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Effects of Interest Rate on Credit Access of Small and Medium Enterprises in Garissa County

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Abstract

Purpose: The main purpose of the study was to assess the effects of interest rate on credit access of small and medium enterprises' in Garissa County.

Methodology: A descriptive survey was employed in this study. The target population of this study was 10 SACCOs and 150 SMEs registered within Garissa County. Primary data was collected from respondents via structured questionnaires. The descriptive statistics was analyzed using the Statistical Package for Social Sciences (SPSS) Version 20.0 and presented in the report in the form of tables, bar charts and graphs. Correlation and regression analysis was done to establish the relationship between the variables.

Results: The results showed that interest rate policy was significantly related to credit access since its p-value (0.000) was less than the significance level of 0.05. The findings implied that a change in interest rate policy by one unit could result to positive variation of 0.70 units in credit access.

Unique contribution to theory, practice and policy: Based on the study findings, the study concluded that SACCO's interest rate policy affect SMEs accessibility to credit. The study recommended that SACCOs should consider revising their policy on interest rate charged. The study also recommended that County government should intervene to ensure that SMEs have access to financial services to enable them contribute to development and employment creation. The study validates the Credit access theory and its applicability in financing SME's firms.

Keywords: *Interest Rate, Credit Access and Small and Medium Enterprises*

1.0 INTRODUCTION

The provision of credit has increasingly been regarded as an important tool for raising the incomes of rural populations, mainly by mobilizing resources to more productive uses. As development takes place, one question that arises is the extent to which credit can be offered to the small and medium size enterprises to facilitate their taking advantage of the developing entrepreneurial activities. The generation of self-employment in non-farm activities requires investment in working capital. However, at low levels of income, the accumulation of such capital may be difficult. Under such circumstances, loans, by increasing family income, can help the poor to accumulate their own capital and invest in employment generating activities (Atieno, 2001).

Access to financial services by small scale enterprises is normally seen as one of the constraints regulated their benefits from credit facilities. However, in most cases the access problem, especially among formal financial institutions is one created by the institutions mainly through their lending policies e.g. minimum loan amounts, complicated application procedures and restrictions on credit for specific purposes. The type of financial institution and its policy will often determine the access problem. Where credit duration, terms of payment, required security and the provision of other services do not fit the needs of the customers, potential borrowers will not apply for credit even where it exists and when they do, they will be denied access (Schmidt and Kropp, 2003).

Most of the conditions imposed by formal credit institutions like collateral requirements should not actually stand in the way of small scale borrowers and the poor in accessing credit. The poor can use the loans and repay if effective procedures for obtaining, supervision and repayment have been established. Bank also supports the view that high interest rate credit can help to keep away the influential non-target group from a targeted credit programme (Hossain, 2004). This further demonstrates the need to develop appropriate lending policies for institutions in the delivery of loans to small scale borrowers.

Credit constraints have been defined by the OECD (2006) as occurring when SMEs cannot obtain financing from banks, capital markets or other suppliers of finance even when they have the capability to use those funds productively. In a situation where economically viable projects may have to be restricted or even abandoned because of funding difficulties, this has the potential to have serious negative consequences for ongoing innovation and growth. It is this potential scenario that motivates the concern for identifying and measuring whether Sacco policies hinders SMEs from accessing credit.

1.2 Problem Statement

In 2010, IFC conducted a study to estimate the number of micro, small, and medium enterprises (MSMEs) in the world, and to determine the degree of access to credit and use of deposit accounts for formal and informal MSMEs (Malhotra, 2007). The survey showed a total gap of 45–55 percent of informal and formal MSMEs in developing economies (200-245 million enterprises) are either unserved or underserved. Generally the rate of SMEs accessibility to credit is very low according to the survey. This is therefore the basis of the study.

Small scale enterprises are an important contributor to the Kenyan economy. Training entrepreneurs, generating income and providing a source of livelihood for the majority of low-income households in the country (Memba, Gakure and Karanja, 2012) accounting for 12–14% of GDP. With about 70% of such enterprises located in rural areas, the sector has a high potential for contributing to rural development. Yet the majority of entrepreneurs in this sector are considered uncreditworthy by most formal credit institutions. Whereas a small number of NGOs finance an increasing number of microenterprise activities, most formal institutions still deny these enterprises access to their services.

