

INFLUENCE OF LOAN COLLATERAL SECURITY AND CREDIT APPRAISAL ON LOAN PORTFOLIO PERFORMANCE
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# INFLUENCE OF LOAN COLLATERAL SECURITY AND CREDIT APPRAISAL ON LOAN PORTFOLIO PERFORMANCE OF DEPOSIT TAKING SACCOS IN NAIROBI CITY COUNTY, KENYA

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#### **ABSTRACT**

The key responsibility of the deposit taking Sacco's is to provide credit to consumers or rather members. Furthermore, lending has been and continues to be the backbone of Sacco's business, which is disastrous for emerging economies like Kenya, where capital markets are still underdeveloped. Nonetheless, lending activities have been controversial and a difficult matter given the credit management practices in the competitive environment. The current study endeavored to find out credit management practices and loan portfolio performance of deposit taking SACCOs in Nairobi city county, Kenya. The study looked at the influence of loan collateral security and credit appraisal on loan portfolio performance of deposit taking saccos in nairobi city county, kenya. This study employed a descriptive survey design. The study targeted credit managers of the forty five deposit taking Sacco's in Nairobi County-Kenya. Given that target population was less than 100, a census method. The study used structured questionnaire to collect primary data. The study used descriptive statistics, which included the use of frequencies, means, and standard deviation. In addition, multiple regression assumptions, model fit, ANOVA, and coefficients were used in the analysis. Credit management practices significantly influence loan portfolio performance among Deposit Taking Saccos in Nairobi. Therefore, this study recommended that credit committees of deposit taking Sacco's should always seek to review some policies such legal procedure and employee skill development in order to maximize profits. The study recommended, DTSs should craft viable and customized collateral security measures meant to reduce loan delinguency ratios while at the same time ensuring DTS's reputation and market share. The study recommended that DTS should establish appropriate credit appraisal methods to offer guidance in the issuance of credit.

Key Words: Loan Collateral Security, Credit Appraisal, SACCOs

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#### **INTRODUCTION**

A financial institution's loan portfolio performance shows how well it achieves its lending goals, which adds to the broader organizational aim of maximizing shareholder value (Ssekizivivu, Mwesigwa & Nkote, 2017). Not just SACCOs but all companies in the lending industry depend on the profitability of their loan portfolios (Fujo & Ali, 2016). Lending is the primary commercial activity of SACCOs. Because of this, lent-out money assets account for a significant percentage of owners' total investment. As a result, the health of the company's loan portfolio has a significant bearing on the company's overall health and ability to continue as a going concern. An institution's capacity to actively manage risk exposure and profitability depends on how well it can manage its loan portfolio, which is by far the most important asset of SACCOs (Shisia & Sang, 2014).

The SACCO industry has played a significant role in the economic growth of the nation and the achievement of Vision 2030. To prevent giving credit to those who can't pay their debts, loan portfolio management is essential for every business that accepts deposits to lend out (Gamba & Komoi, 2015). The loan portfolio, which makes up a large part of most banks' assets, is highly illiquid and subject to credit risk (Koch & MacDonald, 2010). Furthermore, George (2015) established that for majority of financial institution's loan portfolio is the primary source of risk and as such, the loan portfolio is ideally supposed to be the schemes' largest asset. He added, "It should also be remembered that, since most small business lending is not backed by bankable collateral, the quality of the loan portfolio is completely essential."

Kenyan SACCOs, according to reports, have a history of underperforming players who have had worrisome loan performance. Loan advances to different types of customers (institutions, organizations, and people) made up a significant portion of the asset value of Kenyan SACCOs (73.42%) (Fujo & Ali, 2019). Despite the importance of SACCOs' lending role, their capacity to execute

and ensure survival in accordance with the going concern goal is severely harmed by their failure to effectively manage this class of assets (Gichuhi & Omagwa, 2020). According to statistics, Kenyan savings and credit cooperatives (SACCOs) are still facing serious problems with loan repayment. This means that keeping an eye on and making improvements to the loan portfolio is crucial for its effective management.

