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Effect of Credit Risks Management Techniques on Loan Performance: A Survey of Selected Sacco's in Kericho County, Kenya

Eliud Mutai Cheboss

Internal Auditor, University of Kabianga, Kenya

Dr. Isaac Naibei

Lecturer, Department of Accounting and Finance, University of Kabianga, Kenya

Dr. Peter K. Cheruiyot

Senior Lecturer, Department of Accounting and Finance, University of Kabianga, Kenya

Abstract:

The study was set out to assess the effects of credit risk management techniques on loan performance of a SACCO. It assessed whether the techniques are effective in reducing bad loan performance in a dynamic lending business environment. Despite the developments of the risks management programmes, non-performing loans is still a major challenge in SACCOS and hence the need to study the influence of credit management techniques on loan performance. The researcher was guided by the following specific objectives: to establish the effect of collateral securitization on loan performance; to determine the effect of monitoring of borrowers on loan performance of a SACCOS, and; to examine the effect of credit documents on loan performance in SACCOS. The research hypotheses was stated as follows; there is no relationship between collateral securitization and loan performance of a SACCOS ; there is no relationship between monitoring of borrowers and loan performance of a SACCOS; there is no relationship between credit documents and loan performance of a SACCOS. The research was conducted in Kericho County by considering all the Board and Management of SACCO's. The study used survey research design. The tools for data collection were mainly questionnaires and a sample size of 95 respondents. Questionnaires were used to collect data and analyzed using descriptive and inferential statistical analysis. Census survey of all the 95 Management and Board in five selected SACCOS in Kericho County was used, out of which 92 respondents participated in this study. Data collected involved a self-administered questionnaire. Quantitative data collected was analyzed using descriptive and inferential statistics. The data was analyzed using SPSS (Statistical Package for Social Sciences) version 20. Multivariate regression model was also used to analyze the results as shown by a value of $R^2=0.608$ ($p<0.01$). The study established a statistically significant relationship between collateral securitization and the loan performance of SACCOS. The study revealed that monitoring of borrowers has less significance on loan performance. Finally the study found that credit documents affected the loan performance of the SACCO to a very great extent. The study recommends that the management of SACCOS should consider putting in place collateral securitization policy since it affects their loan performance. Monitoring of borrowers mechanism should be instituted in the SACCO since it will minimize default by borrowers. Finally, the study recommended that there should be credit documentation to ensure that there are proper credit follow ups and procedures on lending to borrowers. The study also recommended that the same study be carried out in other financial sectors for example banks, microfinance institutions and public sectors to find out if the same results will be obtained.

Keywords: Credit risks management techniques, loan performance, Kericho County, Kenya

1. Introduction

The evolution of credit risk management as a discipline has been driven by market forces on the one hand and developments in SACCO supervision on the other; each side operating with the other in complementary and mutually reinforcing ways, (Cyree *et al.*, 2003). SACCOS and other lending institution, market participants have made many of the key innovations (Huttenrauch and Schneider, 2009) in credit risk measurement and credit risk management (Daniel and Ramirez, 2008), but supervisors have often helped to adapt and disseminate best practices to a broader array of financial institutions (Federico, 2010). 'Avery important aspect of effective and efficient management of financial institution lending business is a satisfactory and timely recovery (Papias and Ganesan, 2009) of loans advanced and the interest payable on the loaned money' (SACCO Star, 2010). These will warrant research to identify causes and ways of managing credit risks portfolios in SACCOS. (SACCO Star, 2010). Therefore, the study is set out to assess the credit risk management technique in SACCOS and other financial sectors.

The concept of identifying and assessing effectiveness of credit risk management techniques used by Co-operative Savings and Credit society (SACCO) has a great impact on growth of the industry's liquidity position. According to Pearce and Robinson (2007), Operational risk controls provide post action risk evaluation and risk controls over short periods from one month to one year. To be

effective, operational credit risk controls must take four steps common to all post action credit risk controls; set standards of credits risks performance, measure actual credit risk performance, identify deviations from standards and initiate credit risks corrective actions. According to Mwaura (2005), lack of credit risk analysis, credit follow-ups as well as lending without proper procedures are the key factors that contribute to poor performance in loan lending by SACCOs in Kenya.