Improving the availability of credit facilities to this sector is one of the incentives that have been proposed for stimulating its growth and the realization of its potential contribution to the economy (Migiro, 2006). Despite this emphasis, the effects of existing institutional problems, especially the lending terms and conditions on access to credit facilities, have not been addressed. In addition, there is no empirical study indicating the potential role of improved lending policies by both formal and informal credit institutions in alleviating problems of access to credit. Knowledge in this area, especially a quantitative analysis of the effects of lending policies on the choice of credit sources by entrepreneurs, is lacking for the rural financial markets of Kenya.

1.3 Specific Objectives

The specific objective of the study is to assess the effects of interest rate on credit access of small and medium enterprises in Garissa County.

2.0 LITERATURE REVIEW

This section provided a review of credit risk theory which informs the theoretical background of the research subject matter.

2.1 Credit Access Theory

Finance is at the core of the development process. Backed by solid empirical evidence, development practitioners are becoming increasingly convinced that efficient, well-functioning financial systems are crucial in channeling funds to the most productive uses and in allocating risks to those who can best bear them, thus boosting economic growth, improving opportunities and income distribution, and reducing poverty. Conversely, to the extent that access to finance and the available range of services are regulated, the benefit of financial development is likely to elude many individuals and enterprises, leaving much of the population in absolute poverty. This access dimension of financial development is the main focus of credit access theory (Demirguc, Beck and Honohan, 2008).

Improving access and building inclusive financial systems is a goal that is relevant to economies at all levels of development. The challenge of better access means making financial services available to all, thereby spreading equality of opportunity and tapping the full potential in an economy. The challenge is greater than ensuring that as many people as possible have access to basic financial services. It is just as much about enhancing the quality and reach of credit, savings, payments, insurance, and other risk management products in order to facilitate
sustained growth and productivity, especially for small and medium scale enterprises.

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Although the formal financial sector in a few countries has achieved essentially universal coverage of the population, at least for basic services, some financial exclusion persists even in many high-income countries and because they find it difficult to participate fully in those sophisticated economies, financial exclusion can be an even more serious handicap for those affected. Therefore this theory is very relevant to this study (Demirguc, Beck & Honohan, 2008).

2.2 Empirical review

Ochanda (2014) sought to examine the effect of financial deepening on growth of SMEs in Nairobi County. The study sought to find out the effect of financial innovation, financial sector regulation and inflation and general interest rates on growth of SMEs. The study adopted an exploratory design and applied stratified sampling to identify the 100 SMEs in Nairobi County registered by the industrialization ministry that were used in the study. Regression models were used to examine the effect of financial deepening on growth of SMEs. The study found that access to credit positively influenced the growth of 92% of SMEs. Most SMEs were found to be hindered by high cost of finance and lack of collateral for the new SMEs. Financial innovation was also found to have a strong positive influence on the growth of SMEs. High financial sector regulation, inflation and interest rates were found to hinder growth of SMEs.

Muguchu (2013) study sought to find out whether there is relationship between access to credit and financial performance of SMEs in Nairobi, Kenya. The study employed descriptive analysis as well as regression analysis to analyze the data collected. The target population under study was the licensed SMEs by Nairobi City Council in 2013. Cluster sampling of SMEs in the central business district in Nairobi was done by clustering the SMES based on the streets where they are located. A sample of 40 SMEs within the central business district was selected for the survey. Quantitative data was analysed with the use of statistical package for social sciences (SPSS). Descriptive analysis as well as regression analysis found that there was a positive relationship between access to credit and ROA. The study recommends financial institution to have special lending structures for SMEs to enable them access credit.

Gladys (2012) study found that fewer than 20 percent of small to medium sized enterprises (SMEs) in Kenya have ever received credit from formal financial institutions. Access is regulated due to challenges in assessing SME risk in a cost effective manner. Lenders in Kenya address this risk-assessment problem either by not lending to SMEs at all or by requiring collateral and charging high interest rates. The study recommended that Credit scoring offer a number of benefits which can improve access to credit for SMEs.