Credit management techniques govern the lending process in microfinance organizations by defining the rules and procedures that must be followed to guarantee seamless lending. Firms run the danger of default if appropriate risk management procedures aren't put in place before the loan is signed off on. To lend, financial institutions receive deposits from the public against which they offer loans and other types of advances. Since banks incur the expense of carrying these deposits, they engage in lending operations to create income. Margin, interest, fees, and commissions are the main income streams (Fiordelisi, Marques-Ibanez & Molyneux, 2010).

The ability of credit management to affect loan portfolio performance has been emphasized in previous research. It has been shown that good credit management practices ensure that loans to customers are repaid and therefore help to keep the credit function viable in the long run (Mot et al., 2018). SACCOs work with people who are financially excluded and can't get credit from other formal organizations like commercial banks because of the strict requirements. SACCOs work with people who are financially excluded. Because of this, it is critical for SACCOs to have sound credit management standards to make sure that the people they finance are able and willing to repay their loans (Abuto, 2017).

The loan portfolio refers to the overall amount of money disbursed in different loan products, as well as the various kinds of borrowers (Sinkey & Greenwalt, 2011). They go on to assert that, wage loans, community guaranteed loans, individual loans, and corporate loans make up the loan

portfolio. Most financial institutions' survival, according to Puxty, Anthony and Dodds (2011), is entirely dependent on any effective loaning scheme that pirouette around funds and loan re-payments advanced to them by customers.

The profitability or return on investments in various loan products is known as efficiency in the loan portfolio. Generally, it takes into consideration the number of clients asking for loans, the amount they purchased, the prompt payment, the guarantee of collateral against loans, the rate of arrears and the number of credit products available on chains (Rajan et al., 2013). There has been increasing trend of non-performing loan (%) from 2016 to 2020. In 2017, it rose from 5.23% in 2016 to 6.14% while in 2018; it rose to 6.3% from 6.14. However, in 2019, it reduced to 6.15% before jumping to 8.39% in 2020.

#### **Problem Statement**

Kenyan SACCOs, according to empirical research, have significant performance difficulties in their lending portfolios. According to SASRA (2020), the amount of non-performing loans in the SACCO sector increased by a startling 2.36 billion between 2018 and 2019, indicating that loan portfolio performance has deteriorated. The overall loan portfolio at risk (PaR), defined as a proportion of non-performing loans (NPLs) to gross loans, increased from 5.23 percent in 2016 to 8.39 percent in 2020, according to the 2019 SASRA loan condition statistics. Specifically, there has been increasing trend of portfolio at risk from 2016 to 2020. In 2017, it rose from 5.23% in 2016 to 6.14% while in 2018; it rose to 6.3% from 6.14. However, in 2019, it reduced to 6.15% before jumping to 8.39% in 2020. Kenyan SACCOs' PaR, therefore, exceeds both the World Council of Credit Unions' (5%) and SASRA's (3%) recommended maximums by a significant margin (SASRA, 2021). Another SASRA study shows that from 2016 to 2018, the Kenyan industry's overall loans to total deposits dropped significantly. In 2016, the ratio of total loans to total deposits was one hundred and ten percent; in 2017, it was 108 percent, in 2018, it was 107 percent in 2019 it was 110.28 percent and in 2020 it was

110.04 percent. This trend has put the SACCOs' viability and sustainability in jeopardy, as well as their ability to achieve the goals for which they were created, namely, providing credit to members and bridging the financing gap in the mainstream financial sector (SASRA, 2021)

There have been a few studies looking at credit management methods, but the results have been varied. According to Mburu et al. (2020), credit management procedures have an impact on how well commercial banks in Kenya perform while making loans. According to the findings of the research, commercial banks in Kenya's loan performance improved significantly when debt collection and lending policies were combined. There was no substantial impact on commercial bank loan performance from client assessment in Kenya. Kenyan deposit-taking microfinance firms' loan performance will be studied by Njenga (2014) to see how credit management methods affect it. Despite the fact that most deposit-taking microfinance institutions had adopted credit control procedures, the gross loan portfolio had increased consistently over time, according to the results. Also, it was observed that the amount of nonperforming loans increased progressively. The researcher sought to know the influence of loan collateral security and credit appraisal on loan portfolio performance of deposit taking SACCOs in Nairobi City County, Kenya.

