American International Journal of Business Management (AIJBM)
ISSN- 2379-106X, www.aijbm.com Volume 5, Issue 10 (October-2022), PP 55-60

Control Activities and Credit Risk in Registered Deposit Taking Saccos in Western Kenya

Janet Mongina[1], Denis Ouma[2], Joseph Otsyulah[3]
[1](Department of Accounting and Finance, Kaimosi Friends University, Kenya)
[2](Department of Business Administration and Management Sciences, Kaimosi Friends University, Kenya)
[3](Department of Business Administration and Management Sciences, Kaimosi Friends University, Kenya)
*Corresponding Author: Janet Mongina[1]

ABSTRACT : *The study's key objective was to determine the influence of control activities on credit risk of deposit- taking SACCOs in Western Kenya. The study was guided by agency theory, contingency theory and modern portfolio theory. The target population consisted of 212 respondents from the seven registered deposit taking SACCOs. A descriptive research design was adopted in this study. Simple random sampling was used to determine the sample size. Both primary and secondary data were used. Primary data was collected using questionnaires while secondary data was obtained from audited financial statements of the SACCOs. Data was analyzed using Statistical Package for Social Sciences (SPSS). Statistics were generated using both descriptive and inferential methods. Descriptive data included; frequencies and percentages. Diagnostic tests comprised of; normality, autocorrelation, multicollinearity and heteroscedasticity. Inferential statistics consisted of correlation analysis, multiple regression analysis and ANOVA. Control activities had a significant negative relationship with credit risk. It was recommended that SACCOs review their policies and procedures regularly to meet the current market trends and that human resource management department should work towards ensuring that segregation of duties is done.*

KEYWORDS –*Control Activities, Credit Risk, Saccos, Internal Control Systems*

I. INTRODUCTION

Internal control systems have become indispensable both in the private and public sectors in today's world due to the evolution of sophisticated business practices using technology, and the increasing size of business units. Internal control systems are the techniques that a company employs to manage risk and reduce the likelihood of fraud. Both large and small organizations have in-built control systems to run their businesses efficiently and effectively so as to achieve their goals(Mogunde, 2016).

Control activities are actions established through policies, and procedures that help ensure that the direction of management to reduce risks to the achievement of objectives, is carried out. Control activities are carried out at all levels of the entity and can be preventive or detective in nature and can include a series of manual and automated actions. Control activities typically consist of two elements: a policy that sets out what needs to be done, and a procedure for implementing the policy. Further actions taken to deal with identified deviations are also essential to control operations (COSO, 2013).

The Kenyan banking sector faces challenges that arise due to poor loan rates, poor risk management policies or gradual economic neglect and other factors that lower a bank's credit rating. In May 2013, the Kenyan Central Bank issued an update emphasizing the importance of internal control systems in reducing risk and achieving business goals. Kenya's banking industry has adopted guidelines, practices and processes influenced by boards of directors, executives and other department heads to safeguard assets, manage risks, and meet the banks' objectives (Agang, 2020).

The SACCO movement in Kenya offers members and non-members alternatives for savings, credit, and investment. Loans made to members account for a sizable portion of a Sacco's assets. Some of these loans become non-performing and are declared bad debts which causes negative economic impact in these SACCOs. The NPL is currently increasing, which has numerous negative effects on the sustainability of SACCO profitability, ability to service debt, and ability to raise more capital (Ntoiti & Jagongo, 2021).

1.1 Statement of the Problem

Internal control systems are guidelines established by management to guard the assets of the firm and guarantee operational effectiveness. Internal control systems are essentially meant to serve as the first line of defence in safeguarding assets, reducing risks and preventing and detecting errors and fraud. Despite the implementation of internal controls, SACCOs are still highly exposed to credit risk with non- performing loans (NPLs) increasing from 5.2% in 2016 to 9.1% in June 2020 (The Kenya Financial Stability Report, 2020). Loans are the most important earning assets of deposit taking SACCOs and the quality of loan portfolios must be jealously guarded. The overall amount of unremitted money as of September 2020 was an astounding Kshs

5.04 billion, up from Kshs 3.87 billion as of September 2019, and the biggest percentage of these funds, Kshs 4.31 billion, were owed to deposit-taking SACCOs for loan repayment (SASRA, 2020). Credit risk has led SACCOs to have liquidity problems which in turn leads to some members withdrawing from the SACCOs and eventual deregistration of some SACCOs. Studies concerning internal control systems and credit risk have mainly focused on commercial banks yet credit risk is a major concern to many SACCOs in Kenya. Therefore, the need to establish the influence of internal control systems on credit risk in registered deposit taking SACCOs in Western Kenya.

