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INFLUENCE OF COLLECTION EFFORT ON NON-PERFORMING LOANS IN DEPOSIT TAKING SAVINGS AND CREDIT COOPERATIVE SOCIETIES IN KAKAMEGA COUNTY

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ABSTRACT

It is argued that the non-performing loans are one of the major causes of the economic stagnation problems and the current study aimed to examine the influence of collection effort on non-performing loans in DTSs in Kakamega County. The descriptive research design was selected as it helped in establishing the relationship between group borrowing and non-performing loan in DTSs in Kakamega County. The population of this study was 72 employees of 3 registered DTSs within Kakamega County. The study adopted the entire target population of 72 as the study respondents using Census since the staff in the sampled SACCOs were limited in numbers. A Likert scale Questionnaire was used to gather primary information while secondary data information was obtained from articles, books, newspapers, internet and magazines. Content, Criterion and construct validity was tested while reliability was determined by Cronbach Alpha at 0.7 and above. Data was analyzed using both descriptive statistics using frequencies, means and standard deviations as well as inferential statistics using correlation and regression. Information was sorted, coded and input into the statistical package for social sciences (SPSS) version 22.0 for production of graphs and tables. Inferential results revealed that collection force affected non-performance loans. Collection force negatively affected non-performance loans of DTS in Kakamega County. The study recommended that DTSs should involve credit/field officers and customers in formulating customized credit collection policies that positively attract customers as this would reduce loan delinquency, improve market share and consequently influence non-performing loans.

Key Words: *Loan Collection Efforts, Non-performing Loans*

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INTRODUCTION

The critical role played by SACCOs in the provision of credit facilities to Kenyans, as well as the mobilization of savings for national development in a safe, sound and secure environment continue to be the main focus of the authority in discharging its statutory mandate (SASRA 2018). The major activities of SACCOs is to instilling saving culture, investing activities and offering lending services, which is the major source of raising revenue for SACCOs. As noted, large proportion of SACCOs asset comprise issued loans to members (Okundi, 2017). Some of these loans given out by the SACCOs unfortunately become non-performing hence eventually declared bad debts with adverse consequences for the overall loan recovery performance of the institutions SACCOs play a significant role in the provision of financial services to the target both rural and urban groups (Turyahebwa, 2016).

According to McNaughton (2013), collection efforts is the procedure an institution follows to collect past due account. Collection policy refers to the procedures Sacco institutions use to collect due accounts. This collection process can be rather expensive in terms of both product expenditure and lost good will (McNaughton, 2013). Collection efforts may include matching mandatory savings forcing guarantors to pay, attaching collateral assets, courts litigation. Methods used by credit unions could include letters, demand letters, telephone calls, and visits by the firm's officials for face to face reminders to pay the legal enforcements.

Regionally a number of studies have also been conducted to establish the effect of nonperforming loans on the financial performance of firms. Kabiru (2016) carried out a study to establish the relationship between credit risk assessment practice and the level of nonperforming loans in Tanzania. His study revealed that government owned banks had asset quality ratio of 30% above the industry average of 28%. This was attributed to the high levels of NPLs. By contrast three major foreign owned banks had an asset quality of less than 10%. Ultimately he concluded that banks that use qualitative credit assessment methods had higher incidences of NPLs as compared to those that used quantitative methods. Kalani (2016) in his study conducted to establish the causes of nonperforming loans in commercial banks in Uganda argued that some bank factors that related to risk management structures put in place by banks were to blame for NPLs. These bank factors include lax procedures used in credit assessment, negligence in monitoring NPLs, insider loans, lack of trained personnel and aggressive credit collection methods.

SACCOs in Kenya are the leading financial institutions which provide credit for social and economic development at reduced interest rates. SACCOs generate capital from the member's deposits and grant loans to members depending on the individual savings (SASRA 2018). SACCOs as reported by Melania and Justin (2015), have provided access to credit to a class of disadvantaged people with low income who have no access to loans from institutions like banks. Deposit taking SACCOs (DTS) apart from the usual operations of SACCOs offers its member banking, payments, withdrawals and Automated Teller Machines Services (ATM). The Sacco Society Regulatory Authority (SASRA) is the legal body that is entrusted with regulating the conduct, growth and development of DTSs in Kenya. Most SACCOs start their operations as non-deposit taking and as time goes by grow into Deposit Taking to offer more services to its members. According to SASRA (2018) report the subsector recorded an impressive growth of 13% in the gross loans in 2018 which increased to Kshs 374.28 Billion is a clear testament of the critical role of DTSs in the provision of credit facilities to household economies in the country. The number of registered cooperatives is almost 17,000 with 175 being deposit taking SACCOs. The widespread of SACCOs in Kenya is indeed a confirmation that majority of Kenyans household

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derive their livelihoods directly or indirectly from the SACCOs (Joachim, 2017).