## Objectives of the study

The main objective was to determine the Influence of Ioan collateral security and credit appraisal on Ioan portfolio performance of deposit taking SACCOs in Nairobi City County, Kenya. The study's specific objectives were;

- To examine the influence of loan collateral security on loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.
- To examine the effect that credit appraisal had on loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

The study was guided by the following research hypotheses

- **H0**<sub>1</sub>: Loan collateral securities do not have a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.
- **HO<sub>2</sub>:** Credit appraisal does not have a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

#### **RELATED LITERATURE**

#### **Theoretical Review**

## **Asymmetry Information Theory (AIT)**

George Akerlof introduced the asymmetric information theory in 1970. In his hypothesis, he argued that market figures are used by consumers to assess the value of products. However, Steven and Anna (1994) argued that knowledge asymmetry occurs in the debt sector where the consumer has details about the market centered on the underlying risks and ROI projects. Nonetheless, there is insufficient knowledge about the consumer.

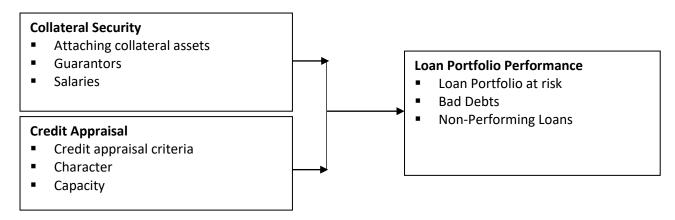
Geitangi (2015) submitted that, whenever Sacco's carry out credit assessments, careful research should be carried out so as to gather sufficient and accurate information about the consumer, whether from CBK or another source. Both qualitative and quantitative techniques are valuable in evaluating a borrower, though there are a few disadvantages, especially with qualitative approaches because they are subjective. The attitudes of borrowers are investigated using a qualitative method that assigns numbers. This approach is useful because it decreases production costs and subjective decisions, all of which can contribute to bias.

In application, Saccos can use the information given to comparison bureaus during credit assessment to screen out lenders with a high debt burden risk and defaulters, allowing only those clients who can pay and fulfill their repayment obligations to access credit. Risk reduction and recognition details are important in credit assessment. The lender looks for information about the borrowers while screening different borrowers to validate their credit worthiness. This theory applies to credit appraisal because DT-Saccos should utilize the information given to the reference bureaus during credit appraisal to evaluate borrowers with a high debt load exposure and defaulters. According to this idea, credit may only be obtained by customers fulfill who can pay and their payback responsibilities.

## **Agency Theory**

The agency theory was hypothesized by (Jensen & 1976) and postulates that management are shareholders agents who are the actual owners of respective companies. This theory is founded on the premise that individual stakeholders interests at the firm will divert or conflict. In this regard, engaged company agents need to act in an appropriate manner so as to enhance the overall wellbeing of the principals. They therefore need not engage in activities that would lead to compromise of their independence while they execute their tasks. In essence, both principals and agents always seek to maximize utility so as to capitalize on potential returns. This common agenda may lead to the collision of the interests of both parties.

The company agents may at times not act in accordance with the principals best interests. This may be caused by various factors for instance differences in risk appetite. This may in turn lead to agents not fully exploiting available opportunities hence not optimally add value to principals objectives and expectations. In the engagement of both principals and agents, risk preferences need to clear and made initially so as to minimize the occurrence of agency problem (Jensen and Meckling, 1976). This theory explains how credit officers of the Deposit taking Saccos act on behalf of the DT-Saccos and its shareholders and directors to ensure that the credits yield interests for the lending institutions through collection efforts.