1.2 Main Objective

The main objective of the study was to find the influence of control activities on credit risk of registered deposit-taking SACCOs in Western Kenya.

II. LITERATURE REVIEW

2.1 Empirical Review

Katumba (2021) sought to explore the credit risk management practices of savings and credit cooperative societies: a case of Uganda Revenue Authority SACCO. A qualitative research design was used in the study. The research design was cross- sectional and descriptive in nature. The target population was the management of the Uganda Revenue Authority SACCO while the sample size were five respondents who were chosen purposively. Structured interview guides were used to collect primary data. Analysis of data was done using descriptive and content analysis techniques. The findings revealed that revealed that following the debt collection policy, adherence to security policies in place which are control activities being best credit risk management practices.

Amunabi and Koori (2018) examined credit risk management and loan portfolio performance among deposit taking savings and credit co-operative societies in Nairobi City, Kenya. A descriptive research design was adopted with a target population of 51 registered SACCOs in Nairobi as at 2016. 45 respondents formed the sample size, and they were selected through the use of systematic random selection. Primary data was collected using questionnaires. Data obtained was summarized, edited and analyzed using SPSS software. The findings established that credit policies which are part of control activities in SACCOs had a positive but insignificant effect on loan portfolio performance in SACCOs.

Shungula, Shavulimo and Kambura (2017) researched on Internal Determinants of Credit Risk Management of Deposit Taking SACCOs in Nairobi County. the study employed a descriptive research design. Respondents were chosen using the stratified random sampling technique. The target population consisted of all branch managers and section heads in all deposit taking SACCOs in Nairobi County. Structured questionnaires were used to collect primary data. Data collected was summarized using descriptive statistics. Data was analyzed using SPPS and data presented in form of tables and graphs. The findings showed that credit policy was statistically significant and was vital for the SACCOs in the study in managing risk.

2.2 Theoretical Review

The research made use of a number of different theoretical frameworks; Agency theory, Contingency theory and Modern portfolio theory.

2.2.1 Agency Theory

This theory was first postulated by Jensen and Meckling (1976). When one or more people (the principal(s)) choose another person (the agent) to act on their behalf and give that person authority to make decisions on their behalf, the principal(s) and agent(s) have formed a legally binding agency relationship (Jensen & Meckling, 1976).

Agency theory states that management implements internal audits and other internal control mechanisms to inform shareholders that management is effectively carrying out its duty to maximize shareholders' wealth. According to the theory, contracts between management, shareholders, and employees regulate connections between them and are what motivate organizational actions (Mihret, 2014).

Agency theory is relevant as a useful theoretical framework for the study of the internal control function. Internal controls are not only explained, but also the significant role they play in reducing agency costs, the agency problem and information asymmetry. From an agency perspective, internal control systems can reduce information asymmetry through boards which can be used as monitoring devices for shareholder interests. Agency problem and costs can be reduced by employing the internal audit function of ensuring compliance, accuracy of an organization's reports and reduction of credit risks.

2.2.2 Contingency Theory

This theory was put forward by Fiedler in 1976. The theory suggests that effective leadership depends not only on the style used by the leader, but also on control over the situation. Organization's reports and reduction of credit risks. It is an approach to the study of organizational behaviour in which explanations are given as to how contingent factors such as technology, culture and the external environment influence the design and function of organizations. The underlying concept of the contingent theory of leadership is that effective

leadership is contingent on the situation, the task, and the people involved and that different situations require different types of leaders (Fiedler & Mahar, 1979).

This theory's basic tenet is that organizational performance emerges from matching organizational traits, such as structure, to contingent characteristics representing the organization's position. Organizations seek to attain fit because the fit of an organization's characteristics to contingencies leads to high performance. The idea underlying the Committee of Sponsoring Organizations' (COSO) and similar frameworks is that the degree to which an organization needs internal control will vary based on its specific circumstances. This gives credibility to the contingency theory's central tenet, which states that in choosing a control system, each organization must account for its unique set of circumstances (Jokipii, 2009).