Robert (1983) asserts that when lenders or investors are uncertain about the future interest rates, they may wish to hedge their belts. This introduces new dimensions into the interest rates calculations and gives rise to the term structure of the interest rates while Borio, Claudio and Fritz, (1995) noted that the inflationary policies and the related monetary policies would often bring about an increase or the fall in the general level of the interest rates. The level of interest rates has a direct effect on a consumer's ability to repay a loan. For example, Mohane, *et al.*, (2002), assert that when interest rates are low, people are willing to borrow because they find it relatively easy to repay their debt. When interest rates are high, people are reluctant to borrow because repayments on loans cost more. Some consumers may even find it difficult to meet their existing loan repayments, especially if interest rates increase faster than the rise in a consumer's income. If interest rates rise sharply and stay high for a long period, some consumers will default on their loans, Mohane, *et al.*, (2002).

In investment, modern portfolio theory management is a critical theory. It tries to look for the most efficient combinations of assets to maximize portfolio expected returns for given level of risk. Alternatively, minimize risk for a given level of expected return. Portfolio theory is presented in a mathematical formulation and clearly gives the idea of diversifying the assets investment combination with a purpose of selecting those assets that will collectively lower the risk than any single asset. In the theory, it clearly identifies this combination is made possible when the individual assets return and movement is opposite direction. An investor therefore needs to study the value movement of the intended asset investment and find out which assets have an opposite movement. However, risk diversification lowers the level of risk even if the assets' returns are not negatively or positively correlated Omisore *et al.*, (2012). Risk is defined as the standard deviation of return, i.e., to what extent is the actual return deviating from the expected return. Therefore, portfolio being a combination of assets, the model becomes a weighted combination of these assets' returns. When different assets are combined and whose returns are not perfectly positively correlated, then portfolio theory leads to reduction of the total variance of such asset combination returns over a given period of investment. The return is calculated by getting the change in value of the assets plus any distribution received during a given period over which the assets are held and expressed as a fraction of the initial outlay. From this theory, it is evident that the level of risk in a portfolio depends on risk of each asset, proportion of resources allocated on each asset and the interrelationship between the assets making up the portfolio. The major assumptions in portfolio theory in managing risk are that the investors are rational and the market is efficient and perfect (Chijoriga, 2007).

Since 1991 there have been numerous changes to the financial system in Kenya. Lack of confidence in lenders to the other financial institution and viability of borrowers to repay their obligations seems to increase considerably Wozabal, *et al.*, (2012). Consequently, there has been severe financial crisis; it is against this backdrop that management of SACCOs becomes complex day by day. Proper management of credit risks is needed to minimize these negative consequences. As it has been defined, credit risk is the probability that the actual return on investment will differ from its expected return. For the smooth operation and sustainable development of the economy of the country, this probability of actual return and expected return should be reduced to a reasonable rate. SACCOs brings direct benefit to the economy of the country, any breakdown in these systems resulted from poor management of credit risks would likely produces adverse results to the economic development systems of a country. SACCOs enhances the ability of savers to transfer wealth from their old age and across generations (Saunders 1996). Many Savings, Credit and other financial institutions in market economies have routine internal procedure for evaluating their clients. These are built around credit documents that contain complete information on the relationship between a SACCOs and client. Credit documents contains summary of business relationship between the SACCOs and clients information on senior officers and directors, financial data including audited 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 provided a window on risk and consistency in evaluation are important for good decisions and for maintaining good relationship with borrower (Howells and Bain 1998). Another means that savings and credit societies use to control risks is credit reporting. SACCOs may exchange information with other SACCOs on the behaviors of their client. Under this method SACCOs are required to develop a code of conduct, which will guarantee each other that credit reports of the client may not be requested for competitive purpose that is for use by one SACCO soliciting a prospective client who currently deals with another SACCO. Another method is by using private credit bureau. These agencies collect data from various sources and receive complaints about commercial behaviors of individuals or groups. Credit reports may be available only to member of the credit bureaus; - Asset securitizations give SACCOs the opportunity to increase the quality of their lending portfolios.