**Independent Variables** 

Figure 1: Conceptual Framework

## **Empirical Literature**

Iftikhar (2016) looked at the relationship between KSE-listed Pakistani commercial banks' credit risk management and financial performance. Ten institutions were chosen to represent the whole Pakistani banking industry for this purpose. The study found that credit risk management has an impact on the financial performance of Pakistani commercial banks as measured by ROE and ROA, with non-performing loans and capital adequacy ratios as indicators of credit risk management. A statistical model had been developed to measure this relationship. The panel regression model was used to examine the data. The study's findings show that credit assessment procedures have a substantial effect on Pakistan's commercial banks' financial performance.

According to Ntiamoah, Oteng, Opoku, and Siaw (2014), credit management methods in Ghana's Greater Accra area are linked to loan performance. Using administered questionnaires, data were gathered from 400 Microfinance businesses in Ghana, with the population comprising of management and non-management employees. Correlation and regression were used to examine the final results. According to the findings, there was a strong connection between loan terms and insurance policy. Study results failed to show whether or not credit risk procedures and commercial bank portfolio performance had been significantly impacted.

Djankov, McLiesh and Shleifer (2007) reviewed empirical research on the impact of credit management on private credit repayment in 129 Eastern European nations, interviewing financial

**Dependent Variable** 

managers of financial institutions and analyzing data using mean and standard deviation. In the study's results, credit management techniques were shown to be important in enabling loan payback.

Factors affecting the loan repayment performance of Ghanaian fisherman were studied by Acquah and Addo (2011). A standard questionnaire was used to collect data from 67 randomly selected fisherman. Descriptive statistics and multiple regression analysis were the primary analytical methods, with an interview schedule serving as the primary data collecting instrument. According to the findings, the vast majority of fishermen questioned were in their prime working years, earning an above-average yearly salary, and had substantial fishing expertise. Collateral security is shown to be a significant predictor of loan repayment in the regression study. The model's variables accounted for 77% of the variance in loan repayment.

#### **METHODOLOGY**

This study employed a descriptive survey design. Mugenda (2008) points out that descriptive research is appropriate for collecting data so as to answer questions concerning the current status of a phenomenon and does not involve manipulation of study variables. The study targeted credit managers

of the forty five deposit taking Sacco's in Nairobi County-Kenya. The sampling frame for the study was credit managers drawn from 45 licensed taking Sacco's in Nairobi County-Kenya. The study used primary data. The questionnaire was the selected instrument or tool for the primary data collection for the study. IBM Statistical Package was used to analyze the data collected via questionnaire. Correlation analysis was used to determine the course, strength, and significance of relationships between variables. The degree to which a change in the independent variable induced a change in the variable dependent was determined regression analysis.

#### **FINDINGS**

# **Credit appraisal**

The study examined the influence of loan collateral security and credit appraisal on loan portfolio performance of deposit taking SACCOs in Nairobi City County, Kenya. So as to achieve this objective, the researcher sought to find out how credit appraisal influences the loan portfolio performance. The results were presented in Table 1 in which percentage are presented inside brackets while frequency outside brackets.

**Table 1: Credit Appraisal** 

Credit Appraisal	Mean	SD
DT Sacco operates within sound, well-defined credit appraisal criteria	3.35	1.37
DT Sacco has established overall credit limits both at individual borrowers and counterparties level	3.76	1.39
DT Sacco has a clearly established process for approving new and re-financing of existing credits	3.41	1.33
All extensions of credit are made on an arm's-length basis	3.44	1.33
The capacity of members to repay the loan is weighed against the loan requested	3.56	1.19
The character of members to repay the loan is weighed against the loan requested based on their lifestyle	3.53	1.33
Overall Score	3.51	1.32

The findings indicated that out of 34 respondents who took part in the study, 35.3% agreed while 20.6% strongly agreed that DT Sacco operates within sound, well-defined credit appraisal criteria. The line had a mean of 3.35 indicating DT Sacco operates within sound, well-defined credit appraisal criteria at moderate extent. Furthermore, 32.4% of the respondents agreed that DT Sacco has established overall credit limits both at individual borrowers and counterparties level which was further supported by 38.2% of the respondents. This observation was supported by a mean of 3.76.