This theory investigates the contingent traits businesses decide to incorporate into their internal control framework and whether doing so leads to a more positive view of the management's ability to exercise control. The form of the relationship is generally of relevance to contingency theory, which also makes the assumption that a consistent relationship is more successful than an inconsistent one. Similarly, according to contingency theory, internal controls are one of the sub-systems that make up an organization, and their relationship to credit risk makes them one of those sub-systems (Mu'azu, 2017).

2.2.3 Modern Portfolio Theory

Harry Markowitz devised this theory in 1952. The Modern Portfolio Theory is a method that can be used by risk-averse investors to construct diversified portfolios that maximize their returns without unacceptable levels of risk.The theory was pegged on two concepts; Each investor seeks to optimize returns across all degrees of risk, and does so by spreading their holdings over a variety of unrelated securities. The theory operates on the assumption that investors are risk averse and prefer low-risk portfolios for a given level of return. Under this assumption, investors will only make high-risk investments if they can expect higher returns (Markowitz, 1952).

Modern Portfolio Theory states that diversification reduces risk but does not eliminate it entirely. It states that an investor should maximize expected portfolio return while minimizing portfolio variance of return. It is not a security's own risk that is important to an investor but rather the contribution the security makes to the variance of his entire portfolio. This theory gives better results in this model than traditional approaches based on credit scores and expert methods. The loan decision was solely the responsibility of the loan officer in the bank office. To establish a customer's creditworthiness, these officers employed intuition and other rating techniques (Agang, 2020).

This theory is applicable to SACCOs since they have the ability to diversify a sizable amount of credit risk, provided that there is some imperfect correlation between the returns on different assets and the returns that are adjusted for default risk. Managers can establish a set of efficient frontier portfolios by diversifying loans whose returns are either inversely linked with those in the current portfolio or positively correlated with those in the current portfolio but still low. The most effective way for SACCO managers to decrease credit risk is by selecting portfolios that are on the efficient frontier.

III. RESEARCH METHODOLOGY

The study used a descriptive research design which was important as it helps to identify the traits of the variables of interest which will help to gather more information about the target population.The target population consisted of 212 respondents from all registered deposit taking SACCOs in Western Kenya which are 7 in total from the four counties which make up the western region; Kakamega, Bungoma, Busia and Vihiga counties.Primary data was collected using questionnaires while Secondary data was obtained from the SACCOs financial statements in 2021.The questionnaires were distributed and collected after two weeks of issuance. This allowed the respondents enough time to respond to the questions. Financial statements from the SACCOs were also requested for secondary data for the financial year 2020/2021.

The regression model is as shown;

$Y= a+ \beta\_1 X_1 + e$

Where;

Y- Credit Risk

a – Regression constant

X_1 - Control activities

β_1 = Measure of sensitivity of variable x to changes in y

e = estimated error of the regression model

IV. RESULTS AND FINDINGS

The section comprises of descriptive and inferential statistics. The findings are presented using tables.

4.1 Descriptive Statistics

On the question on whether segregation of duties reduces credit risk, Feedback obtained from the respondents revealed that SACCOs assign duties to different people in the organization and there is division of

work. This ensures that every employee has a designated place of work and helps employees to focus on their work which in turn increases the profits of the SACCO.

The respondents were asked whether credit policies and procedures were adhered to in credit appraisals. The results indicated that in majority of the SACCOs, credit policies were in place and were used in evaluating a customer's creditworthiness before issuing loans. These policies and procedures help customers to know how much they are able to borrow, interest rates to be used, monthly instalments and the period they are expected to pay back.

Concerning segregation of duties, 61.9% of 118 respondents either agreed or disagreed, 18.6% were neutral while 19.5% either disagreed or strongly disagreed. These findings affirm that deposit taking SACCOs in Western Kenya have segregated the duties in the SACCOs to various personnel.

In response to whether security measures are in place to prevent access of all information by one individual, majority 63.6% agreed or strongly agreed, 225 disagreed while 14.4% disagreed. Most of the SACCOs have set up security rights and authorization measures that ensure that only authorized personnel can access the information.

Results obtained from the study concerning measures regarding approval depicted that 33.9% of the respondents strongly agreed, 28.8% agreed, 25.4% remained neutral, 10.2% disagreed while 1.7% strongly disagreed. Majority of the SACCOs have guidelines which are followed before approvals are made. This therefore means that there are clear policies and procedures of approval in the SACCOs.