Devolution had seen an aggressive mushrooming of SACCOs in counties, Kakamega alike. It was agreeable to note that these trends as much as it had its own advantages, had inevitable awaiting consequences in terms of non-performing loans. That is why this study was handy in addressing these possibilities for the good of all stakeholders in enhancing sustainability of SACCOs as well as social economic empowerment of the targeted populations.

Statement of the Problem

Credit financial institutions play a key role in every nations growth and development. SACCOs being among the financial institutions have played a noteworthy role in mobilization and utilization of unexploited resources. However, global evidence has shown that many SACCOs are struggling with non-performing loans due to failure by borrowers to honor their loan obligations (Siems, 2016). Kenya's Non Performing Loans Ratio for DTSs stood at 6.14 % in 2018, compared with the ratio of 6.13 % in the previous year. The immediate consequence of large amount of non-performing loans in the SACCO sector is SACCO failure. Many researches on the cause of Sacco failures find that asset quality is a statistically significant predictor of insolvency (Siems, 2016), and that failing lending institutions always have high level of non-performing loans prior to failure (Kieso, 2017). While the issuance of loans increased over the year, their risk level as measured by level of non- performing loans deteriorated from 5.73 percent in 2014 to 6.62 percent in 2019. This indicates an elevated credit risk due to deterioration in performance of loans. However, some of the loans given out become non-performing and adversely affect the profitability and overall financial performance of the lending institutions. Many lending institutions in Kenya are confronted with the challenge of rising non-performing loan portfolios despite efforts at stemming the tide (Auronen, 2016). NPLs create problems for the banking sectors balance sheet on the asset side, and have a negative impact on the income statement as a result of provisioning for loan losses (Kumar & Tripathi, 2012). Its agreeable to note that a number of studies have been conducted on the subject of non-performing loans in SACCOs in several contexts and environments. A study conducted by Anderson (2016) attempted to investigate the determinants of non-performing loans in SACCOs in Canada. The study investigated among other aspects, collection efforts, credit policy and interest rate. The study finds that there is a positive relation between collection efforts and interest rate with non-performing loans. However, the same study takes a neutral stand when it comes to influence of credit policy on non-performing loans in SACCOs. The study insists that there is no clear relationship between the credit policy and non-performing loans in SACCOs. The study recommends further research on the same subject matter but in a different microfinance environment.

In a similar study by Hann (2018) to examine the determinants of non-performing loans in deposit taking SACCOs in Latin America which included interest rate, government policy and credit policy as variables, the findings found that there is a positive relationship between government policy being a moderator to non-performing loans in SACCOs but argues that there is a negative relationship between credit policy and interest rate with non-performing loans in SACCOs. This study contradicts that of Anderson (2016) as it negates the relationship of credit policy and interest rate and non-performing loans in SACCOs. This two contradicting viewpoint arises a question of doubt over the validity of the findings in the above studies and thus necessitates an investigation to ascertain the real influence of the highlighted variables on non-performing loans in DTSs in Kakamega County. This study shall seek to investigate the influence of the above determinants on non-performing loans. In addition, the studies conducted in the areas of DTSs in western region of Kenya are few in number and did not give such an emphasis on the factors considered to be determinants of NPLs. For

example, Alemayehu (2018) like most of the studies, studied the financial and operational performance of micro finance institutions by using simple descriptive analysis and employing graphs and percentage growth rates by classifying small, medium and large. The study did not say anything about determinants of financial sustainability of SACCOs. Hence, the current study sought to find out the influence of collection efforts on non-performing loans in DTSs in Kakamega County, Kenya.

General Objective

The objective of this study was to examine the influence collection efforts on non-performing loans in DTSs in Kakamega County.