2.6 Conceptual Framework

Figure 2.2 shows the relationship between the dependent and independent variables to be tested in the study. The dependent variable in this study will be credit access. The independent variables to be included in the study are interest rate policy, credit appraisal policy, debt collection policy and loan regulation policy.

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Independent Variable | **Dependent Variable**

Interest rate
- Reducing balance/straight-line
- Percentage interest
- Appraisal cost
- Penalties on default
- Penalties on penalties

Credit access
- Amount applied
- Fraction given

Figure 1 Conceptual Framework

Source: Researcher (2015)

3.0 RESEARCH METHODOLOGY

A descriptive survey was employed in this study. The target population of interest in this study consisted of 10 SACCOs and 150 SMEs within Garissa County. Sample size consisted of one member from each SACCO and one member from each SME which made up a total of 160 respondents in this study. Therefore 160 questionnaires were administered in this study. Primary data was collected from respondents via questionnaires. The questionnaires were administered to the randomly selected SMEs members who were the respondents. The questionnaire included both closed and open ended questions to enhance uniformity and collection of maximum data. In order to minimize the possible instrumentation error and hence increase the reliability of the data collected, pilot study was first conducted to measure the research instruments reliability and validity (Mathiyazhagan & Nandan, 2010). A pilot study was undertaken on 10% of the sample population of SACCOs and SMEs.

Data was checked for completeness, accuracy, errors in responses, omissions and other inconsistencies. The data was then coded using numerals in order to put them in relevant number of categories. The data was analyzed using the Statistical Package for Social Sciences (SPSS) Version 20.0 and presented in the report in the form of tables, bar charts and graphs. Regression analysis was done to establish the relationship between the variable in the study.

$$Y = \alpha + \beta_1 X_1 + ẹ$$

Where:

Y= Credit Access of SMEs

α =Constant Term,

X_1= Interest rate

In the model, $\beta 0$ = the constant term while the coefficient β_ii= 1…2 was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables. µ is the error term which captured the unexplained variations in the model. The significance of each of the co-efficient was tested at 95 percent level of confidence to explain the variable that explained the most of the problem

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RESULTS AND DISCUSSIONS

Demographics Analysis

This section contains results on demographic analysis which include; age group of the respondents, their profession and their level of income. It shows the demographic characteristics of the respondents.

Age Group

The respondents were asked to indicate their age group. The results in the figure 4.1 below indicate majority of the respondents were between 41-50 years represented by 28% followed by the age group of 31 to 40 which were 27%. Those over 50 years were the lowest represented by 22% of the total respondents. Results are represented in the figure 2 below.

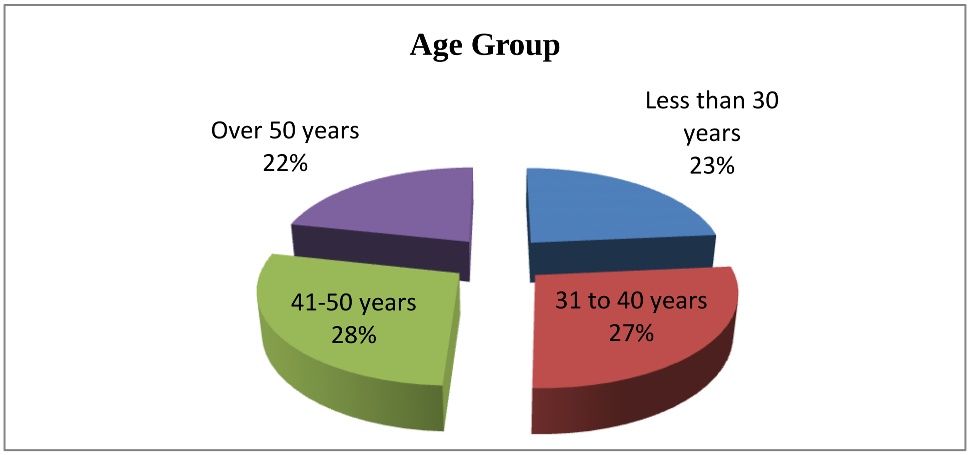

Figure 2 Age Group

Gender

The respondents were asked to indicate their gender. Majority of the respondents were male represented by 67% while female were 33 %as shown in the figure below.