On the statement that DT Sacco had a clearly established process for approving new and refinancing of existing credits, 44.1% agreed while 17.6% strongly agreed. The statement had a mean of 3.41 indicating that DT Sacco somehow has clearly established process for approving new and

re-financing of existing credits. The results also revealed that 38.2% agreed and 20.6% strongly agreed that all extensions of credit are made on an arm's-length basis with a mean of 3.44. The mean was further supported by 23.5% of the respondents who were uncertain.

The outcome further revealed that 11.8% and 61.8% strongly agreed and agreed respectively that the capacity of members to repay the loan is weighed against the loan requested. This was supported by mean of 3.53 although 14.7% of the respondents strongly disagreed. Lastly, 26.5% strongly agreed and further 32.4% agreed that the character of members to repay the loan is weighed against the loan requested based on their lifestyle with a mean of 3.53 and standard deviation of 1.33. Averagely, the level of credit appraisal had a mean of 3.51 implying that majority of the respondents

were in agreement with credit appraisal statement as indicated by 46 and 83 of the respondents who strongly agreed and agreed respectively.

Many Savings, Credit and other financial institutions in market economies have routine internal procedures for evaluating their clients. These are built around credit files that contain complete information on the relationship between a SACCOs and client. Credit files contain a summary of business relationship between SACCOs and clients information on senior officers and directors. financial including audited data financial statements, spreadsheets constructed by savings and credit society that contains ratios and other analytical indicators calculated from financial data. Information about this relationship forms the basis

for financial institutions strategy in managing its exposure and obtaining more business from the client. Appropriate analysis that provides a window on risk and consistency in evaluation are important for good decisions and for maintaining good relationship with borrower (Vorgelegt et al, 2012).

# Loan collateral security

The study examined the influence of loan collateral security on loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya. To achieve this, the researcher probed the respondents about the loan collateral security. The findings were in table 2 in which percentage are presented inside brackets while frequency outside the brackets.

**Table 2: Loan Collateral Security** 

Loan collateral security	Mean	SD
DT Sacco attaches client's property to credit facility taken until it's repaid in full.	3.50	1.02
DT Sacco equates the amount of loan given to the attached property	3.62	1.04
Attachment of property has increased borrowers commitment in repayment of loans	3.68	1.07
DT Sacco management decides on the type of property to be attached.	3.85	1.08
Our DT Sacco has standard type of security requirements for different types of loans	3.82	1.03
In terms of loan guarantees, the branch has rules, processes, and guidelines in place.	3.85	1.02
Overall Score	3.72	1.04

From Table 2, slight majority of the respondents (41.2%) agreed that DT Sacco attaches clients' property to credit facility taken until it's repaid in full while 14.7% of the respondents strongly agreed with a mean of 3.50. However, 26.5% of the respondents were uncertain an indicated that some of the respondents were not aware that DT Sacco attaches clients' property to credit facility taken until it's repaid in full. Similarly, 38.2% of the respondents agreed that DT Sacco equates the amount of loan given to the attached property and further 20.6% strongly agreed with a mean of 3.62. However, few of the respondents (23.5%) strongly agreed that attachment of property has increased borrowers commitment in repayment of loans and further 38.5% agreed on the same. On the hand, 23.5% of the respondents were uncertain and 11.8% disagreed with a mean of 3.68

In regards to DT Sacco management decides on the type of property to be attached, majority of the respondents were in agreement as shown by 35.3% of the respondents who agreed and 32.43% who strongly agreed with a mean of 3.85. The results also revealed that 44.1% of the respondents agreed that DT Sacco has standard type of security requirements for different types of loans and further 26.5% strongly agreed with a mean of 3.82. Lastly, 38.2% of the respondents agreed that in terms of loan guarantees, the branch has rules, processes, and guidelines in place and additional 29.4% of the respondents strongly agreed with a mean of 3.85. Averagely, the level of loan repayment had a mean of 3.72 implying that majority of the respondents were in agreement with loan collateral security as indicated by 50 and 80 of the respondents who strongly agreed and agreed respectively.