The research was guided by the following research hypothesis

- **H_0:** Collection efforts have no significant effort on non-performing loans in DTSs in Kakamega County

LITERATURE REVIEW

Capital Market Theory and the Capital Asset Pricing Model

This Capital market theory was developed by Sharpe, Lintner and Mossin (Parker, 2017). Following research into the capital market line and the security market line, Sharpe (2017) developed a model for stock portfolios that related security returns to the performance of an index of business activity and an error term. Further, for the pricing of assets, capital market theory asserts that it is not the total risk that is important but the level of risk that cannot be diversified away through combining assets within a portfolio, with investors not being willing to pay a premium for bearing risk that can be diversified away.

The evolution of capital market theory led to the development of the Capital Asset Pricing Model (CAPM) which asserts that the return on any risky asset equals the linear combination of the risk free rate plus the sensitivity of the assets non-diversifiable or systematic risk to the market portfolios risk, expressed as beta (Pagliari, 2016). Through such approaches, strategic asset allocation considers the risk and return of different real estate sectors in different geographic locations and combines these through quantitative analysis into a portfolio forecast to achieve either the highest level of return relative to risk or the lowest level of risk relative to return (Parker, 2016). This theory is relevant in debt management and specifically managing nonperforming loans. This theory was employed to explain the variable on collection efforts and non-performing loans.

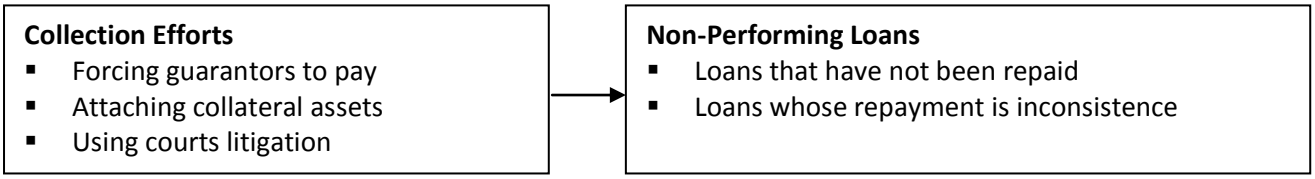

Figure 1: Conceptual Framework

Empirical Literature Review

According to McNaughton (2013), collection efforts is the procedure an institution follows to collect past due account. Collection policy refers to the procedures Sacco institutions use to collect due accounts. This collection process can be rather expensive in terms of both product expenditure and lost good will (McNaughton, 2013). Collection efforts may include matching mandatory savings forcing guarantors to pay, attaching collateral assets, courts litigation. Methods used by credit unions could include letters, demand letters, telephone calls, and visits by the firm's officials for

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face to face reminders to pay the legal enforcements.

Some studies also considered the impact of collection efforts on the NPLs rate. One of those is Hu (2016) which studied Taiwans banking sector. It covered the study period of 1996 to 1999. It claimed that government owned banks that embrace collection efforts have fewer NPLs rate. It also found negative relationship between the collection efforts and NPLs rate. The impact of diversification is not proven significant. The literature suggests a strapping association between NPLs and several macroeconomic factors including collection efforts. These are annual growth in *GDP*, credit growth, real interest rates, the annual inflation rate, real effective exchange rate annual unemployment rate, broad money supply (*M2*) and GDP per capital etc. This study only considers the real GDP per capita, Interest Rates and Total Outstanding Loans including Leases and NPLs Rate

Another study by Dickerson (2016) on collection policy and loan efficiency among SACCOs in UK used descriptive survey design with a sample of 125 respondents. The study also used structured questionnaires for collecting data and data was analyzed using descriptive and inferential statistics. The study findings assert that collection policy is a guide that ensures prompt payment and regular collections. The rationale is that not all clients meet their obligations, some just take it for granted, others simply forget while others just don't have a culture of paying until persuaded to do so.

According to Dickerson, many micro finance institutions may send a letter to such individuals (borrowers) when say ten days' elapse or phone calls and if payment is not received with in thirty days, it may turn over the account to a collection agency. Collection procedure is required because some clients do not pay the loan in time some are slower while others never pay. Thus collection efforts aim at accelerating collections from slower payers to avoid bad debts.