Out of the 118 respondents, 76 (64.4%) either agreed or strongly agreed, 24 (20.3%) were neutral, 18 (15.3%) either disagreed or strongly disagreed. A large number of SACCOs follow credit policies both from the SACCO and those instituted by SACCO Societies Regulatory Authority (SASRA).

More than 50% of the respondents either agreed or strongly agreed thus implying that SACCOs have implemented strict security measures and controls such as passwords and other relevant measures to restrict information access to authorized personnel only.

Majority of the SACCOs in western Kenya have variance reports on provision of bad debts that give detailed explanations. The justification as to why a certain amount has been set aside as the provision is given and any variances between the actual and budgeted are shown.

The overall results show that variance reports were generated and played a major role in reduction of risk. SACCOs use these reports to analyze their credit risk levels and work to ensure that the variances are reduced and that they meet their estimated targets. The descriptive statistics of control activities are summarized in Table 4.

Table 4.1: Descriptive Statistics

Statement	SA	A	N	D	SD
Segregation of Duties Reduces Default Risk	61	33	13	8	3
Credit Policies and Procedures Are Adhered to in Credit Appraisals	34	46	21	13	4
There Is Segregation of Duties in Your SACCO	34	39	22	16	7
Security Measures are in Place to Prevent Access of All Information from the Institution by One Individual		30	45	26	17
Measures are in Place to Ensure That Regulations Regarding Approval Are Adhered to.	40	34	30	12	2
Strict Adherence to Credit Policy Procedures Reduces Default Risk	29	47	24	16	2
Restrictions to Access of All Information Enhances Reduction of Risk	28	39	38	11	2
Variance Reports on Provision for Bad Debts Are Generated with Explanations	23	41	32	20	2
Analysis of Variance Reports Enhances Reduction of Credit Risk	39	26	30	19	4

4.2 Inferential Statistics

Inferential statistics were used to determine the relationship between the independent and dependent variable.

4.2.1 Model Summary

The findings in Table 5 show that control activities explain 24.3% of the variation in credit risk in deposit taking SACCOs in Western Kenya where R= 0.493, R2= 0.243 while adjusted R square is 0.215.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.493a	.243	.215	2.149

ANOVA

Analysis of Variance is used when determining if a model is reliable enough to predict an outcome. The study's significance level was set at 5%, and to be significant, the p-value had to be lower than 0.05. The results are as shown in Table 6.

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	13.466	4	3.3665	14.127	0.001[b]
Residual	26.932	113	0.2383		
Total	40.398	117			

The F ratio was 14.127 which is greater than the critical value of 2.46 denoting a significant relationship between control activities and credit risk in deposit taking SACCOs in Western Kenya. The F-statistic had a p-value of 0.007 which is less 0.05 also implying significance and model fitness.

Multiple Regression Coefficients

Multiple Regression was conducted to establish the relationship between the variables. Regression coefficients were generated to signify how much the mean of the dependent variable varies when the independent variable is changed by one unit when other variables in the model were held constant

Model	Unstandardized Coefficients		T	Sig.
	B	Std. Error		
(Constant)	5.110	1.321	3.867	.000
Control activities	-.191	.084	-2.274	.011

The generated regression results are as shown in Table 4.47 hence the equation (i) shown:

$$Y = 5.11 - 0.191X_1 \text{ .....(i)}$$

The constant value 5.11 shows the value of the dependent variable when the other factors are 0. The constant of 5.11 can be interpreted to mean that without control activities in place credit risk would be at 5.11 units. A significant relationship is shown by the regression constant as demonstrated by the p-value 0.000 which is below 0.05 at 95% confidence level. Control activities was found to be statistically significant with a β value of -.191 and a p-value of 0.011.

V. Conclusions and Recommendations

5.1 Conclusions

The study concluded that the overall relationship between control activities and credit risk was significant since a positive increase in control activities would lead to a decrease in credit risk.

5.2 Recommendations

It was recommended that credit policies and procedures should be followed to the latter to ensure that loans are issued to credit worthy people and that there is a security for every loan issued. This will reduce the number of bad debts incurred and influence financial performance positively.

From these results it was recommended that human resource management department should work towards ensuring that segregation of duties is done. Everyone must have a clear job description and no ghost workers should be there.

Physical controls such as safes and computer controls such as passwords should be in place to avoid leakage of important and confidential information. In addition, authorizations should also be made by specific persons to authorized personnel only.

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**Corresponding Author: Janet Mongina[1]*
[1](Department of Accounting and Finance, Kaimosi Friends University, Kenya)