger, granted to borrowers of smaller size and less capitalized Amour, (2008) expounded on the theory by viewing security as 'hostage' offered by debtor to a creditor to demonstrate debtors' commitment to repayment.

Credit Scorecards theory was proposed by Altman in 1968 to provide a quantitative measurement of the likelihood that a customer will display a defined behaviour (for example loan default) with respect to their current or proposed credit position with a lender. The theory uses data from clients who default on their loans plus observations on a large number of clients who have defaulted. Credit scoring is a quantitative method used to measure the probability that a loan applicant or even existing borrower will default. Low scores correspond to very high risk and high scores indicate almost no risk (Kazi, 2016). Credit scoring model can therefore be used to predict probability of default for new applicant using the same observable characteristics (Altman, 1968).

Credit risk theory was introduced by Merton in 1974. The theory, otherwise known as structural theory holds that the default event derives from a firm's asset evolution modelled by a diffusion process with constant parameters (Longstaff et al., 1995). The theory views default as put option available when circumstance is economically attractive to exercise the default option (Mabonga, 2017). The theory recognizes that default can happen throughout the life of a corporate bond and not only in in its maturity (Muturi, 2015). Accordingly, credit risk involves suffering of financial loss due to decline in the creditworthiness of a counterparty in a financial transaction; the risk that the counterparty will not fulfil contractual obligation (Adriana, 2012). Credit risk theory identifies the need for monitoring of the borrower's creditworthiness, which essentially include monitoring of loan repayment patterns and whether the loan is used for the intended purposes, which will help the borrower repay the principal amount plus the interest.

Conceptual Framework



Methodology

This study adopted a descriptive survey design that aims at exploring the effect of credit risk management practices on nonperforming loans of DTS in Upper Eastern Region Kenya. In this study, the target population was management employees of all DTSs in Kenya while the accessible population was management employees in 22 deposit taking SACCOs in Upper Eastern Region, Kenya. Therefore, accessible population comprised of eighty-eight respondents, four from each SACCO, purposively drawn from Credit and Finance departments.

A census collects information about every member of the population. Data was therefore collected from management employees from all DTS in Upper Eastern region in Kenya. From each of the SACCO, four respondents were picked for the study, who included the Credit Manager, Finance Manager and two Credit Officers. The respondents were selected purposively; those believed to have had vital information that addressed the research objectives. Primary data was collected through semi structured questionnaires which were given out to the respondents.

To ensure effectiveness of questionnaire, a pre-test was carried out. The questionnaire was piloted with a small representative sample. The study therefore selected a pilot group of 8 respondents from outside the accessible population to test the reliability and validity of the research instrument. In this study, reliability of the questionnaire was tested by use of Cronbach's alpha coefficient where a threshold of value of 0.7 and above was used. To test the validity of the questionnaire, experts' judgment was sought.

In order to collect data from the SACCO, a letter of introduction was obtained from the university. Further, permission was sought from the SACCOs' management to collect data from their organization. Thereafter, the questionnaires were administered through drop and pick method. Completed questionnaires were collected directly from the respondents thus allowing for the researcher to clarify any issues that were not clear to the respondents. Descriptive and inferential statistics was to analyze the data collected. Multiple linear regression analysis was used to assess the relationship between the independent variables and the dependent variable.

Results and Discussions

The finding from the correlation analysis indicated that credit information sharing had a negative and significant relationship with nonperforming loans in deposit taking SACCOs (r=-0.395, p-value =0.000). Further, the results revealed that collateralization practices of deposit taking SACCOS had a negative but significant relationship with nonperforming loans in deposit taking SACCOs (r=-0.623, p value=0.000). Additionally, the results revealed that credit appraisal practices had negative significant relationship with nonperforming loans in Deposit Taking SACCOs (r=-0.380, p value=0.001). The results also revealed that loan monitoring practices had a negative significant relationship with nonperforming loans in Deposit Taking SACCOs (r=-0.255, p value=0.006).