In this respect asset securitization allow SACCO members to share the risk of lending with investors, and therefore encourage the SACCOs to perform their roles as intermediation (Klimecki and Willmott, 2009). If the borrower default the lender has a claim against the collateral being offered to secure the loan if the loan is not repaid the property is sold, and the lender to compensate for the money lost through the defaulted loan, collects the money. Lenders often value the property conservatively and lend only a percentage of its appraised value to further minimize the risk incurred, is known as the loan to value ratio (Klimecki and Willmott, 2009). To collect the reliable information from prospective borrower, SACCOs often require the loan seeker to fill out forms that ask details about borrower's financial status, monthly income, previous debts, marital status and so forth. A similar process is carried when a company applies for a business loan. Information is collected regarding the company's profit losses, debts and further information regarding the company financial status; **Monitoring-** To prevent individuals or firms from engaging in activities that would make it less likely that loan is repaid; SACCOs often include restrictive covenants in loan contracts that restrict borrowers from engaging in risky activities.

By such, SACCOs can monitor borrowers, activities determine whether they abide by the covenants and make sure no risk is taken at lenders expenses (Saunders, 1996). Knowledge, Competent, Committed and Innovative Personnel- The personnel provision and administration should be well equipped with all necessary skills on customer care, credit management and administration. Institutions should be flexible to adapt with external changes and put more knowledge among the employees within organization.

The majority challenge is to train and develop manpower, thus equipping them well enough to take on lending problems, as well as contributing to the implementation of the national long term economic development and structural transformation; Capital Absorption and Instruments Development- Compared with past decade, SACCOs now have significantly more capital with which to absorb shocks and they employ improved systems for managing credit risk. In conjunction with this improvement, both as cause and effect, SACCOs have more tools at their disposal with which to transfer credit risk and in so doing to dispense credit risk more broadly through the financial system. Some of these tools are loan syndications, loan sales and pooled asset securitization that are relatively straightforward and transparent. More recently instruments that are more complex and less transparent such as credit default swaps, collateralized debt obligations and credit linked notes have been developed and their use has grown very rapidly in recent years (Wozabal and Hochreiter, 2012).

The ideal situation of a lending business is monitoring the borrowed loan to be repaid according to the time schedule. In performing lending business, SACCOS are always required to be keen on the rules and regulations, principles and procedures that should be followed before the loan is offered. Lending business is accompanied by the credit risk arising out of the borrowers' default in repaying the loan. Despite development of roles of credit risks management programmes, availability of principles, rules and regulations; non-performing loans is still a major challenge in Co-operatives SACCOs. Common to all is the problem of default in loan repayment. Credit risks management of loans have been necessitated by the increase loan default; hence the need to study the influence of credit risks management techniques on loan performance in SACCOs. The research aimed at examining the effect of credit risks management techniques on loan performance: a survey of selected SACCOS in Kericho County, Kenya.

The specific objectives of the study were;

- i. To establish the effect of collateral securitization on loan performance of a SACCO
- ii. To establish the effect of monitoring of borrowers on loan performance of a SACCO
- iii. To establish the effect of credit documents on loan performance of a SACCO

2. Methodology

The study used descriptive survey designs in preliminary and explanatory studies to allow researchers to gather information, summarize, present and interpret for the purpose of clarification. The choice of the descriptive survey research design was based on the fact that in the study, the research was interested on the state of affairs already existing in the field and no variable would be manipulated. The main purpose of this study was to determine the effect of credit risks management techniques on loan performance of SACCOS This study therefore was able to generalise the findings to a larger population. The main focus of this study was quantitative. However, some qualitative approach was used in order to gain a better understanding and possibly enable a better and more insightful interpretation of the results from the quantitative study.

The study was conducted in Kericho County in the South Rift region of Kenya. It was a moderately populated Region. Its population comprised various tribes from other parts of the country. Majority of the people who live in this region are low income earners who own small pieces of land and others who live in trading centres and the outskirts of major towns. However, there were a few who own bigger farms. The choice of the area was guided by the maximum utilization of the most likely available resources in terms of time, human resources and finances and the researcher lives in the area.