These views is supported by Baker (2009) who indicated that collateral security assists MFIs to carefully and appropriately give a limited number of loans based on loan security so as to check MFIs profitability. These results are further support Nizar and Javed (2007) who did a study on the use of collateral in the Islamic microfinancing sector and found that while the Islamic system is a system based on participatory financing hence not depend on tangible collateral as much, interest based banking system generally provides credit to those clients who are able to offer sufficient tangible collateral that gives them legal entitlement to

tangible assets in the event of default. The results also support Central Bank of Sudan (2007) study that found that in microfinance, collaterals though important, on their own are not enough to guarantee loan recovery and avoid risks of default.

## Loan portfolio performance

The general objective of the study was to examine influence of credit management practices on loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya. The results were presented in Table 3 in which percentage are presented inside brackets while frequency outside brackets.

**Table 3: Loan Portfolio Performance** 

Loan portfolio performance	Mean	SD
The credit management practices of the Sacco have a big impact on customers' propensity to		
repay the loans on time	3.38	0.99
There is significant reduction bad debts occasioned by robust credit management practices	3.53	0.96
The level of non-performing loans have decreased in the last five years	4.15	0.86
The level of gross loan portfolio at risk is less than SASRA approved	4.15	0.99
Debt collection costs have dropped significantly as a result of consumers' prompt loan		
repayment.	3.94	1.25
Income generated by the Sacco in issuing loans is less than the cost of maintaining non-		
performing loans	3.44	1.21
Overall Scores	3.76	1.04

From table 3, slight majority respondents confirmed that the credit management practices of the Sacco have a big impact on customers' propensity to repay the loans on time as indicated by 11.8% of the respondents who strongly agreed and further 35.3% who agreed on the same. However, 35.3% of the respondents were uncertain indications that not all credit management practices of the Sacco have a big impact on customers' propensity to repay the loans on time. The results also revealed that 47.1% of respondents agreed that there is significant reduction bad debts occasioned by robust credit management practices and additional 11.8% strongly agreed on the same with a mean of 3.53. More so, 35.3% of respondents strongly agreed that the level of non-performing loans have decreased in the last five years while 50.0% agreed on the same although 11.8% of the respondents were uncertain whether procurement profit has increased with a mean of 4.15.

The study also established that 44.1% of the respondents strongly agreed that the level of gross loan portfolio at risk is less than SASRA approved and 35.3% strongly agreed, although 14.7% were uncertain on the same. In regard to debt collection costs have dropped significantly as a result of consumers' prompt loan repayment, 35.3% of the respondents agreed and 41.2% of the respondents strongly agreed with a mean of 3.94. Lastly, 32.4% of the respondents agreed that income generated by the Sacco in issuing loans is less than the cost of maintaining non-performing loans with 20.6% of strongly agreeing on the same although 26.5 were uncertain. Averagely, the level of loan portfolio performance had a mean of 3.76 implying that majority of the respondents were in agreement with loan portfolio performance statement as indicated by 56 and 80 of the respondents who strongly agreed and agreed respectively.

Table 4: Secondary Data For Loan Performance Between 2016 And 2020

	2016		2017		2018		2019		2020	
	Gross Loans *	% to Totals	Gross Loans *	% to Total	Gross Loans	% to Total Gros s loans	Gros s Loan s*	% to Total Gross Ioans	Gross Loans *	% to Total Gross Ioans
Performing (As per contract)	263,505	89.19%	294.36	88.87 %	335.24	89.5 %	374.5 9	89.29 %	416.9 6	87.82%
Watch (1-30 days)	18,525	5.59%	16.50	4.98%	15.47	4.%	19.16	4.57%	17.96	3.78%
Substandard (31- 180 days)	8,050	2.63%	9.96	3.01%	9.31	2.%	12.08	2.88%	15.73	3.31%
Doubtful (181- 360 days)	3,288	1.11%	4.92	1.48%	5.27	1.%	4.75	- 1.13%	8.31	1.75%
Loss (Over 360 days)	4,236	1.48%	5.47	1.65%	8.99	2.%	8.96	2.14%	15.81	3.33%
<b>Grand Totals</b>	297,604		331.21		374.28		419. 55		474.7 7	
NPL Amount (Billions)	14,567		21.00		23.57		25.79		39. 86	
Provision Amount (Bn)	10,788		14.64		18.08		19.06		28. 97	
Provisions/Gross Loan	3.86%		4.28%		4.83%		4.54 %		6.10%	
Portfolio at Risk (NPL/Gross Loans)	5.22%		6.14%		6.30%		6.15 %		8.39%	