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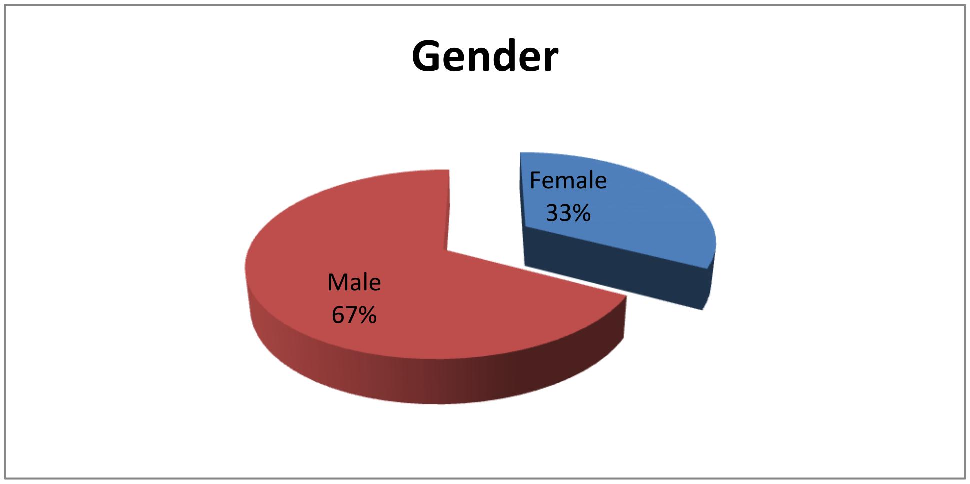

Figure 3 Gender

Position

The study was also interested in the position of the respondents and figure 4 below shows the results. Those at the officer level were the majority represented by 41% followed by management level which was 27%. Directors had the least respondents at 12% as shown below.

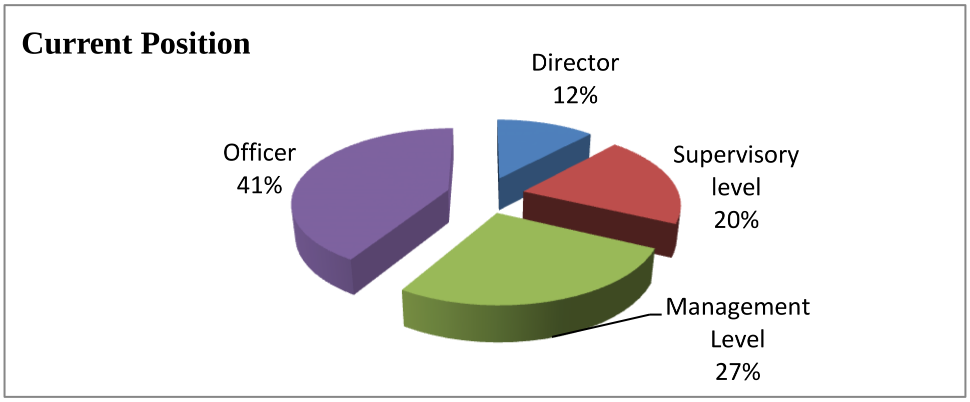

Figure 4 Position

Level of income

The respondents were also asked to indicate their level of income. Majority (22%) of the respondents indicated they had an income of between 40,000 and 60000. Those that had an income of above 60000 were the least at 21% of the total respondents. The figure 5 below shows the results on level of income.