Another study by Pandley (2015) on Collection efforts and Loan Collection in Egypt used correlation design with questionnaires and focused group discussion guides. The study found that collection efforts are aimed at increasing turn over while keeping low and bad debts within limits (Pandley, 2015). However, caution should be taken against stringent steps especially on permanent clients because harsh measures may cause them to shift to competitors. The study recommends that financial institutions should be cautious to avoid occurrence of bad debts thus non-performing loans.

A study conducted in Rwanda by Semukono (2015) in contrasting the works of Pandley states that collection efforts are directed to accelerating recovery from slow payers and decreases bad debts losses. This therefore calls for vigorous collection policy in its slackness in arousing slow paying customers. The study embraced the use of cross-sectional research design with use of structured questionnaires as tools of data collection. The study recommends that SACCOs should put in place deliberate measures to ensure efficient recollection for enhanced financial performance.

A study on determinants of financial viability by Sanderatne (2018) in SACCOs in Kenya was conducted using pragmatic research paradigm with a sample of 342 respondents using questionnaires. The study objective was to determine how collection efforts influence loan collection among SACCOs. The study embraced both qualitative and quantitative methodologies. The study findings defined that the collection efforts and non-performing loans have an important bearing. The study further found a positive correlation between collection efforts and non-performing loans.

Over the last few years the literature that examines nonperforming loans has expanded in line with the interest afforded to understanding the factors responsible for financial vulnerability. This situation may be attributed to the fact that impaired assets plays a critical role in financial vulnerability as evidenced by the strong association between NPLs and the customers economic condition. In this

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section we review the existing literature on nonperforming loans.

Keeton and Morris (2017) present one of the studies to examine the causes of loan losses. In the latter paper the authors examined the losses by 2,470 insured commercial banks in the United States (US) over the 1979-85. Using NPLs net of charge-offs as the primary measure of loan losses Keeton and Morris (2017) shows that local economic conditions along with the poor performance of certain sectors explain the variation in loan losses recorded by the banks. The study also reports that commercial banks with greater risk appetite tend to record higher losses. Several studies which followed the publication of Keeton and Morris (2017) have since proposed similar and other explanations for problem loans in the US.

Sinkey and Greenwalt (2016), for instance, investigate the loan loss-experience of large commercial banks in the US; they argue that both internal and external factors explain the loan loss rate (defined as net loan charge offs plus NPLs divided by total loans plus net charge-offs) of these banks. These authors find a significant positive relationship between the loan loss rate and internal factors such as high interest rates, excessive lending, and volatile funds. Similar to the previous study, Sinkey and Greenwalt (2016) report that depressed regional economic conditions also explain the loss-rate of the commercial banks. The study employs a simple log-linear regression model and data of large commercial banks in the United States from 1984 to 1987.

Furthermore, Keeton (2019) uses data from 1982 to 1996 and a vector auto regression model to analyze the impact of credit growth and loan delinquencies in the US. It reports evidence of a strong relationship between credit growth and impaired assets. Specifically, Keeton (2019) shows that rapid credit growth, which was associated with lower credit standards, contributed to higher loan losses in certain states in the US. In this study loan delinquency was defined as loans which are overdue for more than 90 days or does not accrue interest. Studies that examined other financial systems also provide similar results to those in the US. For instance, Bercoff(2016) examine the fragility of the Argentinean Banking system over the 1993-1996 period; they argue that NPLs are affected by both bank specific factors and macroeconomic factors. To separate the impact of bank specific and macroeconomic factors, the authors employ survival analysis.

Using a dynamic model and a panel dataset covering the period 1985-1997 to investigate the determinants of problem loans of Spanish commercial and saving banks, Salas and Saurina (2002) reveal that real growth in GDP, rapid credit expansion, bank size, capital ratio and market power explain variation in NPLs. Furthermore, Jimenez and Saurina (2005) examine the Spanish banking sector from 1984 to 2003; they provide evidence that NPLs are determined by GDP growth, high real interest rates and lenient credit terms. This study attributes the latter to disaster myopia, herd behavior and agency problems that may entice bank managers to lend excessively during boom periods.

Meanwhile, Rajan and Dhal (2016) utilize panel regression analysis to report that favorable macroeconomic conditions (measured by GDP growth) and financial factors such as maturity, cost and terms of credit, banks size, and credit orientation impact significantly on the NPLs of commercial banks in India. Using a pseudo panel-based model for several Sub-Saharan African countries, Fofack (2005) finds evidence that economic growth, real exchange rate appreciation, the real interest rate, net interest margins, and inter-bank loans are significant determinants of NPLs in these countries. The author attributes the strong association between the macroeconomic factors and nonperforming loan to the undiversified nature of some African economies.