# **Testing Null Hypotheses**

The hypotheses testing were based on Table 4 which is regression coefficient results for multiple linear regression analysis. This was arrived by using significance level of unstandardized B coefficient. The significance level was set at P<0.05; therefore, B coefficient which had significance level less than 0.05 was considered significant and therefore, the null hypothesis was rejected.

 $H_{01}$ : Credit appraisal does not have a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

 $H_{A1}$ : Credit appraisal has a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

B Coefficient results:  $(B_1 = 0.252; p=0.005 < 0.01)$ 

Verdict: The null hypothesis H<sub>01</sub> was rejected.

Results interpretation:  $H_{A1}$ : Credit appraisal has a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

 $H_{A2}$ : Loan collateral securities have a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

B Coefficient results: ( $B_2 = 0.271$ ; p=0.015< 0.05)

Verdict: The null hypothesis  $H_{02}$  was rejected.

Results interpretation:  $H_{A2}$ : Loan collateral securities have a statistical significant relationship with loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya.

#### **CONCLUSIONS AND RECOMMENDATIONS**

The study concluded that credit appraisal have significant influence on the loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya. Therefore, the study rejected the null hypothesis. The capacity of members to repay the loan is weighed against the loan requested. Rating of loan repayment record such as on-time repayment of loan, late repayment information and why recent late payment was made by the borrower is instrumental in determining loan portfolio performance. Further the study established that collection effort have significant influence on loan portfolio performance of Deposit Taking Saccos in Nairobi City County, Kenya hence the second null hypothesis was rejected. To improve performance of loan portfolio, DT-Saccos in Nairobi County considered constant reminders, physical regular visits and late pay penalties and fines. Some DT-Saccos have offered staff incentives to motivate credit officer and managers in improving recovery of delinquent loans.

The study established that credit appraisal significantly influenced loan portfolio performance. The study recommended that DTS should establish appropriate credit appraisal methods to offer guidance in the issuance of credit. Proper customer creditworthiness systems should be put in place on the basis of their capacity to repay their credit and customer loyalty. SACCOs should establish sound credit risk appraisal practices that are central to the mitigation of credit risk. This included an in-depth assessment of the business project for whatever the

aim of the undertaking is. Government, through its regulators SASRA, should develop sound credit policies that control credit procedures in the SACCO fraternity. SACCO management should create and continue to review loan appraisal policies in line with the overall state of the economy and government policies. The study also concluded that loan collateral security has significant influence on portfolio performance. The study recommended, DTSs should craft viable and customized collateral security measures meant to reduce loan delinquency ratios while at the same time ensuring DTS's reputation and market share. From the results, it was recommended that DTS should engage more viable loan security measures meant to reduce loan delinquency ratios which can consequently influence positive loan portfolio performance.

#### **Areas for Further Research**

It is hoped that the findings of this study would contribute to the existing body of knowledge and form a basis for future researches. The following areas of further research are thus suggested. This study focused on credit management practices however, further studies should focus on the influence of SASRA regulation on loan portfolio performance such as liquidity and capital regulations.

Besides loan collateral security, loan repayment period, credit appraisal and collection effort, other macro factor affect non-performance of loan portfolio in financial sector. For instance, further studies should focus on credit insurance and size of Saccos in regard to non-performance loans.

The study utilized both secondary and primary data, however, primary data took precedence in this study since some variables were difficult to be operationalized in to secondary variables, and Future study should give precedence to secondary data for the sake of external validity.

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