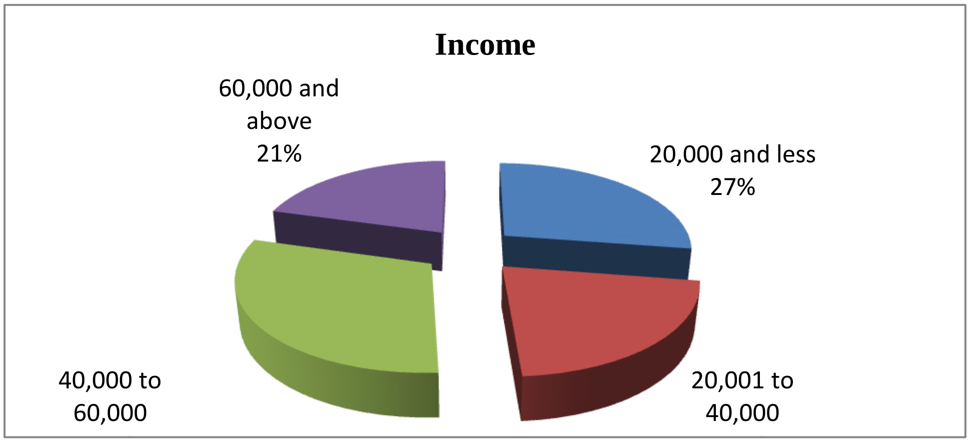

Figure 5 Level of Income

Academic Qualification

The study also sought to know academic qualifications of the respondents. The results indicate that majority of the respondents had secondary qualifications at 39% followed by those of diploma/certificate at 29%. The respondents with master's degree and above level qualification were the least at 5%. The figure 6 below shows the results.

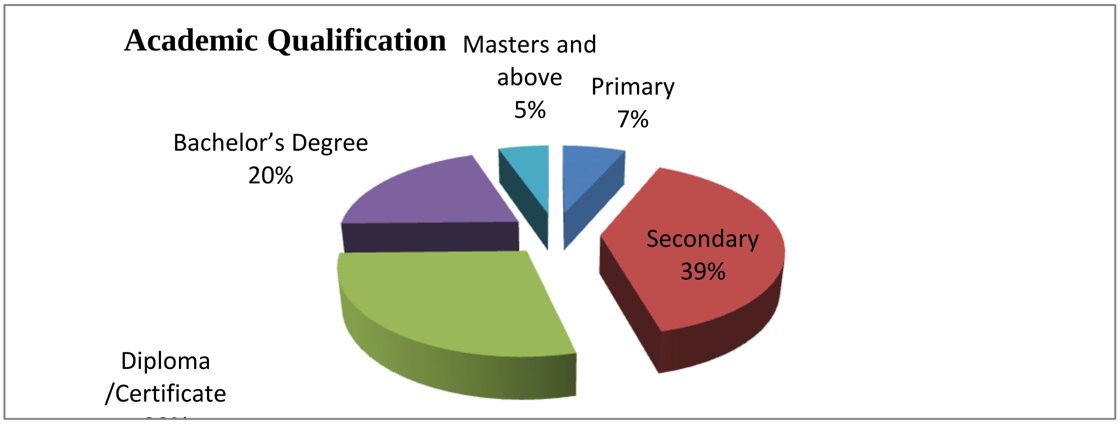

Figure 6 Academic qualification

4.1.6 Revenue of SMEs per Month

The study sought to find out revenue generated per month by SMEs in Garissa town. The results indicate that most SMEs generate revenue of between 100000 and 400000 per month. This was represented by 28% of the respondents. SMEs that generate revenue of above 600000 were represented by 26%. The figure 7 below shows the results.

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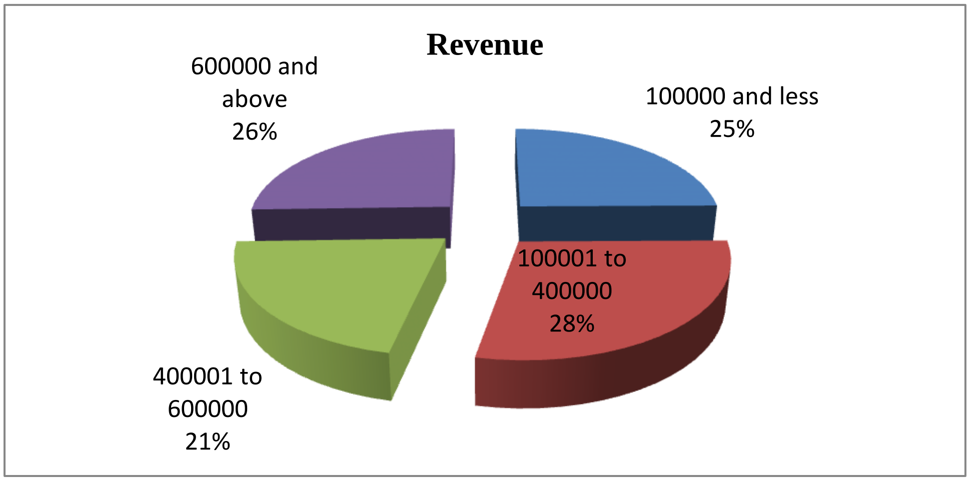