Target population is defined as a set of individuals, cases/objects with some common observable characteristics of a particular nature distinct from other population. According to Ngechu (2004), a population is a well-defined or set of people, services, elements and events, group of things or households that are being investigated. The study targeted about 95 respondents drawn from the Board of Directors and Management team of Sacco's in Kericho County.

| Sacco | Target Population | Percentage |
|--------------------------|-------------------|--------------|
| Ndege Chai Sacco | 22 | 23.1 |
| Kabianga Universit Sacco | 13 | 13.7 |
| Imarisha Sacco | 30 | 31.6 |
| Simba Chai Sacco | 15 | 15.8 |
| Kenya Highlands Sacco | 15 | 15.8 |
| Total | 95 | 100.0 |

Table 1: Target Population per SACCO

The study used descriptive and regression analysis. The aim of this was to assemble or reconstruct the data into a meaningful or comprehensible fashion (Jorgensen, 1989). Data collection questionnaires were edited, coded and tabulated. The data was analyzed through the use of descriptive statistics including frequency distribution tables, percentages, and measures of central tendency like mean, mode and median. The data was analyzed using SPSS (Statistical Package for Social Sciences) version 20. The findings were presented using tables.

Statistics such as means, percentages, and frequencies was used to assess the response of staff with respect to their view on credit risk management techniques. The analysis was used to identify the credit risk management techniques used by SACCOs, to assess the effect of credit risk management techniques used by SACCOs are likely to reduce bad loans performance and enhance liquidity through reduce of loan default and to assess challenges faced in the implementation of credit risk management strategies used by SACCOs were likely to reduce bad loans performance.

Correlation technique and regression methods were used to analyze the degree of relationship between two variables Mugenda and Mugenda, (2003). To test for correlation between the variables, Pearson product moment correlation was used. Regression analysis was used to test the hypothesis that better credit risk management techniques lead to better loan performance. The multiple regression analysis was employed to identify variables influencing good loan performance in SACCO.

The regression equation is:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e$$

Where; Y -Loan Performance, α - Model constant (Alpha), β_1 - Standard coefficient for collateral securitization, X_1 - Understanding the influence of collateral securitization, β_2 - Standard coefficient for monitoring of borrowers, X_2 -monitoring of borrowers, β_3 - Standard coefficient for credit documents, X_3 - credit documents, and e - error of term.

3. Results and Discussion

The study targeted 95 respondents in collecting data with regard to the effect of credit risks management techniques on loan performance in Savings and Credit Cooperative Societies in Kericho County. From the study, 92 out of the 95 sampled respondents filled-in and returned the questionnaires making a response rate of 96.8%. This is a reliable response rate for data analysis as Babbie (2012) posted that any response of 50% and above is adequate for analysis.

| | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Responded | 92 | 96.8 |
| Did not respond | 3 | 3.2 |
| Total | 95 | 100 |

Table 2: Response Rate per Frequencies and Percentages

The demographic information of the research included the gender, age, experience, educational level and the name of the Sacco of the respondents. According to the findings, 45.7% of the respondents were female while 54.3% of the respondents were male. The respondents were required to indicate their age. Majority (45.7%) of the respondents indicated that they were between 46-55 years, 34.8% of the respondents indicated that they were between 26-35 years, 13.0% of the respondents indicated that they were between 36-45 years and 6.5% of the respondents indicated that they were between 18-25 years.

| Age | Frequency | Percent (%) |
|--------------|-----------|--------------|
| 18-25 years | 6 | 6.5 |
| 26- 35 years | 32 | 34.8 |
| 36-45 years | 12 | 13.0 |
| 46-55 years | 42 | 45.7 |
| Total | 92 | 100.0 |

Table 3: Age Bracket of the Respondents

The respondents were required to indicate their age. Majority (45.7%) of the respondents indicated that they were between 46-55 years, 34.8% of the respondents indicated that they were between 26-35 years, 13.0% of the respondents indicated that they were between 36-45 years and 6.5% of the respondents indicated that they were between 18-25 years.

| Experience | Frequency | Percent (%) |
|--------------------|-----------|--------------|
| 1-8 years | 24 | 26.1.8 |
| 9- 16 years | 30 | 32.6 |
| 17-24 years | 34 | 37.0 |
| 25 years and above | 4 | 4.3 |
| Total | 92 | 100.0 |