More recently Cai, Dickinson and Kutan (2016) analyze the relationship between NPLs and ownership structure of commercial banks in Taiwan with a panel dataset covering the period 1996-

1999. The study shows that banks with higher government ownership recorded lower nonperforming loans. Hu et al (2006) also show that bank size is negatively related to NPLs while diversification may not be a determinant. Khemaraj and Pasha (2005) study the relationship between the NPLs ratio and two categories of elements: macroeconomic and bank specific variables. The results show a positive relationship between the loans to asset ratio with NPLs, a positive relationship between real interest rate and NPLs ratio while the credit growth is negatively related to NPLs ratio and is highly significant.

METHODOLOGY

The study employed a descriptive survey design and a correlation design. The descriptive survey design was used because according to Saunders (2002), this design enables one to capture all pertinent aspects of a situation while employing a unit study and investigation. The study was conducted in Kakamega County and targeted 72 respondents that comprised of SACCOs management staff and credit officers of 3 DTSs within Kakamega. Census survey was used for the study. Primary data of both quantitative and qualitative type was collected by the researcher through questionnaires. Both descriptive and inferential statistics were employed in the study. Descriptive statistics employed the use of frequencies, means, percentages and inferential data which was through correlation and inferential statistics. SPSS version 22 was used in analyzing data. The findings were presented using tables in percentages, means, minimums, maximums and standard deviation.

FINDINGS AND DISCUSSION

Collection Effort

Firstly, respondents were also asked five questions about issues of collection effort in as far as they affect non-performing loans of DTSs. The summated responses were presented in the table below, scaled as; 5. Strongly Agree, 4. Agree, 3. Uncertain, 2. Disagree and 1. Strongly Disagree. The results were presented in Table 1.

Table 1: Descriptive Statistics; Collection effort

Statement	5	4	3	2	1	Mean	Std. Dev
Available collection effort assisted towards effective credit recovery.	5 (7.4)	35 (51.5)	21 (30.9)	4 (5.9)	3 (4.4)	3.51	0.89
Formulation of sound credit collection strategies have been a challenge in loan performance	8 (11.8)	35 (51.5)	21 (30.9)	3 (4.4)	1 (1.5)	3.68	0.80
Enforcement of loan recovery in case of loan defaults is a big challenge	12 (17.6)	40 (58.8)	11 (16.2)	4 (5.9)	1 (1.5)	3.85	0.83
Staff incentives are effective in improving recovery of delinquent loans.	3 (4.4)	31 (45.6)	22 (32.4)	8 (11.8)	4 (5.9)	3.31	0.95
Regular reviews have been done on collection policies to improve loan recovery.	9 (13.2)	39 (57.4)	12 (17.6)	5 (7.4)	3 (4.4)	3.68	0.95
Valid N (listwise)	**68**						
Grand mean = 3.61							

From table 1, 51.5% of the respondents agreed that available collection efforts have assisted towards effective credit recovery although 30.8% of them were undecided. This implied that available

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collection efforts had assisted towards effective credit recovery as indicated by a mean of 3.51. Most respondents also agreed (51.5%) and strongly agreed (11.8%) that formulation of sound credit collection strategies had been a challenge in loan performance. On the other hand, 30.9% of the respondents were undecided in regard to formulation of sound credit collection strategies have been a challenge in loan performance

When asked that enforcement of loan recovery in case of loan defaults is a big challenge; 58.8% agreed, 16.2% were uncertain, 4.4% disagreed while 17.6% strongly agreed. The mixed up responses are possibly because enforcement of loan recovery in case of loan defaults is a big challenge depending on various organizational factors.

Further slight majority respondents agreed (45.6%) and strongly agreed (4.4%) that staff incentives are effective in improving recovery of delinquent loans. However, 32.4% of the respondents were undecided implying that some respondents were not sure whether existing staff incentives are effective in improving recovery of delinquent loans.