Figure 7 Revenue of SMEs per Month

Descriptive Analysis of variables

This section contains descriptive analysis of the study variables. Custom tables containing percentages mean and standard deviations of all the items used to test how respondents agreed to various statements. The descriptive results of every variable are shown in the subsections discussed below.

Interest Rate Policy

The results in the Table 1 contain responses on influence of interest rate policy on credit accessibility.

Table 1 Descriptive Analysis of Interest Rate Policy

Statements	SD	D	N	A	S A	Mean	Std Dev
High interest rate charged by SACCOs in Garissa county contribute to low credit access by SMEs	1.3%	2.7%	35.3%	58.7%	2.0%	4	0.65
SACCOs in Garissa charge high appraisal cost	0.0%	1.3%	35.3%	60.0%	3.3%	4	0.57
Percentage of appraisal cost charged by SACCOs is high compared to the loan applied	0.0%	3.3%	38.0%	54.7%	4.0%	4	0.62
SACCOs in Garissa impose high penalties on credit default	0.7%	1.3%	38.0%	56.7%	3.3%	4	0.61

SACCOs in Garissa charge penalties on penalties	0.0%	0.0%	36.7%	56.7%	6.7%	4	0.59

These findings indicate that majority of the respondents agreed to statements on interest rate policy. On the first statement majority (58.7%) agreed that high interest rate reduces credit accessibility by SMEs in Garissa County. Majority (60.0%) also agreed that SACCOs in Garissa County charge high appraisal costs that contribute to low credit accessibility. Respondents also agreed that the percentage of appraisal cost charge is significantly high compared to loan applied for and this could be leading to low credit access. Respondents agreed that SACCOs in Garissa charge high penalties on default and further charge penalties on penalties which seem to contribute to low access to credit by SMEs. These findings imply that interest rate policy used by SACCOs in Garissa County is a limiting factor that discourages SMEs Garissa from accessing Credit from SACCOs.

A study by Ochanda (2014) also found out that financial sector regulation, inflation and interest rates hinder growth of SMEs by reducing credit accessibility. Similarly, Muguchu (2013) study sought to find out whether there is relationship between access to credit and financial performance of SMEs in Nairobi. The findings of the study showed that SMEs with high credit accessibility had high performance the study recommended that financial institution should consider lowering their interest rate to increase credit accessibility to SMEs. Finally Gladys (2012) study recommended that financial institution to have special lending structures for SMEs to enable them access credit.

Inferential Statistics

This section provides the inferential statistics that were conducted on the study variables. It contains the findings on correlation analysis and a multiple regression model used to ascertain the relationship between independent variables and dependent variable.

4.3.1 Correlation Analysis

Table 2 Correlation Analysis of Variables

Variable		Credit Access	Interest rate
Credit Access	Pearson Correlation	1	
	Sig. (2-tailed)		
Interest rate	Pearson Correlation	.435**	1
	Sig. (2-tailed)	0.000	

* Significant

The correlation results in Table 2 above indicate that all the independent variables have a significant positive association with the dependent variable. Interest rate policy was positively and significant related to credit access (*r= 0.435, p=0.000*). These findings imply that interest rate policy influences credit accessibility in Garissa County.

The findings of this study concur with loanable fund theorists who posited that the rise in interest rate leads to decline in demand of loanable funds when all other factors remain unchanged. Similarly, Gynlelberg and Johansson (2007) argue that reduction in nominal interest rate impacts positively on supply and demand of loans. There is negative linear relationship between interest rate and borrowing.