Table 4: Number of Years Respondents had Served in the Sacco

Regarding the number of years, the respondents had served in the SACCOs, 37.0% of the respondents had served for 17-24 years, 32.6% of the respondents had served the for 9-16 years, 26.1% of the respondents had served for 1-8 years and 4.3% of the respondents had served the for 25 years and above. The research sought to find out the highest education level the respondent had achieved. According to the findings, 0.0% of the respondents had no formal education, 0.0% of the respondents had a primary, 0.0% of the respondents had a secondary and 0.0% of the respondents had a diploma, 92.0% of the respondents had a degree.

| Sacco | Frequency | Percentage (%) |
|-----------------|-----------|----------------|
| Ndege Cgai | 22 | 23.9 |
| Kenya Highlands | 16 | 17.4 |
| Kabianga Sacco | 14 | 15.2 |
| Imarisha | 30 | 32.6 |
| Samba Chai | 10 | 10.9 |
| Total | 92 | 100 |

Table 5: Respondents Name of SACCO

The researcher also sought to know from the respondents from the name of the SACCO. From the findings, 32.6% of the respondents were from Imarisha, 23.9% of the respondents are from Ndege Chai, 17.4% of the respondents were from Kenya Highlads, 15.2% of the respondents are from UoK Kabianga and 10.9% of the respondents are from Simba Chai.

Table 6 shows the measures of effects of collateral securitization on the loan performance of Savings and Credit Co-operative Societies in Kericho County in different statement obtained from the respondents.

The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result.

| | N | Minimum | Maximum | Sum | Mean | Std. Deviation |
|-----------------------------------|----|---------|---------|-----|------|----------------|
| Car as collateral | 92 | 3 | 5 | 394 | 4.28 | .652 |
| Land as collateral | 92 | 4 | 5 | 420 | 4.57 | .498 |
| Animals as collateral | 92 | 0 | 5 | 316 | 3.43 | 1.585 |
| House hold as collateral | 92 | 0 | 5 | 297 | 3.23 | 1.438 |
| Personal guarantees as collateral | 92 | 0 | 5 | 380 | 4.13 | 1.369 |
| Group gurantees as collateral | 92 | 0 | 5 | 311 | 3.38 | 1.357 |
| Shares as collateral | 92 | 0 | 5 | 384 | 4.17 | 1.601 |

Table 6: Descriptive Statistics on Collateral Securitization

The research sought to find out the agreement level of the respondents on statements regarding the effect of collateral securitization on loan performance of the SACCO. According to the findings, the majority of the respondents strongly agreed that land is used as a collateral security in the SACCOs as shown by a mean of 4.57 with standard deviation of 0.498, the respondents also agreed that a car is used as collateral Security as revealed with a mean value of 4.28 which is tending towards a maximum point of 5. According to Table 6 above, the respondents agreed that shares were used as collateral Security as reflected by a mean of 4.17 with standard deviation of 1.601. However, this was done to improve the performance of the organization. The study as revealed in Table 4.7 also showed that the respondents seemed to agree that personal guarantees is used as collateral Security as reflected with a mean 4.13. However, the corresponding standard deviation also reflected a significant figure of 1.369. This showed that there is a clear variation in the responses provided by the respondents about the personal guarantees improving the performance of the organization. The results reflected in Table 6, indicates that the respondents agreed that animals are used as a collateral security as shown by a mean of 3.43 with corresponding standard deviation of 1.585. The respondents also show that group guarantees act as a collateral security as indicated by means of 3.38 with corresponding standard deviations of 1.357. This suggests that they possess variation in understanding about the loan performance of the firm.

In Table 4.7, the respondents seemed to agree the use of households as collateral security as shown by a mean of 3.23. Consequently, a standard deviation figure of 1.438 raises concerns regarding the effects of households as collateral security of the firm.

Table 7 shows the measures of effects of monitoring of borrowers on loan performance of Savings and Credit Co-operative Societies in Kericho County in different statement obtained from the respondents. The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result.