Regression analysis results in show that credit management practices had a statistical significance nonperforming loan in deposit taking SACCOs in in Upper Eastern region. Results also show that increase in credit information sharing, collateralization, credit appraisal guidelines and loan monitoring practices would reduce the level of non-performing loans. This shows that credit risk management practices have a negative effect on non-performing loans of SACCOs in the upper eastern region of Kenya.

T-statistics were used to test the hypothesis. Credit information sharing practices showed a significant t-value (p=0.007<0.05), hence, the null hypothesis which stated that credit information sharing has no effect on nonperforming loan in deposit-taking SACCOs in Upper Eastern Region Kenya is therefore rejected.

Collateralization practices showed a significant t-value (p=0.001<0.05), hence, the null hypothesis which stated that collateralization has no effect on nonperforming loan in deposit-taking SACCOs in Upper Eastern Region Kenya is, therefore, rejected.

Credit appraisal guidelines showed a significant t-value (p=0.012<0.05), hence, the null hypothesis which stated that credit appraisal guidelines have no effect on nonperforming loans in deposit-taking SACCOs in Upper Eastern Region Kenya is therefore rejected.

Loan monitoring practices showed a significant t-value (p=0.007<0.05, hence, the null hypothesis which stated that loan monitoring has no effect on nonperforming loans in deposit-taking SACCOs in Upper Eastern Region Kenya is, therefore, not accepted. Therefore, we can conclude that credit information sharing, collateralization, credit appraisal guidelines and loan monitoring all have an effect on nonperforming loan in deposit taking SACCOs in Upper Eastern Region Kenya.

Conclusions

From the findings, the study concludes that collateralization practices have minimized the non-performing loans in deposit-taking SACCOs in the Upper Eastern Region of Kenya. From the correlation analysis, the study concludes that there exists a negative and significant relationship between collateralization and nonperforming loans.

The study further concludes that credit appraisal guidelines affect nonperforming loans of deposit taking SACCOs in Upper Eastern Region, Kenya. A negative and significant relationship exists between credit appraisal guidelines and nonperforming loans of deposit-taking SACCOs in Upper Eastern Region Kenya.

The study also concludes that loan monitoring affect nonperforming loans of deposit-taking SACCOs in Upper Eastern Region Kenya. There exists a negative and a significant relationship between loan monitoring practices and nonperforming loans of deposit-taking SACCOs in Upper Eastern Region Kenya.

Finally, deposit taking SACCOs in Upper Eastern Region Kenya have been experiencing increasing loan disbursements. Non-performing loans in Deposit-Taking SACCOs in Upper Eastern Region Kenya have been on an upward trend with increasing loan loss provisions and loan recovery costs.

Recommendations

Deposit taking SACCOs' management make efforts to share customer credit information and ascertain credit history of a potential borrower through making reference to credit reports before issuing the loan. The SACCOs should also enhance credit sharing among themselves which would enable them to reduce the level of non-performing loans.

The study recommends that SACCOs' management should encourage their loan officers to issue more loans under collateral, particularly loan guarantees. SACCOs should commit more resources to monitor loan repayment patterns to pick indicators of default in the earliest opportunity and initiate the recovery process. The study also recommends that SACCOs should organize seminars or workshops to can sensitize their customers on need for use of collaterals when making loan accessing loans

The study recommends that SACCOs develop credit appraisal to govern and standardized processes of appraising and approving loan applications. The SACCOs should also consider the customers' income and the loan purpose before issuing any loan to the borrowers. The government introduce a regulation that will makes it a compulsory for the SACCOs to share credit information and make it mandatory for all SACCOs to share and ascertain credit status of the borrowers to deal with the risk of multiple loaning.

The study recommends that similar studies should be in other firms other than deposit taking SACCOs. Further the study was restricted to Upper Eastern Region Kenya. This study recommends further studies in a different area other than Upper Eastern Region. The study recommends that further study should be conducted to establish other variables that contribute to the remaining 51.1% change in non-performing loans of deposit taking SACCOs in Upper Eastern Region Kenya.

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