The findings also concurs with those of Ackah and Vuvor (2011) who conducted a study to determine the challenges faced by small and medium enterprises in obtaining credit in Ghana. The study finding established that there were institutions such as bank and non-bank financial institutions that were willing to provide funds to SMEs but Ghanaian SMEs are not able to meet the requirements of these financial institutions. Chief among these requirements is the issue of collateral, which most SMEs cannot provide.

Multiple Regression Analysis

The study carried out a multiple regression analysis to ascertain the relationship between the independent variables and dependent variable. Table 3 contains the summary of the model adopted.

Table 3 Model Summary

Model Summary	
R	0.846
R Square	0.715
Adjusted R Square	0.707
Std. Error of the Estimate	0.27536

The findings show the R-square, adjusted R square and Std. error of the estimate. The R-squared of the regression is the fraction of the variation in dependent variable that is accounted for (or predicted by) independent variables. The value of R-square indicates that independent variables accounts for 71.5% of the variation in dependent variable.

Table 4 Analysis of Variance Results

Model	**Sum of Squares**	**df**	**Mean Square**	**F-statistics**	**Sig.**
Regression	27.618	4	6.904	91.058	.000
Residual	10.995	145	0.076		

Total	38.612	149

Table 4 shows the analysis of variance results. The P value for the F-test of overall significance test is less than significance level; therefore we reject the null-hypothesis that the model is not fit and conclude that the model provides a better fit than the intercept-only model.

Table 5 Regression Analysis Results

Variables	B	Std. Error	Beta	t	Sig.
(Constant)	0.319	0.176		1.815	0.072
Interest Rate Policy Mean	0.708	0.093	0.677	7.616	0.000

The results in Table 5 above shows that interest rate policy was significantly related to credit access since its p-value (0.000) is less than the significance level of 0.05. The findings imply that a change in interest rate policy by one unit will result to positive variation of 0.708 units in credit access. The findings further imply that interest rate policy significantly influences credit access by SMEs in Garissa County. A study by Ochanda (2014) found out that financial sector regulation, inflation and interest rates hinder growth of SMEs by reducing credit accessibility.

CONCLUSIONS AND CONTRIBUTION TO POLICY PRACTICE AND THEORY

The first objective was to assess the effects of interest rate on credit access of small and medium enterprises in Garissa County. Interest rate is a major determinant of demand for credit from financial institutions. Majority of the loan/credit applicants consider the amount of interest their loan will accrue when applying for it. The study findings showed that SACCOs' interest rate policy had a significant relationship with SMEs accessibility to credit in Garissa County. This study established that SACCO's interest rate policy contributes to 0.708 of variation in SMEs credit access in Garissa town. Further, descriptive analysis established that credit appraisal cost policy, cost on penalty policy and penalty on penalty policy negatively and significantly affected credit access from SACCOs. These findings are in agreement with those of Ochanda, (2014), Muguchu, (2013) and Gladys, (2012) who found out that charging high interest rates on credit affected access to credit in financial institutions.

Conclusion

Based on the study findings, the study concludes that SACCO's interest rate policy, credit appraisal policy, debt collection policy and loan limit policy affected SMEs accessibility to credit. This conclusion was based on the findings that the independent variables Interest rate policy, credit appraisal policy, debt collection policy and loan limit policy in the final model accounted for to 71.5% of the variation in dependent variable which was SMEs credit access.

Recommendations

Based on the study findings this study made the following recommendations;

SACCOs should consider revising their policy on interest rate charged, credit appraisal techniques, debt collection process and limitation on the amount of loan granted. The study therefore recommends that SACCOs should consider reducing or waiving credit appraisal costs and penalty cost to increase SMEs accessibility to credit.

The study also recommends that to increase SMEs accessibility to SACCO's credit loan limit policies should be reconsidered or harmonized accommodate the needs of SMEs. The study recommends that County government should intervene to ensure that SMEs have access to financial services to enable them to contribute to development.

Areas of Further Research

This study recommends that similar studies should be carried out on other credit institutions policies and there effects on credit access including commercial banks. A similar study can also be conducted in other region for comparison purposes.

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