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---|----|---------|---------|------|----------------|
| Clear policy exist to monitor borrowers | 92 | 2 | 5 | 4.43 | .775 |
| There exist additional cost of monitoring borrowers | 92 | 1 | 5 | 3.61 | 1.109 |
| Monitoring improves SACCO liquidity | 92 | 1 | 5 | 4.27 | 1.232 |
| Effective monitoring and appraisal of borrowers | 92 | 3 | 5 | 4.53 | .687 |
| Valid N (listwise) | 92 | | | | |

Table 7: Descriptive Statistics on Monitoring of Borrowers

From the results in Table 7, it is clearly indicated that respondents were strongly agreeing that effective monitoring and appraisal of borrowers is done as shown by a mean value of 4.53 which is tending towards maximum value of 5. However, the standard deviation of 0.687 suggests variations in responses by the various respondents.

From the study in Table 4.8, it was found that respondents agreed that there is a clear policy put in place to monitor borrowers. This is reflected by a mean value of 4.43. However, a standard deviation of 0.775 suggests a variation in responses generated by the various respondents. From the same table, respondents agreed that monitoring of borrower's improves SACCO's liquidity. This is also reflected by a mean value of 4.27 with a standard deviation of 1.232 generated by the respondents.

According to Table 7, it was found that respondents agreed that there is additional cost on monitoring of borrowers as shown by a mean value of 3.61. The revealed standard deviation of 1.109 seems to suggest variation in the responses generated for the test.

Table 8 shows the measures of effects of credit documentation on loan performance of Savings and Credit Co-operative Societies in Kericho County in different statement obtained from the respondents. The statement was ranked in terms of their mean and standard deviation to portray the outcome of the result.

| | N | Minimum | Maximum | Mean | Std. Deviation |
|--|----|---------|---------|------|----------------|
| Credit follow ups contribute to poor performance | 92 | 1 | 5 | 2.95 | 1.425 |
| Lending without proper procedures contribute to poor performance | 92 | 4 | 5 | 4.51 | .503 |
| Supplying liquidity to constrained individual is risky | 92 | 2 | 5 | 4.27 | .516 |
| SACCO adopt various forms of credit risk assessment | 92 | 2 | 5 | 4.84 | .452 |
| Valid N (list wise) | 92 | | | | |

Table 8: Descriptive Statistics on Credit Documentation

Results of the Table 8, shows a mean value of 4.84 which is tending to a maximum value of 5. This suggests that respondents agree with the statement that SACCOS can adopt various forms of credit risks assessments in order to asses' effects of loan performance. However, a standard deviation of 0.452 reveals a variation in the responses generated by the respondents.

From the Study reflected in Table 4.9, it can be deduced the respondents agree that lending without proper procedures contribute to poor performance in loan lending by SACCOS. This is revealed by a mean value of 4.51 with a standard deviation of 0.503 which shows the variation in the responses by the respondents. The study as reflected in Table 4.9, respondents seem to agree that supplying liquidity to constrained individual is very risky as it reduces the probability of payments and increases moral hazards problems. This is shown by a mean of 4.27. However, a standard deviation of 0.516 suggests the variations in responses given by the respondents. The Table 4.9 also shows that the respondents disagreed that credit follow-ups contribute to poor performance in loan lending by SACCO societies as revealed by a mean value of 2.95 with a standard deviation of 1.425.

A multiple regression model was applied to determine the relative importance of each of the three variables (collateral securitization, monitoring of borrowers and credit documents) with respect to the effects of credit risks management techniques on loan performance of SACCOS in Kericho County. The R squared is coefficient of determination which describes the variation in the dependent variable due to changes in the independent variables. From the findings in the above table the value of R squared was 0.608 an indication that there was a variation of 60.8% on the loan performance of SACCOS due to changes in collateral securitization, monitoring of borrowers and credit documents rights provided by SACCOS at 95% confidence interval. R is the correlation coefficient which shows the relationship between the study variables, from the findings shown in the table above there was a strong positive relationship between the study variables as shown by 0.780.