Lastly, most respondents agreed (57.4%) and strongly agreed (13.2%) that regular reviews have been done on collection policies to improve loan recovery. A mean of 3.68 indicated that regular reviews have been done on collection policies to improve loan recovery. This supported Ross, Westerfield & Jordan (2008). assertion that MFIs should craft feasible credit policies and products that can make them have a competing market share.

Inferential Analysis

Linear Regression Results

Linear regression was used to analyze the linear influence of predictor variable (collection effort) on the dependent variable (non-performing loans in DTSs in Kakamega County).

Table 2: Linear Regression Results; Influence of Collection effort on NPLs

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.651[a]	.423	.414	.4811609

a. Predictors: (Constant), Collection Efforts

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.209	1	11.209	48.415	.000[b]
	Residual	15.280	66	.232		
	Total	26.489	67			

a. Dependent Variable: Non Performing Loans

b. Predictors: (Constant), Collection Efforts

Coefficients[a]

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.852	.368		2.317	.024
	Collection Efforts	-.766	.110	-.651	-6.958	.000

a. Dependent Variable: Non Performing Loans

Linear regression results in table 2 showed that DTSs collection effort significantly influences non-performing loans in DTSs; R^2 =0.651, F=48.415, significant at *p<0.001.* This implied that DTSs collection effort accounts for 65.1% variations in non-performing loans in DTSs in Kakamega County. Further, the coefficient of determination which explained the extent to which changes in the dependent variable (non-performing loans in DTSs in Kakamega County) can be explained by the

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independent variable (collection effort) is; β= -0.766 with a standard error, 0.110. This indicated that a unit increase in DTSs collection effort will lead to 0.766 unit decrease in non-performing loans in DTSs with a standard error of 0.180. The relationship was presented as shown in the model below

$Y=0.852-0.766\ X_1$

Where;

Y= Non-performing loans of DTSs

X_1= Collection effort

Test of Hypotheses

The hypothesis (H_0) stated that collection efforts have no significant effort on non-performing loans in DTSs in Kakamega County. From the results, the beta coefficient for collection effort was β=-.407; *p*=0.000 at *P*<.001. Hypothesis one was therefore rejected because the results showed MFI collection effort is negatively related to non-performing loans in DTSs in Kakamega County and a unit increase in DTS collection effort, non-performing loans in DTSs in Kakamega County will significantly decrease by 0.407 units with a standard error of 0.102.

This relationship was supported by Kariuki (2010) view that since some customers are slow payers while some are non-payers, credit collection aim at accelerating collections from slow payers and reducing bad debt losses which can affect MFI profitability. These results were consistent with Sindani (2012) who studied on effectiveness of credit management system on loan performance in micro finance sector in Kenya and found out that credit collection policies adopted by microfinance institution had an effect on loan performance, that is, stringent policy had a great impact on loan performance, and the lenient policy had an effect but was not as great as that of stringent policy. Kariuki (2010) also supports credit collection efforts because the collection efforts aim at accelerating collections from slow payers and reducing bad debt losses in the micro finance institutions.

CONCLUSIONS AND RECOMMENDATIONS

The study sought to examine the influence of collection effort on non-performing loans in DTSs in Kakamega County. Linear regression results showed that DTSs collection effort significantly influences non-performing loans in DTSs in Kakamega County. This implied that DTSs collection effort accounts for some variations in non-performing loans in DTSs in Kakamega County. Further, from multiple regression results showed that DTS collection effort is negatively related to non-performing loans in DTSs in Kakamega County and a unit increase in DTS collection effort, non-performing loans in DTSs in Kakamega County will significantly decrease.

The study concluded that collection efforts have significant negative effect on non-performing loans in DTSs in Kakamega County. Robust collection efforts such as formulation of sound credit collection strategies, enforcement of loan recovery, improvement in staff incentives and regular reviews in regard to collection policies would reduce non-performing loans among DTS in Kakamega County.

The study recommended that DTSs should involve credit/field officers and customers in formulating customized credit collection policies that positively attract customers as this would reduce loan delinquency, improve market share and consequently influence non-performing loans.

Areas for further research

Besides collection policy, other macro factor affect non-performance loans in financial sector specifically DTS which the current study did not cover. For instance, further studies should focus on credit insurance and size of SACCOs in regard to non-performance loans. Secondly, another study can be replicated in Nairobi County which is a commercial hub of Kenya hence has well established and competitive DTSs in order to ascertain whether the study would yield similar findings.

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