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | Correlations | | |
|---------------------------|-----------------------------|------------|---------------------------|--------|------|--------------|---------|-------|
| | B | Std. Error | Beta | | | Zero-order | Partial | Part |
| (Constant) | -8.251 | 1.147 | | -7.192 | .000 | | | |
| Collateral securitization | .455 | .144 | .212 | 3.164 | .002 | .292 | .320 | .211 |
| Monitoring of borrowers | -.263 | .125 | -.141 | -2.099 | .039 | -.057 | -.218 | -.140 |
| Credit documents | 2.480 | .229 | .731 | 10.808 | .000 | .737 | .755 | .721 |
| R | = 0.780 ^a | | | | | | | |
| R ² | =0.608 | | | | | | | |
| Adjusted R ² | =0.595 | | | | | | | |

a. Dependent Variable: performance

Table 9: Regression Results
Source research data, (2016)

Regression Equation and the Predictor Relationship

The table 9 shows the determination of the coefficients for the regression equation. The established multiple linear regression equation was:

$$Y = -8.251 + 0.455X_1 - 0.263X_2 + 2.48X_3$$

Where

Constant = -8.251. From the regression equation, the study reflected that if collateral securitization, monitoring of borrowers and credit documents provided by SACCOS were all rated as zero, loan performance of SACCOS would stand at -8.251. $X_1 = 0.455$, shows that one unit change in collateral securitization results in 0.455 units increase in loan performance of SACCOS, $X_2 = -0.263$, shows that one unit change in monitoring of borrowers results in 0.263 units decrease in loan performance of SACCOS and $X_3 = 2.480$, shows that one unit change in credit documents results in 2.480 units increase in loan performance of SACCOS.

4. Conclusions and Recommendations

The study aimed at investigating the effect of credit risks management techniques on the loan performance of selected Savings and Credit Co-operative Societies (SACCOS) in Kericho County.

The study found that majority of the respondents indicated that collateral securitization affected the loan performance of the SACCOS to a great extent. This was shown by beta 0.212 ($P < 0.01$). Collateral securitization affected the loan performance of the SACCOS. The respondents strongly agreed that collateral securitization helped to reduce the chances of loss in case of defaults by members. These findings are in agreement with Voordecker and Steijvers (2006) assertions that collateral are the most important determinants of demand for credit. Therefore we can conclude that there is significant relationship between credit documents and loan performance of SACCOS.

The study revealed that monitoring of borrowers has less significance on loan performance. The study revealed that monitoring of borrowers has slight significance on loan performance with beta -0.141 ($p < 0.05$). The study also showed that the SACCOS should not put much emphasis on monitoring of borrowers. This is in line with the findings of (Mwaura, 2005) that affirm that, monitoring of borrowers has slight significance on loan performance. Therefore we can conclude that there is less significant relationship between monitoring of borrowers and loan performance of SACCOS.

Finally the study found that credit documents affected the loan performance of the SACCO to a very great extent. This was shown by the beta 0.731 ($p < 0.01$). This means that the SACCOS should put more emphasis on credit documents and files. This also shows that having credit documents improves the loan performance significantly. This is in agreement with the findings of (Oldfield and Santomero, 1997) who concluded that credit documents will significantly affect the loan performance of the firm. Therefore we can conclude that there is significant relationship between credit documents and loan performance of SACCOS.

The study concluded that collateral securitization affected the loan performance of the SACCOS. The management and Board of SACCOS should ensure that there is proper mechanism and policy regarding collaterals. Monitoring of borrowers has slight effect on the loan performance of the SACCOS, since they help little to prevent defaults.

The regression analysis model also concludes that credit documents affected the loan performance of the SACCO. The variables in the study contributed to the loan performance of the SACCO.

This study aims to provide empirical evidence for SACCOS in enhancing their understanding in relation to the risk management techniques. As a result, SACCOS are now provided with evidence to set up flexible, dynamic and efficient techniques to manage possible risks in the SACCOS.

The study recommended that collateral securitization policy be put in place since it affects the loan performance of the SACCOS. Monitoring of borrower's mechanism should be instituted in the SACCO since it will minimize default by borrowers. The management should ensure that there is effective monitoring and appraisal of borrowers. Finally, the study recommended that there should be credit documentation to ensure that there are proper credit follow ups and procedures on lending to borrowers. Also, credit document will help in adopting effective credit assessment.

This study suggest that further study should be carried out to establish how SACCOS have been able to come up with various strategies, polices and systems to comply with a regulated business environment. Moreover, a study should also be carried out to establish the challenges SACCOS face. The same study should be carried out in other financial sectors for example banks, microfinance institutions and public sectors to find if the same results will be obtained.

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